# COMMITTEE ON PUBLIC UNDERTAKINGS (1975-76)

(FIFTH LOK SABHA)

# **EIGHTY-FIFTH REPORT**

HINDUSTAN PAPER CORPORATION LTD.

[MINISTRY OF INDUSTRY & CIVIL SUPPLIES]
(Department of Industrial Development)



# LOK SABHA SECRETARIAT NEW DELHI

April, 1976/Chaitra, 1897(S)
Price: Rs. 4.25

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# CONTENTS

					PAGE
I.	Introductory		•	•	1
	A. Historical Background		•	•	I
	B. Objectives		•	•	3
	C. Take over of Sick Mills		•	•	3
	D. Thakur Paper Mill, Samastipur		•		6
II.	DEMAND AND PRODUCTION OF PAPER PAPER BOARDS & NEW	v st'r	INT		
	A. Demand & Production of Paper & Paper Boards			•	10
	B. Demand & Production of Newsprint	•			16
III.	I. RAW MATERIALS				22
IV.	. Mandya National Paper Mills, Karnataka				
	A. Background			•	38
	B. Production Performance .	•		•	41
	C. Working of Machinery			•	44
	D. Expansion Programme			•	51
	E. Purchase of Second-hand machinery .				56
	F. Pricing & Distribution of Paper				62
	G. Shortage of Coal-Difference in Book Balance and Phy	sical	Balan	ce .	<b>6</b> 8
	H. Purchase of Alum .				70
V.	. NAGALAND PULP AND PAPER PROJECT				
4	A. Cost Buimates				76
	B. Selection of Site				<i>7</i> 8
	C. Delay in Commissioning				91
VI.	I. KERALA NEWSPRINT PROJECT				
	A. Consultants				98
	B. World Tour by HPC Officials		-	÷	104
	C. Estimates of the Project				114
	D. Delay in Completion of Project				.117
VII	II. Assam Pulp and Paper Projects				is.
	A. Cachar Pulp & Paper Project				124
29	B. Nowgong Pulp & Paper Project				126

												Pa ge
VII	I. Resi	earch & Developm	MENT				•	•	•	•		134
IX.	FINA	NCIAL MATTERS										
	A. Fi	nancial Structure	•	•	•	•	•	•	•		•	143
	B. W	orking Results	•	•	•				•			144
	C. Ac	counting Manual					٠.	٠.				145
	D. In	ternal Audit	•		•	• •	٠.	٠.	•	. • x		145
					Apper	DICES	•	•	•	•	•	.*
	I.	Types of paper and	d pape	r b	oards i	mport	ed di	uring	1973-	74	•	148
	II.	Balancing equipmexpected to be rule yet to be taken	eceive	d s	hortly	and th	ae ite	whic ms fo	h hav r whi	ch act	eived/ tien is	Í51
	III.	Protective measure then the hillocl Project										İ 54
	IV.	Copy of letter dates to Govt. of Ka Corporation	d 28-8 rnatak	-19 a fo	75 Sent or allo	by Hi cation	ndus of	stan F Fores	ape <del>r</del> t Div	Corpo isions	to the	157
	v.	Details of foreign Corporation from								ustan	Paper	161
	VI.	Details of foreign Paper Corporat										164
¥Υ	VII.	Details of visit o during February for Kerala Proje	-Ma									166
	VIII.	Summary of cond Public undertak							e Co	mmitt	ee on	168

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## Shri Nawal Kishore Sharma

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Shri K. S. Bhalla—Senior Financial Committee Officer.

<sup>\*</sup>Ceased to be a member of the Committee consequent on his retirement from Rajya Sabha.

# STUDY GROUP ON PAPER (1975-76)

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- 8. Shri Sriman Profulla Goswami

#### INTRODUCTION

- I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report, on their behalf, present this Eighty-fifth Report on Hindustan Paper Corporation Limited.
- 2. This Report is based on the examination of the working of the Hindustan Paper Corporation Limited upto the year ending 31st March, 1975.
- 3. The Committee took evidence of the representatives of the Hindustan Paper Corporation Limited on the 20th October, 1975 and of the Ministry of Industry and Civil Supplies (Department of Industrial Development) and the Inspector-General of Forests (Ministry of Agriculture and Irrigation) on the 1st and 2nd December, 1975.
- 4. The Committee considered and adopted the Report at their sitting held on the 24th March, 1976.
- 5. The Committee wish to express their thanks to the Ministry of Industry & Civil Supplies (Department of Industrial Development), Inspector-General of Forests (Ministry of Agriculture and Irrigation), Hindustan Paper Corporation Limited and the non-official Organisations for placing before them the material and information they wanted in connection with the examination of the working of the Hindustan Paper Corporation Limited. They wish to thank in particular the representatives of the Ministries and the Undertaking who gave evidence and placed their considered views before the Committee.

NEW DELHI;

April 6, 1976

Chaitra 17, 1897 (S)

NAWAL KISHORE SHARMA,

Chairman,

Committee on Public Undertakings.

#### INTRODUCTORY

# A. Historical Background

A proposal to set up a Corporation to undertake the establishment of Paper/Pulp/Newsprint Mills in the Public Sector in the country had been under the consideration of Government for a number of years. The entry of the Public Sector into this field was necessitated essentially by the fact that so far as newsprint was concerned the development of any capacity for its manufacture in the private sector had not materialised at all. As regards paper, the development of fresh capacity from beginning of Third Plan period onwards was quite inadequate.

- 1.2. The position of newsprint production at the time of the consideration of the proposal of setting up of this Corporation i.e. during the year 1969-70, was that against the estimated consumption of 1,65,000 tonnes during the year 1968-69, the indigenous production was only about 39,000 tonnes. At that time, it was estimated that by the year 1973-74, on the basis of the cumulative rate of growth of 7 per cent per year, the demand for newsprint would increase to 2,60,000 tonnes/year. To ensure production of 2,60,000 tonnes/year, it was necessary to develop the capacity for the production of at least 3,00,000 tonnes/year. However, during the period of 6 years from 1962-63 to 1968-69, the capacity for production of newsprint was created to the extent of about 39,000 tonnes only. prospect in view at that time for development of indigenous capacity for manufacture of newsprint was the expansion of existing Nepa Mills to 75,000 tonnes per annum leaving considerable gap in the demand and indigenous supply of newsprint in the country.
  - 1.3. Regarding paper and paper boards, production during 1968-69 was about 6,47,000 tonnes. During the year 1969-70, the demand and supply was fairly balanced. On the basis of the increase in demand at a cumulative rate of 7 per cent per year, however, the domestic demand for paper and paper boards during 1973-74 was at that time estimated by the Development Council for Paper Pulp and Allied Industries at 9,00,000 tonnes/year. Adding to it, the export target at that time of 60,000 tonnes/year, the actual production required by the end of the Fourth Plan period was estimated at 9,60,000 tonnes/year. Even on a lower cumulative growth rate of 5 per cent, the

production required for internal consumption and exports was estimated at 8,70,000 tonnes. In order to produce 8,70,000 tonnes, the capacity required to be developed was estimated at 1 million tonnes. During the year 1969-70, the indigenous capacity for paper and paper board was 7,30,000 tonnes/year and it was anticipated that only about 80,000 tonnes would be added to it by the implementation of the expansion schemes then on hand in the private sector, bringing the total to 8,10,000 tonnes/year, leaving the gap between demand and supply at 2,00,000 to 3,00,000 tonnes/year which was required to be further developed during the Fourth Five Year Plan period.

- 1.4. Against the above background of the position of paper and newsprint industry in the country, the need for establishment of fresh capacity in the public sector for these essential consumer items was acutely felt.
- 1.5. The Ministry of Industrial Development had already got prepared feasibility reports for Kerala Newsprint Project, an integrated Pulp/paper Mill in Nagaland and an integrated Pulp/Paper Mill in Assam and also, one Pulp/Paper Mill in Jagdalpur (Bastar) and approached the Cabinet Committee to approve the proposal to set up a Corporation to undertake implementation of all or any of the above projects which might be approved finally by Government for implementation.
- 1.6. The above proposal was submitted to Cabinet by the Ministry of Industry and Civil Supplies on 4th November, 1969 and the Cabinet gave their final clearance for setting up the proposed Corporation in April, 1970. The Corporation was registered on 29th May, 1970, under the Companies' Act, 1956.

### B. Objectives

- 1.7. The main objects of this Corporation as given in the Memorandum of Association are as under:—
  - (1) To carry on in India and elsewhere the trades and business of the survey, prospecting and providing of the existence of suitable raw materials for and manufacture of Pulp, Paper, Boards, Newsprints, Paper Conversions, Chemicals and other products.
  - (2) To produce, manufacture, purchase, refine, prepare, process, import, export, sell and generally to deal in Pulp, Paper, Boards, Newsprints, Paper Conversions, Chemical

1

and other products and to carry on all ancillary and supporting activities connected with the growth of Pulp, Paper, Boards, Newsprint and Allied Industries and the development of expertise and in connection therewith, to acquire erect, construct, establish, operate and maintain factories, forests, fields and plantations, workshops and other works.

- 1.8. The main function of the Corporation is to establish new pulp/paper/newsprint mills in the country and if any sick paper mill is desired by the Government to be taken over by the Corporation, that function has also to be performed.
- 1.9. At present, the Corporation is engaged in the implementation of the following projects:—
  - (i) An integrated pulp/paper mill in Nagaland with annual capacity of 33,000 tonnes.
  - (ii) An integrated newsprint mill in Kerala with an annual capacity of 80,000 tonnes.
  - (iii) An integrated pulp/paper mill in Nowgong District of Assam with a capacity of one lakh tonnes of paper per annum.
    - (iv) An integrated pulp paper mill in Cachar District of Assam with a capacity of one lakh tonnes of paper per annum.
  - (v) In addition to the above, the Govt. also decided in March. 1973 that this Corporation should take over the financial and managerial is control of Mandya National Paper Mills Ltd., a sick mill in Karnataka State. The de facto management of the Mill passed into the hands of the Corporation with effect from 2nd January, 1974.

#### C. Take over of the sick mills

- 1.10. During evidence, the Committee enquired as to why the mills were first allowed to become sick and then taken over by Government resulting in heavy cost to the Exchequer. The representative of the Ministry of Industry and Civil Supplies stated inter alia as follows:—
  - "....No industrial Undertaking survives without taking bank credit and now the banks are nationalised. Since the

public sector is involved in all these industrial undertakings, we in the Ministry have felt for long time that there should be some way for these financial institutions to keep a watch on the performance of these industrial undertakings. Unfortunately, at present the public financial institutions do not have the requisite man-power, nor the expertise to keep track of what is happening in every industrial undertaking. The Parliament has now passed the IDBI Bill which makes the IDBI an apex institution under which all the financial institutions would function. They would all be subsidiary to that. They would build a team of technical people, people who would be accountants, marketing managers, purchase managers, financial experts, engineers, technical people, auditors and so on and this team under the financial institutions will be in a position to nominate directors on the boards of different companies to whom they lend. Today the financial institutions have the right and power to nominate directors. But they do not have the men. So they nominated some directors in the case of few large companies. But they say they cannot nominate directors for all companies to whom they lend because they do not have man-power. So when they have built up this type of expertise, then these directors can represent the interests of the financial institutions, the long term lenders as well as banks.

Now, long before a unit becomes sick, there are red signals, danger signals. For instance, a unit may not be paying the provident fund money due to the Provident Fund Commissioner, or may not be paying the insurance or money due to the suppliers. The idea is that the parttime directors on the boards of these companies will keep a watch on the "goings-on" in these companies. As soon as they see some red signal, some danger signal, in some company, then the financial institution would insist on sending a technical team to assess what is wrong....If we have to watch the performance of 14,000 units, it would be impossible. We have to build up an enormous bureaucracy, and then we will not be able to control our own bureaucracy and we will not know what these people are doing. Then, we would be spending tax-payers' money without any useful purpose. So we have been somewhat reluctant to go into this type of thing.

- In so far as legislation is concerned, the Industrial (Development and Regulation) Act permits us to take over units which are closed. If they are sick, we have to do an investigation under the IDR Act. Only when a factory is closed for atleast three months we can take over a unit without ordering an investigation under IDR Act, but that too under certain special circumstances. But, under the present legislation, there is no power to take action before an industry has actually become sick. This is an area where we are lacking in legislation..."
- 1.11. The Committee note that the industries (Development and Regulation) Act permits the Government to take over units which remain closed for at least 3 months under special circumstances. Under the present legislation, there is no power to take action before any unit has actually fallen sick.
- 1.12. In this connection the Committee would draw the attention of Government to paragraph 2.18 of their 63rd Report (Fifth Lok Sabha) on National Textile Corporation which stated that requirement that a mill must close down and remain closed for at least three months may, in addition to loss of production and loss of revenue to the state, give rise to handicaps in the matter of subsequent working of the mill, cause unemployment and give a jolt to the economy of the unit." The Committee were informed that the Planning Commission had appointed a Committee to suggest measures to help the Government to detect a unit before it became 'sick' and that Committee have made a recommendation that "the financial institutions which come to know of the Financial difficulties of such units, should inform the Government accordingly to enable Government to do something in advance." (Para 2.19 of the 63rd Report). The Committee were also, in that context, informed that certain preventive steps were under the consideration of Government in regard to such units as show signs of incipient sickness. The Committee reiterate their recommendation made in para 2.19 ibid that the preventive measures proposed to be taken may be finalised and implemented expeditiously so to obviate the danger of units becoming sick and, therefore, having to be closed, thus creating a national loss. The Committee would like the Government to consider suitably amending the IDR Act to achieve this objective.

experts in other fields, from amongst whom the financial institutions would nominate directors on the board of the companies to whom they lend funds, to represent the interests of the financial institutions and keep a watch on the "going on" in these companies. As soon as the nominees of the financial institutions see any signs of 'sickness' in any of the companies, they will report the matter to the financial institutions concerned which will send a team to assess what is wrong. While this is a step in the right direction, the Committee stress that IDBI and the financial institutions should select the experts for the proposed team with due care and thought as to ensure that, when nominated to serve on the Board of Directors of any borrowing company, they act as true "watch-dogs" of the financial institutions in the national interest and perform their functions without fear or favour. They expect that the representatives of the IDBI and the financial institutions nominated to serve on: the Board would attend the meetings of the Board regularly and take active interest.

## D. Thakur Paper Mill, Samastipur (Bihar)

1.14. Thakur Paper Mill, Samastipur (Bihar) remained closed for about three years. The paid-up capital of the Mill was approximately Rs. 39 lakhs, and was owned by the controlling group, the Bihar Government and the public as follows:—

					Rs.	39.00 lakhs
(c) Public			•	. 1		8.00 lakhs
(b) Controlling Group	•				,	14.5 lakhs
(a) Bihar Government		•,, •, •,			•	16.5 lakhs

The Mill owed Rs. 51 lakhs inclusive of interest to the Industrial Finance Corporation and the Bihar State Financial Corporation. Both these Corporations had obtained decree from the Civil Court at Darbhanga against the Mill which was pending for auction sale by court. The Mill also had other unsecured and sundry creditors totalling Rs. 29 lakhs.

1.15. The State Government of Bihar had suggested that the Central Government may consider the take-over of Thakur Paper Mills under the provisions of the Industries (Development and Regulation) Act, 1951. In the event of doing so, suitable terms were to be given for repayment of debts incurred by the Mills to the IFC and Bihar State Financial Corporation. The Government of India asked the Hindustan Paper Corporation to examine and give their report on the question of taking-over one of their sick mills—Thakur Paper Mills at Samastipur. It was felt that the

control of the undertaking could be obtained by acquiring the snares by outright purchase. The State Government could also retain its share holding and the Mill could be run as a joint venture with the State Government.

1.16 The engineers of HPC visited the milliand studied in detail the condition of the plant, machinery and equipment as also the prospects of rehabilitating the unit and found that the plant was technically good and could be revived. In a note submitted to Government of India in March, 1974, HPC inter alia stated—

"HPC are of the view that this mill should be taken-over provided dependable arrangements for supply of sabai grass are made with the State Government.\*\*\*\*\*\*\* Perhaps the simpler way to take over the Mill by HPC would be for the Ministry to exercise its power under the Industries (Development & Regulation) Act. It is however, to be kept in view that rehabilitation of this mill would involve an expenditure of at least Rs. 30 lakhs to the Government and with proper management in a period of three years it should be possible for this mill to stand on its own and also be on the threshold of its expansion. If the mill at that stage is to be restored to the present owners, HPC, acting as an instrument of the Government, would have only done social service without gaining anything. There would also be the danger that the affairs of the mill may once again be mis-managed and all the good work done may prove to be infructuous."

1.17. In the mean time, on 5th January, 1974, at a meeting arranged at the Office of the Industrial Finance Corporation of India which was attended by representatives of State Government to consider the proposals of the various industrialists to take over the management of the company by acquiring the shareholding of the Sharma Group and to come to a suitable arrangements for repayment of the dues of the Bihar State Finance Corporation and the Industrial Finance Corporation of India two persons Shri Taval and Shri Saxena handed ever letter dated 5th January, 1974 in which it was stated that the Board of Directors of the company had been reconstituted and the Directors had decided to take all necessary steps for restarting the factory. The State Government appears to have become aware of this matter only at the said meeting. A petition was moved by the State Government of Bihar in the High Court of Patna regarding transfer of shares of the Sharma group. The High Court dismissed

the application by its judgement dated 22nd May, 1974. No appeal against the judgement appears to have been preferred to the Supreme Court. Pursuant to the High Court judgement a high level meeting was held on 30th July, 1974, under the chairmanship of MID, which was attended amongst others by the Chairman-Cum-Managing Director H.P.C., the representative of the Industrial Finance Corporation and the Industrial Development Commissioner of Government of Bihar. The Industrial Development Commissioner, Bihar, expressed that in view of the judgement of the High Court which had upheld the validity of the transfer of shares of Thakur Paper Mills by the Sharma Group Tayal Group, the Government of Bihar would have to act in pursuance of the judgement and the State Government would not favour the auction of the Mill but would recommend that negotiations should be resumed between the present management and Industrial Finance Corporation/State Finance Corporation in accordance with the decision of the High Court.

Minister of Industrial Development pointed out that the Ministry had taken up the matter at the request of the Government of Bihar who had wanted the HPC to take over the Mill. Government of India have now taken note of the judgement of the High Court and the decision of the State Government to consider having the mill restarted by the private party, MID also observed that there was no point in taking over the management of the Mill under the IDR Act for a temporary period and then handing over the mill back to the private party, after making a lot of investment.

Having regard to the above position, MID was of the opinion that it was for the Government of Bihar and the I.F.C. to decide on the future course of action to rehabilitate the Mill.

- 1.18. Asked as to why the Samastipur mill was handed over to a private party when Hindustan Paper Corporation was agreeable to take it over, the representative of the Ministry of Industry & Civil Supplies, during evidence, stated inter alia as follows:—
  - ".....The Bihar Government was a predominent owner.

    When this proposal had come this unit was deeply in debts and, under a court order, the unit was to be liquidated.
  - The Bihar Government got very worried that in the event of its liquidation, all the money that it had invested would be lost. So, the Bihar Government was not very anxious that this should be the solution. They wanted the I.F.C. to

Iend more money. The I.F.C. was reluctant to lend more Money unless there was a complete change in the management. In the meantime, the private party sold its equity shares worth Rs. 14 lakhs to another group and the other group said that they would provide the funds to start the mill. This private party also got a stay order from the Court against liquidation of the Company Then, the mill restarted working. The Bihar Government said that they were interested in seeing that the Mill was revived and run because they were interested in production and, secondly, their investment was not lost completely. When the Bihar Government categorically said that they were not interested in our taking it over, when majority owners which is the State Government did not want us to take it over, we withdrew ourselves."

1.19. The Committee note that the Hindustan Paper Corporation was asked by the Government of India to examine the question of taking over of the Thakur Paper Mills, Samastipur, which remained closed for two-three years. The Corporation's engineers visited the Mill and studied in detail the condition of the plant, machinery and equipment as also the prospects of rehabilitating the unit and found that the plant was technically good and could be revived. The Corporation was of the view that the Mill could be taken over provided dependable arrangements for supply of sabai grass are made with the State Government and the Mill could be taken over under the I.D.R. Act. The Committee, however, find that a decision was taken by the Government of India in July, 1974 that it was for the Government of Bihar and I.F.C. to decide on the future course of action of the Mill. The Committee find that the State Government ultimately decided to hand over the Mill to a private party.

1.20. The Committee feel that it is an interesting situation where the State Government was interested in handing over an undertaking in which it had a majority investment of over Rs. 24 lakhs out of total paid-up capital of Rs. 39 lakhs and which was technically sound and could be revived to a private party instead of the HPC a Public Undertaking especially when HPC was of the view that it could be taken over. The Committee recommend that the reasons why the Central Government could not take over the mill or persuade the State Government to take over the mill under the Industries (Development and Regulation) Act should be gone into and the Committee apprised of the results.

# DEMAND AND PRODUCTION OF PAPER, PAPER BOARDS AND NEWSPRINTS

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## A. Demand and Production of Paper and Paper Boards

There has been no scientific survey ever conducted of the demand in the country for different varieties of paper. However, the domestic demand for paper and paper boards during 1973-74 was at that time estimated by the Development Council for Paper Pulp and Allied Industries at 9,00,000 tonnes/year. Adding to it the export target at that time of 60,000 tonnes/year, the actual production required demand by the end of the Fourth Plan period was estimated at 9,60,000 tonnes/year.

The Fourth Plan did not lay down targets for capacity and production for the paper industry. Based on as assessment of the then situation and the progress likely to be made by the industry, the Fourth Plan merely indicated the anticipated level of production of paper and paper board at about 8,50,000 tonnes in 1973-74.

2.2. The present installed capacity of paper and paper board industry at the end of 1974 was estimated at 10.4 lakh tonnes per annum. Actual production during 1974 was about 8.35 lakhs tonnes and its break up is as follows:—

 Private Sector .
 . . . 8,25,725 tonnes

 Public Sector
 . . . 9,202 tonnes

 Mandya National Paper Mill)

2.3. By the end of Fifth Five Year Plan, it is estimated that the available capacity of paper and paper boards would be 13,50,000 tonnes. It is expected that HPC would be creating the undernoted capacity by the end of Fifth Five Year Plan:

(10) Gachar Troject	•	•	•	•	•	2,73,000 * M.T.
(iii) Nowgong Project (iv) Cachar Project		•		•		. 1,00,000 M.T.
(ii) Mandya Mills	•	•	•	•		. 40,000 M.T.
(i) Nagaland Project	•	•		•		. 33,000 M.T.

HPC would therefore be accounting for 20 per cent of the total capacity by the end of the Fifth Plan.

<sup>\*</sup>At the time factual verification, the Ministry of Industry and Civil Supplies stated as follows:—

<sup>&</sup>quot;The Nowgong and Cachar Projects are not expected to be commissioned by the end of the Fifth Plan Similarly it is not certain as to whether the expansion of Mandya National Paper Mill will come about by that time. The figure of 2,73,000 M.T. would, therefore, need to be reduced by 2.27 lakhs M. T."

- 2.4. According to corporation, during 1975, an additional capacity of the order of 1,40,000 tonnes is likely to be commissioned. A further capacity of the order of 60,000 tonnes and 80,000 tonnes is likely to be commissioned during the year 1976 and 1977 respectively. It is understood that some other schemes already approved are likely to come to fruition during the period following 1977. It, thus, seems possible that the demand of 13,30,000 tonnes by 1978-79, for which a capacity of 15,00,000 tonnes is needed would be met.
- 2.5. For formulating proposals for the development of the paper and paper board industry during the Fifth Plan period, a Task Force on paper pulp and allied industries was set up. This Task Force which estimated the demand for paper and paper board to be 13.3 lakh tonnes in 1978-79, recommended capacity and production targets of 15 lakh tonnes and 13.3 lakh tonnes respectively for 1978-79.
- 2.6. As against the above targets recommended by the Task Force, capacity and production targets of 14 lakh tonnes and 12 lakh tonnes have been indicated in the Draft Fifth Plan for the paper and paper board industry or 1978-79. The somewhat lower targets proposed by the Planning Commission have been arrived at in the light of the anticipated availability of financial resources and an assessment of the capacity that was expected to fructify during the Fifth Plan period. The targets of capacity and production envisaged in the Draft Fifth Plan do not ensure self-sufficiency in the commodity and anticipate some gaps between the demand and supply of paper and paper board by 1978-79.
- 2.7. The target of 14 lakh tonnes for capacity and 12 lakh tonnes for production during 1978-79 is based on the expected annual increase in capacity and demand during the 5 year period 1973-74 to 1978-79.
- 2.8. By the end of March 1974, an acute shortage of white printing paper was being felt throughout the country. This shortage was due to a radical change in the pattern of production brought about by the paper industry resulting in production of white printing paper, being the common variety of printing paper used by the student community in the form of exercise books, answer books and text books, reducing from 1.78 lakh tonnes in 1966 (30.4 per cent of total production) to 75,000 tonnes in 1973 (9.4 per cent of total production). With this change in the pattern of production, scarcity conditions get created for white printing paper and a substantial part of production of white printing paper started being packed and sold under various nomenclatures and names at high prices. This resulted in 1974 in wide confusion in the production and consumption patterns and paper started being sold at high

- prices. This situation was rectified by imposing controls on production under which production pattern of all the big mills was regulated making it compulsory for them to produce white printing paper and other commonly needed varieties in sufficient quantities.
- 2.9. By and large, India is self-sufficient so far as its requirements of writing, printing and ordinary varieties of packaging papers are concerned. Imports have been limited to special qualities of tissues and speciality papers and the tonnage imported was 17,000 tonnes in 1973-74 and 16,104 tonnes in 1974-75.
- 2.10. The different types of paper and paper boards imported during 1973-74 are given in Appendix I. The foreign exchange involved in import of paper during 1973-74 and 1974-75 was Rs. 10.15 crores and Rs. 13.44 crores respectively.
- 2.11. It may be mentioned that imports of paper and paper boards are restricted to only speciality papers which are either not manufactured in the country or whose production is not adequate to meet the domestic demand.
- 2.12. The requirement of different varieties of paper for the current and next plan period have been estimated as under:—

Item							
			1978-79	1983-84			
Cultural Papers:							
(i) Writing & Printing			745	1020			
Industrial Papers							
(i) Kraft			250	350			
(ii) Others			100	150			
Paper Boards			235	340			
			1330	1860			
# Newsprint			350	500			

- 2.13. While explaining the position with regard to the availability of paper in the country, the Secretary, Ministry of Industry and Civil Supplies, during evidence, stated *inter alia* as follows:—
  - "....For paper as a whole there has been shortage. That shortage has come down. Now there is a marginal shortage. We have to see in priority sector the requirements are met."
  - "In the Fifth Plan we expect that we should have self-sufficiency. In fact our imports of paper have been practically negligible except for small varieties. It is in regard

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to the newsprint our problem for self-sufficiency comes. We have been importing large quantities involving foreign exchange."

2.14. In a note submitted to the Committee, the Corporation has stated that paper industry is capital intensive and a 200-tonnes per day mill currently costs approximately Rs. 85 to Rs. 90 crores. Letters of intent have already been issued for a capacity of nearly 20,00,000 tonnes but considering the long gestation period and the heavy investments needed, it is not clear as to what percentage of this capacity would actually materialise. It would HPC would have to play a vital role in the future growth of paper industry in India. Once various units of HPC currently under implementation and planning are commissioned, a base would have been created for setting up of more mills by the Corporation. It may, however, be remembered that paper industry has a long gestation period and the first few schemes of the Corporation would. therefore, necessarily come to fruition several years after they are thought of. To save on time for future schemes, the Corporation is already investigating possible future projects and in this connection has under examination schemes for the manufacture of newsprint in North Bengal, pulp and paper in Bastar (Central India) and Tripura.

2.15. In the report prepared by the Consultant of Food and Agricultural Organisation of the United Nations on the Pulp and Paper Industries Development Programme (Phase I), it is stated that "in the light of FAO Pulp and Paper capacity and Production Survey for 1974, it has become obvious that a serious shortage of pulp and paper products is developing. It is well known among pulp and paper users that a tight supply situation already exists; however, the serious deficit between projected consumption planned new production capacity is less known. The current tight supply situation is being felt most severely in the developing countries in obtaining supplies of pulp and paper and where the production of these commodities is only a small proportion of the world production. This shortage and the simultaneous very high rise in prices is severally restricting the development and the basic need for education commerce and communication in these countries."

It is further stated in the aforesaid Report that total paper and paper board production capacity is forecasted to be sufficient to satisfy the total world requirements until 1977. After 1977 the forecasted installed paper and paper board capacity will not be sufficient to meet the forecast paper and paper board consumption

on a total world basis. Including the shortage of paper pulp capacity, the production of paper and paper board is estimated to result in a deficit in 1978 of 11 million mt. in the developed countries, 5.1 million mt. in the developing countries, or a total world deficit of paper and paper board of 16.1 million mt.

2.16. The Committee are surprised to note that no scientific survey of the demand for the different varieties of Paper was ever conducted in the country. The Committee are at a loss to understand how in the absence of scientific assessment of demand, investment decisions for expansion of capacities or setting up new capacities are taken. It has been stated that the demand for Paper and Paper Boards by the end of Fourth Five Year Plan was estimated at .96 million tonnes per year on the basis of demand estimates given by Development Council for Paper, Pulp and Allied Industries and the export targets. In regard to Fifth Five Year Plan, a task force on Paper Pulp and allied industries estimated the demand to be 1.33 million tonnes in 1978-79, based on the expected annual increase in demand. The Committee thus find that even the Fifth Plan estimates are not based on scientific method of assessment of demand for different varieties of Paper and Paper Boards. The Committee, therefore, stress that Government should without further loss of time conduct a scientific survey for different varieties of paper so as to plan the future development of paper industry on right lines and take correct investment decisions therefor.

2.17. The Committee find that for meeting the demand of paper of 1.33 million tonnes by 1978-79, the Task Force has recommended capacity and production targets of 1.5 million and 1.33 million tonnes respectively. The Planning Commission has, however, lowered the targets of capacity and production to 1.4 million and 1.2 million tonnes respectively based on the assessment of capacity likely to fructify and the constraint of resources. The Committee understand that the installed capacity at the end of 1974 was of the order of 1.04 million tonnes. Letters of intent have been issued for a capacity of 2 million tonnes during 1975, 1976 and 1977. According to corporation, additional capacities of 1,40,000 tonnes, 60,000 tonnes and 80,000 tonnes are likely to be commissioned during these years and some other schemes already approved are likely to come to fruition during the period following 1977. It may thus be possible to meet the demand of 1.33 million tonnes by 1978-79. Unless the new capacities expected to be available during 1975-1977 and after 1977 actually come to be established before 1978-79, the Committee apprehend that the targets of capacity and production may not be

fulfilled. Since Paper Industry has a long gestation period, the Committee recommend that Government should monitor the progress of the projects which are to be commissioned during these years so as to ensure that these projects actually come up and are commissioned on schedule so that the demand for paper is fully met and scarcity conditions do not develop in this essential commodity.

The Committee also find that as against the installed capacity of 1.04 million tonnes at the end of 1974 the production during 1974 has been of the order of 8,35,000 tonnes only. The Committee would like Government to go into the reasons for the production being less than the installed capacity and see that the capacities already installed are utilised to the maximum extent.

2.18. The Committee have observed from the report prepared by Consultant of the Food and Agricultural Organisation of United Nations that the production of paper and paper boards in the world is estimated to result in a deficit, in 1978, of 16.1 million metric tonnes (11 million mt. in the developed countries and 5.1 million mt. in the developing countries) which will have devastating impact on education communications and commerce in the developing countries. They feel that the world-wide shortage of paper would not only make it difficult for India to import paper from other countries to meet her requirements, as is being done at present, but that it would also make it too costly for her to import the paper thus causing heavy drain on her foreign exchange resources. The Committee are, therefore, of the opinion that in view of this it is all the more imperative for the Government/HPC that effective steps are initiated without loss of time to meet the anticipated shortage of paper and paper board in the world so as to minimise the harmful effect which the shortage of paper may otherwise have particularly on education for the people in this country.

They would suggest that the anticipated shortage of paper in the world in 1978 should in fact be viewed both as a challenge and an opportunity and no efforts should be spared to achieve self-sufficiency in this field before that date and also to enter the export markets in a big way.

2.19. The Committee learn that letters of intent have been issued for a capacity of nearly 2 million tonnes but considering the long gestation period and the heavy investment need, it is not clear as to what percentage of this capacity would materialise. They stress that HPC, which it is stated would account for only 20 per cent of the capacity by the end of the Fifth Plan period, should play a leading and more vigorous role in the growth of paper industry in the country. It should ensure that the various

projects which are under implementation are commissioned on schedule and the new projects which are under investigation are finalised expeditiously and taken up for implementation well in time to cope with the growing demand for paper in the country in the years to come.

## B. Demand and production of newsprint

- 2.20. According to the Corporation the present demand of newsprint in the country is about 2,30,000 tonnes and Newsprint and Paper Mills WEPA is the only unit in the country producing newsprint at present. The installed capacity of the factory was 30,000 tonnes per annum till recently. An expansion programme of the Mill raising the Capacity to 75,000 tonnes per annum is under implementation.
- 2.21. According to the material furnished to Committee on Public Undertakings in 1972-73 the expanded capacity of 75,000 tonnes was planned to be achieved as under:—

Year					•			Quality in tonnes
1972-73	•		•			•		45,000
1973-74							•	50,000
1974-75								6 <b>5,00</b> 0
<b>197</b> 5-76				• /				75,000

The present production is in the region of 55,000 tonnes per annum.

- 2.22. The Hindustan Paper Corporation is constructing a newsprint mill in Kerala which will produce 80,000 tonnes of newsprint from October, 1978. The country's dependence on imported newsprint will reduce to the extent of the production of the Kerala Unit. The foreign exchange involved for the import of newsprint during 1973-74 and 1974-75 was Rs. 18.48 crores and 44.99 crores respectively.
- 2.23. In a note, the Corporation stated that the demand for newsprint and HPC's production of newsprint for the next five years was estimated to be as follows:—

Year					Demand	HPC's production
1975-76		•		•	2,30,000	Nil
1976-77					3,06,000	Nil
1977-78					3,27,000	Nil
1978-79				•	3;50,000	15,000
1979-80					3,75,000	72,000

- 2.24. Against the total demand of 3,75,000 tonnes in 1979-80. Hindustan Paper Corporation would be in a position to produce only 80,000 tonnes of newsprint which roughly comes to 21 per cent of the total demand.
- 2.25. The Ministry in a written reply has, however, stated that "the present demand for newsprint in the country was earlier estimated to be 2,50,000 tonnes, but now is expected to be about 1,50,000 tonnes. For 1979-80 also the demand may not rise as much as 3,75,000 tonnes as estimated earlier". The Ministry has added that on the basis of the current year's estimated consumption of 1,50,000 tonnes, "the demand by 1979-80, keeping in view the growth rate of 7 per cent will only be 1,96,620 tonnes. However, keeping a margin for increased growth rate in consumption, perhaps a target of 2.5 lakhtonnes would be a safe target."
- 2.26. HPC is examining the feasibility of putting up further newsprint mills in the country. At present there is a proposal to put up a newsprint mill in North Bengal of the capacity of 60,000-tonnes per annum. The scheme is still under examination and will be submitted to the Government in due course. Experiments are being carried out on Korai wood of Assam. Should these experiments give satisfactory results a scheme will be drawn up for a newsprint mill in Assam. In due course, expansion of Kerala Mill also be considered.
- 2.27. The Ministry have stated in a written reply that it is the policy of the Government to give all possible encouragement to new newsprint projects so that the country becomes self-sufficient in newsprint. This item is open to large houses and import of machinery is also allowed. Government would also allow economic pricing for newsprint. However, as due to high costs, private investment in newsprint is tardy, the Hindustan Paper Corporation will have to play an increasingly important role for manufacture of newsprint.
- 2.28. It has been stated by the Ministry that a number of schemes for manufacture of newsprint are under the consideration of Government and letters of intents/licences have already been issued.

Some of these are mentioned below:-

(1) Ballarpur Industries Ltd. Himachal Pradesh	60,000	torne	s p.as
(2) Century Pulp—Uttar Pradesh .	20,000	,,	3,
(3) Ramganga Paper Mills, Uttar Pradesh	30,000	,,	,,
(4) Hargopal & Sons, Punjab	30,000	,,	,,
(5) West Bengal, IDC .	80,000	,,	33~
	2,20,000		

Excluding the West Bengal IDC Project the capacity for newsprint manufacture may according to the Ministry reach 2.3 lakhs\* tonnes by 1979.

Apart from the schemes of Ballarpur and of Century Pulp the remaining schemes are under preliminary stages of project formulation and detailed feasibility studies.

- 2.29. Indigenous production would continue to be substantially short of the requirements for the next few years. This is partly due to the lack of investment and the non-availability of conventional raw materials. Certain areas where raw materials are available present locational difficulties and lack infra-structural facilities.
- 2.30. When asked as to how long it would take the country to become self-sufficient with regard to the requirements of newsprint, the undertaking, in a written reply, stated as under:—
  - "It is difficult to predict as to when it would be possible for the country to attain self-sufficiency in production of newsprint paper. It is expected, that for the next 8/10 years, there will be shortfall in production of newsprint and the country will have to depend on import from other countries."
- 2.31. The Secretary, Ministry of Industry and Civil Supplies, during the evidence, stated inter alia as follows:—
  - "In regard to newsprint, unless the resources are made available for going ahead with more Projects, it will not be possible in the near future to have self-sufficiency. The Planning Commission has assigned one newsprint project for the public sector in Kerala with which we are going ahead. In the private sector there has not been much progress. Unless we have more projects in the public sector, I do not see that we will have self-sufficiency....

<sup>\*</sup>At the time of factual verification, the Ministry of Industry and Civil Supplies stated as under:—

<sup>&</sup>quot;Only the first phase of expansion of the National Newsprint and Paper Mills to a capacity of 75,000 tonnes per annum and the Kerala Newsprint Project of capacity of 80,000 tonnes per annum are likely—to be completed by the end of Fifth Five Year Plan. Therefore, the capacity for manufacture of newsprint would only be 1.55 lakh tonnes per annum by 1979 and not 2.3 lakh tonnes.

The progress of schemes mentioned in para 2.28 has been very slow and it is not possible to say at this stage with any degree of certainty as to when they would materialise."

- There is one project of Nepa which is expected to produce 70 to 75 thousand tonnes of this (newsprint). We have Kerala and the two together will make 1½ lakh tonnes. The total demand is expected to be something like 3 lakh tonnes. About that, there is some difference of opinion, may be demand is not 3 lakhs, but there is still very substantial shortage."
- 2.32. The Ministry in a written reply further stated that the Government at one time, considered the possibility of setting up newsprint making units in the Port-towns based on imported mechanical pulp and indigenous chemical pulp. There has been world-wide shortage of pulp during the last few years and according to the forecast made by the F.A.O. this shortage will become more pronounced by 1978. It was not, therefore, deemed advisable to set up paper making operations based on the imported pulp.
- 2.33. It was also stated by the Ministry that "generally the differential between the prices of imported pulp and newsprint is marginal, e.g. unbleached mechanical plup from Sweden is Rs. 2365 per tonne and newsprint Rs. 2490 per tonne. Thus, it would appear not prudent to have our newsprint production based on imported pulp."
- 2.34. India has resources of hard woods and it is hoped that newsprint mills would be set up utilising these resources thus eliminating to a great extent the present dependence on imports.
- 2.35. To a suggestion whether NEPA Mill which produces newsprint should not be merged with Hindustan Paper Corporation which is a bigger corporation entrusted with the responsibility of producing all qualities of paper including newsprint, the Secretary, Ministry of Industry and Civil Supplies stated inter alia as follows:—
  - "As you know, NEPA has been existing since 1948 and their own programme does not envisage going beyond 80,000 tonnes as of now. At the stage when HPC was formed the question of having one undertaking to deal with paper as well as newsprint was considered and on a balance of advantage, it was felt that inasmuch as the HPC is a new organisation which we have to build up it would not be advantageous to club the two. There was really no question of principle or policy involved. It was a question of convenience and expediency. From that point of view we took the decision that let Nepa carry on and HPC build up its own capabilities. HPC is having a major task and at this stage it would not be proper to combine the

two organisations.....We have not so far thought that it was time for us to consider this kind of merger."

2.36. The Committee note that at present against the total demand of 1,50,000 tonnes of newsprint in the country, NEPA Mill is the only working newsprint unit in the country which produces 55,000 tonnes per annum and rest of the requirement is being met by import. A sum of Rs. 18.48 crores in foreign exchange was spent on imports of newsprint in 1973-74 and Rs. 44.99 crores in 1974-75. They also note that expansion programme of NEPA Mill raising its capacity to 75,000 tonnes per annum is under implementation and according to original schedule expected to be completed by 1975-76, and the Hindustan Paper Corporation, is implementing a newsprint project in Kerala which will produce 80,000 tonnes of newsprint from October, 1978. Against the estimated demand of 2,50,000 tonnes by 1979-80 indigenous production of newsprint both from NEPA Mill and Kerala Project is expected to be around 1,50,000 tonnes only.

2.37. Government had already issued letters of intent for the manufacture of newsprint to the extent of 2,20,000 tonnes per annum to five units. Three of the five schemes are still stated to be under preliminary stages of project formulation and detailed feasibility studies. It has been stated that the progress of these schemes has been very slow and it is not possible to say at this stage with any degree of certainty as to when they would materialise. Committee stress that serious efforts should be made to ensure completion of the NEPA Expansion Project without avoidable delay and also accelerate the progress of completion of the public sector project in Kerala so that the country's dependence on imports could be reduced to the extent of newsprint production from these mills. Since it takes about six years to plan and build a paper mill, unless the projects which have been licensed, are completed and commissioned on schedule, the Committee feel that the possibility of even the present demand projections up to 1979-80 not being met is not ruled out and the gap between demand and availability might thus be widened further. The Committee would therefore like that the schemes for which the licences have been issued are monitored regularly to see that the projects come up in time and are commissioned according to schedule.

2.38. The Committee are informed that indigenous production is likely to be short of requirements in the near future partly because of lack of investment and partly due to non-availability of conventional raw materials. Certain areas where raw materials are available are reported to be presenting locational difficulties and lacking

in infrastructural facilities. The Committee recommend that Government and HPC should examine the constraints in the way of further increasing the capacities for production of newsprint and formulate a long-term plan to remove these constraints and provide infrastructural facilities in the areas where raw materials for newsprint are available. The Committee recommend that while locating the future newsprint projects, care should be taken to see that they are situated in areas where raw materials for newsprint are available and infrastructural facilities have been established.

- 2.39. The Committee also recommend that the production of newsprint in the country should be stepped up and imports in future kept to the barest minimum. They would stress that adequate care should be taken to see that newsprint produced by N.E.P.A. Mill is properly utilised and is not allowed to deteriorate as a result of stock piling etc.
- 2.40. The Committee note that NEPA Mills and Hindustan Paper Corporation are both engaged in the manufacture of newsprint. The Committee are informed that when HPC was formed, the question of having one undertaking to deal with paper and newsprint was considered and it was felt that on balance, it would not be advantageous to club the two public sector corporations. According to the Ministry, it has not so far thought that it was time to consider merger of the two organisations. The Committee feel that in the interest of better co-ordination of the two newsprint manufacturing units, Govt. should consider at the appropriate time the desirability of thaving one set-up to look after the manufacture of newsprint.

# RAW MATERIALS

3.1. The question of availability of raw materials for paper industry was discussed with the representative of the Ministry of Agriculture and Irrigation, Inspector-General of Forest. The representative of the Ministry during evidence stated *inter alia* as follows:

"As far as my information goes, bamboo is the main and important material for the production of paper. All the older paper mills were, in fact, conceived to be run on bamboo furnishing alone. This was developed in India for the first time in 1918 and 1920. These first bamboo mills (anywhere in the world) were put up in India. Later on, as the mills began to multiply, shortage of bamboo was felt. Now there is hardly much surplus capacity in the natural bamboo forests. In order to off-set that, bamboo plantations are being raised mainly in the States of Bihar, UP and to a certain extent in Karnataka. In addition to bamboo, hardwoods are also being used and certain mills are using this upto 40 per cent. Generally 40 per cent hardwood raw material goes into pulp. This is mixed with bamboo pulp. There is advance in technology. Short-fibres and hard wood with modern machinery are being used in the production of paper.

Besides wood, there are number of other products which can be used as raw material or paper. Jute sticks, kenaf, straws etc. and bagasse. There are certain difficulties with regard to these bulky products. Jute sticks are cultivated by small farmers on small lands. There are two questions involved. One is the question of finding alternative sources of fuel because the jute sticks are used as fuel material and other is the machinery for collection, for transport and storage of this material at economic cost so that it can be delivered at economic cost to the processing industry. It applies also to kenaf which is grown in Andhra Pradesh. Regarding feasibilities of all these materials for production of paper, studies have been made in the forest Research Institute. It has been established that several varieties of paper including newsprint can be made with a

certain mixture of long-fibre things like conifers, bambooetc."

- 3.2. Government of India recognising that inability to meet demand for wood products could seriously limit and impair the industrial and economic development programme of the country requested the United Nations (FAO) to initiate and investigate about the availability of wood and other raw material and their suitability for industrial purposes. The FAO in collaboration with Government of India carried out a pre-investment survey (PIS) during the period 1965-68. The purpose of this project was to investigate the economic availability of raw materials for industrial purposes in three selected areas only and to establish which industry was likely to be viable and consequently appropriate for subsequent full scale feasibility studies. The survey activities were restricted principally to Bastar in Madhya Pradesh (18,600 KM2), Jamuna catchment in Himachal Pradesh (6.500 KM<sup>2</sup>) and Central and Southern parts of Kerala (4,700 KM2). The survey report confirmed that sufficient raw materials are available in Bastar and Kerala for establishing large size paper/newsprint mills. As follow up activity of the FAO survey work, Government of India in the Pre-investment Survey of Forest resources independently carried out further survey work from 1969 onwards in Chandrapur and Bhandara Districts in Maharashtra, Khammam and East Godavari Districts in Andhra Pradesh, parts of Bihar, Jhelum and Chenab catchments in Jammu and Kashmir and some other areas. It has been established that Forest raw materials are available in economically surplus quantities for establishment of further pulp and paper mills in all three regions.
- 3.3. The Pre-Investment Survey is at present carrying out resources survey in the North Eastern part of the country where also potential sources of raw material exist. The PIS undertakes surveys as advised by the Ministry of Agriculture and fix priorities for such surveys.
- 3.4. During the evidence, the representative of the Ministry of Industry and Civil Supplies also informed the Committee that there were still certain forests areas which were entirely unexploited. In this connection, he stated *inter alia* as follows:
  - ".....Bastar area of Madhya Pradesh is one example where we have not even attempted to go so far. According to surveys which have been carried out, that area is not only capable of sustaining two or three big-sized—large-sized—bulk paper plants in the country but that area has been

found to be typically suited for the regeneration of tropical pines. Even if you start cutting the trees in the existing forests which have come up in wild state, you will very soon find these tropical pines being grown there in the course of eight to ten years' time and by the time you recycle them you will be able to get from the same area on the basis of these man-made forests so much of resources needed for the paper. Even if you start with two plants, let us say with three hundred tonnes capacity, there is a possibility that in these areas there are resources which you can make use of for this purpose if you can provide the infrastructural facilities. For example you will have to provide a new railway connection there and you have to provide coal too because the plants cannot function without coal. You will have to take various other infrastructural facilities. Then only you will, not only get paper but you will also succeed in regenerating the forests and get new sources of supply for paper manufacture. You will have to develop the areas. This requires a long term plan of action."

- 3.5. In a note submitted to the Committee, the HPC stated that with the allotment of bamboo resources for the major pulp and paper industries in the country, all resources except the areas of Central India, have been earmarked for the present and future expansion of the paper industry. Future development of the paper industry would, therefore, have to be based on the hard-woods, agricultural residues, including bagasse, and other cellulosic raw materials from man-made plantations.
  - 3.6. Long-fibred pine and spruce wood are available in the country only in a limited amount in the Himalayan ranges. The economic extraction of the long fibred wood, growing at a high altitude in comparatively inaccessible areas, has been the bottleneck in maximising the use of such woods in our country. For the manmade plantation of hard-woods, such as Eucalyptus, the fields have been identified in the country. Many States in India have started the plantation of Eucalyptus wood, which grows fast and is suitable raw-material for the pulp and paper industry.
  - 3.7. Jute sticks and rice hay are also being used by several paper mills for production of paper. Satisfactory solutions have to be

found for collection on large scale of jute sticks and rice straw and in the case of jute sticks for the subsequent storage for a period of several months. The Development Council for Paper, Pulp and Allied Industries have set up a Committee to examine this problem.

- 3.8. Bagasse is being used by paper industry for production of ordinary varieties of writing and printing paper not needing strength characteristics. Large scale utilisation of bagasse can become possible only if its availability on a long term basis is assured to the paper industry. Currently bagasse is being used as fuel by the sugar industry for its boilers.
- 3.9. In this connection the representative of HPC, Chairman-cum-Managing Director, during evidence stated as follows:
  - "I have been personally involved in the investigations on bagasse not only for the HPC, but for the entire paper industry and I want to make this general statement that no sugar mill is willing to part with its bagasse except on conditions which are very difficult for the paper industry to fulfil. For instance, all the sugar mills insist that their entire boiler must be replaced by coal-fired boilers and that the paper industry must accept the responsibility of supplying coal. In today's conditions it is not difficult to take on that responsibility because wagons of coal are available, but last year it was not possible. It is my humble submission that the first step in popularising the use of bagasse in the paper industry would be for the Government to make it obligatory on all new sugar mills to have coal-fired boilers. While granting licence it must be a condition that they must generate all their steam by coal and make available the bagasse for making paper. there are three centrally located sugar mills it will be easy for pulp mill to come up in the middle because the bagasse will be available. I have tried it on behalf of the Development Council, as the Executive Vice-President of Shree Gopal and on behalf of Ballarpur, but there has never been a settlement with the sugar mills. We invest Rs. 50 crores on a mill and we want bagasse for all time to come. Many times because of some trouble, sugarcane is not coming in enough quantities and the sugar mills say that they cannot give any bagasse for 15 or 20 days, but a bulk mill cannot remain idle so long.

- 3.10. Government of India also included in the terms of reference of the National Commission on Agriculture necessary investigations regarding the requirements, supply and investment in respect of wood based industries. The National Commission on Agriculture examined the position of requirement and supply for wood based industries by 1980 and 1990 and recommended substantial investments to bridge the gap between requirement and supply.
- 3.11. According to the Interim Report of the National Commission on Agriculture, the revised requirements of raw material by 1980 and 1990 based on estimated consumption are:

		В	7 1980					
	Conife in ooo m3	rs Broad leaved in ooom3	Total in ooom3	In ooo tonnes	Coni- fers in ocom	Broad leaved 3 000m3	in in	Total in 000 tonnes
Pulp wood	1,555	3,478	5,033		4,461	8,271	12,732	
Bamboo for Paper making	••		• •	2,199			••	1,954

- 3.12. As per the findings of National Commission on Agriculture, an additional investment of Rs. 242 crores will be required by 1980 for clear-felling forest areas and raising plantations (1 lakh hectares annually). The necessary industrial investment to absorb the fruits of the forestry sector's activities was worked out at Rs. 815 crores, of which the investment for newsprint paper was estimated at Rs. 611 crores. During the period 1981—90, further investment has been estimated at Rs. 306 crores in clear-felling plantations and Rs. 1187 crores in forest industries sector, of which the Paper industries will account for Rs. 979 crores.
- 3.13. In view of the necessity of this massive investment, the National Commission on Agriculture recommended the formation of Forest Development Corporations in almost all the important States to undertake the massive plantation programmes with the assistance of institutional finance. Forest Plantation Corporations have now been formed in some States and are in the process of being formed in others. Large plantation programmes of fast growing industrial woods are being planned to be undertaken by these Corporations.

- 3.14. In pursuance of the recommendations of National Commission on Agriculture, 18 States Union Territories have kept provisions in the Fifth Plan for establishment of Corporations, 11 States have already established Corporations. Among the States Union Territories which have made provision for establishment of Forest Corporation during Fifth Plan, Assam, Jammu and Kashmir, Orissa, Punjab, Tripura, Arunachal Pradesh, Andhra Pradesh and Andaman and Nicobar Islands have not set up Corporation during Fifth Plan. In other State Union Territories, progress is at various stages. The Government of India is continuing its efforts for establishment of Corporation in some of these States Union Territories.
- 3.15. In this connection it has been stated by the Ministry of Agriculture and Irrigation that—
  - "a provision of Rs. 10 crores has been kept in the Fifth Five Year Plan for Central participation in the equity of State Corporations. A number of Corporations have prepared project reports, some of which have been appraised by financial institutions. It is expected that finance in respect of at least two-three Corporations will flow from lending Institutions during the year 1975-76".
  - "As far as plantation for paper and pulp is concerned, provision of Rs. 17.26 crores has been made in the State Sector of Fifth Five Year Plan. In addition, 18 States Union Territories have made provision for establishment of Forest Development Corporations the main activities of most of which will be tapping of resources in hitherto untapped areas and plantation of fast growing species. The plantation activities in the State Sector and the Forest Development Corporation taken together is expected to cover 1 lakh hectares annually."
- 3.16. If the plantation programme as envisaged by the National Commission on Agriculture in their 'Report on Production Forestry—Man-Made Forests' is undertaken, then it is possible that all the future requirements of raw materials in the next two decades can be met not only for pulp and paper industry but for all wood-based industries.
- 3.17. As regards the association of Paper Industry with the schemes for raising man-made plantations, the Chairman-cum-

Managing Director of the Hindustan Paper Corporation, during evidence, stated inter alia as follows:

- "Agricultural Commission has recommended that all States should have Forests Corporations. Those Corporations have been formed by many States and they are diverting funds for raising man-made plantations. The only problem is that paper industry is not being associated with these schemes. In my humble opinion it would be advantageous if the industry was associated so that at least some part of the plantations could be made industry-oriented."
- 3.18. In the note submitted to the Committee by the Ministry of Industry and Civil Supplies, it is stated the Hindustan Paper Corporation Limited has requested the Government of Kerala and the Government of Karnataka to generally examine the possibility of assigning land for raising plantations by the HPC for the future expansion of their projects, and also requested the State Governments to inform it of the terms and conditions for the grant of such lease of land so as to enable the HPC to decide regarding its participation or otherwise in the plantation programme. So far none of the State Governments has replied to the letter of the HPC in this connection.
- 3.19. The Government of India has been encouraging the State Governments to experiment with plantations of tropical pines and Eucalyptus. The latter has been successfully planted in Kerala and the terai areas of Uttar Pradesh, and limited success has also been attained in the Madhya Pradesh. Experiments with tropical pines are yet to be made on any significant scale.
- 3.20. When asked to identify the new sources of raw materials for the anticipated requirements of paper industry, the Inspector General of Forests, during evidence, stated *inter alia* as follows:—
  - "So far as the plantation programme is concerned, 5,25,000 hectares have already been planted with pulpable species; the annual rate of planting at the moment is 50,000 hectares. It is expected to be raised to 1 lakh hectares per annum half of which will be in the plan sector and the other half will be done by State Forest Corporations. 11 States have so far set up corporations, but none has so far secured any financial assistance from ARC. Two States have gone far ahead in formulating their proposals.

An ARC appraisal report has been received and they are very advanced in the stage of beginning their operations. Central participation has also been approved and funds have been released by the Centre to finance these corporations.

- So far as wood-based industry is concerned from the conversion into plantation of the present poorly stocked forest and materials alreadygrowing in forest areas which are inaccessible, there are plenty of forest resources; there are 575,000 hectares of plantations, half of which are mature for harvest. From these sources plenty of material can be obtained right now to establish units which could start producing paper in a matter of two or three years. For example, the Kerala newsprint project which the HPC in handling is there and by the time it goes into production the eucalyptus plantation would be 17 years old. It was contemplated that it could be worked on a ten year rotation basis. Similarly in U.P. there are eucalyptus plantations started in 1962 and by the time the industry begins using that, it may be 15-17 years old. The plantations will be worked later on a sustained basis, on a rotation of 10 vears."
- 3.21. The requirement of raw materials for the present as well as future projects of HPC is as under:

# 1. Kerala Newsprint-Project

Eucalyptus . . 1,60,000 tonnes per annum

Eta Reeds . 1,29,000 tonnes per annum

After ascertaining that the above-mentioned raw material is available from the reserve forests of Kerala State, HPC has already entered into an agreement with the Kerala Government on 7th October, 1974 for sustained supply of these raw materials to the Kerala Newsprint Project from the year 1977-78.

## 2. Nagaland Pulp & Paper Project

The requirement of raw materials for Nagaland Project is as under:

The reed and grass bearing areas are within a distance of 10 Kms from the mill site at Tuli. Sufficient quantity of reeds will be available from an area of about 10 sq. miles. Nearly 63 sq. miles of forest area predominantly containing bamboos has been identified to obtain 50,000 tonnes of bamboos on a sustained basis for this Project. As the forest areas belong to village communities and villagers, Government of Nagaland is now going ahead with the outright purchase acquisition of these areas. Once the reed and bamboo bearing forest areas are acquired by the State Government these would be leased to the Nagaland Pulp and Paper Company, a subsidiary of HPC, for exploitation from year to year.

Government of Nagaland has in their latest letter assured the HPC that they will see that these areas are immediately acquired by the State Government and assigned on a long lease for extraction of bamboos and reeds for the project.

## 3. Mandya National Paper Mills Limited

At present the mills are fed entirely with bagasse obtained from sugar mills in Karnataka, Andhra Pradesh and Tamil Nadu. The mills were originally located in Belagula on the assumption that bagasse would become fully available from the nearby sugar mills in Mandya. Unfortunately the arrangements made with Mandya never operated properly. The mills have, therefore, had to obtain bagasse from out-station sugar mills in Andhra Pradesh, Maharashtra and Tamil Nadu also.

It was a condition of the take over of the Mandya Mills by HPC that the mills would be expanded, it having been recognised that without expansion Mandya would eventually have to go into liquidation. Accordingly, the State Government committed itself to make available 140,000 tonnes of bamboo from nearby areas after the bamboo regeneration in these areas stood completed.

It may be mentioned that the bamboos of the forest areas nearby the mills flowered in 1962-63. It is expected that the new crop would have matured and would be ready for harvesting by 1982-83. The State Government had committed itself to allow Mandya Mills to extract from these areas whatever quantities were currently available. The survey conducted by the Corporation revealed that 25,000 tonnes of bamboos would become available immediately and they approached the State Government to allow the Corporation to carry out this exploitation and additionally make available all the available reeds in the State and 15 to 20 thousand

tonnes of hard woods annually. While the State Government agreed to make available to Mandya 10,000 tonnes of hard woods annually and also permit it to exploit the reed forests, they did not allot Chamrajnagar and Kollegal forest divisions from which approximately 20,000 tonnes of bamboo could become available immediately. These forests were allotted to Mysore Paper Mills. In regard to the long term commitments of 140,000 tonnes after the bamboo forestes regenerate, the State Government finally decided to limit the availability to 73,000 tonnes only and not permit the mill to harvest in Kollegal and Chamrajnagar divisions which are nearer to the mill.

This has created a problem for Mandya and attempts are now being made to find out which additional quantities of bamboo and hard woods can become available from neighbouring States and on the basis thereof a limited programme of expansion of the mills will be worked out. In the meantime, the State Government has been requested to reconsider their decision and not to make any changes in the commitments made at the time of take over of the mill by the Corporation. The Ministry of Industry and Civil Supplies has also intervened in the matter.

## 4. Cachar Project

The Cachar Project is based on bamboos. The total requirement of bamboos has been worked out at 2.25 lakh tonnes. The Forest Department of Assam has carried out detailed scientific resources survey of the availability of bamboos in this division and they have worked out that approximately 2 lakh tonnes of bamboos will be available from the forests of Cachar district alone on a sustained basis.

The balance requirement of 25,000 tonnes of A.D. (air dry) raw materials required for this project is expected to be net from bomboo reserves of adjoining States/forest areas of Assam State. The availability of hardwoods from Cachar and adjoining areas has also been investigated and the Chief Conservator of Forests, Assam, has assured that in case the balance quantity of bamboos is not available, then the requirement for this project will be met by allotment of hardwoods which are available in the reserve forests adjacent to the Mills.

# 5. Nowgong Project:

This Project is exclusively based on the use of bamboos as the cellulosic raw material. The annual requirement of bamboos for

this Project has been worked out at 2.25 lakh tonnes. The availability of bamboos district-wise is as under:—

										tonnes
(a) Kamrup District (South	Kar	nrup ]	Forest	Divi	sion)	•	•		•	40,000
(b) Nowgong District	•	•		•		•		•	•	54,000
(c) Dibrugarh District	•	•	•	•	•			•		50,000
(d) Mikir Hill District	•			•		•			•	1,20,000
									•	2,64,000

- 3.22. The Forest Department has already completed the resources survey in South Kamrup Division and part of Mikir Hills District. The availability of bamboos in the two other districts viz., Nowgong and Dibrugarh, has been worked out in the respective working plans. The total availability of bamboos as mentioned in these plans is much in excess of the requirement of the mills. A draft agreement has already been prepared for execution with the Government of Assam and the District Council to ensure sustained supplies of raw materials.
- 3.23. The National Commission on Agriculture in their interim report on 'Production Forestry—Man-made Forests' submitted to the Govt. of India in August, 1972, has also mentioned that the paper industry mainly depended on Bamboo as raw material for paper pulp and newsprint industry was based on hardwood for mechanical pulp and bamboo for chemical pulp. With growing demand for newsprint and paper, it was found that unless we changed over to pulpwood because of limitation of bamboo supply, paper industry would face a serious raw material shortage. Some of the points referred to by the National Commission on Agriculture in their abovementioned report are as follows:
  - (1) Unless the paper or newsprint factory is sufficiently close to the source of pulpwood or the saw mills and process units are close to the raw material source, the cost of transporting raw material to factories will be too prohibitive to enable the foresters to benefit from the market: This is a big constraints in the way of development of man-made forests.

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(2) In the national interest the vast unexploited forests which have started deteriorating for lack of exploitation should

be utilised. The first category of these forests is the coniferous forests in Upper Himalayas where large clear-felling and plantation may not be possible because of difficulties of artificial regeneration. The second category is coniferous forests in Lower Himalayas where clear-felling and replantation with commercial varieties is possible and the third category is the unexploited mixed forests like those in Bastar, Chanda and East Godavari where because of inaccessibility of the area and its distance from the industries exploitation has almost been negligible so far.

- (3) Considering the advantages of an aggressive man-made forestry programme, the future production programme should concentrate on clearfelling of valuable mixed forests, mixed quality forests and inaccessible hardwood forests and planting these areas with suitable fast growing species yielding higher return per unit areas.
- (4) For the development of pulp and paper industries during the Fifth Plan, mainly those States which have large areas of untapped forests, must make a substantial public sector investment in these industries. For this purpose the states may have to invest between Rs. 160 crores and Rs. 340 crores in the industry programme.
- (5) There should be a rational pricing policy in future for bamboo and pulpwood which are the two main raw materials required for paper and pulp making. Paper industry should be in a position to pay higher royalty of uniformity of raw material is assured through plantations. The industry can pay still higher price, if the plantations are within a reasonable distance from the factory. It should be possible for both the forester and the factory to take a reasonable view in this matter and plan the programme of man-made forests to make it a profitable venture.
- (6) The paper and pulp industry should be treated as a priority industry in the Public Sector. There is a clear need for augmenting production to meet the demand for paper.
- (7) For sophisticated industries like paper and pulp, the States may not have large number of experts in the country

to enable each of them to have a strong Industrial Cell to support its programme. A Brains Trust of the top technical experts of such industries available in the country should therefore be formed by the Planning Cell in the Forestry Division supported, if necessary, by indigenous and foreign consultancy to help the States in the formulation of detailed project reports.

3.24. The Committee note that according to the Interim Report of National Commission on Agriculture, the requirements of pulp and bamboo are 50.33 lakhs tonnes and 21.99 lakhs tonnes respectively by 1980 and 127.32 lakhs tonnes and 19.54 lakhs tonnes respectively by 1990. It has also been stated that by 1980 additional investment of Rs. 242 crores would be required for clear-felling and raising plantations. During 1981 to 1990 further investment of Rs. 306 crores in clear-felling plantations and Rs. 1187 crores in forest industries would be required of which the paper industries alone would account for Rs. 979 crores. The Committee also note that in pursuance of the recommendations of the National Commission on Agriculture for the establishment of forest development corporation in almost all the important states, 18 states/union territories have included provision in their Fifth Plan for establishment of forest development corporation and 11 states have already set up such corporation, the main activities of most of which would be tapping of resources in hitherto untapped areas and plantation of fast growing species. A provision of Rs. 10 crores has also been kept in the Fifth Plan for central participation in the equity of the state corporations. The Committee are informed that if the plantation programme as envisaged by the Commission is undertaken then it will be possible to meet all future raw material requirements of not only the pulp and paper industry but all the wood based industries. Future paper industry would have to be based on hard woods, agricultural residues including bagasse and other cellulosic raw materials for man-made plantations.

3.25. The Committee recommend that there should be a meaning-ful coordination between Hindustan Paper Corporation and the Forest Corporations so that the latter can so arrange their programme as to meet in full the requirements of raw materials for the projects of HPC. A watch should also be kept on the working of Forest Corporations to make sure that these subserve the larger objectives of providing essential raw materials for the paper industry. The Committee need hardly stress that the location of future paper/newsprint projects should be sufficiently close to the source of raw

materials so as to reduce the cost of transportation of raw material to the minimum and thereby ensure production of paper/newsprint at economic cost.

- 3.26. The Committee are informed that though in pursuance of the recommendations of National Commission on Agriculture, forest development corporations have been formed in many states, the paper industry as such is not being associated with these schemes. The Committee would like Government to impress upon the State Governments and the forest development corporations the importance of associating the paper industry with the implementation of the programmes of forest development corporations.
- 3.27. The Committee note that the requirements of raw materials for the present as well as future projects of Hindustan Paper Corporation are 1.6 lakhs tonnes of eucalyptus and 1.29 lakhs tonnes reeds for the Kerala Project, 50,000 tonnes of reeds and 50,000 tonnes of bamboos for the Mandya Mills and 2.25 lakhs tonnes of bamboos for each of the Nowgong and Cachar Projects.
- 3.28. The Committee also note that the H.P.C. had made arrangements with the State Governments concerned for meeting the requirements of raw materials for the different projects. In the case of Kerala Projects, H.P.C. had already entered into an agreement with Kerala Government for sustained supply of raw materials. In the case of Nagaland Projects, forests areas have been identified from which it should be possible to obtain the required quantities of bamboos and reed and the Govt. of Nagaland have assured the Corporation that these areas would be acquired and assigned to the Corporation on long lease. In the case of Mandya project, the State Government has restricted the availability to about 73,000 tonnes instead of 1,40,000 and the matter is under correspondence with the State Government through the Ministry.
- 3.29. In regard to Cachar Project, it has been stated that according to the survey by Forest Department, approximately 2 lakhs tonnes of bamboos would be available from the forests of Cachar District and the balance will be met by allocation of hard-wood which will be available in the reserve forests adjacent to the mill. In Nowgong Project, a draft agreement is stated to be ready for execution with the Government of Assam and District Councils for obtaining sustained supplies of raw materials.

- 3.30. The Committee have given their recommendations in regard to availability of raw materials in the relevant chapters of the report. The Committee would like that the Corporation should ensure that their arrangements with the State Governments are finalised early so as to enable it to have an assured and continuous supply of the raw materials for their projects.
- 3.31. The Committee also find that H.P.C. has requested the Governments of Kerala and Karnataka to generally examine the possibilities of assigning land for raising plantation by Corporation for future expansion of its projects. It has been stated that neither of the State Governments has so far given its reply. The Committee feel that the Corporation should while concentrating its activities for the present on the implementation of the paper projects already in hand should take care in co-ordination with the State Forest Development Corporations that the programme of afforestation is co-related with the future demand.
- 3.32. The Committee note that according to surveys done by F.A.O. and Government of India sufficient raw materials are available in Bastar, Kerala Chanderpur and Bhandara Districts of Maharashtra, Khammam and East Godavari Districts of Andhra Pradesh parts of Bihar, -Jhelum and Chenab, catchments of Jammu and Kashmir and some other areas. Surveys are also being carried out in Eastern parts of India. It has been stated that Bastar area in Madhya Pradesh is not only capable of sustaining large sized bulk plants but also suited for regeneration of tropical pines if this area is developed and infra-structural facilities are provided. measures call for a long term plan of action. The Committee informed that with the allotment of bamboo resources for the major pulp and paper industries in the country, all resources except the areas of Central India have been earmarked for the present and future expansion of paper industry. The Committee would therefore like Government to examine the possibilty of developing the Bastar and adjoining areas which have the potential for raw material for paper industry. The Committee would like that Government should prepare a perspective plan for the development of paper industry and should also have a shelf of schemes consistent with the availability of raw materials best suited for paper/newsprint manufacture. The Committee also desire that the Corporation keep itself abreast of technological advancements made in the world for the manufacture of paper/newsprint so that they could be suitably adopted for paper manufacture in the country.

- 3.33. The Committee note that while bamboo is the main and important raw material for production of paper, because of shortages developed in the availability of bamboos, hardwoods are also being used upto 40 per cent for pulp. In addition, there are a number of other products like jute sticks, conifers straws, bagasse etc. which can be used as raw materials for paper. In regard to jute sticks, it has been stated that because these are used as fuel, the question of finding alternative sources of fuel and the problem of finding machinery for collection, transport and storage on economic cost have to be considered. The Development Council for Paper, Pulp and Allied Industries is reported to have set up a Committee to examine these problems. The Committee hope that the body set up by the Development Council will conclude its examination soon and suggest ways and means of solving the problem of collection, transportation and storage of these products in the interest of making jute sticks available to the paper industry.
- 3.34. The Committee note that bagasse is being used by industry for the production of ordinary varieties of writing and printing paper not needing strength characteristics but large scale utilisation of bagasse is possible only if its availability is assured on a long term basis to the paper industry. The Committee are informed that since bagasse is at present being used as fuel by sugar mills for their boilers, no sugar mill is willing to part with bagasse except on the condition that their boilers should be replaced by coal-fired boilers by the paper industry which should also accept the responsibility supplying coal. It has been suggested by the Corporation that in order to popularise the use of bagasse for the production of writing and printing paper, Government should make it obligatory on all the new sugar mills to have coal fired boilers and to make all the bagasse available with them to the paper industry for making paper. The Committee feel that in view of the considerable improvement in the position of coal, Government should consider the feasibility of making it a condition for the new sugar mills to be licensed to have only coalfired boilers and to release the bagasse for use by the paper industry. The Government should also consider ways and means of introducing coal-fired boilers in place of the existing (bagasse fired) boilers in the sugar mills.

# MANDYA NATIONAL PAPER MILLS, KARNATAKA

# A. Background

4.1. The Mandya National Paper Mills Limited was incorporated on 7th November, 1957 with a paid up capital of Rs. 1.26 crores. M|s. Parsons and Whittemore (USA) and M|s. Bedi and Co., Management (Pvt.) Ltd. subscribed to the share capital to the extent of Rs. 62.41 and Rs. 32.58 lakhs respectively. Ms Bedi and Co. Management (Pvt.) Ltd. were appointed as Managing Agents of the Mis. Parsons & Whittemore were partners in Bedi and Company. Company. Agreements with M/s. Parsons and Whittemore were signed on 15th November, 1958 for supply of plant and machinery and technical services. The plant, machinery and equipment were supplied at a cost of \$ 20,00,000 plus approximately £ 10,81,000/- out of which \$ 20 lakhs were paid cash down and the balance in 9 equal half-yearly instalments with interest. The deferred payments with interest were guaranteed by the IFCI for a total amount of Rs. 1,82,00,000 -. The Mandya National Paper Mills Ltd. was located at Belagula in Mysore State with the sole purpose of bagasse from Mysore Sugar Co., a Mysore State Government undertaking and an agreement was entered into between the Paper Mills and Sugar Co. on 21-9-59 for supply of bagasse. The construction of mills was started in 1959 and the factory building was completed in November, 1961 and erection of machinery by middle of 1961. The Mysore State Government agreed to give power to the company but due to delay in completion of their power generating projects all the power required for production could not be made available by the Electricity Board. The company therefore purchased a power generating set in 1966-61. The power generating plant which was commissioned in middle of November, 1962 met with an accident while the trial runs were on. The plant had to be scrapped and the mills were closed down till January, 1963. Temporary power connection at a very high tariff was sanctioned by the State Electricity Board in January, 1963, making it possible for the mills to recommence production. Power at normal tariff was sanctioned in September, 1963.

- 4.2. Arrangements made by the mills with Mysore Sugar Company Ltd., located in Mandya at a distance of 30 miles from Bengula for supply of bagasse did not yield satisfactory results. As part of the arrangements, a multi-fuel boiler was installed at the sugar mills premises jointly financed by the Sugar and Paper Mills, but because of disputes about the fuel exchange ratios of oil and coal with bagasse, the mills could not get enough bagasse to meet their full requirements. During the years 1966 to 1968, on account of drought conditions and the consequent non-availability of cane, the sugar mills had to close down. The Paper Mills, therefore, could not get any bagasse from the sugar mills from 1966 to 1968.
- 4.3. During the 4 years of its operation from 1962 to 1966, the mills ran into continuous losses. The working position of the mills during these 4 years was as follows:

Year						Prodn. (M.T.)	No. of working days	Daily produc- tion	Loss during the year before depre- ciation
			`	~					(Rs. Lakhs)
1962-63	•	•	•	•	<del>-</del> -	6,018	253	23.71	28.43
1963-64						10,114	300	33.71	12.34
1964-65			•			9,692	305	31 · 70	12.84
1965-66						6,635	231.61	28.50	<b>2</b> 8· 36
									81.97

4.4. In April, 1966, the Company faced a financial crisis and because of non-availability of bagasse found it impossible to continue its operations. During these 4 years, the subscribed capital had increased to Rs. 202.72 lakhs and the Company had got indebted in the following manner:—

(De in lakhe)

			 						_	(Ks	. III lakns)
To IFCI by virtuequipment	ie of r	ion-pa		he inst					hinery		1 <b>21</b> ·86
Canara Bank											18.75
State Bank of My	sore			•			•,				7.50
AID		,•				<u>.</u> •	•	. •	• *		117.00
Andhra Bank					•.4	È.	• .		•	•	20.09
Selling Agents	•		 	o <b>i</b> 20	•	•	, • <sub>4</sub> ,		•	: }	20.79

Besides, the Company had borrowed its requirements of working capital to the extent of Rs. 13.01 lakhs from the State Bank of Mysore. The Company also owed Rs. 24.94 lakhs towards interest. In April, 1966, a petition for winding up of the Company was filed by one of the Company's agents. The petition was contested by the Company. Ultimately, with the help of the State Government, the petitioner was persuaded to withdraw the petition. The petition was dismissed in March, 1967. The mill was re-started on 30th August, 1968, after a closure of 2½ years. There was a further increase in the cumulative losses which on 30th June, 1968 stood at Rs. 178.75 lakhs.

On re-start of the mills in 1968, supply of bagasse was arranged from not only Mysore Sugar Company, but also from the Cooperative Sugar Mills in Karnataka, Maharashtra and Tamil Nadu. The control on paper prices was lifted at the time the Mills was re-started.

4.5. During the three years 1968-69 to 1970-71, the operations of the Company were as follows:—

Year	:						Prodn. (M.T.)	No. of working days	Daily prodn. (M.T.)	Loss during the year before depre- ciation (Rs.lakhs)
1968-69	•	•	•	•			4,319	240	18	42.05
£969-70				بز	ė.	•	8,032	289	27.7	23·26
<b>1</b> 9 70-71	•			•	•		9,880	302	32. 7	22.45
										87.76

4.6. To check further deterioration in the affairs of the Company and to place it on a sound footing, the Government of Karnataka considered it advisable to entrust the management of the mills to a party equipped with expertise, know-how and finance. With a view to attract such a party to take over the Company, it was considered necessary to reconstruct its capital structure so that it becomes free of its long-term debts. Accordingly, a scheme was drawn up and submitted to the High Court providing for capital reorganisation.

- 4.7. In June, 1971. Karnataka Government accorded their approval to the take over of the management of the Mandya Mills by MIs. Ballarpur Paper and Straw Boards. MIs. Ballarpur agreed to take over from the State Government all the shares of Mandya acquired by the Government consequent upon the reconstruction of the Company's capital. Mis. Ballarpur also agreed to make available to the State Government Rs. 56.55 lakhs for settling the account of Parsons and Whittemore. The Central Government, however, did not approve of M|s. Ballarpur taking over the Management of Mandya Mills. In April, 1973, it was decided by Government of India to hand over the Mills to HPC on the same conditions as the State Government wanted to give to M|s. Ballarpur Mills. The High Court, by its order dated 19-10-1973, approved the capital reorganisation of the Company effective from 1st October, 1973. However, the management of the Company remained in the hands of its previous Board until 2-1-1974 when new Board was constituted and Chairman, HPC was appointed as Chairman of Mandya National Paper Mills Ltd.
- 4.8. The Management of Mandya National Paper Mills was de-facto taken over by Hindustan Paper Corporation on 2nd January, 1974. The capital structure of the company after reconstruction is Preference Shares—59.95 lakhs Equity shares 529.46 lakhs out of which shares to the extent of Rs. 490.12 lakhs i.e. about 92.5 per cent of equity are held by HPC.

#### **B** Production Performance

- 4.9. Although the Mandya Mills was started as and continued to be, the first paper mill in the country mainly based on bagasse the maximum that the mill achieved in the past was incorporation of 75% bagasse pulp in its furnish. Quite often, papers produced in the mill contained even as high as 30% of purchased pulp. It was clear that paper containing 30% of purchased up pulp costing Rs. 3500|- for tonne against Rs. 1400 per tonne in the past would never be a paying proposition particularly in a mill which suffers from poor operational disadvantages. Hindustan Paper Corporation; therefore, made it its first task to drastically change the furnish of the mills and reduce the dependability of the Mills on purchased pulp.
- 4.10. The paper production, utilisation of capacity and fibre furnish before and after the HPC took-over the Mill were stated to 2919 LS—4

be as follows:

Rated capacity\_10,800 tonnes

Year					Deadwatian	Comonita	%a;	ge Furnish	
rear					Production (M.T.)	Capacity utilised (%age)	Bagasse	Purchased pulp	Paper cuttings &linter
Before Take	Over	•							
1962-63					6,018	55° 7	30.0	70.0	• •
1963-64			•		10,114	93.7	45.0	55.0	
1964-65	•				9,692	89.8	66·o	34.0	
1965-66			•	•	6,635	61 • 4	75.0	25.0	
1966-67							Mill Shut_		
1967-68			•				Do.		
1968-69					4,319	40.0	68·o	32.0	
1969-70					8,032	74 4	77.0	12.0	11.0
1970-71			•		9,880	91.5	77.0	18· <b>0</b>	5.0
1971-72			.`		9,825	91	84· o	13.5	2 ' 5
1972-73					9,595	88.8	80·0	7.4	2.6
1973-74 (July	1973	to	Mar <b>c</b> h	, 197	7,760 4)	95·6	87:0	8.6	4.4
After Take	ove	r							
1974-75			•	•	9,202	85.2	88.3	6.8	4.9
1975-76 (upto	Sep	te <b>m</b> l	oer, 1	975)	6,135	113.6	99. 1	2.9	6.0

It would be seen from the statement that after the take-over of the Mill by HPC, there has been an increasing use of bagasse pulpin the fibre furnish. The average bagasse percentage during 1974-75 was over 88 per cent and during the current year 1975-76 at is 91.1%.

4.11. The target of production for the year 1974-75 was fixed at 10,650 tonnes. However, the actual production was only 9202 tonnes. The shortfall of 1448 tonnes was stated to be due to the unexpected breakdown of the boiler in July, 1974, acute power shortage, bagasse shortage and water shortage. Even during the repair of the damaged boiler, the management was able to run the Mill by working the oil fired boiler.

- 4.12. It has been stated that 1974 turned out to be very different year for the mills. On account of the drought conditions the water level of Krishnarajasagar lake (from which water was being pumped for the mills) became dry and emergency measures had to be taken to lay a pipeline from the anicut to the canal, and instal a pumping station at the anicut. This work was completed in the record time of four weeks.
- 4.13. During April and May 1974, the mill had to be shut down for nearly 30 days. The powercut of 10% during the months of January-March 1974, was increased to 30% in April to June. In July, not only was the powercut doubled to 60% but the coal-fired boiler of the mills gave in and out of 160 tubes, 130 had to be repaired and/or replaced. In August, powercut was reduced to 40% but the mill had hardly any bagasse and, therefore, had to undertake manufacture of light weight papers. In September, while there was an improvement in powercut in so far as it was fixed at 30% but the mills were without any bagasse. During October the powercut was increased to 35% and the position of bagasse suppliers remained unhappy.

In November-December, the powercut was reduced to 10% and supplies of bagasse also improved.

- 4.14. In regard to supply of bagasse, it has been stated that in Mandya, the total requirements of bagasse are not being met by the nearby sugar factories and therefore it became necessary to procure bagasse from distant places like Tamilnadu, Andhra Pradesh and Maharashtra. Annual contracts are being entered into with these mills to ensure sustained supply of bagasse throughout the year.
- 4.15. In regard to power it has bee nstated that the second-hand Turbine which was purchased in 1962 could not be commissioned due to some accident.
- 4.16. Mandya National Paper Mills has to depend on purchased power. The availability of power from Karnataka State Grid depends on the rainfall. During last year the Mill could not function to its capacity due to powercuts which ranged from 10% to 60%.

In general the policy of Hindustan Paper Corporation Limited is to generate its own power in its captive power plants. Hindustan Paper Corporation Limited has plans to install Turbo Generator set for its own power generation in the Mill.

# C. Working of Machinery

4.17. The following table gives the information in regard to the available machine hours and the idle hours with the reasons therefor.

Description		1972-73	1973-74 (9 months)	1974-75
Total available Hours	•	. 8,650	6,576	8,768
Running Hours		. 7,003	5,063	6,146
Running Hours (%)		79.9	77	70
Hours Shut		. 1,758	1,512	2,622
Shut Hours (%).		20. 1	23	30
Details of Shut Hours				
General Shut	•	500	538 216	1809·0 <b>*</b> (Fire)
Mechanical repairs		292	140	134.75
Operational Shut		. 211	171	153.25
Electricals repairs		. 50	45	24 . 25
Pulp shortage		. 58	84	244.00
Water System repairs .		. 34	16	23.5
Steam distribution break-down		19.	4 42	29.5
Air breakdown		7	7 36	5.0
Power failures		97	60	(included in item General Shut')
Machine clothing		. 197	122	198 · 75
Others		. 47	7 42	
		1,758	1,512	2,622.00

<sup>\*</sup>This includes shut down on account of Water shortage also.

<sup>4.18.</sup> During the year 1974-75, out of 8760 machine hours available, 1809 hours were lost on account of restrictions of power, shortage of water etc. 726 hours were lost as shut time (such as engineering, maintenance, power shortage, changing of paper machine clothing etc.) and 6225 hours were utilised for production.

4.19. The normal downtime for engineering and process reasons was 16% and the balance of 20% of the total hours was due to external reasons beyond the control of the Mills, like water, power and bagasse shortage. However, out of this unexpected 20% downtime about 6% was utilised for regular maintenance and wire change which in any case would have been there. Thus, the actual time lost was about 14% resulting in to a loss of production of about 2000 tonnes of paper which would in terms of sale value corresponds to an amount of Rs. 90 lakhs. This corresponds to reduction in profit of about Rs. 40 lakhs.

#### Boiler Unit

- 4.20. The Mandya Mill has two boilers one based on coal and the other based on fuel oil. Both the boilers run together can just provide steam needed for 45 tonnes per day pulp production. These boilers are inefficient and old and require huge maintenance. One of them failed during July, 1974 and was shut for 4 to 5 months for repair and overhaul.
- 4.21. During evidence, the Chairman-cum-Managing Director of HPC stated, in this connection, as follows:—
  - "It is a very old boiler which was never maintained properly. There was, perhaps, one way. The day we took over in January, we should have stopped the mill for five or six months, repaired it and then started. But we thought that that would be suicidal. So, we took the risk and unfortunately the boiler broke down in the month of August. In this also the HPC and Mandya did an excellent job. In a period of five weeks, we replaced the tubes and recommissioned it."

When asked whether the Corporation had provided for such contingencies, the representative of the Corporation stated that it would be done as part of expansion scheme.

- 4.22. Asked about the reasons for the break-down of the coalboiler and also the preventive measures taken, the HPC in a note submitted to the Committee explained as under:
  - "A team of engineers of the Corporation was sent to Mandya in early July 1974 to examine the working of the engineering division so that necessary improvements could be brought about without any delay. This team first took up

the engineering problems of the paper machine and while these were being sorted out, before the team could move over to the Boiler house, the unfortunate break-down occurred. The HPC's team, therefore, had to immediately concentrate on repairs to the boiler. This team did analyse the causes of this break-down and came to the conclusion that it was due to absence of qualified supervisors. Necessary qualified supervisors have already been appointed including an experienced Boiler-house Incharge. It may be mentioned that repairs to the boiler was done on a war-footing and while the boiler was under repair, a marine boiler was commissioned and wheels of production kept moving as much as possilbe".

4.23. In regard to preventive maintenance measures, it was stated—

"Maintenance schedules have been tightened. Chief Engineer and Senior Mechanical Engineer have been appointed. A complete equipment list has been made. A daily equipment check list is made and being followed. Equipment history cards are maintained. Lubrication schedules are drawn and operated. After gaining more experience on equipment spares, life and import substituted spares, the maintenance schedules will be updated from time to time."

## Balancing Equipments

- 4.24. When asked whether there was any unutilised capacity in the Mill, the Corporation stated in a note that as an integrated pulp and paper mill, there was no overall unutilised capacity. However, all the sections of the mill did not have matching capacity. Thus while it was possible to obtain from the paper machine 55 tonnes of paper per day, the chemical recovery section had a capacity sufficient for a daily production of 30 tonnes only. In the case of pulp mill, it was possible on a continuous basis to produce upto 40 tonnes per day. But the limitation was the chemical recovery. Attempt had been made to slightly remove some of these imbalances by addition of balancing equipments costing about Rs. 69 lakhs. The total removal of these would, however, call for replacement of some of the sections of the mill with newer sections of larger capacity.
  - 4.25. Modern chemical recovery plant comprises of an evaporator unit, soda recovery boiler and causticizer and replacing old soda

recovery unit without increasing production capacity would be very expensive proposition and can become technically and economically viable only if it forms part of an overall expansion. This would therefore be attended to as part of the expansion of the mill. However, with the addition of the balancing equipments it would be possible to maintain production of about 55 M.T. of paper per day on a sustained basis. The capacity of stock preparation section would be increased to 60 M.T. per day. In the pulp mill, the capacity is expected to go up to 45 M.T. per day with improved working efficiency.

It may be seen from the list of balancing equipments (Appendix II) machines worth Rs. 19.35 lakhs have either been received or are expected to be received shortly while for items worth Rs. 50 lakhs action is yet to be taken for issue of their orders.

4.26. The Committee note that against the annual rated capacity of 10,800 tonnes in the Mandya Mills, the actual production during 1971-72, 1972-73 and 1973-74 (9 months) was 9825, 9595 and 7760 tonnes respectively. The utilisation of capacity was accordingly 91 per cent in 1971-72, 88.8 per cent in 1972-73 and 95.6 per cent in 1973-74. After the take over of the Mill in January, 1974, the Corporation reorganised the production operations by increasing the percentage of bagasse furnish and fixed the target for the year 1974-75 at 10,650 tonnes. However, the actual production was only 9202 tonnes and utilisation of capacity was 85.2 per cent. The shortfall of 1448 tonnes is stated to be due to the break-down of boiler in July, 1974 and acute shortage of water and bagasse.

4.27. The Committee are informed that since the total requirements of bagasse were not met by the nearby sugar factories, it became necessary to procure bagasse from distant places like Tamil Nadu, Andhra Pradesh and Maharashtra and annual contracts are being entered into with mills there to ensure sustained supply of bagasse throughout the year. The Committee would like the Government to examine the arrangements and conditions for supply of bagasse by Mysore Sugar Mills and whether there has been failure or breach of contract by the Sugar Mills in supplying required quantity of bagasse to the Mandya Mills because of which they had to go in for supplies from distant places and, if so, take suitable action therefor. They also recommend that the Corporation should work out the bagasse requirements of the Mandya Mills with reference to the present capacity and future expansion, identify the nearest sources of supply of bagasse and enter into firm commitments with the suppliers on a long term basis so as to ensure that its production is not affected on account of shortage of this essential raw material.

- 4.28. The Committee are informed that one of the reasons for under-utilisation of capacity was power shortage/cuts which ranged between 10 per cent and 60 per cent during 1974-75. The mills depend for their power supply on the Karnataka State grid. In view of the fact that power situation is now comfortable in the Southern region as stated by the Deputy Minister of Energy in answer to Lok Sabha Unstarred Question No. 1330, dated the 28th January, 1976, the Committee feel that it should not be difficult for the Government/Corporation to take up successfully the question of power supply with the State authorities and enter into firm commitments with them in regard to power supply to the mills.
- 4.29. The Committee are also informed that in general, the policy of the Hindustan Paper Corporation is to generate its own power in its captive power plants and it has plans to instal turbo generator set for its own power generation in the Mandya Mills. The Committee would like that the Ministry of Industry and Civil Supplies/Corporation should, in consultation with the Ministry of Power, critically examine the need and economics of the proposed captive power plant for Mandya Mill in the context of the comfortable power position in the Karnataka State and take a final decision in the matter in the larger interest of economic and efficient working of the Mill.
- 4.30. The Committee are informed that the second hand turbine which was purchased in 1962 could not be commissioned due to some accident and since then the mill has been dependent on the purchased power. As they have already roommended the Corporation should first decide expeditiously whether or not installation of a captive power plant is absolutely essential for the mill and if it be so, the Corporation should determine in consultation with the experts whether or not the old turbine, after repairs, can be put to economic use to meet the power requirements of the Mill. In case the old turbine cannot be put to economic use, the Committee have no doubt that the Corporation/Government would take urgent action to dispose it off in the best public interest.
- 4.31. The Committee note that the shut-down hours of the Mills rose from 20 per cent in 1972-73 to 23 per cent in 1973-74 and to 30 per cent during the first full year (1974-75) of the working of the Mills under the control and management of the Corporation. The Committee find that out of 2622 shut-down hours during 1974-75, the "General Shut" which included shut-down due to power failures and water shortage accounted for 1809 hours; repairs of various equip-

ments accounted for 368 hours and machine clothing for 199 hours. The Committee are distressed to note that the shut-down of the machines during 1974-75, which was higher than that during the two preceding years, caused a shortfall of 2000 tonnes in the production of paper equivalent to sales value of Rs. 90 lakhs and a reduction in profit to the extent of Rs. 40 lakhs to the Mill. The Committee would like the Corporation to investigate the various causes for the shut down with a view to determine as to how far the causes could have been avoided by timely and preventive action and fix responsibility for the lapses if any. The Committee recommend that conclusive measures should be taken to keep the shut-down hours to the minimum and save the mill from loss in production.

- 4.32. The Committee note that a team of engineers of the Corporation was sent to Mandya in early July, 1974 to examine the working of the engineering division and it started looking into the engineering problems of the paper machine. Before it could move over to the boiler house, the boiler broke down. The team which analysed the causes of the break-down of the boiler came to the conclusion that it was due to the absence of qualified supervisors. The Committee were informed during the evidence that the boiler was old and was not maintained properly. The Committee feel that the condition of the plant/boiler should have been properly examined at the time of taking-over the mill before determining the amount to be paid.
- 4.33. The Committee feel that as the break-down of the boiler occurred within 6-7 months of the take over of the mill by the Corporation, the enquiry into the causes of the break-down should have also gone into the question of security and safety of the equipment and whether it was not due to sabotage or any other extraneous reasons. The Committee would, therefore, like the Corporation to look into this aspect of the matter, if not already done, and take adequate security measures in the interest of the safety of the plant and equipment.
- 4.34. The Committee suggest that whenever a private unit is taken over by Government, the Government/Management should immediately identify the critical items of machinery and equipment and take all possible precautions to guard the critical equipments against sabotage or careless handling.
- 4.35. The Committee are informed that qualified supervisors and senior engineers have since been appointed to look after the entire equipment; the maintenance schedules have been tightened and steps

have been taken to ensure that these are followed; and that the maintenance schedules would be up-dated from time to time. The Committee would like the Undertaking to draw a lesson from this experience and make individual engineers/supervisors responsible for the implementation of the maintenance schedules and place the review of the implementation of the maintenance schedules.

- 4.36. The Committee note that though as an integrated pulp and paper mill there was no overall unutilised capacity, all the sections of the Mandya Mills did not, however, have the matching capacity, while the paper machine has a capacity of 55 tonnes per day the chemical recovery section has a capacity for production of 30 tonnes per day and the pulp mill can produce only 40 tonnes per day. A scheme costing about Rs. 69 lakhs has been proposed for addition of balancing equipments. With the provision of these balancing equipments, the mill which was designed for a total production of 34 MT per day will be expected to produce around 50 to 55 tonnes of paper per day.
- 4.37. The Committee also note that while orders for balancing equipments to the extent of over Rs. 19 lakhs were placed in 1974 and 1975, action in regard to the balance of items is yet to be taken. Even in cases where orders have been placed, the delivery schedules in certain cases have not been adhered to by the suppliers. The Committee see no reason why all the orders for the balancing equipment could not be finalised and the entire equipment not obtained on top priority basis. They recommend that the Corporation should finalise orders in all the remaining cases without delay and ensure that supply of equipments is made according to a time-bound programme which should be adhered to strictly. They also recommend that the Corporation should not hesitate to enforce the penalty clause in the supply orders in cases where avoidable delays in adhering to the delivery schedules have occurred.
- 4.38. The Committee need hardly emphasise the urgency and importance of providing balancing equipments in the Mill to remove bottlenecks for the optimum utilisation of the available machine capacity. The Committee recommend that the Corporation should ensure that all civil and erection works are completed and the balancing equipments pressed into service without delay so that the heavy investment made to remove the imbalances starts yielding return at the earliest. The Committee would like the Corporation to ensure that the balancing equipment would be suitably integrated with the proposed expansion programme so as to ensure that the investment

being made now is not rendered infructuous after the expansion.

### D. Expansion Programme

- 4.39. A special provision for the expansion of the Mandya National Paper Mills Ltd. was made in the Tripartite agreement dated the 16th May, 1973 between the State Government, Mandya Mills and the Hindustan Paper Corporation. Under the Agreement, the Government Karnataka agreed inter alia to provide the following facilities to the Corporation:—
  - (1) Lease out to the Corporation forests areas adjacent to the mills which will give an annual yield of about 140000 tonnes of A.D. bamboos. Period of lease would be 20 years commencing after the regeneration of bamboos forests and the royalty will be same as fixed from time to time in the case of Mysore Paper Mills.
  - (2) During the period the forests so allotted were in the process of regeneration, allow the Corporation to extract such quantities as would be available on the same royalty.

It was understood that HPS were committed to expand the Mills provided State Government were able to implement the provisions contained in the Government Order.

4.40. The total production of the paper in the Mandya National Paper Mills Limited during 1974-75 was 9200 tonnes and in calender year 1974 it was 9541 tonnes. The Corporation has stated that it has all along been recognised that the sick Mills cannot survive unless and until it is expanded to a reasonable size. Accordingly, the expansion of Mandya is being planned for an ultimate production of about 40,000 tonnes of paper annually with the following spulp:

Bagasse pulp (45 M.T./day)			•		•	14,850	MT
Bamboo pulp (55 M.T./day)						17,790	,,
Rag/Linter Pulp/Waste Paper	•	•	•			3,000	,,
Filler (Soap stone etc.)	•					3,960	,,
						49,600	MT

- 4.41. The expansion of Mandya Mills would comprise of:
  - (a) Increasing the production of the existing machine to 16,500 tonnes.

- (b) Installing a new Paper Machine to produce 70 t.p.d. leading to an ultimate production of 23,100 tonnes annually.
- (c) Installing a Bamboo pulping unit having a capacity of 55 MT/day.
- (d) Installing an evaporator, soda recovery boiler and recausticizer to take care of black liquor from a pulp production of 120 t.p.d. from both the pulping streets existing as well as new.
- (e) Installing coal fired boilers to meet the total steam requirements of the existing as well as the expanded mill.
- (f) Installing a SMW Turbo Generator set to eliminate total dependence on the purchased power.
- (g) Building up of a well equipped workshop.
- (h) Installing an effluent treatment plant.
- (i) Expanding the existing rag plant to give 3000 tonnes of rag/linter pulp.
- 4.42. In order to keep the investment cost low a Second-hand Paper Machine is proposed to be installed. A Second-hand Paper Machine of suitable capacity and in good condition is expected to cost approximately Rs. 2 crores. Based on a Second-hand Paper Machine, the cost of expansion is expected to be about Rs. 32 crores excluding the price escalation during a construction period.
- 4.43. The proposed expansion of Manaya by 70 tonnes/day actually includes installation of a chemical recovery plant of a capacity of 120 tonnes/day. The expansion also includes installation of a boiler house, a power generation unit sufficient for a capacity of 120 tonnes/day. The expansion of Mandya, therefore, involves not only setting up of 70 tonnes/day additional capacity but also of certain sections having a capacity of 120 tonnes/day.

It has been stated that the cost per tonne after expansion would be lowered by Rs. 50 per tonne and that the return on equity after taxation would be 17.2 per cent.

# Raw materials for expansion

444. In regard to the availability of raw materials for the expansion programme of the Mandya Mills, the representative of the

Hindustan Paper Corporation, during the evidence stated inter alia as follows:—

- "....our agreement with the State Government provided for the bamboo forests, which can give us 1,40,000 tonnes of bamboo, being allotted to us after they regenerate. We have now spend about 18 months with the State Government to allot these forests to us, but I am sorry to inform you that, ultimately, the Government have been almost going back on their promise.....
- The State Government is now interested in Mysore Paper Mills in Bhadravati. It was a private Company, in which the State Government owned a small percentage of shares, but they decided to acquire the majority. So they have allotted these forests in Kollegal and Chamarajnagar, which are next to us, to Mysore Paper Mills and not to us."
- 4.45. From the correspondence exchanged between the Hindustan Paper Corporation and Government of Karnataka commitment made by Karnataka Government about the availability of 1,40,000 tonnes of bamboos from nearby forests for the expansion of Mandya Mills, it is observed that after the gregarious flowerareas had flowered and regeneration had not been adequate". HPC's that "it was not possible for them to fulfil it as extensive bamboo areas had flowered and regeneration had not been adequate". HP's foresters then immediately conducted independent survey of the available raw materials in the eight forest divisions close to the Mandya Mills i.a. Mysore, Kollegal, Hassan, Managlore, Chamarajnagar, Hunsure, Mercara and Coondpur and reported the availability of bamboos, reeds and hardwood to the extent of 24,500 tonnes, 95,000 tonnes and 45,000 tonnes, respectively. On the basis of quick reconnoitre made by its foresters, HPC requested the Government of Karnataka vide their letter dated the 1st October, 1974, to "allot them the adjoining forest divisions for the immediate expansion of the Mandya Mills for which necessary financial allocations in the Fifth Five Year Plan have already been secured."
- 4.46. After protracted correspondence between the HPC, Government of Karnataka and the Union Ministry of Industry and Civil Supplies, the Government of Karnataka agreed on 23-12-1974 to allot 20,000 tonnes of reeds, 5,000 tonnes of dead bamboos and 10,000 tonnes of hardwood.

4.47. On 29th April, 1975, the Chairman-cum-Managing Director of HPC attended a meeting at Bangalore convened by the Chief Minister of Karnataka State regarding the allotment of forest raw materials for the expansion of Mandya National Paper Mills. In this meeting it was decided in principle to allot to Mandya forest areas as under:—

									Tonnes
(i) Bamboos from	n Kollegal,	Chamarajna	agar and N	<b>Ay</b> soi	re divi	sions			20,000
(ii) Bamboos from	m Mercara	Division	•		•		•		6,000
(iii) Reeds	•	•	•	•			•		15,000
(iv) Hardwoods		•	•		•	•			10,000
						То	TAL	٠ _	51,000

However, the formula order of Karnataka Government for assigning the aforesaid raw materials was not issued till May, 1975. HPC reminded the State Government in this regard on the 26th May, 1975. In the meantime, the Government of Karnataka decided to allot Chamarajnagar and Kollegal Divisions which are adjacent to Mandya Mills to Mysore Paper Mills located in Bhadravati. Mysore Paper Mills had also been allotted all the forest divisions in Shimoga circle in Coondapur Division. HPC then took up the matter with the State Government and in their letter dated the 6th August, 1975pointed out to them that "the latest decision of the State Government was not in keeping with their commitment to HPC and Mandya and if implemented would result in the expansion plans of Mandya having to be shelved for the next 6-7 years". The position in regard to the availability of raw materials for expansion of Mandya Mills was again brought to the notice of Government of Karnataka in HPC's letter dated the 28th August, 1975 (See Appendix III). was emphasised that the allotment made to HPC from the forestsdivisions of Hunsur, Hassan, Mercara, Mangalore and Mysore for the extraction of 73,000 tonnes of bamboos which was only for 5 years and not permitting the extraction of 28,000 tonnes of bamboos from Chamarajnagar and Kollegal was not in conformity with the agreement executed with HPC and it would not thus be possible to go ahead with the expansion programme. It was also mentioned that unless expansion of Mandya Mills was done immediately it would not be able to survive in its present uneconomic and small capacity. The Government of Karnataka was therefore requested to reconsider their decision and assign the bamboo areas on a long term basis.

- 4.48. In a note submitted to the Committee on the 20th October, 1975, the Ministry of Industry & Civil Supplies stated that "the Government of Karnataka had finally agreed to make available 25,000 tonnes of bamboos, 20,000 tonnes of reeds and 10,000 tonnes of hardwood, in the interim period till regeneration of bamboo was completed in 1982. On the basis of the above availability of forest raw materials in the interim period, the HPC is preparing a scheme for immediate expansion of Mandya. This scheme is likely to be sent to the Government for further consideration in the near furture"
- 4.49. The Committee note that a scheme for expansion of the Mandya Mills costing about Rs. 32 crores was drawn up by the Corporation as it was recognised that the sick mills cannot survive unless it is expanded to an economic and reasonable size. The Committee also note that a special provision was made for the expansion of the Mills in the Tripartite Agreement dated the 16th May, 1973, signed by the State Government of Karnataka, National Paper Mills and the Hindustan Paper Corporation under which the State Government of Karnataka had agreed to make available eight forest areas adjacent to the mills which were expected to yield about 1.40,000 tonnes of air-dry bamboos for a period of 20 years commencing after regeneration of bamboo forests and during the period of process of regeneration, the Corporation was to be allowed to extract such quantities as would be available. Committee are informed that subsequently the situation had changed as the Government of Karnataka had taken control over the Mysore Paper Mills and had decided that both Mandya and Mysore Paper Mills should be expanded to an economic capacity.
- 4.50. They also learn that after the gregarious flowering of bamboos in 1974 the Government of Karnataka informed the Corporation that it was not possible for them to fulfil their earlier commitment to allot 1,40,000 tonnes of bamboos per annum on regeneration as extensive bamboo areas had flowered and regeneration had not been adequate. After protracted correspondence with the State Government by the Corporation as also by the Central Government at the highest level, the Government of Karnataka have now agreed to allocate five such forest areas to the Mandya Mills as on regeneration would yield 73,000 tonnes of bamboos that too only for a period of 5 years. As the regeneration is expected only, in about 1982, the Government of Karnataka have also agreed to make available 25,000 tonnes of bamboos, 20,000 tonnes of reeds and 10,000 tonnes of hardwoods in the interim period. The Committee are informed that on the basis of the availability of forest raw materials in the interim

period, the Corporation is preparing a scheme for immediate expansion of Mandya Mill which will then be sent to the Government of India for consideration and approval. The Committee feel that the expansion plan should be such as to raise the capacity of the mill to an economic and viable size and it should be possible to persuade the State Government to agree to supply the forest raw materials on a long term basis for the expansion of the mill to an economic size.

- 4.51. The Committee feel that in view of the past experience of the Corporation/Government with the Government of Karnataka who have once gone back on their commitment made in 1973 in this regard, it would be advisable to make sure that the new commitment made by the State Government to allot forest areas of bambros on regeneration and bamboos, reed and hardwoods in the interim period is irrevocable before any expansion plan is implemented.
- 4.52. The Committee feel that the five year period for the duration of lease as agreed to by the State Government is not adequate in view of the heavy investment which the Corporation would be making on the expansion programme. They recommend that the Government/Corporation should have the duration of lease extended to a period of 20 years as originally envisaged.
- 4.53. The Committee also recommend that Government/Corporation should carefully examine the financial viability of the new expansion scheme on the basis of current availability of raw materials before its sanction and implementation.

### E. Purchase of second-hand machinery

- 4.54. In connection with the expansion of the capacity of Mandya Paper Mill, the HPC is considering purchase of second-hand paper machine from abroad.
- 4.55. In a note submitted to the Committee it has been stated that the cost of purchasing second-hand machinery would be approximately Rs. 2 crores at site, inclusive of renovation charges. It would be difficult to say as to from which country it would be possible to purchase second-hand machinery. However, the Corporation had offers of such machines from Switzerland and Sweden. Since the cost of the old paper machine would be much less as compared to the new one and as the life of both the machines is

expected to be more or less the same, after old machine is renovated, according to the Corporation the cost of production per tonne would be reduced by approximately Rs. 150/- as calculated below and the Corporation would be saving about Rs. 32 lakhs per year.

	New Machinery	Old Machinery
Cost	Rs. 6 crores	Rs. 2 crores
Life (After renovation of the old machine)	20 years	20 years
Repairs & Maintenance	Rs. 30 lakbs	Rs. 36 lakhs
Down-time		5 days more than new machine per year.
Loss of production in case of second-hand machine		300 tonnes per
Loss of Profit		Rs. 6 lakhs
Extra repairs & maintenance		Rs. 6 lakhs
Total excess expenditure and loss (in case of ol machine)	d	Rs. 12 lakhs
Excess depreciation on new mahinery	Rs. 20 lakhs	••
Interest charges on the average excess capital employed i.s. 1/2 of Rs. 4 crores @ 12%	Rs. 24 lakhs	
Total excess expenditure on new machine	Rs. 44 lakhs	
Net saving per year (Rs. 44 lakhs minus Rs. 12 lakhs)	Rs. 32 lakhs	

4.56. When asked as to whether the purchase of the second-hand machinery from abroad would be economical in long run in view of the rapid changing technology in the world, the Hindustan Paper Corporation in a note submitted to the Committee stated that:—

"The basic machine to manufacture paper is almost the same. Only when short fibre furnish like bagasse is used depending on the wet web strength, speed of machine and type of suitable closed nip press is selected. However, in case of expansion of Mandya the raw material to be utilised will be only reed and bamboo instead of bagasse.

The rapid change of technology in the world is mostly for high speed larger sized machines and pulping technology. In Mandya we have a limitation in raw-material for which such a machine cannot be installed. Attempt is being made to make Mandya completely comparable to other units in India by increasing the production capacity, improve the profitability with minimum capital investment. Moreover, we have in mind to install a second hand machine of not very old model or which have been rebuilt and renovated with modern features".

- 4.57. Asked whether such machinery could not be obtained through indigenouls manufacturers, the HPC stated that a number of small paper machines were available for sale in countries in Western Europe at a very cheap price as in Western Europe many of the small mills had closed down in view of the stringent regulations of effluent disposal and higher cost of production of smaller capacity machines. Hindustan Paper Corporation Limited had surveyed a number of such offers and found that a second-hand paper machine of about 60 TPD would cost around Rs. 2.00 crores, while a new paper machine of same capacity from a reputable supplier like Jessops ('Beloit') or Utmal ('Voith') etc., would cost around 6 crores.
- 4.58. All offers of second-hand machines are subject to prior sale. If such a machine could be obtained, it must be certified by independent assessors as being in proper shape and having sufficient balance life. The intention of Hindustan Paper Corporation Limited in going for a proposal for a second-hand paper machine was to reduce the total project cost for the proposed expansion.
- 4.59. It was also added that from time to time, second-hand paper mill plant, machinery and equipment were offered by foreign brokers and middlemen because:—
  - The paper mills where such plant was installed find it economically advantageous to replace it by new plant; or
  - The paper mills decided to launch a major programme of expansion and in the process decided to get rid of paper machine and other equipment of similar capacities; or

3. For one reason or the other the paper mills had to close down and wanted to get rid of their assets.

The prices demanded for second-hand plant could be between 10 to 40 per cent of new plant of corresponding size. Using second-hand plant, therefore, provided to the entrepreneur the advantage of cutting down on his capital investments.

- 4.60. Second-hand plant is invariably offered on "as is where is" condition. It is not unusual that the plant offered is incomplete, substantial parts of it are nothing more than scrap and even if reconditioned its residual life is debitable. On the other hand, it is also possible to pick up paper machines and other equipment which have just run for 8 to 10 years and have a residual life of 30 to 40 years or more at less than half the price of a new equipment.
- 4.61. Asked as to what steps have been taken to ensure that incomplete and obsolete paper machinery are not imported in the country the Ministry of Industry and Civil Supplies stated that:
  - "One of the conditions stipulated while permitting import of second hand plant is that the equipment should have a certified residual life of at least ten years and a certificate from a Chartered Engineer of a firm of Appraisers is required. Further, in the case of imports through financial institutions, the latter will also satisfy themselves that the machinery is in good order. The cost of second hand paper machines is not to exceed the cost of the imported components required for the manufacture of an indigenous paper machine of the same capacity. Therefore, the cost of the plant is likely to be substantially lower than the cost of new indigenous plant. Due to this factor the total investment required would be comparatively much lower and the projects are expected to work economically, provided that the second hand equipment is in working order and has a reasonable residual life. Government have also imposed a penalty of Rs. 30,000 per month for every month for which the commissioning of the plant is delayed after a period of 24 months from the date of issue of the import licence within which period the plant is expected to be imported, erected and commissioned. This would also act as a deterrent to importing obsolete paper machinery."

- 4.62. When asked about the utilisation of capacity in paper-machinery manufacturing industries, the Hindustan Paper Corporation in written replies stated that "only 25 per cent of the existing manufacturing capacity within the country is being utilised" and "the indigenous machinery manufacturers complain that they are starving for orders."
- 4.63. In this connection, the Ministry of Industry and Civil Supplies in a note submitted to the Committee stated inter alia as follows:—
  - "Paper machinery industry in the country is capable of produring small size plants, medium size plants and large size plants of capacity ranging from 20 tonnes to 150/200 tonnes per day. Certain miscellaneous items of paper machinery such as fourdrinier wire cloth, brown stock washers, dandy rolls etc. are also being produced.

The draft Fifth Five Year Plan had laid down a target for capacity and production of Rs. 4500 lakhs and Rs. 3600 lakhs respectively to be achieved by 1978-79 which was reassessed to Rs. 3500 lakhs and Rs. 3000 lakhs. The capacity licensed in items of numbers of plants has risen from December, 1971 to December, 1975 from 35 plants of various sizes to 50 plants, as shown below:—

					Страс	ity licenced
				As i	n :. <b>19</b> 71	As in Dec. 1975
(a) Upto 50 TPD	•	•		. 🔻	341	4112
(b) 50—100 TPD					Nil	I
(c) 100 TPD above				•	1	8
			TOTAL		351	50½

The installed capacity as in December, 1975 has been assessed at Rs. 3570 lakhs at current prices, against which a production of Rs. 2000 lakhs approx. Is expected during 1975. The capacity utilisation, thus is around 50—55 per cent. The capacity utilisation in the industry in the past has been rather low on account of lack of orders or improper flow of orders. The existing capacity is, however, considered sufficient to meet the demand.

In view of indigenous capacity in the industry Government was not allowing imports of paper making plants. The indigenous manufacturers had also given an assurance to Government that their prices will favourably compare with the landed cost of equipment if imported from abroad. In December, 1974, however to obviate the shortage of paper, a decision was taken to permit import of second-hand paper plants upto a capacity of 30 tonnes per day, subject to certain conditions. The intending importers were expected to commission the plants by a particular time, failing which they were liable to penalties. This facility of import of second hand plants was valid upto 31-12-1975."

4.64. The Committee note that the Hindustan Paper Corporation proposes to procure a second hand paper machine from abroad to reduce the project cost of the proposed expansion of the Mandya Mill. They are informed that a second hand paper machine of about 60 TPD would cost around Rs. 2 crores while a new paped machine of the same capacity would cost around Rs. 6 crores and the installation of second hand machine would enable the Corporation to gain roubly Rs. 32 lakhs per annum of reduction in the cost of production @ Rs. 150 per tonne. The Committee do not see the rationale behind the assumption of 20 years as the expected life of a new machine as well as the old machine for purpose of comparative calculation of cost of production. In view of this, the Committee feel doubtful as to how far the claim of the Corporation that the old machine, as compared to the new machine, would yield a gain of Rs. 32 lakhs a year on cost of production @ Rs. 150 per tonne could be sustained.

4.65. The Committee note that the paper machinery industry in the country is capable of producing small size, medium size and large size plants of capacity ranging from 20 tonnes to 150/200 tonnes per day and its capacity utilisation during 1975 has been around 50—55 per cent. The Committee also note that while on the one hand the capacity utilisation in the industry has been rather low on account of lack of orders or improper flow of orders, on the other hand, the Corporation is thinking of importing second hand paper plant to keep the project cost low. As stated by the Corporation itself, the possibility of second-hand machinery imported from abroad turning out to be incomplete and its substantial parts being nothing more than scrap is also not ruled out. The Committee would like that the Government should critically go into the economics and advisability of importing second hand machinery from abroad consistent with their policy of encouraging use of indigenous machinery taking into

account all the relevant factors and take a decision in the larger and long term interest of the nation and the paper industry. They need hardly stress that when indigenous capacity to manufacture paper machinery is available in adequate measure, maximum amount of machinery should be obtained from indigenous sources.

# F. Pricing and Distribution of Paper

4.66. The Corporation has stated that estimates of costs of production are made based on norms, which were worked out on the past performance and the future potentiality of the Mill. According to the cost estimate prepared for 1975-76, the total cost of production including sales expenses was expected to be Rs. 3636 per tonne. The actual cost of production during the period from 1st April to 31st August, 1975 was however, Rs. 3609 only. It has been stated that although authentic data about the cost of production in the private sector is not available, it is estimated that the variable costs of Mandya Mills compare favourably with those in private sector. Mandya Mills being a small mill, it cannot, however, take advantage of the economies of large scale production.

4.67. Break-up of cost of Production of Mandya National Paper Mills Limited:

Year	19 <b>72</b> -	• -	1973- (9 m 776	onths)	1974-75 9202		
	Total cost (Rs. Lakhs)	Cost per tonne	Total cost (Rs. Lakhs)	Cost per tonne (Rs.)	Total cost (Rs. Lakhs	Cost per tonne ) (Rs.)	
1. Raw material arg other manufactur- ing expenses.		1608	119.63	1541	210.56	2288	
2. Employees' remu- neration	42 <sup>.</sup> 35	441	37.72	486	6 <b>4•Q</b> ၁	696	
3. Repairs and main- tenance	<b>6·6</b> 9	70	9· <b>7</b> 6	126	15.85	172	
4. Interest and other financial charges	r 45·60	475	17.61	227	8. 19	89	
5. Administrative ex penses.	- 9· <b>6</b> 5	101	8·29	107	11.16	121	
6. Selling and dis- tribution expenses		238	18.66	240	13•46	146	
7. Depreciation	. 21.15	220	16.23	209	21.73	23	
TOTAL .	302.67	315	3 227.90	2936	344.95	3748	

#### **EXPLANATIONS:**

#### Raw Material

- 1. Due to unprecedented increase in prices, the cost increased to Rs. 2,288 per tonne in 1974-75. The average cost of bagasse at Mills increased from Rs. 80/- per tonne in 1972-73 and 1973-74 to Rs. 115/- in 1974-75.
- 2. Employees remunerations:—D.A. & Allowances of the workers and staff were raised to bring their emoluments at par with the neighbouring industries.
- Repairs and maintenance:—Mill was suffering for want of maintenance from its very beginning, and the maintenance has started after HPC has taken over. The maintenance cost has, therefore, increased.
- 4. Administrative expenses:—Increased due to general rise in prices.
- 4.68. Asked about the step $_{\rm S}$  taken to effect reduction in the cost of production the Corporation stated that:
  - 1. Use of bamboo purchased pulp has been minimised and the bagasse pulp is being used to the extent of 87 to 90 per cent as against 80 per cent used in 1972-73.
  - 2. Higher percentage of loadings (Fillers) are used after the take-over. The percentage of Filler are now about 10 percent as against 5-6 per cent before take over.
  - Efforts are being made to improve production with the help of balancing equipment and better maintenance of plant and equipment. This will also reduce the cost per tonne as we expect a production of about 12600 tonnes during 1975-76.
  - 4. The interest burden on the cost of production is also being reduced by utilising the funds internally generated.

# Pricing Policy

4.69. Government lifted control on the selling price of all varieties of paper w.e.f. 1968. The prices of paper registered steady increase between 1968 and 1973. There were also complaints that substantial "on money" was being charged by the paper traders. In December, 1973 there was a series of meetings between the representatives of the

industry and the Government as a result of which the industry was persuaded to make available white printing paper for the educational sector at a concessional price of Rs. 2750 per tonne. Accordingly, the industry is making available 2 lakhs tonnes of white priting paper for meeting the requirements of the educational sector and for Government requirements at the price of Rs. 2750 per tonne.

- 4.70. With the enforcement of the Paper (Control of Production) order in August, 1974, Government imposed an obligation on the Paper Industry to produce white printing paper to the extent of at least 30 per cent of its production. As a result of this supply of white printing paper has improved appreciably.
- 4.71. In so far Mandya Mills are concerned the enforcement of the Paper (Control of Production) Order has resulted in abundant supply of white printing paper the Mill is finding it difficult to clear the stock. Sometimes the stocks accumulate to the extent of 300 to 400 tonnes. Whenever stocks increase abnormally the matter is taken up with the Ministry and through their good office efforts are made to get the stocks lifted.
- 4.72. With a view to ensuring equitable distribution of white printing paper for educational purposes, a National Coordination Committee with sub-committees in all the States has been constituted. The National Coordination Committee allots to the various sub-committees, who in turn allot the paper to the various consumers in their respective States. With the streamlining of the production of white printing paper after the issuance of the Paper (Control and Distribution) Order and the constitution of the National Coordination Committee for distribution, requirements of white printing paper are being met equitably at a reasonable price.
- 4.73. The white printing paper produced by the Mandya Mills is also being distributed at the concessional price of Rs. 2750/- per tonne as per the Production Control Order. The cost of production of this type of paper is Rs. 3205 per tonne and the loss the mill is suffering on the production and the sale of this type of paper is about Rs. 478 per tonne.
- 4.74 HPC are trying their best to reduce the cost of production of this quality of paper by using a higher percentage of filler and reducing the chemical consumption to the extent that the quality of paper remains within the I.S.I. specification as required by the Government of India.

- 4.75. As regards the marketing operations, the Chairman-cum-Managing Director of the Corporation, during the evidence, stated inter alia as follows:—
  - "When we took over .... I knew a bit about the Mandya. We had the following important aspects to deal with. The marketing operations of the Corporation were not desireable. In fact, a lot of money which should have gone into the balance-sheet of the Corporation was going elsewhere .... I would factually say that the prices which Mandya was charging for its production while marketing it were much lower than the prices which were available in the market...
  - I was talking about the problems which HPC were facing when they took over Mandya and the type of priorities the HPC had to assign in dealing with these problems. It was impossible to handle all the....
  - I was pointing out that the first problem was that Mandya pricing was lower than what Mandya could get in the market. How was Mandya doing it? Mandya had three or four sales representatives through whom the entire production was being sold at prices which were low so far as the books of the company were concerned. Yet, anywhere in the open market, Mandya paper was selling at the same price as of any other mill paper.
  - The paper prices were revised by the paper industry in 1973 twice, on two occasions. The total increase was by about Rs. 1250 per tonne. Mandya had not then come into the hands of HPC. But what we did and I am not feeling ashamed about it is this. When we took it over, the first thing that we did was that we got rid of these middlemen. We refused to have anything to do with them. The second thing we did was to get in touch with our consumers direct so that the supplies went from us direct to the consumers. The third thing that we did was that we put up our prices in keeping with the market level."
  - 4.76. In a written reply, the Corporation stated that immediately after the management was taken over by the HPC, the agreements with the middlemen which were only upto 31st December, 1973 were not extended.

- 4.77. HPC started playing a role in shaping new techniques in the marketing of paper and started making sales direct to bulk consumers. This resulted in consumers receiving during periods of acute shortage supplies of paper at mill rates without having to pay any 'on money' or premiums.
- 4.78. A marketing organisation is also being built up based on the principle of direct dealings with consumers and for this purpose it is proposed to set up depots to meet the requirements of smaller consumers who are not able to purchase in wagon loads.
- 4.79. The Committee note that the cost per tonne of paper produced by Mandya Mill has gone up from Rs. 2936 per tonne in 1973-74 (9 months) to Rs. 3748 per tonne in 1974-75. The increase in cost is stated to be due to increase in prices of raw material, rise in dearness allowance of the staff and workers, increased maintenance expenditure and higher administrative expenses due to general rise in prices. The Committee, however, find that the cost of production includes an element of selling and distribution expenses. They are unable to appreciate the rationale of allocating selling and distribution expenses to cost of production as such expenses do not constitute even indirect overheads on production. They would recommend that the Bureau of Public Enterprises should issue standing guidelines as regards the items which should be taken into account while calculating the cost of production.

They are informed that certain steps like increased use bagasse and loading (fillers), provision of balancing have been taken to reduce the cost of production. While the cost of production during 1975-76 was estimated at Rs. 3636 per tonne, the actual cost during the first five months of the year was only Rs. 3606. The Committee expect that with the steps now taken and provision of balancing equipment and keeping strict and effective control on over-heads, it should be possible to utilise the full capacity in the mill and reduce cost of production. The Committee also recommend that the Corporation should review the norms so far obtaining in the various elements of production and revise them suitably on the basis of improvements in techniques and with reference to addition balancing equipment and work out standard costs of production for purposes of cost controls. The Committee recommend that the cost data and analysis of the variances from the standards together with a report on remedial measures taken should be placed as a regular item on the agenda for the Board's meeting so as to enable the Board to review all aspects of the matter from time to time.

- 4.80. The Committee note that while the cost of production of white printing paper in Mandya Mills is Rs. 3205 per tonne, under the orders of the Government it is required to be sold at a controlled price of Rs. 2750 per tonne, with the result that there is a gap of Rs. 478 per tonne between the cost of production and the selling price. The Committee are informed that the Corporation is trying to reduce the cost of production by using higher percentage of filler and reducing the chemical consumption to the extent that the quality of paper is within ISI specifications. The Committee would like the Corporation not to spare any efforts to bring about reduction in the cost of production of white printing papers consistent with the quality specifications so as to be within the standard level and avoid loss on this account.
- 4.81. The Committee note that before take over of the Mandya Mill by the Corporation, the prices at which the sales representatives used to sell paper were much lower than the prices which were prevailing in the market and the money which the Mill could have earned on selling the paper at market price was going elsewhere. After take-over, the Corporation got rid of the middle men and started making sales direct to bulk consumers. The Corporation also put up the prices of its paper in keeping with the market level. The Committee are informed that the Corporation is building up a marketing organisation based on the principles of direct dealing with the consumers and for this purpose it is proposed to set up depots to meet the requirements of smaller consumers who are not able to purchase wagon loads.
- 4.82. While the Committee are happy at the reorganisation of the marketing system by the Corporation after the take over of Mandya Mill, they feel that in the field of paper where demand is much more than the supplies, it should not be necessary to have a very large marketing set up. They would, therefore, like the Corporation to keep this aspect in mind while determining the size of the marketing set-up, and ensure that the marketing expenses are kept to the minimum.

<sup>4.82.</sup> The Committee find that the Corporation is setting up depots to meet the requirements of smaller consumers. They would like the working of depots to be kept under constant and continuous review and necessary improvements made in the light of the experience gained to ensure that paper is available easily to all the smaller consumers at a reasonable price.

They recommend that the marketing expenses vis-a-vis sales turnover and the working results of the depots should be reviewed from time to time and the report of the review should be placed before the Board periodically to enable it to advise remedial measures to bring the marketing expenses down whenever they happen to go up beyond a reasonable limit.

4.83. The Committee would suggest that, after a unit is taken over by Government, Government/Management should take that opportunity to explore the possibility of evolving a wage system with built-in incentives in which the accent should be on productivity.

The Committee further suggest that immediately after take over, the Management should also review the sales and purchase procedures of the private units to make sure that there is no surreptitious margin built into these procedures so that these do not operate to the detriment of the public sector.

## G. Shortage of Coal—Difference in Book Balance and Physical Balance

4.84. The stock verification reports for the years 1973-74 and 1974-75 indicated the following shortages:

Year								Quantity (in M.T.)	Rate (p.r tonne	Amount )
									Rs.	Rs.
1973-74	•			 			•	800.489	127.85	102,343
1974-75	•	•	•	•	•	•	•	987 .050	150.00	157,928

The shortage represents difference between the quantity received as per Railway Receipts and the physical verified stock arrived at on Volume-weight basis.

4.35. In a note submitted to the Committee, the Hindustan Paper Corporation has stated that the "coal at the mills is received in closed and open wagons and at the time of despatch from different mines in Bengal, Bihar and Singareni, weighment is recorded by the railway authorities in the presence of a representative of the coal mines authority. On the way there are supervisors at the two points where transhipment is done so as to ensure smooth transhipment. On receipt at the railway siding of the mills, it is ensured

rectly according to the loading advice. There is of course no weigh bridge at our siding but correct receipt of coal is ensured through visual inspection of the levels which at least ensures an approximate check. After unloading and stacking in the coal yard, the coal is fed to the boiler. A record of the approximate weight of coal fed is kept through the number of grabs lifted from the feeding pit. The consumption recorded is based on the number of grabs fed as cross checked through theoretical consumption of coal in the boiler. At the year end, the physical balance available in the mill is counterchecked with the book balance. The difference between the two occur because of the following factors:—

- (1) The weight of incoming coal is recorded in bulk weighment of wagons whereas consumption and issues is based on piece-mal issues through grabs at standard weight. This difference in weighment mode is bound to cause some difference.
- (2) Before being fed to the boiler, coal is handled at several points within the mill premises. It is initially unloaded at the railway siding and is then carried through trucks to the coal yard where it is stacked. From the stacks it is carried to the feeding pit after screening and is finally fed from the feeding pit to the boiler.
- (3) Some losses during transit do take place during railway journeys."

4.86. It has been stated that the difference in two years is 7.5 per cent for 1973-74 and 6.8 per cent for 1974-75. This difference is considered to be normal looking to the factors stated above. Enquiries were also made from few other neighbouring mills about the losses of this nature. West Coast Mills have reported that their shortages are of the order of about 18 to 19 per cent. Bhadravati Mills have their own weigh bridge; but even apart from the railway transit losses, handling loss within the mill itself is 5 per cent. Thus, the percentage of difference in Mandya mills seems reasonable as compared to other mills.

4.87. The Committee note that stock verifications done during the years 1973-74 and 1974-75 indicated shortages of coal to the extent of 800 tonnes (of the value of Rs. 1.02 lakhs) and 987 tonnes (of the value of Rs. 1.58 lakhs) respectively. The Corporation stated that the consignments were received correctly at the Railway siding, but, since

there was no weigh-bridge at the siding of the mill, correct receipt of the coal was ensured through visual inspection only. The difference between the coal received and the coal used by the mills added to the coal left in stocks might in the opinion of the Corporation, also be due to the handling of the coal within the mills and inability of the workers to keep exact record of consumption due to the very nature of operations. The Committee are informed that the shortages of coal in the Mandya Mill were of the order of 7.5 per cent in 1973-74 and 6.8 per cent in 1974-75 which are considered "normal" by the Corporation in comparison with West Coast Mills (where shortage is stated to be of the order of 18-19 per cent) and Bhadravati Mills (where it is stated to be 5 per cent) the latter having their own weigh bridge.

4.88. The Committee feel that in the absence of weigh bridge at the siding of the Mandya Mills and also of a suitable device measuring issues and utilisation of coal, the possibility of pilferage between the Railway siding and the Mills premises or within premises itself cannot be ruled out. They are not happy at the complacent attitude adopted by the Management towards the heavy shortages of coal from year to year. They would recommend that the Government/Corporation should have the shortages investigated and take action against those found responsible for the shortages. Committee see no reason why it was not found possible to instal weigh-bridge if it could help to control the pilferages. They would also like the Corporation to identity the various other loopholes in the handling of coal at various stages and take positive measures to plug them without loss of time. They would also like to be informed of the action taken in the matter.

#### H. Purchase of Alum

4.89. During their visit to the Mandya Mills in October, 1975, the Committee noticed that in July, 1973, the Company invited tenders from 15 firms for procurement of alum for stock purposes at 100|-150 metric tonnes por month from August, 1973 to July, 1974. In response, only one firm M/s. India Chemicals quoted a price of Rs. 425/- per metric tonne f.o.r. Mandya Mill. Another firm—DCM Chemicals, Delhi despatched samples of 3 grades of chemicals on 4th August, 1973 for testing and accepting before submitting their quotations. The quotations were opened on 7th August, 1973 and a decision was taken to place orders for supply of 1,200 metric tonnes at Rs. 363|- per metric tonne f.o.r. Belagula at 100 metric tonnes per month on a firm which had not quoted at all i.e. M|s. Solar

Chemicals, Chanda after negotiation. The firm supplied 406 metric tonnes of alum during August, 1973 to February, 1974 against 600 tonnes to be supplied during this period. The order was cancelled in April, 1974 and a fresh order placed on the same supplier for the supply of 1440 metric tonnes at an increased rate of Rs. 450|per metric tonne on the plea of price increase for raw materials. Again after supply of 98 metric tonnes, these orders were also cancelled and another order was issued in May, 1974 for 1320 metric tonnes at Rs. 510/- per metric tonne f.o.r. Chanda. This order was also cancelled in June, 1974 and another order was issued for supply of 1360 metric tonnes at Rs. 730/- per metric tonne f.o.r. Chanda In March, 1975, the Company found that it had stocks in excess of its requirement and closed the order. The action of the company in allowing the increase in prices resulted in an extra expenditure of about Rs. 3 lakhs on the purchase of 793 metric tonnes at higher prices The Committee required full details of the case and the justification for higher prices from time to time and why orders had been cancelled and also how M/s. Solar Chemicals came to be selected at all.

4.90. In a note submitted to the Committee the Hindustan Paper Corporation has stated that MIs. Solar Chemicals Limited were supplying alum to Mandya National Paper Mills Limited for the last several years. A contract for purchase of alum was placed on 14-2-72 (during pre-take over period) on M/s. Solar Chemicals Ltd. at the rate of Rs. 343 - per M.T. f.o.r. Belagula for the year 1972-73 (March, 1972 to February, 1973) with a monthly supply of 100 tonnes per month. Supplies against the contract were continued at this rate beyond March, 1973, also but on 23-5-1973 the party requested for an increase in the rate from Rs. 343 to Rs. 375 per M.T | f.o.r. In order to ascertain competitive rates, offers were invited during July, 1973 from 15 reputed parties. In reply, only one party namely, Indira Chemicals quoted a rate of Rs. 425 - per M.T. f.o.r. Mandya. D.C.M. though sent their samples did not quote the rates. Because of poor response to the limited enquiries, negotiations were carried out by the then Commercial Manager with the representatives of the existing supplier M|s. Solar Chemicals Limited. As a result of these negotiations, the party reduced the price from Rs. 375|- to Rs. 363|- per M.T. f.o.r. Belagula and order was placed on 9-8-1973 for the yearly requirement for 1200 M.T. with a monthly supply of 100 M.T. Thus, it would be observed that the rate of M|s. Solar Chemicals Limited was accepted as it was much lower than the rate quoted in response to enquiries by M|s Indira Chemicals.

4.91. This rate was subsequently revised 3 times as brought out below, after a quantity of 406 M.T. had been supplied at this rate.

Increase No. 1: From Rs. 363-Rs. 450 per M.T.

In January, 1974, M|s. Solar Chemicals represented that M.M.T.C. has increased the price of sulphur by 50 per cent and the cost of bauxite had also increased substantially leading to an overall increase in the market rates of alum and asked for a revision in the price of alum. Therefore, again the limited tenders were invited to test the market. Out of the five quotations thus received, the rate of Rs. 450/- per M.T. f.o.r. Belagula quoted by M/s. Solar Chemicals was found to be the cheapest and a new purchase order dated 15-4-1974 was issued to them for yearly requirement from April,1974 to March, 1975 at 120 M.T. per month.

Increase No. 2: From Rs. 450—Rs. 510 per M.T.

During May, 1974, the firm again represented that the price of sulphur and bauxite had further gone up in the market and consequently they asked for a further increase in the rates. Since the market was showing a constant upward trend, a further survey was again carried out by contracting the reputed firms and it was found that the revised rate of Rs. 510|- per M.T. f.o.r. Chanda quoted by M|s. Solar Chemicals was still the cheapest. Accordingly, a new purchase order dated 16th May, 1974 was again issued to M|s. Solar Chemicals at this rate to cover supplies from May, 1974 to March, 1975 at 120 M.T. per month.

Increase No. 3: From Rs. 510—Rs. 795 per M.T.

Since the market was still going up, it was considered advisable to issue an advertised enquiry through press to ascertain the latest market trend. In response 6 offers were received in June, 1974. The lowest from M|s. Ravi Chemicals, Mardras quoting a rate of Rs. 575|- f.o.r. Bombay; but this was ignored as the firm had failed to supply samples although these were specifically asked for in the tender enquiry. (It is pertinent to mention in this conncetion that a trial order on Ravi Chemicals was placed subsequently for 2 wagon loads, but they failed to supply). The second lowest offer of M|s. Eastern Chemicals at Rs. 650|- per M.T. f.o.r. Bombay was also rejected as the previous performance of this firm had been very unsatisfactory in as much as even a trial order of 2 wagons had to be completely rejected, the quality being entirely inferior. After ignoring these two offers, an order dated 26-6-1974 was, there-

fore, finalised by M|s. Solar Chemicals at a rate of Rs. 730|- per M.T. f.o.r. Chanda against their quoted rate of Rs. 795|-. The order was to cover the supplies for the period August, 1974 to March, 1975 at 150 M.T. per month. A quantity of 647 M.T. was supplied against this order during the period August, 1974 to February, 1975. No supplies against this order were despatched beyond February, 1975 as the order was to cover the requirements only upto March, 1975. All the alum from Chanda was transported by Rails. There was no excess stock piling as the inventory at the end of February, 1975 was only 276 tonnes which was just enough for 2-3 months requirements and thus was not excessive considering the difficult supply position.

- 4.92. The Committee were informed during the evidence that the amount involved for the purchase of alum from the Solar Chemicals Ltd. was to the extent of Rs. 7 lakhs per annum.
- 4.93. It has been stated by the Corporation that all the above increases were allowed after testing the market. In the absence of any security deposit, the only alternative left to the mills was to black-list the supplier and then take the alum from the other best offers obtained. However, the mill tried to protect its own interest and did not black-list the firm because the other offers received were higher than the Solar Chemicals. It was also not possible to obtain security deposits from the suppliers particularly at a time when the prices were increasing day by day.

When the management of Mandya Mills was taken over by the Corporation, the first task assigned by the Corporation to itself was to take remedial measures on the various problems of the mill. Unfortunately, almost all the activities of Mandya needed complete overhaul and since the manpower and other resources of the Corporation were very limited, it did not become possible to undertake these operations in all directions at one and the same time.

The Corporation could make a beginning towards the creation of a Purchase Division at its Headquarters only in June, 1974 but unfortunately the choice of the Controller of Purchases proved to be wrong. With the transfer of the Head Office of the mills from Bengalore to Belagula in July, 1974, it was hoped that the Financial Controller, who had been appointed before the take over of the management by Hindustan Paper Corporation Limited, would be able to exercise financial control on purchases and other operations of the mill. Unfortunately, the choice of Financial Controller also proved wrong as he did not exercise any control on the purchases and even other financial aspects of the operations of the mill. The 2919 LS—6.

Commercial Manager left the services of the mill on 10-1-1975 after having worked under the old management for 15 years. A new Purchase Manager has been appointed who has experience of working in Government Undertakings. Guidelines about the purchases procedure have already been issued to the mills. A detailed procedure is being drafted to ensure that the purchases are made strictly according to the procedure laid down. It is the intention to ultimately centralise purchases of all the mills in the Head Office and leave in the hands of the mills local purchases and purchases of an emergent nature necessary to keep the wheels of production moving. An Internal Auditor also is being appointed for the mills so that a concurrent audit of all purchases may be done on a regular basis. The Purchase Committee which has been functioning for some months now has been asked to tighten its control.

- 4.94. In this connection, the Chairman-cum-Managing Director of the Hindustan Paper Corporation stated, during evidence, as follows:—
  - "I would straightway admit that the Furchase Department at Mandya was not functioning well. The concerned person was...an old employee...During the end of 1973 when this (Mandya Mills) was taken over, HPC appointed a Financial Controller for the mills...Unfortunately, he also proved to be not a sound accountant and we got rid of both of them in the month of August, when things like this came to our notice".
- 4.95. The Committee note that though the Mandya Mill invited tenders for supply of alum from August, 1973 to July, 1974 and only one firm quoted against the tender and another firm sent sample, the contract was settled after negotiations with M/s. Solar Chemicals who had not quoted at all. The Committee also note that though orders were placed at the negotiated rate of Rs. 363 per metric tonne on M/s. Solar Chemicals for supply at 100 to 150 metric tonnes per month from August 1973 to July, 1974, even before the completion of the stipulated supply upto February, 1974; the rate was increased to Rs. 450/- per metric tonne in April, 1974. The rate was again raised to Rs. 510 in May, 1974—and was further raised to Rs. 730/- in August, 1974—every time much before the completion of the supply according to the originally agreed rate. The Committee fail to understand why the supply order was not got executed and why no action was taken against the firm for not completing the supply.

- 4.96. The Committee are informed that the increase in rate in April, 1974 was allowed after testing the market through limited tender while a subsequent increase in May, 1974 was allowed merely on the basis of a survey carried out by contacting reputed firms. However, the further increase to Rs. 730/- per metric tonne was allowed after ascertaining the market trend through advertised enquiry.
- 4.97. The Committee are informed that it was not possible to obtain the security deposit from the suppliers particularly at a time when the prices were increasing day by day and offers received were higher than those of Solar Chemicals. The Committee are informed that although in the absence of security deposit only alternative left was to black-list the firm no action was taken in the interest of the Mill and also because the other offers were higher than those of the Solar Chemicals. The Committee are not convinced of the reasons adduced by Corporation for deciding the supply order in favour of M/s. Solar Chemicals. They would like that the matter should be got thoroughly investigated through C.B.I. with a view to determine how far the settlement made with the Solar Chemicals for the supply of alum and the increase in rates allowed to the firm were justified and why no action was taken against the firm for not completing the supply according to the originally agreed rate and fix responsibility for the lapses and Committee informed.
- 4.98. The Committee are informed that the Purchase Manager and the Financial Controller of the Mill, who was in the service of the mill before the take over of the Mill by the Corporation, were found lacking in exercising effective financial control on purchases and the Corporation "got rid of them" when things came to its notice. The Commercial Manager is reported to have left the services of the Mills in January, 1975 after having worked under the old management for 15 years. A new Purchase Manager has been appointed and a new Financial Controller and Internal Auditor are also joining. guidelines about the purchase procedure have been issued and procedure is being streamlined. The Purchase Committee has been asked to tighten its control. The Committee recommend that the Corporation should ensure that the procedure for purchases is implemented in letter and spirit and all deviations from the purchase procedure in the case of major purchases together with the reasons therefor should be brought to the notice of the top management of the mill and the Board. The purchase procedure should also be reviewed from time to time and modified if necessary in the light of experience gained.

### NAGALAND PULP AND PAPER PROJECT

### A. Cost Estimates

- 5.1. In March, 1971 the project report for Nagaland Pulp and Paper Project was prepared by National Industrial Development Corporation Limited (NIDC), New Delhi, N.I.D.C. estimated a total capital outlay of 18.72 crores of rupees for this project, having an annual capacity of 30,000 tonnes of paper. A separate company, i.e. Nagaland Pulp and Paper Co. was formed in 1971 as a subsidiary of Hindustan Paper Corporation in order to implement this project. Orders were placed for almost all plant and equipments needed for this project. In almost all cases, it was found that the prices for different equipments were much higher than estimated by N.I.D.C. This necessitated having a fresh look into the capital outlay of this project. In June, 1973, estimates were revised upwards to Rs. 5154 crores. Again, after a final review of the project cost in July, 1974, estimates were further revised to Rs. 61.82 crores.
  - 5.2. The Corporation recently carried out a re-appraisal of this project based on the actual prices for various equipments which had already been ordered. The revised project cost, as approved by N.P.P.C. Board came to Rs. 62.65 crores. This included price escalation on plant and machinery and civil works. Based on this capital cost, the economics of the project was stated to be as below:—

1. Total net profit per annum .	•	•	•	•	Rs. 20.38 Lakh	
2. Percentage net return			•		0.6 %	
3. Net profit after depreciation and befor	e Taxes	s per	tonne		Rs.63	
4. Gross Profit before depreciation and	amorti	zatior.	per 1	or r.c	Rs. 145	
5. Break-even point	•	•	•		98 per cent	

<sup>5.3.</sup> When asked about the economics of the project the Chairmancum-Managing Director of the Corporation stated during evidence that "it will never make profits in all probability". Explaining the factors that will affect the profitability of the Project, he added that

"there are several factors. Location and the raw materials have accounted for approximately Rs. 13 crores extra in their capital investment."

5.4. When asked about the reasons of the steep increase in the cost estimates and their effect on the profitability and economic viability of the project, the Ministry of Industry and Civil Supplies in a note submitted to the Committee stated as follows:—

"The revised capital estimate of Rs. 51.54 crores does not include price escalation during the period of execution of the Project. It has been estimated that the price escalation costs during the period of execution of the Project will be about Rs. 11.10 crores (21.53 per cent) and therefore, the total capital outlay of the Project at the time of its commissioning has been estimated at Rs. 62.64 crores. The main reasons for the increase in the cost estimates are as follows:—

Machinery					
(i) Due to change in specification					. 16%
(ii) Due to addition in equipment		•			. 25%
(iii) Due to increase in price .				•	. 106%
TOTAL			•	•	. 147%
Site Development and Other civil En	gineeri	ing wo	rk		
(i) Due to increase in quality.			•		. 250%
(ii) Due to price escalation					. 69%
TGTAL				•	. 319%
Structural Civil Work					
(i) Increase due to price escalation	n.		•	•	. 32%
(ii) Increase due to equipment for	undat i	ion .	•		. 8%
(iii) Increase in area		•		•	. 58%
TOTAL	•	•	•	•	• 98%

Besides, the NIDC, in their original estimate did not take into consideration certain items of expenditure like initial spares and margin money. In fact, in 1970-71, when the NIDC prepared the first capital estimates, the paper-machinery-building industry was having a period of slump and rock-bottom prices were being quoted. NIDC's estimates therefore, proved to be much on the lower side, and since then there has been a continuous rise in prices of the materials and this has severely out-dated the original estimate of Rs. 18.72 crores made by the NIDC in 1971.

The Government is still examining the profitability of the project. The revised costs are being sent to the Public Investment Board. The cost of production has increased from Rs. 1606/- per tonne as was estimated in 1971 to Rs. 4584/- per tonne as estimated in 1975. Assuming an average sales realisation of Rs. 4860/- against current cost of Rs. 4584/- per tonne it is expected that the profit per tonne would now be about Rs. 276/- as against Rs. 424/- estimated in 1971. This position of profitability is based on the mills in Nagaland not suffering from unusual down-time and not having to incur any unusal expenses on the treatment and disposal of effluent. It is feared by the Management of the Hindustan Paper Corporation that because of the somewhat dispersed location of the various sections of the mills and the difficulties which will be experienced in repairs and maintinance during the rainy season, downtime will be rather high, making it not possible to run the mill to its full capacity.

The scheme for the treatment and disposal of effluent is yet be finalised by the NIDC and it is feared that the capital costs for this operation would be substantially higher than the provisions made in the latest estimates. The treatment and disposal of effluent would eventually adversely affect the costs of production. As against this, with continuing escalation of costs, one cannot expect that the price of paper would remain unchanged, so that the mill may not be unviable. It cannot be denied, however, that this mill would not be among the more profitable ones."

#### B. Selection of Site

- 5.5. The general criteria for selecting a suitable site for a paper mill are stated as below:—
  - (a) proximity to the raw material resources.
  - (b) Availability of adequate perennial sources of fresh water for utilisation in process for manufacturing pulp and paper in the mill and also for dilution of effluent.
  - (c) Proximity to rail and road communications.
  - (d) Availability of adequate plain land at a higher level which should be safely above the highest flood level.
  - (e) The soil should have sufficient load bearing capacity involving minimum cost on laying foundations for housing heavy pulp and paper machinery.

- 5.6 The Corporation has stated that—these criteria have been strictly followed except in the case of Nagaland Project.
- 5.7. As regards the selection of the site of the Nagaland Pulp and Paper project at Tuli, the Hindustan Paper Corporation has explained the position as follows:—

"The preliminary feasibility report for the project has been prepared by Shri Subir Gupta of International Consultants, engaged by Nagaland Government towards the end of 1965 and on the strength of which, the State Government had approached the Planning Commission for sanction of a 50 tonnes per day unit based on the grasses available in Nagaland. As per the said report first preference was given to Dimapur as a suitable site but ultimately this site was rejected because of insufficient water. alternate sites were considered by him-one in Tuli area and the other at Naginimara. He did not decide upon either of the two sites pending completion of the survey of the forest resources of the area. However, certain broad indications were given by Shri Subir Gupta about the relative merits of the two sites. According to him, in terms of cellulosic raw materials, Tuli on visual examination, was expected to provide larger quantities. From the point of view of rail head, Naginimara was considered superior though it was mentioned that consequent upon a meeting between the Chief Minister and the Central Railway Minister in September, 1965, a survey was expected to be undertaken to establish rail link to Tuli. In regard to coal availability. Naginimara was considered better place because of its being nearest to colliery. A reference, however, was made to coal deposits having been struck in Lakuni near Tuli. In regard to nonfibrous raw materials, it was pointed out that Naginimara was 15 miles further away from Tuli by rail but it was admitted that it would not make any difference in profitability considering the long distances involved because of the telescopic freight structure. From the point of view of effluent disposal, Shri Subir Gupta considered Naginimara better. From the point of view of land procurement he felt that Naginimara might be more expensive.

The Planning Commission having considered the preliminary report decided that it should be examined by a committee

of Experts and in June, 1967, an Advisory Committee under the Chairmanship of Dr. G. P. Kane, was constituted. Kane Committee did not visit Nagaland and devoted all its time in examining the suitability of the grasses for pulp making. The Kane Committee authorised experiments being carried out on these grasses in France and based on the results of the experiments so carried out came to conclusion that it was technically possible for a paper mill in Nagaland being stabilised with a capacity of 100 tonnes/ per day based on Bhuting and Khagra grasses.

The next step was taken when the Government of India asked the Government of Nagaland to prepare a complete feasibility report. The Government of Nagaland submitted this Report in six volumes to the Ministry of Industrial Development in September, 1969. The Report did not give any detailed comparison of Tuli and Naginimara sites. From this Report it would appear that Tuli was selected because the cost of fibrous raw-materials delivered at mill site was expected to be lower at Tuli due to its close vicinity to the cellulous raw materials resources. Other arguments advanced for the selection of Tuli were that the soil in Tuli was better that Naginimara (no soil tests had been carried either at Tuli or Naginimara) and Tuli was located on taxmacadam State Highway whereas Naginimara was on the ordinary gravel road.

The DPR so submitted was further examined by an Appraisal Group of Experts, who submitted their Report in January 1970. The Appraisal Group did visit Nagaland in December, 1969. The Experts Committee compared the merits of the two possible sites in Tuli area, one located at the 18th milestone and the other located at 13½ milestone and recommended that 13½ milestone would be better than the 18th milestone."

5.8. While commenting on (economic viability of) the present site of Mill at Tuli, the Chairman-cum-Managing Director of the Hindustan Paper Corporation, during the evidence, stated as follows.

"The mill was conceived and thought of by the State Government some time in mid-sixties. They engaged International Consultants, owned by Shri Sudir Gupta, who prepared the necessary project report. Later on they approached the Government of India for money and the Government of India decided that it should be a joint venture between the HPC and the Nagaland Government. A new company was started in 1971. The mill is under construction in a place called Tuli, 13½ miles away from the Railway Station in Assam called Amguri.....Shri Gupta in his report, a five-volume document, discussed the three sites. One was Dimapur. It is the gateway to Nagaland in so far as railway station is concerned. It was rejected because sufficient water was not available. We need approximately one lakh gallon water for every tonne of paper. The second important thing is the railway line. Production has to go on and four/five times the production has to be the input every day. Although Dimapur had advantage of railway line, it was rejected on the ground of insufficient water. The second site. Naginimara was well-commented in the report, but somehow or the other, it was not accepted. It has a railway line, flat land and water.

The site at Tuli was selected finally, and it represented actually 5/6 hill tops. The tops of these had to be slashed to produce flat ground and the mill had to be located in different parts. Unfortunately, in my limited experience, I have not seen a mill of this type in this country or abroad. When I visited this first, I was quite a bit surprise that how a mill could be constructed at a site with these disadvantages...This site was decided upon mainly by the Nagaland Government. In fact a team was sent by the Government of India. When they arrived in Dimapur, or in Jorhat, they were handed over a letter addressed to them by the State Minister telling them that the decision about the site is final and they have not interfere with it."

- 5.9. On being asked about the economics of the mill in this context, the Chairman-cum-Managing Director of the Corporation stated that "It will never make profits in all probability" and that if the mill were shifted to Naginimara it would run economically....
- 5.10. The Corporation has stated that there was a proposal to shift the project to a new site. An expenditure of Rs. 2.78 crores had already been incurred on the civil and other works at Tuli, the

existing site. The Corporation has also stated that "in the event of the mill site being shifted, it is hoped that the facilities created at the existing site would be made use of and, therefore, the expenditure already incurred would not be a total loss."

... 5.11. In their note submitted to the Committee, the Hindustan Paper Corporation stated that there would be a saving of Rs. 2.35 crores by shifting the mill to Naginimara. The Corporation stated:

"HPC have prepared a Project Estimate for the construction of the Mill at Naginimara, which included price escalations payable in respect of plant, machinery and equipment and on civil constructions. It will be observed that a 100tonnes/day pulp and paper mill at Naginimara will cost Rs. 59.48 crores as against Rs. 61.83 crores at Tuli. There is thus a saving of Rs. 2.35 crores by shifting the mill to Naginimara. This amount is much more than the expenditure already incurred at Tuli and even if a part of that expenditure becomes infructuous, the construction of the mill at Naginimara would result in saving on the capital cost. There can be no doubt that the pulp and paper making operations at Naginimara would be efficient and not only will the production of 33,000 tonnes per annum be achieved but it would increase as the operations stabilise. Unlike Tuli, Naginimara, therefore, will not suffer from the problem of excessive dowtime. Saving in the cost of production would amount to Rs. 195 per tonne and therefore, on an annual production of 33,000 tonnes, the saving would be Rs. 64.35 lakhs. In actual practice, the saving will be much more because the production at Tuli will be less than 33,000 tonnes but at Naginimara it will be more than 33,000 tonnes.

From what has been stated above, it will be observed that, between Naginimara and Tuli, Naginimara offer a better solution for the housing of a 100 tonne pulp and paper mill. Even at Naginimara, the profit would be marginal. The Mill located in Nagimimada however, will have the advantage of firstly being well managed resulting in better utilisation of the installed capacity and secondly being expanded as and when raw materials and money become available. There is not any other site available in Nagaland having these advantages."

- 5.12. From the notes prepared by the Chairman-cum-Managing Director of HPC for consideration of the Board of Directors of Nagaland Pulp & Paper Company the following facts have been noticed:—
  - "6. From the file of Planning Commission, I find that on the basis of the aforesaid preliminary Report (prepared by Subir Gupta) the Government of Nagaland approached the Planning Commission for allocation of funds to set up a 50 tonnes per day pulp and paper mill based on Bhutang and Khagra grasses and reeds of Nagaland. The requests of the Nagaland and Government as well as Shri Gupta's Report were considered by the Planning Commission and also discussed in an inter-ministerial meeting where it was decided that an Advisory Committee be set up to go into the Feasibility Report and other aspects connected with the establishment of the Paper Project. \* \*
  - 8. \*\*\*The preliminary report of Subir Gupta left the question of site between Tuli and Naginimara undecided and one would have expected the Committee to make its pronouncement on the comparative merits and demerits of these two sites and offer its recommendation on acceptance of one of these sites or recommend an altogether different site. The Committee, it would appear, ever visited Nagaland but held its meetings in Delhi and solely relied on the information submitted to it from time to time by Mr. Subir Gupta and the representatives of the Nagaland Government. The Committee gave no consideration to the question of selecting a suitable site for the project.\*\*\*
  - 13. To enable the Government to take investment decision, the State Government were requested to up-date the Feasibility Report prepared by Shri Subir Gupta on the basis of conclusions arrived at by Kane Committee. The Government of Nagaland prepared a Detailed Project Report in August, 1969 (6 volumes) and forwarded the same to the Ministry of Industrial Development in September, 1969.
  - 14. On the question of site selection, strangely enough, the Report did not give any detailed comparison of Tuli and Naginimara sites.
  - 16. The question of sustained availability of adequate materials was further discussed at a meeting of working group

of forest-based industries set up by the standing Committee of the Eastern Zonal Council which raised some doubts about the sustained availability of raw materials on which it was proposed to base the Project. It was felt that the DPR did not contain data in a scientific manner to establish the claim that raw materials were available in abundance. In view of the above factors, it was considered necessary that the question for sustained availability of suitable raw materials in adequate quantity for 100 t.p.d. paper mill in Nagaland required further study. It was, therefore, decided to have the DPR scrutinised by an Appraisal Group of Experts consisting of the following:—

- Dr. J. C. Aggarwala, then General Manager of Rohtas Industries
- 2. Shri P. S. Kothari, then General Manager of Bengal Paper Mills
- 3. Shri R. P. Bhargava, General Manager, Star Paper Mills:
- 4. Shri N. Narasimhan, the Development Officer (Paper, DGTC).

The Committee was set up on the 15th October, 1969 and submitted its Report in January, 1970.

17. The Appraisal Group held its first meeting in New Delhis on the 6th December, 1969. Among other things, Committee felt that a railway siding from Amguri to Tuli was a 'must'. This Committee seemed to be sceptical about the pulp worthiness of the grasses. As regards the site, the Committee decided to visit Nagaland and thereafter make its recommendations.

. . . . . .

19. On their arrival at Johrat on 27th December, 1969, the Committee were handed over a letter addressed to them by the Finance Minister of Nagaland. This letter categorically stated that 'technical and economic feasibility of the Project at Tuli based on Bhutang and Khangra having been examined by the Planning commission and the Government of India cannot be reopened again.' In their first meeting held on the 6th December, 1969, Shri Subir Gupta, who had been specially invited, told the Committee.

that his participation would be conditional on the Committee not reopening the technical and economic feasibility of the Project and allowing the project implementation which had started (at a site near to the 18th milestone) not being delayed whatsoever. On the 27th Dec., 1969, the Minister told the Appraisal Group Gupta would explain the State Government's thinking on some of the suggestions made in their first meeting which were not acceptable to the State Government. The Group did not undertake a tour of the Nagaland boundry adjacent to the North Frontier Railway and also did not examine the merits of the other two sites suggested in the preliminary report, i.e. Dimapur and Naginimara. The expert Group, it would appear, because of Shri Jamir's letter of the 27th Dec., 1969, only examined the areas and finally recommended that the Mill be located at 13½ mile-stone".

\* \* \* \* \*

"23. The Government of India cleared the Project in April, 1970, subject to the stipulation that the Project Estimates be up-dated and submitted to the Government for final approval. The Ministry of Industrial Development decided to set up a Cell consisting of Shri Abid Hussain Dr. R. L. Bhargava, Shri R. P. Bhargava and Shri L. Narasimhan, to provide guidance and active assistance for the quick implementation of the Project. Shri Abid Hussain, Dr. R. L. Bhargava and Narasimhan visited Nagaland on the 25th November, 1970. They appeared to be satisfied with the progress of the work at the original site located nearabout 18th mile-stone on the Amguri-Mokokchung Road. In his letter dated 27-11-1970 addressed to the Secretary (industries) Government of Nagaland, Shri Abid Hussain expressed the following views in respect of the site:

"We generally agree with the site which has been selected by you for locating the proposed plant. But before a detailed layout could be suggested it is necessary that a thorough survey must be made of the site selected. We are sure that your team of engineers will work on this and send us (with a few copies to Dr. Bhargava) the details of the survey Report so that we may in consultation with Paper experts orient, the layout in such a way that we take the fullest advantage of the scenic beauty of the area without sacrificing the utility aspect of the layout.

- 26. In their Board Meeting held on 6th January, 1971 HPC decided that NIDC be preferred to Kulijan Corporation, as consultants for the Project. The Corporation decided that Dr. A. Seetharamiah and Shri B. P. Balwani should negotiate with NIDC their fees for revising the project Estimates. A fee of Rs. 40,000 was decided upon by this Committee with NIDC, subject to the condition that in the event of NIDC being appointed as 'turn-dey' consultants, they would not charge this fee. The Board approved of this and accordingly the Government of Nagaland were requested to ask NIDC for up-dating the Project estimates. The Government of Nagaland engaged NIDC who submitted their Report in June, 1971. NIDC did not deal in their Report with the merits of the site. proceeded on the assumption that the mill would located at 13½ mile-stone on the Amguri-Mokokchung Road.
- 27. From what has been indicated above, it will be observed that none of the Committees constituted by the Government of India examined the merits of the site selected by Subir Gupta. Surprisingly, in the preliminary prepared by him he rightly enumerated the various factors governing the selection of site, such as availability of sufficient water of tolerable quality, fairly good communications with the rest of the country scope for future expansion, proximity to lime, coal and other nonfibrous raw materials, nearness to a river having sufficient minimum flow to ensure disposal of treated effluent, etc. Yet while actually advising the Nagaland Government on the proper site he altogether ignored some of these important considerations and finally recommended the location of the mill in hilly terrain away from a railhead and near a river which would need to be dammed to provide water throughout the year for the mill."
- 5.13. In the minutes of the Nineteenth meeting of the Board of Nagaland Pulp and Paper Company, it has been stated:—
  - "The DPR so submitted (by Government of Nagaland) was further examined by an Appraisal Group of Experts,

who submitted their Report in January, 1970. The Appraisal Group did visit Nagaland in December, 1969. Shri Zutshi pointed out that the Appraisal Group in their report had referred to a letter handed over to them at Jorhat on 27-12-69 by the then Finance Minister of Nagaland. This letter categorically stated that the technical and economic feasibility of the Project at Tuli based on Bhutan and Khagra grasses have been examined by the Planning Commission and the Kane Committee and can-The Expert Committee, it would apnot be re-opened'. pear, therefore, compared the merits of the two possible sites in Tuli area, one located at 18 mile-stone and the other located at 13½ mile-stone and recommended that 13½ mile-stone would be better than the 18th mile-stone. Thereafter, NIDC was engaged to update the capital costs and on the strength of their report the Project was finally cleared by the Government.

Shri Zutshi told the Directors that no scientific study has been carried out to determine the suitability of Tuli area and the present site would have numerous disadvantages."

5.14. When enquired whether it was not possible for the Government to revise their decision and shift the Nagaland Project to a more suitable site, the representative of the Ministry stated interalia as follows:—

"This was very seriously considered in the Ministry. In order to shift to an alternative site which would be feasible, we will again have to carry out a detailed survey and all manner of soil tests. Assuming that this exercise is successful, there is the question of land acquisition. First the experiments will take about six months; after that the acquisition of land will take anything from 2 to 3 years. This is what we have been told by the Nagaland Government. A personal reference was made to the Governor. He also said that these lands in Nagaland are owned by the tribals; therefore, one has to negotiate with each village. These negotiations are sometimes very arduous and will take over two to three years. If that is so, the project has to be delayed for that period. In the meantime, equipment for the project has been ordered. It was ready for shifting. Some part of it is held back at Bongaigaon pending finalisation. You will recognise that when major part of the equipment has been fabricated and deli. . .

vered because earlier we wanted to execute and implement the Nagaland project expeditiously and some part of it had been shifted, it would be impossible to go back on it, because we would have a situation where we just do not know what would happen. The equipment would have been shifted to one place; we would be looking for another site which might be ready only two or three years later. Then we have to start the civil construction there. This would be an impossible situation when we have already gone too far ahead with the original project.

Therefore, although there was, comparatively speaking, some advantage in having the other site, the balance of advantage from the practical point of view lay in sticking to the original site taking care of the other difficulties and defects that might arise in this site for the simple reason that it would be impossible with the equipment having been shifted already to this site to say that we will wait and keep these equipments unused, leaving it to rust and become bad and defective."

5.15. The Committee pointed out to the representatives of the Ministry that according to the firm opinion expressed by the Chairman-cum-Managing Director of HPC, the project would never make profit in all probability. Further-more, the estimated cost of the project at Naginimara would be Rs. 59.48 crores and at Tuli it was Rs. 61.83 crores. Therefore, if project was shifted to Naginimara, the loss of expenditure already incurred at Tuli was considered likely to be fully compensated. The Committee enquired whether it would not be desirable to shift the project to Naginimara, the Secretary of the Ministry then stated inter alia as follows:—

"Based on the data and the experience that we now have of the Tuli site, HPC had pointed out that it had many drawbacks which will seriously affect the profitability of this project. This is a point which the department also appreciates. Because of this we did consider the possibility of an alternative site in consultation with RPC. There were of course difficulties that have already been pointed out. The cost factor—we will lose some money on the investments already made; there is also the time factor; we will lose more time. There were also difficulties in regard to the acquisition of land.

- Apart from these difficulties we had also consulted the Nagaland Government as to whether it was at all possible to change the site, previously the elected Government of Nagaland quite clearly advised us that it was just not realistic at all; it was not possible from the point of view of the State Government to shift the site. We have to go by judgement of the State Government in the matter of availability of land. Subsequently when the State come under the President's rule, we had consulted the Governor and he had given us categorical advice that it was not possible to shift the site. They may have many reasons for coming to that decision."
- 5.16. The Committee pointed out that according to the annual report for 1973-74 there was a land slide near the Digester House of the mill some time in September, 1974 which, according to the Soil Experts, was mainly due to surplus over-burden soil dumped on the slopes of the hills and the penetration of rainy water during heavy The National Industrial Development Corporation, who are the turn-key consultants to the project appointed an Expert Committee consisting of Shri R. S. Gahlowt, ex-Chairman-cum-Managing Director, Hindustan Steel Works Construction Co., Shri K. C. Sood, Retd. Member Civil Engg.. Railway; Board and Shri Dinesh Mohan, Director, Central Building Research Institute, Roorkee; to examine the suitability of the existing site from engineering point of view and to make recommendations, if any, for protection and stabilization of the hillock slopes. The Experts Committee were also told that the Corporation was worried about the site being located in the active thrust zone of earthquake and that they should keep this in view while giving opinion and recommendations.
- 5.17. In regard to the reasons for the land slide and the suitability of the site from engineering aspect, the aforesaid Expert Committee has stated as follows:—

#### "REASONS FOR LAND SLIDE:

- 1. We are of the view that so-called slips of the hillock sides are essentially the sliding of the loose excavated soil dumped on the hillock sides caused by rain water. At two or three places, the sliding of the surcharged loose earth dumped on the hill slopes has also caused partial slip of the adjoining natural soil along with it.
- 2 The rain water flowing along the hillock sides resulted in deep cuts in the loose soil dumped on the hill sides which, 2919 LS—7.

at a few places, was standing at a very steep slope. This free flow of rain water along the hillock side has led to the sliding down of the loose excavated soil in which led to destruction of vegetation and in some cases slipping of existing hillock face alongwith it.

3. The fact that no slippage whatsoever has occurred in places where loose soil had not been dumped is further proof of the above observation that the slippages which have occurred are the results of movement of the loose earth with rain water and that the hill face covered with vegetation is quite stable.

# SUITABILITY OF SITE FROM ENGINEERING ASPECT:

- We can well appreciate the anxiety of Authorities regarding the stability of the soil because of these slippages. However, based on our experiences and observations in this case, we are satisfied that the natural soil is quite stable and there need be no anxiety on this account. Such slippage of loose earth and of natural soil adjoining it are not unknown. Occurrence of such slippage cannot be avoided when hill side and faces are disturbed due to construction activities, what is important, however, is that suitable drainage of the terrace as well as of hill faces and the protection are provided when the work of levelling and grading has been completed.
- As regard the site being in an active earthquake thrust zone, there need be no fears on this account as long as structures and foundations are designed making allowances for earthquake as per I.S.I. codes. We have been advised by NIDC that this is being done.
- We are, therefore, satisfied that the site is suitable from an engineering standpoint. No doubt, the designer will take note of the available bearing pressures, wind pressures, earthquake forces and equipment loads (both static and dynamic) while designing the structures and foundations."
- 5.18. The Expert Committee were of the opinion that considering the conditions prevailing at the site, certain additional protection measures (as given in the Appendix IV) would be necessary to protect the hillock sides from further damage.

## C. Delay in Commissioning

- 5.19. The main features of the project as modified by the Corporation are as below:
  - A. (i) Original estimated cost: Rs. 18.72 crores.
    - (ii) Revised estimated cost: Rs. 61.82 crores.

(The revised Project cost as approved by N.P.P.C. Board comes to the Rs. 62.65 crores.)

- B. (i) Original date of commissioning: December, 1976.
  - (ii) Revised date of commissioning: October, 1977.
- 5.20. As regards the revision in the schedule of commissioning of the project, the Chairman-cum-Managing Director of the HPC, during evidence, stated *inter alia* as follows:—
  - "One of the earlier assessments made about the commissioning of the mill in 1976 was unrealistic, because they did not take into consideration the site clearance work that would be involved as also the fact that there is going to be transhipment of all the equipment at Bongai-gaon and then this equipment has to go 13½ miles from Amruri to the site and then again at site, it has to move from one hill to the other. The way the things are now going, it is our hope that the mill would go into production in 1977".
- 5.21. In this connection the Ministry stated that actually, the earlier scheduled date of December, 1976 was an unrealistic and optimistic estimate. The magnitude of the work involved in preparing the soil (the effect of torrential rains for almost six months in a year, the non-availability of local labour and hence the dependence of the project for imported labour from Bihar and Orissa, and the inadequate infrastructure available, were not in all probability taken into consideration while determining the expected date of commissioning the project. If these factors had been properly evaluated, December, 1976, could not have been indicated as the date of commissioning. The revised date of commissioning of the project, viz., Octobed, 1977 is more realistic, though there may be some slippage even from this date.

5.22. In regard to the steps taken to ensure that there is no slippage in the date of commissioning of the plant it has been stated that:

"The turn-key consultants—Messrs. National Industrial Development Corporation were appointed in January, 1972. No specific time schedule was stipulated in the agreement for implementing the project. However, a supplementary Agreement has been drawn out indicating the time schedule and an agreed PERT-CHART has since been signed. For construction of all the production buildings the National Projects Construction Corporation (a Public Sector Undertaking) were appointed as the Civil Contractors in November, 1973. In the letter of intent issued to them it was stipulated that the civil work would be completed in 24 months. The Chairman of the National Projects Construction Corporation has been requested to provide the required labour, strength & equipment at Tuli to enable his Company to complete the balance civil work in accordance with the time table laid down in the aforesaid PERT-CHART.

A coordination cell has been set up in the Head Office to monitor the project. A whole-time General Manager for the Project has been appointed and the Chairman and Managing Director of the Corporation took over w.e.f. September, 1975 the charge as the Managing Director of the Company to ensure speedy execution of the Project.

The Government is also keeping close touch with the progress of the project and have directed the Corporation to send quarterly reports of the progress of the construction work. It is expected that this will help monitoring the project and taking corrective steps as and when necessary so as to maintain the time schedule."

5.23. The Committee note that the original cost estimates of Rs. 18.72 crores or the Nagaland project, as prepared by the National Industrial Development Corporation (NIDC) in 1971 were revised to Rs. 51.54 crores in 1973 and again to Rs. 61.82 crores in 1974. These estimates were further revised to Rs. 62.64 crores as a result of reappraisal by the Corporation. The Committee were informed that the steep upward revision has been due not only to general increase in costs of machinery (1.96 per cent), civil engineering works (69 per cent) and structural civil works (32 per cent), but also due to changes and additions in the quantity and quality of machinery and civil works which raised the costs of machinery by 41 per cent, site development and other civil engineering works by 250 per cent and structural civil

works by 66 per cent. The Committee cannot but express their unhappiness over the fact that the cost estimates originally prepared by the consultants (NIDC) were unrealistic, incomplete and did not take full care of all aspects of the project. They would like that the matter, as to why the estimates were unrealistic, should be enquired into with a view to fixing responsibility. They feel that if the cost estimates prepared by the consultants had been thoroughly scrutinised by the Ministry before these were approved, deficiencies which have been noticed subsequently, could have been detected right at the beginning and rectified. In this connection the Committee would like to invite attention to their recommendations contained in para 118 of their Fifteenth Report (Fourth Lok Sabha) on Financial Management im-Public Undertakings and reiterate that the importance of estimates in the detailed project report being as realistic as possible needs hard. ly any emphasis as the project report forms the very basis on which Government approve the project and the capital outlay. It is essential that the estimates take into account all foreseeable items of expenditure and are based on correct data so as to obviate the necessity of revision of estimates frequently.

5.24. The Committee recommend that when the revised estimates vary so widely from the original estimates as has been in this case, the Investment Board of the Central Government should go into the reasons for such wide variations, fix responsibility for it as it seriously affects the economic parameters on the basis of which the Project is sanctioned and issue necessary guidelines to all concerned to obviate recurrence.

5.25 The Committee further note that the revised cost estimates of the Nagaland Project would push up the cost of production per tonne from Rs. 1606 as estimated in 1971 to Rs. 4584 as estimated in 1975 and depress the profit per tonne from Rs. 424 estimated in 1971 Rs. 276 as estimated in 1975. This position of profitability stated by the Ministry to be based on the assumption down-time of machinery and the expenses of treatment and disposal of effluent would not be unusually high. But, the Corporation feels that because of the dispersed locations of the various sections of the mill, and the difficulties which would be experienced in repairs and maintenance during rainy season, the down-time will be rather high, making it not possible to run the mill to full capacity, and the capital costs on treatment and disposal of effluent would be substantially higher than earlier estimated. The Committee regret to note that "thi mill would not be among the more profitable ones", opinion of the Chairman-cum-Managing Director of HPC, "it will never make profits in all probability". The Committee cannot but express their deep concern over the bleak future thus projected of this mill which an present indications would turn out to be a losing concern in all probability and thus become a permanent liability. The Committee recommend that the Government Corporation should seriously and ungently look into the problems of maintenance, down-time and effluent treatment and disposal which have upset the profitability of the Mill so gravely and spare no efforts to find a satisfactory solution with the help of experts to these known problems.

- 5.26. The Committee note that the Nagaland Pulp and Paper Mill was conceived by the State Government of Nagaland sometime in mid sixties and out of the two sites, at Tuli and Naginimara, considered suitable by the experts, the site at Tuli was selected by the State Government for constructing the mill.
- 5.27. The Committee are informed by the Corporation that the site at Tuli has many disadvantages and the mill at Tuli would never make profits in all probability. The Corporation is reported to have suggested shifting of the mill from Tuli to Naginimara where besides many other advantages, the cost of construction of the mill will be Rs. 2 crores less than that at Tuli and saving in the cost of production on an annual production of 33,000 tonnes would be Rs. 64.35 lakhs.
- . 5.28. The Committee are informed by the Ministry that they have consulted the Nagaland Government twice about the proposed shifting but the latter had stated that it was not possible from their point of view to shift the site. The Committee learn that besides loss of a considerable part of the investment already made at Tuli and the delay that the shifting will cause, there were difficulties in regard to the acquisition of land and in this matter the Central Government have to go by the judgement of the State Government. The Ministry have stated that although, comparatively speaking, there was some advantage in having the other site, the balance of advantage from the practical point of view lies in sticking to the original site taking care of the other difficulties and defects that might arise at the present site.
- 5.29. The Committee note that while the preliminary report of the International Consultants left the question of site between Tuli and Naginimara undecided, the Kane Committee, which was appointed by the Central Government to go into the feasibility

report and other aspects connected with the establishment of the paper project, concentrated only on the problems relating to the availability and suitability of raw materials and did not give any consideration to the question of selecting a suitable site for the project. The detailed project Report prepared by the Government of Nagaland on the basis of conclusions arrived at by Kane Committee did not give any detailed comparison of Tuli and Naginimara sites. The appraisal group of experts appointed by the Central Government to scrutinise the DPR submitted by the Government of Nagaland, it appears, did not examine the merits of the other two sites, (Dimapur and Naginimara) and compared the merits of the two possible sites in Tuli area only and recommended the present site. Thereafter, a Cell was set up by the Ministry of Industrial Development to provide guidance and active assistance for the quick implementation of the project and the Cell, expressing their views in respect of the site, stated that "we generally agree with the site which has been selected by you for locating the proposed plant."

- 5.30. The Committee are informed that thereafter NIDC was engaged to update the capital costs and on the strength of their report the project was finally cleared by the Government. The Committee are constrained to observe that even though the project was examined by many experts at various stages, the question of suitability of site was either side-tracked, or not subjected to any scientific study to determine the effect of site on the economics and efficiency of the project. It is all the more regrettable that NIDC which were appointed consultants for the project also overlooked the question of suitability of Tuli area for the project and did not bring out the inherent disadvantages of the site which, it is now pointed out, will have serious effect on the economics and efficiency of the mill.
- 5.31. In view of the difficulties involved in shifting the mill to any other site as also the fact that an expenditure of nearly Rs. 3 crores has already been incurred on civil and other works at Tuli, the Committee are led to the conclusion that location of mill at Tuli is fait accompli. There is imperative need to resolve the difficulties and defects that arise at the present site. As already recommended by the Committee in para 5.25 of this Chapter, they would like the Government/Corporation to earnestly look into the problems of maintenance, down-time and effluent disposal which are likely to upset seriously the profitability of the mill and spare no efforts to find satisfactory solutions to these problems so as to offset the locational disadvantages of the project and thus prevent this mill from becoming a permanent liability.
  - 5.32. The Committee need hardly point out that the selection of site for location of public sector enterprises should be made in the larger public interest after a thorough and critical appraisal of the

merits and demerits of all the possible sites and the location should be such as will, on balance, be most conducive to the efficient and economic running of the project, and not such as would make a project a permanently losing proposition. The Committee need hardly stress that the investment Board is expected to critically and thoroughly go into the suitability of location of a project before according approval thereto. They would like the Bureau of Public Enterprises to bring this matter to the notice of all the Ministries and public undertakings for their future guidance.

- 5.33. The Committee are informed that a landside occurred in September, 1974 near the Digester House of the mill. The Experts Committee, which was appointed by the NIDC (the consultants) to go into the matter came to the conclusion "the so-called slips to the hillock sides are essentially the sliding of the loose excavated soil dumped on the hillock sides caused by rain water". The Expert Committee observed that the natural soil was quite stable and there need be no anxiety on this account. As regards the site being in an active earthquake thrust zone the Experts Committee stated that there need be no fears on this account as long as structures and formulations were designed making allowances for earthquake as per ISI codes, which they were advised, was being done. Experts Committee were satisfied that the site was suitable from an engineering point of view. They however, did not examine the suitability of the site from the operational and economic angles.
- 5.34. The Experts Committee have made recommendations for taking certain additional protective measures to protect the hillock sides from further damage. The Committee would like Government to take all necessary protective measures to safeguard the structure of mill and plant. The Committee would like to be informed of the concrete measures taken in this behalf.
- 5.35. The Committee note that the date of commissioning of project which was originally fixed as December, 1976 has been revised to October, 1977. They regret to note that in the agreement with the consultants (NIDC) no specific time-schedule was stipulated for the completion of the project, with the result that the consultants could not now be held responsible for the delay. The Committee take a serious view of this omission in the agreement and would like the matter to be investigated with a view to fix responsibility for the lapse. The Committee are informed that a Supplementary Agreement has been drawn up and an agreed PERT-CHART has since been signed. The Committee find that the Ministry still apperhend that there may be some slippage even in the revised date of

commissioning. If serious and concerted measures are taken by the Corporation and the Government render all possible assistance to the Corporation in overcoming the constraints that may arise in the execution of the project it should be possible to avert any further slippage in the date of commissioning of the mill.

### KERALA NEWSPRINT PROJECT

#### A. Consultants

- 6.1. The execution of the Kerala Newsprint Project was entrusted to Hindustan Paper Corporation in May, 1970.
- 6.2. The HPC having completed the necessary basic work for the Kerala Newsprint Project regarding land acquisition, infrastructural facilities, basic engineering equipment, appointment of key personnel etc. issued on the 6th August, 1973 a letter of intent to the National Industrial Development Corporation on the strength of their collaboration with M/s. Simons (International) of Canada for their appointment as turnkey consultants for the Project. An advance payment of Rs. 8 lakhs was also made to them during 1973-74. The Consultants were to work in foreign collaborations with Simons International. After a good deal of work had been done by NIDC and examined by Simons, when NIDC and HPC representatives visited Canada in September 1973, the foreign collaborators of NIDC backed out and withdrew their collaboration. Since NIDC did not have the requisite expertise in paper technology, it was considered by the Board of Directors on 18.3.1974 to limit NIDC's role to the preparations of detailed engineering only. But in the Board's meeting held on 1.5.1974, the matter relating to the role of NIDC in respect of consultancy service of Kerala Project was further discussed and it was decided to terminate the consultancy arrangement with NIDC for the Project. The work done by NIDC is being evaluated by the Corporation and the recovery if any would be made from them during the current year.

It was also decided by the Government of India that consultants for the project should be directly appointed by the Corporation. Accordingly, the Corporation approached all the reputed firms of foreign consultants to quote their fees and ultimately M/s. Sandwell & Co. Ltd., Vancouver (Canada) were selected. The Government of India have approved this arrangement.

6.3. Asked as to how the NIDC was selected as consultants for the Kerala Project when they did not have the requisite expertise in Paper Technology. The Chairman-cum-Managing Director of HPC, stated during the evidence as follows:—

"The background is like this. In 1972 or 1973-I do not know the exact date-an action committee headed by the then member, Industry, Planning Commission, Mr. M.S. Pathak was set up. It had as a member the Chief Consultant of the Planning Commission, Shri Rajadhaksha; were other members. They recommended then there that NIDC should be developed into a consultancy house for paper and pulp, because at that time NTDC had tied up with a very well known Canadian firm of consultants. H. A. Simons, one of the topmost consultants in the world. Based on that agreement, HPC thought that NIDC could be appointed as consultants. They were actually appointed as turnkey consultants for the Kerala project. In February, 1974, the agreement between Simons and NIDC got terminated. Simons walked out of the arrangement. Just at that time I had joined HPC. Therefore, the first thing I did was to cancel HPC's arrangement with NIDC to whom by then they had paid Rs. 8 lakhs as advance. We are now in touch with them to get the account for the money and claim whatever is the refund due. That was how NIDC came into the picture and went out of it."

6.4. In this connection, the Ministry of Industry and Civil Supplies has stated in a note, that it was not the Government who appointed the NIDC as turn-key Consultants, but the dustan Paper Corporation itself took this decision. The was upheld by Government. The considerations which would have weighed with the Corporation for appointment of the NIDC turn-key consultants appear to be three fold. In the first place, at the time when the decision to appoint a consultant for Kerala Project was taken, NIDC was one of the few consulting organisations available in the field. No private consultant in India had any particular standing for consultancy for newsprint projects and the NIDC could be deemed to be as good as any other Indian consultant. Secondly the NIDC was an undertaking of the Government of India under the Ministry of Industrial Development and other things being equal, naturally preference could be given to a governmental agency. The Corporation would have been aware that it was the desire of the Government that the NIDC develops into an effective and reliable consultant in the field of paper and newsprint industry. This was with a view to developing indigenous capability in the design of newsprint plants. Thirdly, the NIDC had been able to tie up foreign collaboration and had the backing of M|S. H. A. Simons of Canada who are consultants of world repute in the field of paper and newsprint. This was an important factor which influenced the decision of the HPC to appoint the NIDC as the turn-key consultants for the Kerala Newsprint Project in 1973. The Corporation made it a condition for appointment of the NIDC that they must have a back up consultancy of M/S H. A. Simons.

- 6.5 The appointment of the NIDC as consultants was cancelled because later, the collaboration of the NIDC with M $\mid$ S H. A. Simons fell apart. The reasons for this were as follows:
  - (a) M|S H. A. Simons were insisting that the complete work of basic engineering must be carried out in Canada as according to them that was the only way of doing it most efficiently. On the other hand, the NIDC and the Government wanted that the bulk of basic engineering work be done by the Canadian experts in India, rather than in their home offices in Canada, so that there was greater involvement of Indian engineers in the basic engineering work and the transfer of technology could come about more rapidly.
  - (b) M|S H. A. Simons felt that the total basic engineering work for the first project, i.e. Kerala Newsprint Project, should be done by them. On the other hand, with a view to developing indigenous capability at a much faster pace, the Government had stipulated in the collaboration arrangement between the NIDC and M|S. Simons that even in the case of the first project the foreign collaborator should be assigned the work of basic engineering upto 75 per cent a only and the balance 25 per cent work should be done indigenously by Indian parties such as NIDC and HPC.
  - (c) On the question of fees, the collaboration agreement provided that the NIDC would have the right to call upon MS. Simons for the services of such number of technical personnel as would be necessary to assist and guide the NIDC's technical personnel from time to time but the reimbursement to M/s Simons on this account shall not exceed 3000 Canadian Dollars per month. The view of MS Simons was that this amount was too low and it

would put a limit to the capabilities of the personnel to be deputed for the project.

As the foreign collaboration between the NIDC and MS Simons fell through and as in any case it was essential for the HPC to have a foreign consultant of worldwide repute in newsprint manufacture, particularly because the basic raw material, viz. hybrid eucalyptus, was nonconventional and the technology of using it for manufacture of newsprint was not fully developed, there was no reason for the Corporation to continue with the consultancy of the NIDC and the search for consultants was started afresh.

- 6.6 It would be seen from the above that in regard to the Kerala Project there was no adequate opportunity to test the capabilities of the NIDC as consultants. Nevertheless, as a general policy, the Government felt that taking a long range point of view, it might be advisable to gradually develop capability for such purposes within the HPC itself. The advantage would be that as HPC would get involved in production of paper and newsprint and running of mills, it would get a practical orientation and a consultancy wing within the organisation would have a greater practical bias and be close to actual operational experience. This proposal still remained to be considered from all angles and given a concrete shape.
- 6.7 Explaining the reasons for having foreign collaboration for the Kerala Newsprint Project the Chairman-cum-Managing Director of HPC stated as follows:—

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"Mechanical pulp is produced in this country in one mill, which is NEPA. What its quality is and what its reputation with the newspapers is, I am sure, you all know. We are using Eucalyptus for our mechanical pulp. There is no knowledge in this country of mechanical pulping of Eucalyptus. Therefore, to say that there is technical knowhow available, in my humble opinion, is not really factually what it is. This is, of course, the situation as the facts go. In addition, we are going to construct this mill with the assistance of German and English money, and it is a pre-requisite in both these loans that we have the backing of a very well known internationally acceptable consultant. Therefore, even if I would have per-

sonally been willing to go along with you and taken the risk of setting up a newsprint mill without consultants by solely depending upon machinery manufacturers—in other words, I would have had a consortium of machinery manufacturers—and with adequate guarantees gone ahead, but this was not acceptable to the foreign credit institution KFW. It was not even acceptable to my own Ministry, Public Investment Board and others. This is because they felt that the machinery suppliers would be inclined to push their own equipment in preference to what is best, and therefore, they should not be the consultants."

- 6.8. The Committee note that the National Industrial Development Corporation, a public sector undertaking, was appointed in August, 1973, as turn-key consultants for the Kerala Newsprint Project on the strength of its collaboration with M/s Simons (International) of Canada in spite of the fact that the NIDC did not have the requisite expertise in paper technology and a sum of Rs. 8 lakhs was also advanced to them. The Committee find that in September, 1973, the foreign collaborators, M/s. Simons (International) of Canada, formally backed out and withdrew their collaboration with NIDC because of certain differences with the latter. Since NIDC did not have the requisite expertise in paper technology and as the foreign collaboration with M/s. Simons fell through, the Hindustan Paper Corporation decided in 1974 to terminate the consultancy arrangement with the NIDC for the project, and to start afresh the search for consultants.
- 6.9. The Committee are informed that the NIDC was selected as consultants on the suggestion of the Action Committee of the Planning Commission which observed that NIDC, a public sector undertaking, should be developed into a consultancy house for paper and pulp as it had tied up with a very well known firm of consultants M/s. H. A. Simons of Canada. Moreover, at that time there was no private consultants in India which had any standing for consultancy services for newsprint. The Ministry stated that it was not the Government who appointed NIDC as consultants but the HPC itself took this decision though the Ministry admitted that "the Corporation would have been aware that it was the desire of the Government that the NIDC develops into an effective and reliable consultant" in this field. The Ministry have also admitted that there was no adequate opportunity to test the capabilities of NIDC as consultants. While the idea to develop an Indian organisation into

a consultancy organisation in the field of paper and pulp industry is appreciated, in the opinion of the Committee, the choice of NIDC which admittedly did not have the requisite expertise in this field was not right.

6.10. The Committee are informed that as a general policy Government feel that taking a long range point of view it may be advisable to gradually develop capability for such purposes with Hindustan Paper Corporation itself although this proposal is yet to be considered from all angles and given a concrete shape.

Now that the Hindustan Paper Corporation has been entrusted with the implementation of the Newsprint Project and a number of other projects, it appears to be more appropriate if the consultancy service and expertise for paper technology are developed under the H.P.C. The expertise, if any, available with the NIDC could also be suitable absorbed by the HPC.

- 6.11. The Committee have found that in the case of fertilizers, several parallel agencies in the public sector have been developed for designs and consultancy with the results that not only the efforts of these organisations got diluted and difficulties are faced in taking final decisions about designs but there is also avoidable duplication and heavy unnecessary overheads. The Committee feel that it is time that Government consider all aspects and take a decision about the location of design and consultancy services for paper in the public sector so that it could be squarely entrusted with the responsibility of development and execution of projects.
- 6.12. The Committee are informed that the Hindustan Paper Corporation approached the reputed firms of foreign consultants to quote their fees and ultimately in 1975 appointed M/s. Sandwell & Co. Limited, Vancouver (Canada) as its consultants for the Kerala Project and this arrangement has also been approved by the Government of India. The Committee find that before entering into agreement with M/s. Sandwell & Co. negotiations were also conducted with M/s. Simons (International) Limited about the terms and conditions and finally M/s. Sandwell & Co. had been selected. The Committee hope that the Corporation had kept in view the difficulties experienced by NIDC with M/s. Simons & Co. before finalising the terms and conditions of agreement with M/s. Sandwell & Co. and ensure that such problems had been taken care of. so that the terms and conditions are in the best interests of the Corporation and the country and the technology selected is most uptodate.

## B. World Tours by HPC Officials

- 6.13. It has been stated that Hindustan Paper Corporation having completed the necessary basic work for Kerala Newsprint Project regarding land acquisition, infra-structural facilities, PIB requirements, basic engineering, detailed specifications of the plant and equipments, appointment of key personnel, issued the Letter of Intent to the National Industrial Development Corporation on the 6th August, 1973 for retaining them as Prime Consultants.
- 6.14. It was quite apparent from the existing capabilities of NIDC that the progress of the Project would depend on the active participation of HPC, and Simons and NIDC. Also the specifications and modifications, if any, of the long delivery items, such as paper machine and stock preparation equipments had to be finalised with the help of Simons in order that the Board of Directors could take the appropriate decision to order out the equipments as early as possible.

In view of the above observations, a visit of HPC, and NIDC delegation to the Simons offices and to the plant and equipment suppliers to discuss and clarify the specifications and then obtain their proposals, was planned.

6.15. A team of technical experts of HPC and its Chairman, Dr. R. L. Bhargava made a tour of various countries during 1973. The Board of Directors of HPC had approved the tour in their 14th Meeting held on July 30, 1973 and August 1, 1973. The relevant extract of the minutes is reproduced below:—

# Item No. 6-para C

The Board also approved the proposed visit of Chairman to foreign countries including Canada, accompanied by HPC technical experts to be selected by him in the company of NIDC. Team and one officer of DGTD to be decided upon by Dr. A. Seetharamaiah. This will enable the Corporation to finalise broad specifications of machinery in consultation with Messrs H. A. Simons (International) of Canada who are technical collaborators of NIDC and thereafter finalise proposals for the placement of orders for long delivery machinery required for Kerala Newsprint Project.

The purposes of the tour were:

- (i) To have joint discussions with NIDC, the turn key consultants and their collaborators Messrs H. A. Simons on the basic engineering work of the Kerala Newsprint Project carried out by HPC and finalise detailed specifications of each section:
- (ii) To visit different workshops and pulp and paper mills to observe the technical and engineering developments in the field of pulp, paper and newsprint industry, more particularly study the operations of various twin-wire formers developed by various manufacturers and the new chemi-mechanical process developed for the pulping of mechanical pulp from un-conventional raw materials;
- (iii) To have tenders issued for plant, machinery and equipment corresponding to the specifications approved by Simons and obtain offers therefor.
- 6.16. The following Officers of the Corporation undertook the tour:
  - 1. Dr. R. L. Bhargava, Chairman.
  - 2. Dr. A. Panda, then Dy. Chief Project Officer.
  - 3. Shri S. G. Prabhu, then Senior Project Officer (Pulp & Recovery).
  - 4. Shri R. K. Pillay, then Senior Project Officer (Paper).

The Team consisting of Dr. A. Panda, Shri Prabhu and Shri Pillay left India on August 26, 1973 and returned on October 28, 1973 as per programme in (Appendix V).

- 6.17. The Chairman left Delhi on August 29, 1973 and returned back on September 29, 1973. He joined the HPC Team in Vancouver after his visit to various countries. He was in Vancouver with the Team from September 12 to September 19, 1973. The details of his tour are given in Appendix VI.
- 6.18. The following officers of NIDC joined the HPC Team in Vancouver, Canada for discussions with H. A. Simons (International) Ltd.
  - 1. Shri Kan D. Mariwalla, Chief Consultant.
  - 2. Shri I. S. Bhathal, Project Manager.
  - 3. Shri T. Panchpakesan, Senior Engineer.

2919 LS-8

The total expenditure incurred by the team of three officers and the Chairman of Hindustan Paper Corporation was Rs. 1,43,147/-.

6.19. It has been stated by the Corporation that the HPC's team of officers held discussions with Messrs H. A. Simons (International) Ltd. and the National Industrial Development Corporation in Vancouver, Canada, on the 13th and 14th September, 1973. On 13th September, they discussed concepts and parameters concerning the proposed Kerala Newsprint Project. The main purpose of the meeting on the 14th September was to establish HPC's views as to the party or parties responsible for the various activities listed and if the responsibility was to be shared by parties who should take the lead.

6.20. While explaining the purpose of the foreign tour of HPC's team in 1973, the Chairman-cum-Managing Director of HPC stated as follows:—

"One delegation of HPC visited in August 1973. It was headed by the then Chairman, Dr. Bhargava. The members were Dr. Panda and two engineers, Mr. Pillay and Mr. Prabhu. This delegation went all over the world practically. Why this delegation went was that there was no action taking place on the part of NIDC in Simons coming over to India and starting their work. In the meantime they wanted to finalise the specifications of the paper machine. So, this delegation went firstly to see Simons in Vancouver. Then they visited various paper machinery manufacturers in different parts of world to see the type of equipment which was proposed to be installed in the Kerala Newsprint Mill in actual operation. It was a two months' trip and the delegation came back and submitted a report. Actually the one thing which the delegation has achieved is that they finalised the specification in Vancouver and the paper machine with Simons and then we issued worldwide tenders. They had the basic engineering done for the machanical pulping side which was examined by the Simons and their broad OK was obtained. .They took with them the basic engineering which the HPC has done for the Kerala project. They had this basic engineering examined by Simons which resulted in Simons approving and changing slightly the paper machine specifications and examining the mechanical pulping section, the general lay-out of the mill as proposed by the HPC and according their approval not in writing but verbally and which also resulted in the paper machine specifications being circulated to all the well-known paper machine manufacturers to get their quotations."

6.21. When enquired as to what was the justification for HPC sending their own delegation round the world they had their consultancy arrangements with NIDC, the representatives of HPC who was a member of the team stated inter alia as follows:—

"HPC had the NIDC as the turnkey consultants, but insisted that there should be a tie-up with a foreign consultant because NIDC did not have any experience implementing or planning any newsprint mill. The agreement between NIDC and Simons was not coming forth. So, the then Chairman of the Corporation, Dr. Bhargava consulted the Ministry and the decision was that a joint team from NIDC and HPC should visit Simons office and finalise the specifications for the long-term delivery of equipment. So there was a joint group which visited Simons office. Our main work there was to finalise the lay out of the project, to finalise the specifications of the paper machine, to finalise the specifications of some of the pulping equipment which I believe are quite new to India. That is why it was necessary for us to first visit Simons.

Later on specifications were made and worldwide enquiries floated. Simons did not sign these particular specifications. They said that they would not sign it because there were some difficulties about the payment. What we achieved was that we made the specifications. Our basic engineering was more or less examined by the Simons although not approved in writing and then we sent the specifications to the various paper machinery manufacturers. Officers were received and we evaluated them, so on and so forth....

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Usually when you ask for an offer, one has to make the specifications and the specifications have to be technically approved by the consultants and NIDC were not in a position to approve them.....

That was the main object. The other objective was to visit certain paper mills which use hard-woods for pulping and paper mills because our Kerala project was based on eucalyptus. We included Japan in our itinerary because it is one of the few countries using maximum amount of hard-woods for making newsprint. We visited a paper mill at Tomakomai in Hokkaide island in north Japan, which is probably one of the largest newsprint companies in the world. Out of the total stay of around a week in Japan, we spent two days in Tomakomai. Then we visited Mihara Works (a licensee  $\mathbf{of}$ Beloit) Mihara near Nagoya in the Central Japan because they communicated to us that they would be supplying machi-We saw their workshop and discussed technical problems which our raw materials might pose-From Japan we went to Vancouver. We were in Canada for about a month. We visited two mills near Vancouver in British Columbia. Then we visited a few mills and workshops in the United States and Canada..... There are two major equipment suppliers in United States for refiner mechanical pulping. One is in Springfield in the State of Ohio and the other is in Muncy, PENN. Then we visited Beloit Wisconsin near Chicago. We were in the United States for more than a week. Then we went to Sweden....For one day we stopped in London. Then we went to Stockholm. There we visited two mills. We discussed refinery mechanical pulping and other technical problems with Defibrator in Sweden. Then we visited two mills in Sweden, one is in Sundsvall north of Stockholm. Then we went to Finland and visited Valnet and the Metex company there. We visited one mill Helsinki also. In Finland we discussed about the supply for Refiner pulping and paper machine. Then we came to West Germany and visited two companies and a mill. From West Germany we came to Italy and India."

6.22. While further elucidating the purpose of foreign visit of HPC's Delegation, the Chairman-cum-Managing Director of HPC stated as follows:—

"I think that the point which has not been very clearly made out is that all over the world newsprint is manufactured from soft-woods. It is 100 per cent soft-wood; between 80 per cent to 85 per cent is mechanical pulp made from soft-wood; and about 10 per cent to 15 per cent in the chemical pulp made from soft-wood. It is only in the past 10 or 12 years that hard-wood has been introduced in the manufacture of newsprint. Hard-woods have been introduced partly in the mechanical component and partly in the chemical component. For instance, newsprint is manufactured in Australia, using hard-wood in the manufacture of both chemical and mechanical pulp. But nowhere in the world does the hard-wood component yet exceed 40 per cent to 42 per cent. In other words, out of 100 tonnes of pulp, broadly speaking, you will get 100 tonnes of paper. In all the countries of the world, hard woods constitute about 40 per cent to 42 per cent, and the rest are soft-woods, partly in the form of mechanical pulp. There is one mill under construction in Argentina where they are hoping to use upto 65 per cent of hard-wood pulp and 35 per cent of soft-wood pulp. In India, Kerala newsprint plant is being planned on the basis of using hard-wood to the extent of 70 per cent of the total, in the form of mechanical pulp; and for chemical pulp, we are using a thinner variety of bamboo, popularly known as 'reed'.

When the HPC took up the Kerala project, they were faced with the problem of starting a newsprint mill in which the mechanical component would be from hard-wood. Again, unfortunately, these hard-woods are not of a single species. Even among eucalyptus trees one variety is difficult for mechanical preparation. I find from papers which I saw when I joined, that some early 1973 or the end of 1972, when the NIDC was not in the picture, they had invited quotations and machines were offered to them having ordinary four drinier wire parts. The normal operation of a paper, machine is, you pour on an endless wire pulp in a consistency of four to five per cent. In other words, it is 95 per cent water and four to five per cent of pulp is dropped on a moving wire where the water is drained and the pulp is formed into a sheet. This is the type of machine which quoted to them. In India, all the paper machines that are installed are based on this particular way of formation of the sheet. This is a good way of forming a sheet when you are using chemical pulp, like all these pieces

of paper which you see here, which are hundred per cent chemical pulp.

It seems that in 1973 the HPC under the able guidance of its Chairman, Dr. Roshan Lal Bhargava, carried out studies and two things came to notice. One was that the technology for making newsprint from hard-wood has changed at the machine side, because the concept of four drinier wire has been changed into a set of vertical wire, popularly known as twin-wire former, where the wires vertically running and the pulp is injected either from the bottom or from the top, the water is drained on the sides and the sheet is formed. An analysis of the available information they collected revealed that a twin-wire former has the advantage of giving a better sheet bearing a better strength and a sheet which does not suffer from one sidedness. It will be of interest to you to know that in a four drinier paper machine that side of the sheet which touches the wire has a different type of formation than the others. In a newsprint sheet which contains 85 to 90 per cent of mechanical pulp and 10 to 15 per cent of chemical pulp this difference becomes very pronounced. It affects the printing quality on both sides. Therefore, all over the world the tendency has been to develop a sheet which does not suffer from one sidedness. They have discovered that the sheet which is coming in between two wires has better finish on both sides because the drainage of water is uniform and the formation is uniform. So, the twin-wire former has become popular. One of the purposes of their visit was to see different types of twin-wire formers and evaluate them so that when the quotations come they would be in a position to take the right decision....

The second thing which they had to examine was the utilisation of the hard-wood to the maximum extent and they were thinking of 70 per cent through a particular process of Refiner mechanical de-fibration which they would employ. In 1972 or 1973 they had received quotations for these stone grinders; that is the type of mechanical pulp system which our Nepa Paper Mills employ. These are big stones. You put the logs in and these stones grind them into some sort of semi-powder. Then it is washed like an ordinary dhobikhana. But, obviously,

stone-grinders were not the answer for hard-wood because nowhere was this process used in the case of hard-wood."

- 6.23. It has been stated by the Hindustan Paper Corporation that a team consisting of Shri M. L. Zutishi, Chairman-cum-Managing Director, Dr. A. Panda, General Manager (Technical Services), and Shri B. Misra, General Manager (Engineering Services) visited Japan, Canada, USA and Europe in February-March, 1975. The details of visits of the team are given in Appendix VII.
- 6.24. No purchases were made for the Kerala Project during this trip. Visit to Finland was for meeting M/s. Ekono and M/s. Jaakko Poyry both in Helsinki. The team stayed in Finland for 1½ days and in addition to discussions with Ekono and Jaakko Poyry also met M/s. Metox. Metox is a consortium organisation of the various machinery manufacturers for selling their equipment. Metox had made offers of paper machines as well as refiner groundwood and discussions were held with them on their offers. HPC's team were informed that no credit was available and should the HPC have the interest in Finnish equipment, a separate credit would have to be organised between the two Governments.
- 6.25. It is stated that the tour undertaken by the officials in February-March, 1975 had for its purpose the following:—
  - (i) Discussions with foreign parties to find out if they would be interested in investing in India in joint ventures, with HPC, particularly in Bastar and in the North Eastern region, if necessary on the basis of sustained export of pulp;
  - (ii) Discussions with foreign consultants as directed by Government, so as to narrow down the choice to two or three parties who would be invited to have more detailed discussions in India, so that ultimately one of them could be selected as the consultant for the Kerala Project;
  - (iii) Discussions with KFW, the German financial institution to provide necessary information in regard to the assessment of the project for foreign exchange loan;
  - (iv) Observe the latest developments in paper formers and continuous pulping techniques.

The expenditure involved on this tour was Rs. 1,05,956.60.

The team completed the work allotted to them. As a result of their visit, two consulting firms were invited to India and out of them one was finally selected.

- 6.26. The Committee note that within a month after the appointment of NIDC as turnkey consultants in August, 1973, the then Chairman and officers of the Corporation went on a tour of foreign countries including Canada in August, and September, 1973, it has been stated that the purpose of the tour was to have joint discussions with NIDC, the turnkey consultants, and their collaborators M/s. H. A. Simons on the basic engineering work of the Kerala Newsprint Project, finalise detailed specifications, different workshops and pulp and paper mills to see special equipments and plants to have tenders issued for plant and machinery and to obtain offers therefor. The fact that the then Chairman and officers of the Corporation undertook the tour along officials for finalising even the basic detailed specifications, etc. would indicate that enough spade work had not been done by the turnkey consultants/Corporation, and the tour became necessary primarily because the NIDC, the consultants for the project had hardly any experience of planning or designing newsprint mills.
- 6.27. The Committee regret to observe that the Corporation had not taken even the elementary precaution of varifying whether or not a firm agreement existed between the NIDC and M/s. Simons of Canada, before the choice of NIDC as consultants for newsprint project was made.
- 6.28. The Committee note that while the three officers of Hindustan Paper Corporation left India on 26th August 1973 and returned on 28th October, 1973 (64 days) after visiting as many as 9 countries (Japan, Canada, U.S.A., U.K., Finland, Sweden, West Germany, Holland and Italy), the Chairman of the Corporation left India on 29th August, 1973 and returned on 29th September, visiting 8 countries (Italy, Switzerland, West Germany, France, Canada, USA, Poland and Denmark). He was with the team of officers only for 8 days from September 12 to September 19, 1973 at Vancouver (Canada). For other days, his itinerary was different from that of officers. The total expenditure on the tour is stated to be about Rs. 1.5 lakhs. The Committee are not clear as to why the Chairman of the Corporation followed a different itinerary than that of his officers. The Committee understand that the then Chairman of the Corporation who was part-time left the Corporation in January, 1974. The Committee would like to draw attention Corporation to their comments about the appointment of the then

Chairman of the Corporation in their 40th Report (1973-74) on 'Role and Achievements of Public Undertakings'.

- 6.29. The Committee are informed that basic engineering, general lay out were got examined by Simons, specifications were finalised and world tenders were invited. It has been claimed that the tour was of advantage in as much as for the first time the Hindustan Paper Corporation was able to get first hand knowledge about the use of hard woods for pulp and paper making, formation of pulp sheets, types of twin wire framers and operation of certain machines and processes and this information, it is stated, has been useful, in subsequent discussions in 1974 with the machinery manufacturers and crystalisation of the thinking of the Corporation on the type of equipment to be ultimately selected for the project. The Committee are not sure whether the advantages claimed to have actually been realised are commensurate with the expenditure incurred and time spent.
- 6.30. The Committee also note that within less than two years after the first tour by the Chairman and the officers of the Corporation, a team of three officers including the new Chairman-cum-Managing Director went on another tour of six countries for 24 days from 19th February to 14th March, 1975. The total expenditure incurred on this tour is stated to be about Rs. 1.06 lakhs. It has been stated that as a result of their visit two consulting firms were invited to India and out of them one was finally selected. The second tour it is claimed enabled the undertaking to finalise its consultancy arrangements in place of the NIDC.
- 6.31. The Committee are not clear as to how such foreign tours were at all approved by the Ministry. They would like that all aspects of the tour in August-September, 1973 including the necessity for the tour, the benefits derived therefrom, the Composition of the team, the itinerary followed by them should be thoroughly investigated and the Committee informed of the action taken against those who are found not to have acted with probity and prudence expected not to executives of a public sector undertaking.
- 6.32. The Committee need hardly point out that precious and scarce foreign exchange should not be allowed to be wasted on long, leisurely and unnecessary tours. They recommend that Government should critically scrutinise proposals for foreign tours received from the public undertakings and only if they are satisfied

that a proposed tour is absolutely necessary in the larger interests of the public undertaking, they should allow a minimum number of officers to go abroad for a short duration to visit specified places for specific purposes. The officers who go on tour should be asked to submit, on return, detailed reports on their tour to the Board of Directors and the administrative Ministry concerned who should evaluate the reports critically. The Committee would like the Bureau of Public Enterprises to issue suitable guidelines to all the Public Undertakings and the also administrative Ministries concerned in this regard and review the guidelines from time to time in the light of experience gained.

#### C. Estimates of the Project

- 6.33. The execution of the Kerala Newsprint Project was entrusted to Hindustan Paper Corporation in May, 1970 and in January, 1971, the National Industrial Development Corporation (NIDC) was asked to prepare a D.P.R. for the project. The NIDC submitted in October, 1971 its report based on three pulping streets plus a creating plant with a capital outlay of about Rs. 30.08 crores. The HPC after preliminary examination of the DPR recommended in March, 1972 its acceptence by Government. The HPC submitted its reapprisal of the DPR to Government recommending installation of two pulping streets. The Capital outlay was revised to Rs. 39.08 crores which includes Rs. 5.18 crores for Civil Works and Rs. 26.2 crores for Plant and Machinery. The PIB recommended in May 1973 the acceptance of the DPR as reapprised by HPC subject to the condition that utilisation of pulping techniques for hybrid eucalyptus are carefully examined and necessary precautions taken to arrest the fungus attack on eucalyptus. An Expert Committee appointed by HPC to examine the question of utilisation of hybrid variety of eucalyptus recommended in July, 1973 the installation of three pulping streets instead of two originally envisaged without any revision of capital cost.
- 6.34. The Corporation appointed another Export Committee to examine fungus problems—associating the Dehra Dun Forest Research Institute.
- 6.35. In 1973 H.P.C. invited tenders for various machineries and equipments for the Kerala Newsprint Project. Quotations were received from several world renowned machinery manufacturers as well as from indigenous parties. Based on these quotations the Corporation prepared a supplementary report on 29th May, 1974 and submitted to the Government for consideration. This report

was subsequently approved by the Public Investment Board and the Cabinet on 12th September, 1974 with the following parameters:—

1. Capacity . . . 80,000 tonnes per annum.

2. Total capital cost . Rs. 82.88 crores.

3. Foreign Exchange . Rs. 22.65 crores.

The total capital cost includes Rs. 59.63 crores for Plant and Machinery and Rs. 8.97 crores for civil works.

6.36. The estimates submitted by HPC in 1973 was mainly based on the NIDC report and certain inquiries made with the local parties. The supplementary report submitted by the Corporation on 29th May, 1974 was based on actual quotations received from various parties from Indian and foreign machinery manufacturers. The main reasons for increase in the cost of plant and machinery which was 118 per cent have been stated to be:—

- 1. Incorporation of latest technology;
- 2. Increase in the customs duty from 32½ per cent to 40 per cent;
- 3. Increase in the freight and insurance charges for machinery and equipments;
- 4. Unprecedented increase in prices of all equipments during the last two years both in the domestic and international markets.

The increase in cost of civil works has been stated to be due to increase in floor area and escalation in prices.

6.37. As regards the effect of the revision of and steep rise in estimates on the production and profitability of project, HPC, have stated in a note submitted to Committee, that the cost of production has increased from Rs. 1248 to Rs. 2770 per tonne of Newsprint. However, the profitability of Plant remains the same i.e. at 9 per cent rate of internal return based on a realisation of Rs. 3400 per tonne of newsprint which was the international price of newsprint prevailing at that time.

When full production is attained the annual turn over of the company would be Rs. 2784 lakhs; as against this the annual cost of production is estimated at Rs. 2245.8 lakhs.

6.38. Based on this, the broad economics of the project are as follows:

1. Average annual gross re	turn on capital	•	. 8.9%	
2. Internal Rate of return	•		. 9%	
3. Average return on equit	у .	•	. 11%	
4. Pay back period	•	•	. 6 years	s and 6 months
5. Break-even point		•	. 65 %	

It has been added that the international price for newsprint is going up steadily during the last two years. In this context any increase in the cost of inputs will be more than off-set by the corresponding increase in the sales value.

6.39. The Committee regret to note that the original estimates prepared by N.I.D.C., the turnkey consultants, for the Kerala Newsprint Project in 1971 for a capital outlay of Rs. 30.86 crores were revised to Rs. 39.08 crores in 1973 as a result of reappraisal by the HPC and again revised to Rs. 62.88 crores in 1974 representing an increase of 113 per cent over the revised cost of the project. The Committee are informed that apart from increase due to price escalation the main reasons for increase in the project estimates are changes in specifications, requirements of additional equipments (which account for 62 per cent increase in the cost of machinery) and increase in the civil works due to increase in floor area (which account for 40 per cent increase in the cost of civil works).

6.40. The Committee cannot but conclude that it was because of the choice of NIDC who had not the requisite expertise in paper technology as consultants for the project that the estimates of the project proved unrealistic and incorrect and had to be revised. The Committee hope that at least the revised estimates now prepared are complete, realistic and have taken into account all the foreseable items and there will not be any occasion for further revision. The Committee would like Government to ensure that the arrangements for preparation/revision of estimates are such that responsibility could be fixed for any lapses in this regard.

6.41. The Committee find that the approval to the revised estimates was given by the P.I.B. subject to the condition that utilisation of pulping techniques for hybrid eucalyptus is carefully examined and necessary precautions taken to arrest the fungus attack on eucalyptus. The Committee are informed that the Expert Committee appointed in July 1973 examined the question of utilisation of hybrid variety of eucalyptus recommended installation of three pulping streets instead of two as originally envisaged without involving revision of capital cost. The Committee are also informed that the question of fungus problem has been referred to another Expert Committee associating the Dehra Dun Forest Research Institute. The Committee would like to be informed of the findings in regard to fungus problem and the action taken in pursuance thereof, as this raises a very basic question about the raw material to be used for paper manufacture.

#### D. Delay in completion of project

- 6.42. During the course of examination of NEPA in September, 1973, the Committee on Public Undertakings were informed by the Secretary of Ministry of Industrial Development that the Kerala Project which would produce 70,000 tonnes of newsprint and 10,000 tonnes of magazine paper based on eucalyptus would be completed by the end of 1976.
- 6.43. It is stated that the date of commissioning of the project as given in the original project report prepared by NIDC in October, 1971 was October, 1977. The date of commissioning was revised to October, 1978 in the revised project cost estimate submitted by HPC in May, 1974 and approved by Cabinet Committee in September, 1974.
- 6.44. The Committee enquired about the reasons for the delay in the Commissioning of the Kerala Project. The Chairman-cum-Managing Director of HPC stated during the evidence as follows:
  - "There was a statement in a press conference in 1973 by the Corporation Chairman that the Kerala newsprint project would go into production in 1976. It was an impossible proposition, because the raw materials had not been tied up, a very small parcel of land had been acquired, foreign exchange had not been provided, settlement with the State Government on infra-structural facilities had not been made and even quotations for equipment had not been received. Even the final PIB clearance for the capital cost had not been obtained. I am not in a position to explain what particular advantages were seen by the then manage-

ment to have made such statements, but based on my limited experience, I would say that in 1973 there could not be any possibility of the Kerala project going into production in 1976. In 1973, the situation was that it would still take a year to tie up the preliminaries resulting in the placement of orders, after which it would be at least 3. if not 31/2, years for the date of commissioning. Hence the revised date which we have given in October, 1978, because we have placed orders for equipment of long-delivery indigenous bits and we will soon place orders for imported equipment as foreign exchange has now been earmarked. The capital cost estimates made through a firm of consultants called NIDC unfortunately were all under-estimates, not based on realities. In 1974, one of the first jobs we had to do was to bring these uptodate, make them realistic in keeping with the prices of machinery prevailing then.... In my humble opinion, 1976 was not a realistic date and was not based on actual realistics. In February, or March, the NIDC-Simons arrangements broke down and thereafter we decided that we had to do it ourselves. Foreign exchange allocation of about Rs. 12 to 14 crores was made on KFW of Germany for the paper machine part, partly on Sweden from the Swedish credit and partly on England from the U.K. credit. KFW were not willing to examine the scheme, because it is going to be the first of its kind in the world using so much of hard wood, unless it is by top foreign consultants. This was also the view expressed by the Public Investment Board when they approved of this investment, and by the Finance Ministry. So, we got into touch with all the well-known consultants in the world, including Simons. Interest was shown by four firms including Simons and Sandwell. They were willing to come over and discuss this matter with us. We discussed the matter with them and we finally settled with Sandwell. We signed an agreement with them. We got the FIB clearance. We have issued a letter of credit and their team is right now here examining the whole thing, and they have brought the documents with them.... In Kerala we are now in business and in another three years or so we should be in production."

6.45. Hindustan Paper Corporation in a note submitted to the Committee stated that the indication given towards the end of 1973 that the Kerala Project would be completed by the end of 1976 was

not realistic. By the end of 1973, the following issues had yet to be finalised:

- (1) Settlement with the State Government on assistance required for the setting up of the project including allotment on a long term basis of forest areas, was not made. The agreement with the State Government was signed on 7th October, 1974. Information was received on 7th June, 1974 by the Corporation from its representative in Trivandrum that the State Government were contemplating to allot the forest areas to a private mill and if this happened there would not have been adequate raw material left to sustain the newsprint operations at Velloor. The matter was brought to the notice of the Ministry of Industrial Development and with their intervention necessary terms and conditions were finalised resulting in the signing of the agreement with the State Government on 7th October, 1974.
- (2) A small parcel of land only had been acquired and it was only by the middle of 1975 that approximately 325 acres of land had been taken over by the Corporation thus making it possible to get ready for the site preparation operations.
- (3) No foreign exchange had been earmarked for the project. It was only in the month of August, 1974 that the Ministry of Finance finally informed the Ministry of Industrial Development about the arrangements made to cover the foreign exchange requirements of the project.
- (4) There were rumblings of the misunderstandings between NIDC (who had been appointed the turn-key consultants for the project on the understanding that they would have the full technical backing of H.A. Simons of Canada) and Simons, and our representatives who were in Vancouver in September, 1973 had received the impression that Simons were not at all happy about fulfilment by NIDC of their obligations under the agreement and they were not willing to spend any time on the project. In February, 1974, Simons formally backed out from their collaboration arrangements with NIDC, and HPC in turn was obliged to cancel its arrangement with NIDC.
- (5) Except for an order for recovery boiler placed on BHEL in 1973, suppliers of major plant, machinery and equipment had yet to be selected let alone placing orders therefor.

- 6.46. The Corporation stated that in the above background, it can be categorically stated that end of 1976 originally indicated in 1973 for the commissioning of the mill was not realistic. The Government of India were fully in the know of the above position.
- 6.47. In a written reply, the Ministry also stated that in the above background, the date indicated towards the end of the 1973 for the commissioning of the mill, i.e. end of 1976, was not realistic. Even if the above problem had not intervened, the project could not have been completed by the end of 1976, since it would have taken some 3 1/2 years from all final clearances for the project to be completed.
- 648. The following preliminary works have now been completed/done:
  - (1) Survey of the raw material resources and execution of an agreement with the Government of Kerala for supply in sufficient quantities of eucalyptus and reeds on a long terms and sustained basis:
  - (2) Selection of project site in Village Velloor, Vaikom Taluk, Distt. Kottayam, State of Kerala. The Corporation had already acquired and taken possession of 410 acres of land out of 480 acres requisitioned for the said purpose;
  - (3) Collection of site data such as wind direction, rain-fall, completed contour survey of site and carried out site investigations;
  - (4) Carrying out of laboratory tests on the raw materials including pilot plant and mill trials;
  - (5) Obtained investment decision of the Government of India for the Capital outlay needed for the project.
  - (6) Prepared conceptual lay out for the project.
  - (7) Selected the process technology;
  - (8) Carried out basic design calculations on materials balances and sizing of equipment;
  - (9) Prepared all functional specifications of major items of machinery and equipment including long delivery items.
  - (10) Prepared utility block, flow diagrams;
  - (11) Carried out soil investigation tests;
  - (12) Started site levelling and grading work;

- (13) Prepared Project Schedules PERT Chart;
- (14) Consultants have been appointed and they have started their work;
- (15) Orders for the long delivery indigenous equipment like recovery and power boiler and turbo-alternator placed.
- 6.49. It has been stated that HPC had entered into an agreement with the Kerala Government on 7-10-74 for the sustained supply of raw materials to the Kerala Newsprint Project from the year 1977-78. Para 4(i) of the Agreement provides as follows:—
  - "4. (i) The Government of Kerala undertake to make available annually to the Corporation one lakh fifty thousand tonnes Eucalyptus wood at fifty percent moisture content consisting of not less than one lakh tonnes of Eucalyptus grandis variety at fifty per cent moisture content from the state plantations of Eucalyptus grandis and Eucalyptus tereticornis including the yield from the plantations reserved hereunder. The Government of Kerala further agree to keep reserved from the date of this agreement the state plantations of Eucalyptus grandis in Pamba, Kottayam, Punalur, Thenmalai and Trivandrum Forest Divisions as constituted at present and not permit harvesting Eucalyptus grandis therefrom by any party other than the Corporation;
  - Provided that the Government of Kerala will review the reservation of plantations indicated above in case the Corporation (a) does not place orders for major plants, machinery and equipments on or before the 31st March, 1977; or (b) does not complete before the 31st December, 1978 all the factory and other buildings essential for production except for reasons beyond the control of the Corporation."
  - 6.50. As regards the steps taken to ensure the completion of the Project according to revised schedule, the Ministry stated in a written note that—
    - "Close watch is being kept on the progress of the project by obtaining periodical reports from the Corporation. It is expected that the project would now be commissioned by the due date of October, 1978. The Government would no doubt initiate corrective steps as called for from time to

time to ensure that the corporation adheres to this time schedule."

- 6.51. It is seen from the agreement entered into with M|s. Sandwell & Co. that the latter would use its best efforts to complete the work under the agreement by 31st December, 1978.
- 6.52. During the course of examination of the Nepa Mills in 1973, the Secretary of the Ministry of Industrial Development had informed the Committee that besides expanding the capacity of Nepa Mills, a project was coming up in Kerala under HPC which would be completed by the end of 1976 and it would produce 70,000 tonnes of newsprint and 10,000 tonnes of magazine paper based on eucalyptus.
- 6.53. The Committee are now informed by the Corporation as well as the Ministry that the date indicated towards the end of 1973 for the commissioning of the Kerala Project was not realistic, as raw materials had not been tied up, only a small parcel of land had been acquired, foreign exchange had not been provided, settlement with State Government regarding infrastructural facilities had not been made and even quotations for equipment had not been received. The PIB clearance for capital cost had not been obtained. The Ministry stated that even if the above problems had not intervened, the project could not have been completed by the end of 1976 since it would have taken 3 to 3½ years from the date of final clearance of the project.

#### 6.54. The Committee are also informed that:

- (a) Agreement with the State Government on the assistance required including allotment on long term basis of forest areas was signed only on 7th October, 1974;
- (b) The major portion of the land had been taken over by HPC only by the middle of 1975 for the site preparation operations;
- (c) Arrangement for foreign exchange was made only in the month of August, 1974;
- (d) In February, 1974, Simons formally backed out of collaboration with NIDC and HPC had to cancel its consultancy ardangement with NIDC and had to make alternative arrangement for foreign collaboration; and

(e) Orders for major plant and machinery are yet to be placed.

The Committee are surprised as to how without taking these important factors into account the date for commissioning could have been given out as 1976.

6.55. The Committee are informed that a number of preliminary items of work had been completed and the project is now expected to be commissioned by 1978. The Committee also note that the Corporation has entered into an agreement with the Kerala Government on 7th October, 1974 for sustained supply of raw materials to the project from 1977-78. According to the agreement if the Corporation does not place orders for major plants by the end of March, 1977 or does not complete before the end of December, 1978, all the factory and other buildings essential for production, the Government of Kerala would be entitled to review the reservation of plantations from where the Corporation has to take raw materials for its Kerala Project. According to the agreement with M/s. Sandwell, the work is to be completed by the 31st December, 1978 at the latest.

6.65. The Committee need hardly stress that it is imparative on the part of the Corporation to ensure that the completion of project is not delayed more as there is a commitment made with the Kerala Government on which the Corporation are dependent for the supply of raw materials.

1850

6.57. The Committee would like the Ministry to keep a close watch over the progress of the project and render all assistance to the Corporation in overcoming constraints, if any, so as to enable the Corporation to adhere to the revised schedule.

#### VII

### ASSAM PULP AND PAPER PROJECTS

## A-Cachar Pulp and Paper Project

1

The original project report was prepared by NIDC in early 1972: with a capacity of 150 tonnes of paper per day (annual capacity being 50,000 tonnes). N.I.D.C. estimated a total outlay of Rs. 30.88 crores for this project. After analysing the report H.P.C. recommended a project of 250 tonnes of paper per day (annual capacity being of 80,000 tonnes) in the district of Cachar in Assam. Accordingly, a re-appraisal report was submitted to the Government in December, 1972 and the project cost was then estimated as Rs. 52.43 crores, which included Rs. 37.93 crores for machinery and Rs. 4.69 crores for civil works.

- 7.2. Quotations were invited for various machineries and equipments during the year 1973. It was also felt that by a marginal increase in capital outlay it could be possible to set up a mill with an annual capacity of 1,00,000 tonnes instead of 80,000 tonnes. Based on these quotations and the prevailing prices for other commodities the revised capital outlay and economics of the project was re-done by the Corporation for an annual capacity of 1,00,000 tonnes. This report was submitted to the Government in May, 1974. The total capital outlay was then estimated as Rs. 88.68 crores which included Rs. 67.11 crores for machinery and Rs. 7.2 crores for civil works.
- 7.3. The increase in the cost of plant and machinery between 1973-74 has been stated to be about 75 per cent and has been attributed to the following:
  - 1. Incorporation of latest technology.
  - 2. Going for multi-stage bleaching with chlorine dioxide togive better brightness and improved strength.
  - 3. Increase in the capacity of caustic chlorine plant.
  - 4. Inclusion of additional turbine for complete captive power generation.
  - 5. Increase of custom duty from 31½ per cent to 40 per cent.
  - Unprecedental increase in the cost of all equipments during: the last two years both in the domestic and internationally markets.

- 7. Increase in the capacity from 80,000 tonnes to 1,00,000 tonnes.
- 7.4. The main features of the project are stated to be as under:

A. (i) Original estimated cost:	•	•	•	•	. Rs	· 52·43	crores
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- B. (i) Original date of commissioning: . . . . December 1978
  - (ii) Revised date of commissioning: . . . April, 1979

There was a delay in the clearance of the project and hence the commissioning date was also delayed.

€.	(i) Annual rated capacity:	•		•	•		tonnes of
						writing	& Printing
						paper	

- D. Year of reaching the rated capacity: . . . . 1981-82
- E. Annual production and cost of Production:

					Prod	uction	Cost of Production
•	•	•			70,000	tonnes	Rs. 2305.1 lakhs
		÷			90,000	tonnes	Rs. 2633.6 lakhs
	•		•	•	1,00,000	tonnes	Rs. 2797.8 lakhs
•						90,000	

- F. (i) Estimated cost of production . . . . Rs. 2609 lakhs per tonne.
  - - 7.5. The following are the broad economics of the project:
    - 11. Average annual gross return on capital: . . . 10.2%

    - 4. Pay back period: . . . . . . . . . . . . . Years 10 months
    - 5. Break-even point: . . . . . . 61%
  - 7.6. It has been stated that there has since been substantial escalation in the cost of machineries, the building materials, labour etc. It is now estimated that the cost would need to be escalated by 30 percent. Accordingly the update capital outlay of the Project has been estimated as Rs. 115.28 crores though the cost of production as well as the capital cost have gone up considerably, since the submission of this report, the sales realisation on the basis of current market

price of paper would more than off-set the increase in cost. In otherwords, the economic analysis of the project would not be affected by the increase in the cost of materials.

- 7.7. The Corporation is still awaiting the investment decision of the Government for this project.
- 7.8. It is stated that a package deal for 700 acres of land was negotiated through the Government of Assam for a total cost of Rs. 5 lakhs. Lay-out of the mill has been prepared. The contract for the soil testing work has already been awarded and the work is likely to be taken up shortly by the contractors. The water analysis is also in progress and samples of water are regularly being drawn and sent to the Analyst for this purpose.
- 7.9. It has also been stated that the basic engineering for this project has been completed by the Corporation and fresh tenders for the purchase of plant and machinery would be invited shortly.

#### B. Nowgong Pulp and Paper Project

- 7.10. In 1971 N.I.D.C. submitted a project report recommending an integrated pulp and paper project in the district of Nowgong in Assam with the product mix of 50,000 tonnes of paper and 30,000 tonnes of saleable pulp per annum. The project was estimated to cost Rs. 31.70 crores.
- 7.11. H.P.C. after analysing the report recommended to the Government to have an integrated pulp and paper project having an annual capacity of 1,00,000 tonnes of writing and printing paper which is similar to the Cachar project. The Corporation's recommendation was based on various economies that can be achieved by standardising both the projects. This recommendation was submitted after studying the availability of raw materials in the regions.
- 7.12. In March 1973, the Corporation submitted the re-appraisal report to the Government with a capital outlay of Rs. 55.80 crores which includes Rs. 39.72 crores for plant and machinery and Rs. 5.17 crores for civil works. Quotations were invited for this project alongwith the Cachar Project during the latter half of 1973 and based on the quotations the capital outlay was revised at Rs. 88.99 crores which includes Rs. 67.57 crores for plant and machinery and Rs. 6.94 crores for civil works. The revised capital outlay and economics of the project were submitted to the Government in May 1974. These estimates were based on the offers of Plant and Machinery received in September to November 1973. Since then there

had been substantial escalation in the cost of machineries, building materials, labour etc. Allowing an escalation of 30 percent for these factors, the up-to-date capital cost of project, is estimated as Rs. 115.68 crores.

- 7.13. The principal reasons for an increase (of about 72 per cent in the cost of plant and machinery are stated to be as follows:
  - 1. Incorporation of latest technology.
  - 2. Going for multi-stage bleaching with chlorine dioxide to give better brightness and improved strength.
  - 3. Increase in the capacity of caustic chlorine plant.
  - 4. Inclusion of additional turbine for complete captive power generation.
  - 5. Increase of customs duty from  $32\frac{1}{2}$  to 40 per cent.
  - 6. Unprecedental increase in the cost of all equipments during the last two years both in the domestic and international markets.
  - 7. Marginal increase in the capacity to produce 1,00,000 tonnes.

The increase in cost of civil works has been attributed to increase/decrease in area and escalation in prices.

7.14. The main features of the project are as given below:

B. (i) Original date of commissioning . Decembr, 1978

(ii) Revised date of commissioning . . / Ptil 1979.

It was originally envisaged that the project would be cleared for investment in 1974.

investment in 1974.

C. (i) Annual rated capacity . . 1,00,000 tonnes per

D. Year of reaching rated capacity: 1981-82

E. Production year-wise:

Year			Production Cost of production
1979-80 .			70,000 tonnes Rs. 2311 lakhs
1980-81 .			90,000 tonnes Rs. 2640 lakhs
1981-82 .	•	•	1,00,000 tonnes Rs. 2804 lakhs

F.	(i) Ann 1al cost of production	•	•		•	•	•	Rs. 2615 lakhs
	(ii) Cost per tonne of paper				•	•		Rs. 2615 lakhs
	(iii) Annual sales realisation of different varieties of Paper		aver	_		•		Rs. 3349 lakhs

G. On the above basis, the following are the broad economics of the project:

ı.	Average annual gross return on capital	•	•	10.1%
2.	Internal Rate of Return .			10.52%
3.	Average return on Equity			13.9%
4.	Pay back period			5 Years 10 months.
5.	Break-even point			61%

7.15. The increase in the cost of material and other inputs during the last one year has not been taken into account in the above analysis. However, it was hoped that any increase in the cost of production would be more than off-set by a corresponding increase in the sales return.

7.16. The implementation of this Project is also awaiting the investment decision of the Government of India.

However, the Corporation had requested the State Government to acquire 500 acres of land for this Project, out of which 200 acres are forest reserves belonging to the State Government and the balance 300 acres private lands belonging to different parties. Out of 200 acres belonging to the State Government, the Corporation has taken possession of 175 acres of land and for the land belonging to the private parties, the State Government has started the acquisition proceedings. The soil testing work on this project has already been started and is likely to be completed shortly.

- 7.17. The basic engineering for this project has also been completed. Fresh tenders are being invited for purchase of plant and machinery.
- 7.18. The offers received for the plant and equipment as a result of an earlier advertisement are no longed valid and action is being taken to readvertise for the long delivery plant and equipment for both the projects (Cachar and Nowgong) so that the orders may be placed as soon as the projects are cleared by the Public Investment Board.

- 7.19. The terms of agreement with the State Government for the supply of raw materials and infrastructural facilities for both the Projects have already been finalised and the agreements will be signed as soon as the investment decisions are taken by the Government of India.
- 7.20. When asked about the effect of delay on commissioning, completion, cost and viability of the Projects, HPC in their note submitted to Committee stated that the delay in getting clearance of PIB for these projects would definitely affect the completion and commissioning of the projects. For both the projects the land was being acquired and all preliminary work had been completed or was in the process of being completed. Therefore, these projects could go on stream within 3½ years from the date of placing orders for main equipment.
- 7.21. In May 1974, total capital outlay estimates for these projects were of the order of Rs. 89 crores per project. These have since been revised to about Rs. 115 crores. If the projects got inordinately delayed, these estimates would have to be further revised unless there is a recession and prices come down.
- 7.22. Even at the revised cost of about Rs. 115 crores, because of the higher expected sales realisation, rate of return would remain practically constant.
- 7.23. When enquired about the reasons for the projects not being cleared by Government so far, the Ministry of Industry and Civil Supplies stated in their note as follows:
  - "The Government are aware of the importance of these two projects. The detailed project reports has also been received from the Corporation and have been sent to the Finance Ministry for obtaining approval of the PIB. However, as these projects require considerable resources and the Government have to allocate their scarce resources for specific projects keeping in view the competitive demand for funds from other sectors, attempts are being made to obtain financial assistance from abroad for these projects. This matter is being actively pursued.
  - Government are aware of the implications of the delay in giving final clearance to the projects, but the compulsions and priorities of the day namely to avoid inflation, to give boost to Agriculture, irrigation and power programmes and the limitation of resources required for

such large investments have so far stood in the way of clearance of these two projects."

-7.24. While expressing their concern over the delay in setting up-Cachar and Nowgong Projects, the Chief Minister of Assam, in his D.O. No. CMS. 41 74, dated 4th December, 1974, to the Minister of Industry and Civil Supplies, stated *inter alia*, as follows:—

"As you know, the Prime Minister herself had promised these two mills to this State about four years ago. The State Government have already taken all possible steps to accommodate the requests of H.P.C. in connection with these mills. The assurance of the Prime Minister has also been reiterated on various occasions in the Parliament with the result that the expectations of the Public of this State have been aroused. Under these circumstances, I am sure you will kindly appreciate the difficulty in now telling the public to wait indefinitely for the establishment of these two paper mills. As a backward State, we hope to receive the utmost sympathetic consideration from the Government of India. Hence, while I am fully aware of the present difficult resource position, I am confident that with their known sympathies for the backward regions, the Government of India would be able to find the required resources for these two mills. In this connection, for easing the pressure on the limited financial resources, I would suggest that we may plan to have a pulping machine and one paper machine in each of the two paper mills during the Fifth Plan leaving the remaining paper machine for each of the two mills to be set up in the beginning of the Sixth Plan.

Incidentally, I may mention that the State Government have already agreed to grant a considerably concessional rate of royalty for these two paper mills during their gestation period, in the hope that they would be established soon, thereby helping the development of our State. It will be appreciated that it would be extremely difficult to keep this concessional rate open indefinitely when all costs and prices are going up. Further, it would not be in the interest of economic exploitation of forests to keep the required forests reserved for the paper mills on an extremely fluid basis. It may also be mentioned that this matter involves the financial interests not only of the

State Government but also of the Mikir Hills District Council, a Constitutionally autonomous body."

7.25. In regard to finalisation of agreements with Assam Government for supply of raw materials for both the projects, the Ministry of Industry and Civil Supplies stated "that the State Government have not agreed to sign the agreement for the raw materials supply and infrastructural facilities until a definite date for the exploitation of the forests is decided upon. The Ministry has suggested to the State Government to execute the agreement with the condition that the project would be completed within a given period commencing from the date the Corporation is able to obtain all the Governmental clearances. The State Government have not yet agreed to do so."

"Having regard to the tight resources position and the attempts being made by Government of India to secure the necessary funds from abroad, it is hoped that the State Government will maintain the concessional rates of royalty offered by them."

7.26. In reply to Starred Question No. 219 in the Rajya Sabha on 18th March, 1976, the Minister of Industry and Civil Supplies has stated—

"The final investment decision in regard to these two projects, especially in respect of their timing is yet to be taken owing to the size of investment funds required and the constraint of financial resources for which there are competing demands.

In the Annual Plan for 1976-77, an outlay of Rs. 5 crores has been provided for these projects. Government have not been able to make an investment decision in regard to these projects although the matter has been pursued with the Ministry of Finance and the Planning Commission. The possibility of obtaining assistance from abroad is also in the vision."

7.27. The Committee note that the project estimates prepared by the National Industrial Development Corporation for the Nowgong and Cachar projects in 1971-72 for Rs. 32 crores and Rs. 31 crores respectively for an annual capacity of 50,000 tonnes had first been revised by the Hindustan Paper Corporation to Rs. 88 crores for a capacity of 80,090 tonnes and thereafter to Rs. 115 crores for an annual capacity of 1 lakh tonnes and submitted to Government in

May 1974. The increase in cost has been stated to be due to not only the increase in capacity but also factors like incorporation of latest technology, provision of additional machinery and equipment and price escalation. The Committee feel that the initial project itself should have been based on plants of economic size of 1 lakh tonnes capacity instead of 50,000 tonnes and revising the estimates from time to time thus losing more than two to three years in the process.

7.28. The Committee note that while the basic engineering in these projects has been completed by the Corporation and preliminaries like acquisition of land etc., have been initiated, the projects are awaiting the investment decision of the Government. The Committee are informed that on the basis of the revised estimates of Rs. 88 crores, the average return on equity in the case of each of these projects would be about 14 per cent and the break-even point 61 per cent while the internal rate of return would be 10.5 per cent. As the cost of these projects has now been revised to Rs. 115 crores each, the Committee would like that the Government should make sure of the economics of these projects.

7.29. The Committee further note that the Corporation has settled the terms of agreement with the State Government for supply of raw materials and infrastructural facilities for both the projects and the conclusion of the agreement were awaiting investment decision of the Government.

7.30. The Committee are informed that the Ministry are aware of the implications of the delay in giving final clearance of the projects but compulsions and priorities of other sectors and the limitation of resources have so far stood in the way of clearance of these two projects.

The Committee find that in reply to a Starred Question No. 219 in the Rajya Sabha on the 18th March, 1976, the Minister of Industry and Civil Supplies has stated that final investment decision in regard to these projects especially "in respect of their timings" is yet to be taken owing to the size of the investment funds required and the constraint of financial resources for which there are competing demands. A provision of Rs. 5 crores has been included in the Annual Plan for 1976-77. It has also been stated that the possibility of obtaining assistance from abroad is also in view. The Committee note that both the projects are situated in backward regions and are for the manufacture of white printing paper where against an estimated demand of 7.5 lakhs tonnes by 1978-79 the pre-

sent availability is only of the order of 4 lakhs tonnes. The Committee feel that keeping in view the policy of development of backward areas and the gap between the demand and availability of the white printing paper in the country, the Government should take an early investment decision in regard to these paper plants. The Committee need hardly point out that any further delay may result not only in the escalation of costs but may create difficulties in the conclusion of firm agreements with the State Government for assured supplies of raw materials for the mills at agreed rates.

#### VIII

# RESEARCH AND DEVELOPMENT

- 28.1. The Estimates Committee had in their 197th Report, Second Tok Sabha, recommended as far back as in 1961-82 that min view of the proposed expansion in the newsprint and paper manufacturing industry in the mountain would be desirable if a specialised research centre on paper technology is set up."
- 8.2. Government then replied vide Ninth Report of the Committee on Public Undertakings (Third Lok Sabha):
  - "The Cellulose and Paper Branch of the Forest Research Institute, Dehra Dun are engaged in fostering research development and technology of pulp, paper and allied industries. It has been proposed that the Advisory Committee of the Forest Institute should include a representative of Nepa Mills in order that problems connected with newsprint production receive adequate attention in the research programmes of Cellulose and Paper Branch of the Forest Research Institute."
- 8.3. Accordingly the Nepa Mills are represented on the Advisory Committee and the Technical Sub-Committee of the Forest Research Institute, so that problems connected with newsprint production receive adequate attention in the reach programmes of the Cellulose and Paper Branch. The Nepa Mills contribute regularly towards the recurring expenses of the Forest Research Institute at the rate of Rs. 0.25 per tonne of newsprint produced at the Mills.
- 8.4. In connection with the examination of National Newsprint and Paper Mills Ltd. (NEPA) in 1972, when the Committee on public Undertakings enquired about the research being conducted in the country to develop other sources of raw material for production of newsprint with a view to become self-reliant in the field of newsprint, the representative of the Ministry of Industrial Development, during evidence stated:
  - "The Forest Research Institute in Dehra Dun have a pilot plant for paper manufacture and they keep on carrying on some research work. Apart from that there is some small

research work in Jorhat and Poona CSIR laboratories. But I agree that this is not sufficient for an important industry like paper. This matter has recently been taken up by the National Council of Science and Technology which has constituted a committee under Dr. Tilak of CSIR. It is looking into the question of setting up some organised research in the field of paper. They are also considering whether they should have a cess on paper the proceeds of which could be used for research on paper production."

- 8.5. In this connection, the Nepa Mills stated in a written note as follows:—
  - "We have carried out a large number of trials on pre-treatment of wood in our Mill Laboratory. The results indicated that the strength of the machanical pulp did improve with the increased intensity of the pre-treatment but this improvement was invariably accompanied with the deterioration of the colour. The pre-treatment trials on chips has also been conducted in the laboratory. The pre-treatment was found to give encouraging pesults. The process has been incorporated in the expansion programme of the Mill. The results obtained by our laboratory have since been confirmed by many laboratories in Japan, Sweden, West Germany etc."
- 8.6. In regard to development of unconventional resources of raw material, the Nepa Mills stated as follows:
  - "We have carried out trials on various conventional wood species which are not used anywhere for the production of various types of the pulps from various areas such as !—
    - (i) Mainly wood species available from the surrounding areas of the Mill;
  - (ii) For pre-investment survey of forest Resources Woods from Bastar region;
    - (iii) For Hindustan Paper Corporation for their Kerala Newsprint Project.

We have not carried out any pulping trials on other types of unconventional resources of raw material such as Bagasse or Salai gross because they are not available

around the Mills in sufficient quantity and the areaswhere they are available are beyond economic limits."

- 8.7. The Committee on Public Undertaking (1972-73) in para 7.14-of their Twenty-Seventh Report recommended—
  - "That a concerted effort is required to be made in the matter of identifying the best source of pulp available in India for manufacture of newsprint as also to develop suitable varieties of forests which would provide the essential raw material for manufacture of newsprint of requisite quality. The Committee suggest that there should be a close liaison between the Ministry of Industrial Development and the Forest Research Institute."
- 8.8. Government informed the Committee in reply that "a project document under U.N.D.P. country programme has been prepared for exploration and identification of alternative raw materials for paper and newsprint manufacture. This scheme will be implemented in close liaison with the Forest Research Institute." [Fifty-fifth Action Taken Report of Committee on Public Undertakings (Fifth Lok Sabha)].
- 8.9. The paper technology involves two distinctive productions processes, i.e.:
  - (i) Pulping process; and
  - (ii) Paper making process.

Bamboo has been the main fibrous raw material for the pulp and paper industry. The pulping technique of bamboo by the chemical processes has been successfully developed in India. In fact India is in a position to offer the know-how of bamboo pulping to other countries.

Bamboo has not yet been used commercially for the manufacture of mechanical pulp anywhere. There is, therefore, room for development of a process to utilise the bamboo by mechanical pulping.

8.10. With the allotment of bamboo resources for the major pulpand paper industries in the country, all resource except the areas of Central India, have been earmarked for the present and future expansion of the paper industry. Future developments of the paper

industry would, therefore, have to be based on the hard-woods, agricultural residues, including bagasse, and other cellulosic raw materials from man-made plantations.

- 8.11. Chemical pulping of hard-woods has already been undertaken successfully by the Indian paper industry. In fact, a number of mills use hard-woods for manufacture of ordinary varieties of paper to the extent of 30 to 40 per cent. In countries like Japan and Australia, the technique of ad-mixing hard-wood pulp has been well developed and these countries have been using hard-wood pulp to the extent of 60 to 80 per cent in several varieties of paper. Therefore, there is need for research in increasing and optimising the use of short-fibred hard-wood pulp in the country.
- 8.12. Agricultural residues, such as rice and wheat straw, jute stalks, bagasse, have been used in this country in smaller mills. There is, however, the problem of silica in the pulping and chemicals recovery section of straw based mills.
- 8.13. There are a few mills in the country which use bagasse for pulping. The technique of manufacturing chemical pulp from bagasse has been successfully developed in the country. The bagasse pulp so made is used for making several varieties of paper. The use of bagasse for manufacturing newsprint, has been a topic requiring considerable research work.
- 8.14. Long-fibred pine and spruce wood are available in the country only in a limited amount in the Himalanyan ranges. The economic extraction of the long fibred wood, growing at a high altitude in comparatively inaccessible areas, has been the bottleneck in maximising the use of such woods in our country. For the manmade plantation of hard-woods, such as Eucalyptus, the fields have been identified in the country. Many States in India has started the plantation of Eucalyptus wood, which grows fast and is suitable raw material for the pulp and paper industry.
- 8.15. The Hindustan Paper Corporation intends to develop research and development wing at all plant sites for continuing research and improving the technology. The Corporation has spent so far on research and development approximately Rs. 1.3 lakhs as direct expenses (fees to the various research institutes, etc.) for carrying out tests on the various raw materials.
- 8.16. In addition under the project "Exploration and Identification of Alternative Raw materials for Paper and Newsprint Manufacture" the Hindustan Paper Corporation has taken the charge of 2919 LS—10

188

the coordination between UNDP, the Ministry of Industrial Development and Civil Supplies and the Ministry of Agriculture. Under this programme the problems to be tackled are as follows:—

- I. Exploring available raw materials in the country;
- II. Identifying the cellulosic raw materials for the industrial production;
- III. Concerted research, both in the field of chemistry and engineering, to improve the technology for increasing production of pulp and paper.
- 8.17. This scheme will be financed to the extent of 1.35 million US dollars, as contribution from UNDP and Rs. 1.74 crores from the Government of India as counter-part contributions.
- 8.18. Under this scheme a large number of laboratory as well as pilot plant equipment, shall be provided to the existing two research institutes namely, the Forest Research Institute, Dehra Dun (Cellulose & Paper Branch) and the Institute of Paper Technology, Saharanpur, U.P.
- 8.19. In a note furnished by the Ministry of Industry and Civil Supplies, it has been stated that "the Institute of Paper Technology, Saharanpur, was set up in 1964 as a joint venture of the U.P. and Central Government. This Institute was registered under Societies Act XXI of 1860 and is being managed by a Board of Governors. The Board is composed of the representatives of Central and State Governments and Paper Industry. It is a well-equipped Institute and has all potentialities for further development. At present, it is mainly catering the need of paper industry in the field of education and training and with further expansion it can cater to the need of pulp and paper industry in the field of research and development also."
- 8.20. Regarding the feasibility of using jute sticks, conifers, straws etc. for the production of paper, the Inspector-General of Forests, during the evidence, informed the Committee that:—
  - "Studies have been made in the Forest Research Institute. It has been established that several varieties of paper including newsprint can be made with a certain mixture of long-fibre things like conifers, bamboos, etc., if we can organise suitable collection of the same, suitable storage etc. But this is the stumbling block at present and as the indus-

try develops it is hoped that we will be able to master this and organise this sector so that it can substantially contribute to production of paper in addition to woody materials."

- 8.21. Asked whether Government had thought of setting up any research organisation to identify and solve the problems faced by the paper industry, the representative of Ministry of Industry and Civil Supplies during the evidence, stated *inter alia* as follows:—
  - "Actually there is the Forest Research Institute. There is also an Institute at Saharanpur. They are already having a certain role to play. Now, we are contemplating that we should set up a Central Research and Development Institute for filling up the gap in the existing research development programmes and recommending these activities throughout the country. The Institute would look after the research and development activities of this particular branch. They are:—
    - ((1) Identification of information about the raw materials and their development;
    - ((2) Development of process know-how by utilisation of various raw materials:
    - (3) Improvements of technology with a view to optimising production and reducing the cost;
    - (4) Development and updating of design engineering for pulp and paper industry; and
    - (5) Evolving solutions to problems of effluent disposal.

We are contemplating that the Institute should be an autonomous organisations. It should be registered under the Societies Act and the membership of the Institute should be open to all companies or corporate bodies engaged in the manufacture or otherwise interested in the development of paper pulp and newsprint and allied project. We are also contemplating various other provisions.

One of our problems is finding out sufficient money for this industry. What we are now contemplating is that we would make it a self-financing project by imposing a small cess on paper and there is a provision under the IDR Act that we can impose a cess but that cess should go to the Development Council for development purposes and this has to be routed through this institute because it is for research purposes.

In fact we have been somewhat lagging behind in research. Research has been a major lacuna in most of theindustries, whether it is paper or drugs or any other For all these industries, we have not had any indigenous research activities on a large scale because wehad to import machinery, we had to import technology, we had to import products also sometimes. This has been a lacuna so far but we are now trying to grapple with the real problem. The real problem is that in any research activity, you have to pour in a lot of money. You do not get the results immediately but after a long time, if not a very long time, you will find the outcome in the shape of the product. So, we are now thinking on those lines rather than trying to get it from elsewhere. Wewill try self-financing instrument and if an agreement is reached, then we hope to set it up fairly soon."

8.22. The Committee note that the major problems identified in the paper industry at present are about commercial use of bamboo for mechanical pulp, problem of silica in the pulping mechanical recovery section of straw based mills, use of bagasse for manufacture of newsprint, problem of collection, storage, transport etc. of agricultural residues such as rice, straw, jute sticks etc. increasing and optimising use of short fibred hardwoods in the country, economic extraction of long fibred pine and spruce growing in comparatively inaccessible areas etc. Although there are two research institutes in the field of paper technology, viz. the Forest Research Institute, Dehradun (Cellulose & Paper Branch) and the Institute of Paper Technology, Saharanpur, the Committee feel the contribution made by these institutes has not been very significant and many substantial and urgent problems still remain to be tackled. While the Forest Research Institute, Dehradun, has made some studies about the use of jute sticks, the research efforts still need to be intensified evolve viable schemes and processes to set up paper mills and plants.

8.23. The Institute at Saharanpur has been mainly catering to the needs of paper industry in the field of education and training and not in the research and development, though it is stated to be a well equipped institute and has the potentialities for further development. Under the UNDP sponsored project of exploration and identification of all raw materials for Paper and Newsprint Manufacture it is proposed to provide a large number of laboratories as well as pilot plant equipment for the existing two Research Institutes at Dehradun & Sharanpur.

- 8.24. The Government are also contemplating to set up a Central Research and Development Institute for filling in the gaps in the existing R&D programmes.
- 8.25. The Committee feel that significant gaps exist between the demand and supply of paper, particularly newsprint. The Committee have, elsewhere in this Report, already emphasised the need for attaining self-reliance in paper production, as paper is vital for imparting education, dissemination of information and for carrying on business, industrial and governmental work. The traditional resource for manufacture of paper is soft wood, which unfortunately is not available at present in abundant quantities in the country. It is therefore imperative that research is intensified in order to develop processes for using hard wood in large quantities for the manufacture of paper. There is need for identifying and developing newer species of wood better suited to paper manufacture. There is need also for intensifying research in order to encourage the use of agricultural residues like bagasse, jute sticks etc. for paper manufacture.
- 8.26. The Committee feel that the Government should have drawn up much earlier a comprehensive programme for integrated intensified research on paper manufacture. The concept of setting up a Central Research and Development Institute devoted to paper manufacture has come not a day too soon and it is imperative that it is put on the ground without delay. The programme for research should be pragmatic and relate to the requirements of the paper, industry, particularly of the Hindustan Paper Corporation which has been given a major role in the Fifth Plan of setting up paper plants in the Public Sector. There should be close co-ordination between the Central Research & Development Institute, the Forest Research Institute, Dehradun, and the Training Institution at Saharanpur so that the experience gathered so far in the field is put to best use in public interest. There should also be co-ordination with UNDP programme which is underway for identifying suitable raw materials for paper manufacture. The Committee would like to be informed of the concrete measures taken by Government to implement a comprehensive national research programme for paper manufacture as per a time-bound programme to be drawn up in consultation with the Hindustan Paper Corporation, N.E.P.A. and other leading paper manufacturing units.
- 8.27. The Committee also suggest that there should be a procedure by which the achievements of the Research Institutions are

published and are available, to the paper industry as a whole in the national interest. The results of studies in regard to raw materials should also be fed back to the Agriculture and Forest Departments so that the latter may keep in view the needs of paper industry while determining the programmes for afforestation and regeneration of plantations.

8.28. The Committee are informed that the Corporation intends to set up R. & D. wings at all plants. The Committee feel that the R. & D. units should besides taking steps for assimilation of the foreign technology and transfer of technology to the new units to be set up, should also be closely associated with the work of suggesting measures for increasing utilisation of capacity, effecting reduction in cost, improving efficiency and effecting economies. The Committee would like that a review of the activities of the R. & D. spelling out in specific terms its achievements and the expenditure incurred thereon should be suitably included in the Annual Report of the Corporation.

# FINANCIAL MATTERS

# A. Financial Structure

- 9.1. The Hindustan Paper Corporation was set up in May 1970, with an authorised capital of Rs. 30 crores. The paid up capital on 1st April, 1974 was Rs. 8.51 crores. During the year 1974-75 a sum of Rs. 15 crores was received from the Government as contribution towards the equity capital raising the paid-up capital of the Corporation to Rs. 23.51 crores as on 31st March 1975. In view of its increased activities and the rise in the project estimates due to unprecedented escalation in prices, the Corporation requested the Government to approve the increase in the authorised share capital. The Government sanctioned the increase in the authorised capital from Rs. 30 crores to Rs. 50 crores on the 21st April, 1975.
- 9.2. The capital structure of two subsidiaries of the Corporation i.e., Nagaland Pulp and Paper Company Ltd., Tuli (Nagaland) and Mandya National Paper Mills Ltd., Belagula (Karnataka) are:

# (i) Nagaland Pulp and Paper Company

The H.P.C. and Government of Nagaland hold shares in the ratio of 7:1. The authorised capital of the Company has increased from Rs. 16 crores to Rs. 27 crores w.e.f. 1st February, 1975, as approved by Board of Directors of HPC, and it has been registered with the Registrar of Companies. Against the original authorised capital of Rs. 8 crores, subsequently increased to Rs. 16 crores, the total paid-up capital as on 31st March, 1975 was Rs. 15,60,24,120. The total amount invested by the Corporation in the equity capital of the Company upto 31st March, 1975 amounted to Rs. 14 crores.

# (ii) Mandya National Paper Mills Ltd.

The High Court of Karnataka issued orders on 19-10-1973 on the Scheme of Reconstruction of the company, settlement of Long-term Debts and other connected matters. The High Court order became effective from 1-10-1973. Close on its heels, steps were taken to issue and allot Equity Shares of Rs. 5/- each in settlement of the claims of the major long-term creditors.

The Corporation holds 98,02,382 Equity Share of the Company, which represents 92.5 per cent of its total Equity Capital. The Corporation has paid so far Rs. 166.37 lakhs towards the purchase consideration of Rs. 386.96 lakhs. The balance amount is payable in 6 annual instalments.

The Company has now been freed of its long-term indebtedness with consequent reduction in the burden of interest on cost of production.

# B. Working Results

- 9.3. The Hindustan Paper Corporation is at present engaged in the implementation of the following projects:
  - (i) Mandya National Paper Mills;
  - (ii) Nagaland Pulp and Paper Project;
  - (iii) Kerala Newsprint Project;
  - (iv) Cachar Pulp and Paper Project; and
  - (v) Nowgong Pulp and Paper Project.
- 9.4. The working results, profitability etc. of the Mandya National Paper Mills have already been discussed by the Committee in Chapter IV of this Report. Nagaland Pulp and Paper Project and Kerala Newsprint Project are still in construction stage. Cachar and Nowgong Projects have not yet been cleared by Government so far. The expenditure incurred so far on these four projects is in the nature of developmental expenditure.

The progress of these four Projects has been discussed in detail in the relevant Chapters.

9.5. The financial position of the Corporation for the years 1970-71 to 1974-75 is given below:

				(Rs. i	n lakhs)
	1970-71	1971-72	1972-73	1973-74	1974-75
I	2	3	4	5	6
Liabilities and Assets					
1. Paid up Capital plus re- serves and surplus .	7. 27	35.00	411.00	851 <b>·0</b> 0	2351.00
2. (a) Gross fixed assets	0.65	1.14	1.95	21.67	46· <b>5</b> 7
(b) Net fixed assets	0.56	0.86	1.39	20.47	44.36
3. Inventories	0.03	0.03	0.10	0.25	0.43

I	2 ' ′	3	4	5	6
Liabilities and Assets—Contd.					
4. (a) Gross Fixed Assets plus inventories	0.67	1.17	2.05	21.92	47.00
(b) Net fixed Assets plus inventories	0.28	0.89	1.49	20.72	44 · 79
5. (a) Total Gross Assets (before depreciation).	3.74	28 · 14	217.77	80.68	584· <b>2</b> 4
(b) Total Net Assets (after depreciation)	3.65	27.87	217.21	79.47	582.03
«Excluding					
(a) Preliminary expenses.	2. 27	2.27	2.27	2.27	2.27
(b) Excess of expenditure over income as per profit and loss account	1.77	6.19	11.58	1.17	4.09

# C. Accounting Manual

9.6. The statutory auditors of the Hindustan Paper Corporation, in their report for the year ended 31st March, 1973, had commented that no detailed accounting Manual had been prepared so far as the Corporation had been dealing with limited transactions only.

# D. Internal Audit

- 9.7. Hindustan Paper Corporation has also stated in a note that no system of internal audit has so far been introduced and no manual has been prepared. Last year one Chartered accountant was appointed to start the audit but due to pressing demand from Purchase Division, his services were transferred there. Corporation has again advertised the post of Chief Internal Auditor and the post is likely to be filled up shortly. However, there is a system of preaudit by qualified accountants and the Accounts Officers before payments are released.
- .. 9.8. The Committee note that the Hindustan Paper Corporation is at present engaged in the implementation of the following projects:—
  - (1) Kerala Newsprint Project;
  - (2) Cachar Pulp and Paper Project.
  - (3) Nowgong Pulp and Paper Project.

In addition, the Corporation has two subsidiary companies viz., Nagaland Pulp and Paper Company and the Mandya National Paper Mills Ltd.

Mandya National Paper Mills is the only running unit and the other projects are still at the various stages of implementation/construction. The Committee have given their comments in regard to these projects in the relevant chapters of the Report.

- 9.9. The Committee would, however, like that the Ministry/Corporation should critically examine the economics of projects particularly those which are still in the planning stage and satisfy themselves about their viability. The Committee would also like the Ministry/Corporation to keep a strict watch on the capital cost of the various paper projects which are under way, complete the projects expeditiously and commission them without delay.
- 9.10. The Committee would also like that the Corporation should introduce a scientific system of costing in all its projects so that analysis of the cost of production of paper may be made on correct lines and economies effected wherever necessary.
- 9.11. The Committee also recommend that the Corporation should right from the beginning ensure that there is no over-staffing in any project and the overheads are kept to the minimum.

As the wages in the Public Sector paper plants are generally high, there should be a built-in accent on productivity in the wage structure from the very inception to subserve the larger public interest.

- 9.12. Paper is highly capitalised industry. It is therefore necessary that strict financial control is exercised from the very inception. Care should be taken to see that the establishment and other overhead charges are kept within the norms which should be prescribed in this behalf. The Corporation should also introduce the system of management accountancy to assist the Management and the Board to take right decisions.
- 9.13. The Committee would like the Government representatives on the Board to pay attention to the aforementioned aspects more particularly to the necessity of ensuring that the expenditure on the projects under implementation does not get so inflated as to militate against the viability of the project.

- 9.14. The Committee would like the administrative Ministry also to pay special attention to the functioning of the Corporation including recruitment of staff to see that there is no over-staffing at any stage, as large funds are being expended through it to develop large scale paper manufacturing units in the public sector.
- 9.15. The Committee regret to note that so far neither a detailed accounting manual nor a system of internal audit has been introduced in the Corporation. The Committee need hardly emphasise the importance of the internal audit as an aid to management which besides discovering irregularities if any, concurrently has the added advantage of bringing to the notice of the management the weak areas and help them to streamline financial procedures cutting out waste etc. The Committee would therefore urge that the Corporation may immediately set up a compact internal audit cell with qualified personnel. The important points noticed by internal audit may be brought to the notice of top management and a report of the points together with action taken thereon may be placed before the Board of Directors from time to time.

### APPENDIX I

(Vide para 2.10)

# (See para 2.10 of Chapter II)

# S. No.

13

1

# Description of item

- 1. Paper in Roll Sheets Art Papers uncoated
- 2. Imitation Art Paper
- 3. Litho and Off-set paper uncoated
- 4. Poster paper uncoated
- 5. Photo-base paper
- 6. Printing paper Dyed Marble NES uncoated
- 7. Printing paper NES
- 8. Airmail paper uncoated
- 9. Bank Bond Cheque paper uncoated
- 10. Drawing paper uncoated
- 11. Writing paper NES uncoated
- 12. Chrome and art paper coated
- 13. Kraft paper board kraft liner
- 14. Kraft paper except liner
- 15. Kraft paper board
- 16. Cigarette paper in bulk rolls and sheets
- 17. Blotting paper
- 18. Cable and condenser paper
- 19. Cartridge paper
- 20. Filter paper
- 21. Manila packaging paper
- 22. Sulphate packaging paper
- 23. Tissue paper coloured
- 24. Tissue paper NES
- 25. Packing wrapping paper

### S. No.

# Description of item

- 26. Paper simply finished NES
- 27. Art Board
- 28. Electrical insulating press board
- 29. Leather and Imitation leather board
- 30. Matrix board
- 31. Matrix paper board
- 32. Press paper board
- 33. Wood pulp board
- 34. Paper board simply finished
- 35. Insulation board
- 36. Other fibres building board
- 37. Building boards NES
- 38. Genuine Veg. Parchment paper
- 39. Glassine paper
- 40. Grease proof paper
- 41. Other grease-proof or parchment paper
- 42. Composite straw board
- 43. Other composite paper board
- 44. Corrugated
- 45. Creps or cringled
- 46. Leather grade paper
- 47. Linen finished paper
- 48. Embossed paper NES
- 49. Perforated paper
- 50. Ruled or sard paper
- 51. Adhesive paper in rolls or sheets
- 52. Building board of pulp or paper impregnated
- 53. Chrome board
- 54. Insulating paper
- 55. Oiled paper
- 56. Litmus paper and DDT coated paper
- 57. Paper and paper board bituminise asphalted
- 58. Raw-base paper for sensitizing coated
- 59. Tracing paper

# S. No.

# Description of item

- 60. Waxed paper
- 61. Other coated impregnated paper and board NES
- 62. Paper, pulp filter in main blocks
- 63. Wall paper and Linirusta.

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# PPENDIX II

KF - 1

		(Vide P	(Vide Para 4.25)			
No.	l' Equipment	Name of supplice	Amount	Date of order	Date of order Date of delivery	Remarks
1		3	4	5	9	7
ä	I. Compressor	Khisia & Co.	62,250	28-3-74	28-3-74 ex-stock	Delivered in May 7
<del>ri</del>	2. Brown stock Washer .	Dorr Oliver	7,24,300	Order placed June 1975 in Sept. 74 initial advance paid in Dec. 1975	June 1975	instance in June. Materials ready awaitieg despatch.
ю́.	Vibroscreen	Penwalt	39,000	41-4-74	3-4 months	Decommend
<b>4</b> .	Aghators for stock chest, High Den- sity towers bleached and unbleached	KMW Johnson	1,85,400	24-1-75		Part contiguates
. <b>ખ</b>	Pumps (stock pps)	KMW Johnson		24-1-75	24-1-75 6 months	despatched. Part consignment despatched
•	Liquor Pumps	KMW Johnson	16,915	10-2-75	8-10 months	Materials received
Ķ	Motors (of various HP)	NGEF	2,93,721	18-2-75	a few items ex- Stock afew items 10-12 months deliway	Most of items received.
<b>∞</b>	Pipes 400mm and 200 mm	Southerr Suppliers	70,350	25-3-75	Ex-stock	Received.

ı	2	m	4	'n	9	7
6	9. Pipes 150mm and 100mm	. Kashavlal Lalloo Bhai	150,30	5-3-75 Ex-stock	stock	Received.
10.	10. Pipes 75mm, somm	Hindustan Construction	4,950	5-3-75 6-16 weeks	16 weeks	Received.
Ξ	11. Pipes 25mm	Ishardas Agarwal	621,1	5-3-75 Ex-stock	stock	Rcceived.
12	12. Pipes 160mm and 63 HDP	. Hem Sai Enterprises	25,200	5-3-75 4-5 weeks	weeks	Rcceivcd.
13.	13. 100T Hydraulic Press	. Jayems	19,500	13-3-75 12-14 wecks	14 wecks	Expected shortly.
14.	14. Shimoge-Lathe	. Mactool Traders	33,858	18-4-75 4 weeks	weeks	Expected shortly.
15.	15. Control values for Instruments	. Blue Star	28,945	15-5-75 20-24 wecks	24 wecks	
16.	16. Byring Machine	Machine Tradirg Corporation	1,08,500	7-3-75 8-10 weeks	o weeks	
17.	17. Lathe (22 ft.)	. Jayems Bangalore	57,990	11-7-75 12-14 wecks	14 wecks	
18.	18. Compressor (Instrument)	Consolidated Pneumatics	56,177	10-3-75 8 weeks	weeks	Under despatch.
<b>6</b> 1.	19. Recorder Controller	· Instrumentation Kota	19,635	4-7-75 12-14 weeks	-14 weeks	
20.	25. Livel Transmitters and accessories	Taylor Instruments	23,380	25-6-75 9-10 wecks	o wecks	
Ä	21. High I mity stance Centricleaner Order placed with legs, Deflaker for stock preparation Utmals	on Utmals	1,48,489			

19,34,670

Equipment	Amount	Remarks
I Rennovation of paper machine as d Refiner .	11,60,000	Quotations received from three parties being finalised.
2 Byaporator Bodies	25,00,000	Addition of two bodies to the existing evaporator will be finalised only with final expansion.
3 Demineralisation Plant	4,00,000	Earlier expected to be tagged with final expansion but in view of the condition of the boilers, action being taken for placement of order.
4 Storage tanks, etc. for blackliquor (thick and weakliquor and white liquor	5,05,330	Steel awaited.
s Civil works of HD tower, working building etc. Starter, Cables, Valves etc.	4,00,000	Civil works will be started as the equipment are received, keeping in view the final expansion scheme.
	000,00,69	

Position of the other items is as under :--

# APPENDIX III (Vide Para 4.47)

FO|MNPM|73|8471|-74.

Dated: 28-8-1975

To,

The Secretary to Government Food & Forest Department, Government of Karnataka Vidhan Soudha, BANGALORE

Dear Sir,

į.

Sub: Allocation of Forest Divisions to the Hindustan Paper Corporation Ltd., New Delhi, for supply of bamboosanction.

REF: Govt. of Karnataka Orders No. (1) AFD 220 FDP 73 (I) and (2) AFD 220 FDP 73 (II) both dt. 20th Aug., 1975.

We are grateful to the Karnataka Government for sanctioning allotment of reeds upto 20,000 tonnes per year from all over the State of Karnataka and hardwoods to the extent of 10,000 tonnes from the lops and tops from Mangalore and Coondapur Divisions.

As you know, the transfer of the controlling interest of MNPM to HPC was governed by the following considerations:—

- (1) that if Mandya was not immediately expanded, the Company would have to go into liquidation and consequently the State Government made it a condition that HPC would undertake the expansion of the Mill;
- (2) to enable to HPC to fulfil its obligation, the State Government Committee to lease to the Company forest areas adjacent to Belagula capable of yielding 1,40,000 tonnes of bamboo annually after the flowered bamboos regenerate and till the process of regeneration was completed allow

Mandya to harvest from the said areas whatever bamboo was available in these areas.

On the basis of the tripartite agreement between the Government of Karnataka, Mandya Mills and Hindustan Paper Corporation and the Government order issued in connection therewith, the forest areas adjacent to Mandya National Paper Mills which could have eventually provided 1,40,000 tonnes of bamboo were identified as under on the basis of data available with the Forest Department of pre-flowered growing stock of bamboos in the various Forest Divisions of the State:—

	me of th										g Yield r annual)
r.	Chamraj	Naga	r	•	•	•	•	•	•	•	20,000
٤.	Mysore										
3.	Kolle gal		•						•		28,000
4.	Hunsur	•.	•	•		•					35,000
5.	Hassan	•	•		•		•				5,000
5.	Mercara	•	•	•	•						8,000
7.	Mangalo	re									25,000
3.	Coondap	ur	•			•	•				18,000
										_	1,39,500

You are well aware that the present availability of bamboo in the five Forest Divisions allotted to Mandya National Paper Mills vide your order under reference is hardly 5,000 tonnes of dead bamboo. The main supply of bamboo which was to come till such time as the forest areas requested by the Mandya Mills would regenerate was from Kollegal & Chamrajnagar Divisions which are capable of yielding 28,000 tonnes of bamboo. The Government of Karnataka in their order under reference have not allotted the bamboo forests of Chamrajnagar and Kollegal Divisions to us, although they are within the closet proximity to our Mills and on the other hand they have been assigned to Mysore Paper Mills, Bhadravati, which is at a distance of 500 and odd KMs from these forest areas.

We would respectfully like to point out that the allotment made to us of bamboo from the Forest Divisions of Hunsur, Hassan, Mercara, Mysore and Mangalore for extraction of 73,000 tonnes of bamboo per annum as against the commitment of 1,40,000 tonnes and not permitting us to extract the present availability of 28.000 tonnes from Chamrajnagar and Kollegal Forest Divisions, is not in conformity with the agreement executed with us. On the basis of the allotment of forest areas made by the Government of Karnataka, for the Mandya Mills, it will not be possible for us to go ahead with the proposed immediate expansion programme. We have on several occasions in the past brought to the kind notice of the Karnataka Government that if Mandya Mills are not expanded immediately, it will not be able to survive in its present uneconomic and small capacity. We would, therefore, once again earnestly urge that in addition to the Forest Divisions assigned to the Mandya Mills in the above-mentioned order, bamboo from the forest areas of Kollegal and Chamrajnagar Forest Divisions be also allotted for the expansion of the said Mills. We may also submit here that it will not be possible for us to plan the ultimate expansion of the Mills on the basis of allotment of 73,000 tonnes of bamboo, as our minimum requirement for this expansion will be to the extent of 1,40,000 tonnes.

The allotment of 5 Forest Divisions has been made to Mandya National Paper Mills only for a period of five years. This again is not in conformity with the agreement executed with us. It will not be possible to undertake investment on a paper mill without assignment of forest areas on a long term basis. We would, therefore, request you kindly to reconsider the decision and assign the bamboo areas on a long term basis, as the Government order under reference has very adversely affected the interests of Mandya National Paper Mills.

Yours faithfully, Sd/- M. L. ZUTSHI,

Chairman-cum-Managing Director.

Copy to:

- (1) Shri R. Sampath, Speical Assistant to Minister of Industry & Civil Supplies, Udyog Bhavan, New Delhi.
- (2) Shri B. N. Jaisimha, I.A.S., Joint Secretary, Ministry of Industry and Civil Supplies, Udyog Bhavan, New Delhi.
- (3) Shri R. C. Kothari, General Manager, Mandya National Paper Mills Ltd., Belagula, for information.

Sd/- M. L. ZUTSHI, Chairman-cum-Managing Director.

# APPENDIX IV

(Vide Para 5.18)

Protection measures recommended by Expert Committee to strengthen the hillock sides

- 1. The operation of bull-dozers near the edge of hillocks results in softening of the soil in this region. We, therefore, recommend that bull-dozing of soil within 15-20 metres of the hillock edge should be stopped. Lowering of the terrace in this reach should be carried out manually.
- 2. Dumping of loose soil on the hillock face is likely to create complications in rainy season. We recommend that as planned earlier, all excavated earth should be carried away and dumped at suitable places in the fill area which are not required for plant structures and which also do not block the drainage around the hillock in any manner.
- 3. Certain areas in the valley are proposed to be recovered for setting of mill complex. The fill in such areas must be laid in layers and each layer should be compacted to the required dry density as earlier planned and specified by the NIDC.
- 4. During the preparation of the site when the high ground is being cut and the low places are being filled up, care should be exercised to see that proper drainage is provided for rain water. The water due to rain falling on hillock should not be allowed to collect and sweep down through the strata where heavy structures are to be located. Special attention to this aspect should be paid during the month of March when rainy season is about to commence.
  - 5. With regard to the locations where loose soil has already been dumped on the hill sides and where the slides have already caused damage to the natural hill slope, immediate action is necessary to arrest further damage. We consider that retaining/breast walls would be necessary and these should be built at locations to be determined according to site conditions at vulnerable points. Suitable retaining walls commencing from the base of the hillock near the nallahs should be built in the first instance. We see from

the report submitted by United Technical Consultants Pvt. Ltd. that they have also recommended construction of these walls and that in their opinion the hill sides would be stable provided a slope angle of 30 degrees from the face of the hill to the levelled ground on top of the hill with a berm of 20 metres was available. It is seen from the site contours and cross-section of the area that except the north and north-eastern portion, the existing slope is already around 30 degrees. In this area, the slope is around 38°-40°. In a convex profile of the hill, there is no need to alter the slope of the hill which has been stable over a long period. To provide for the loose fill over the slope, the toe retaining wall in stages should be constructed in such a way as would arrest the slipping away of the soil and would also help in easing the slope. We also find that the requirement of width of berm is based on the surcharge loading of 20 tonnes per sq. metre. Since the actual foundation loading would be of the order of 15 tonnes per sq. metre only and the foundations are only 4 to 5 metres wide, the berm width can be reduced to 12 to 15 metres. We feel that this berm width should be available at the level at which the foundation of column at the periphery is laid and not on the levelled top surface. The proposed retaining breast wall at the lowest point near the Nallah should be built in the first instance and construction of walls at higher levels should be taken up later as considered necessary to suit conditions at site, depending upon the behaviour of the fill and the hillock face.

- 6. We consider that rain water falling on the terrace cannot be allowed to roll-down along the hill sides anywhere and everywhere. NIDC have made provision for stone pitching on the terrace edge. In order to provide positive barrier to rain-water flow, we recommend that after the terrace has been cut down to the proper level, edge walling of about one metre height should be built around its periphery and catch-water drains should then be led to the existing nallah in the valleys through chutes and catchpits at suitable intervals. These chutes may have to be lined for some length to avoid further erosion in vulnerable areas where bedbars may also be necessary.
- 7. After the mill complex has been completed the entire area on the hill top would have to be protected against rain water soaking into the soil adjoining the main structures. We were informed that NIDC have not yet finalised the scheme for proper drainage of the mill complex area. The scheme should not be finalised and the various items of work should be executed in stages, essential items being completed as early as possible.

- 8. The siting of the columns or other important structures near the periphery of the terrace is not very clear from the plan made available to us. Wherever some buildings or other structures are located in area of filling, we would like to emphasize that foundations of such columns or other important structures should not be laid in the bill but must be taken down to a deeper level so that they are founded about 1 to 2 metres in the natural strata. Founding on driven piles within 15 to 20 metres of the periphery of the hillock would not be a desirable preposition.
- 9. We have stated earlier herein that the strata of the hillock is not of uniform nature. We would recommend that where there is wide variation in the nature of soil it may be desirable to provide raft foundations for columns or group of columns sensitive to differential settlement.
- 10. The protection works described above are normal for such terrain and development of sites and such protective works have to be undertaken depending upon the behaviour of hill side. No doubt, the costs relating thereto have to be taken into consideration. In our view, these may involve an expenditure of around Rs. 20-25 lakhs.

#### General:

- 1. United Technical Consultants have suggested installation of Piezometers and Bamboo stakes. CPWC have suggested fixation of bamboo stakes or masonry pillars. Piezometers are used to record pore pressure of underground water. Bamboo stakes masonry pillars are used to record soil movement, if any. These devices are, needed for information collection and observation. They are not in them-selves preventive measures. Whatever protection measures are necessary should now be taken up based on the observation and recommendations given above.
- 2. We noticed that foundation pits for number of columns had been dug out and the work was subsequently held in abyance. After the excavation of the foundation has been carried out, it is desirable to carry out the concreting as early as possible, as any delay would lead to seepage of water below the foundation level whenever water can find its way into the pits. We would, therefore, recommend that these foundations should be completed as early as possible. The work on other foundations can also be carried out but the foundations of the columns coming at the periphery

can be taken up after the protection measures have made adequate progress.

3. The total civil works involved in the mill complex is substantial and complicated. Considering the organisation of the contractors at site, we are of the view that intensive supervision of work including attendant modifications on the scheme of protection work during the course of execution would be necessary and provision of such supervision should be made immediately.

# APPENDIX V

(Vide para 6.16)

Details of foreign tour undertaken by officials of Hindustan Paper Corporation from 26th August to 29th September, 1975

Details of Tour	abro	ad Departure and Arrival
I		2
Dates		
26-8-73	•	Departure from Delhi at 05:00 hrs. Reached Hong Kong at 17:45 hrs. stayed overnight.
27-8-73	•	Departure from Hong Kong at 16.45 hrs. Arrived at Osaka at 21.00 hrs. stayed overnight.
28-8-73 -	•	Left Osaka at 09.00 hrs. Arrival at Sappore at 11.15 hrs. stayed overnight.
29-8-73	•	Left Sappore at 18.00 hrs. Arrival in Tckyo at 19.00 hrs. stayed overnight.
30-8-73	•	Left Tokyo at 07.00 hrs. Arrived Mihara at 13.00 hrs. stayed overnight.
31-8-73	٠	Left Mihara at 14.00 hrs. Arrived in Tokyo at 19.00 hrs. steyed overnight.
1-9-73 ·		Left Tokyo at 19.00 hrs. Arrived at Los Angeles at 17.00 hrs. stayed overnight.
2-9-73 · ·	•	Left Los Angeles at 16 00 hrs. Arrived at Vancouver at 21 co hrs.
2-9-73 to 14-9-7	73 .	Stay at Vancouver.
1 <b>4</b> -9-73 ·		Left Vancouver at 18:00 hrs. Arrived at Kamlcop at 18:30 hrs.
14-9-73 to 15-9	-73	Stay at Kamloop.
1 <b>6-</b> 9-73 .		Left Kamloop at 09.00 hrs. Arrived at Vancouver at 17.00 hrs.
16-9-73 to 26-9-	-73	Stay at Vancouver.
26-9-73	•	Left Vancouver at 15.00 hrs. Arrived at Powell River at 21.00 hrs. Stayed Overnight.
2 <b>7-9-</b> 73 ·		Left Power River at 15.00 hrs. Arrived in Vancouver at 21.00 hrs.
27-9-73 to 28-9	<b>≻</b> 73	Stay at Vancouver.
29-9-73	•	Left Vancouver at 16.00 hrs. Arrived at Portland at 18.00 hrs. Stay at Portland overnight.
3 <b>0-9-</b> 73	•	Left Portland at 16:00 hrs. Arrived in Chicago at 18:00 hrs. Stay at Chicago overnight.
1-10-73	•	Left Chicago at 9.00 hrs. Arrived Montreal at 20.00 hrs. stay at Montreal overnight.

I			2
2-10-73		•	Left Montreal at 08:30 hrs. Arrived Chicago at 10:30 hrs. Stayed at Beloit overnight.
··:3-10·73	•	•	Left Beloit at 16.00 hrs. Arrived Escanaba at 23.00 hrs. stay at Escanaba overnight.
4-10-73		•	Left Escanaba at 13.00 hrs. Arrived Milwankee at 16.00 hrs. Left Milwankee at 18.00 hrs. Arrived at Daytor at 20.00 hrs. Left Daytori at 20.00 hrs. Arrived Springfield at 20.30 hrs. stay at Springfield overnight.
· 5-10-73	•	•	Left Springfield/Dayton at 17.00 hrs. Arrived to Rochester at 20.00 hrs.
5-10-73 to	7-10-7	73	Stay at Rochester.
7-17-73		•	Lift Richister at 14:00 hrs. Arrived at Williamport at 20:00 hrs. Stay at Williamport overnight. Went to Muncy and back on 8th.
8-10-73	•	•	Left Williamport at 17:00 hrs. Arrived in Newyork at 19:00 hrs. Stay at New York overnight.
9-10-73			Left New York at 18.00 hrs. Arrived in Montreal at 20.00 hrs.
9-10-73-to	11-10-	73	Stay in Montreal.
11-10-73			Left Montreal at 19.00 hrs.
12-10-73	•		Arrived in Manchester at 07.00 hrs. Stay at Manchester.
. 13-10-73		•	Left Manchester at 10.00 hrs. Arrived in London at 11.00 hrs. Stay in Overnight.
14-10- <b>7</b> 3	••	•	Left London at 13.00 hrs. Arrived in Helsinki at 18.00 hrs. Stay in Helsinki Overnight.
. 15-10-73		•	Left Helsinki at 09.00 hrs. Arrived at Yvaskola at 09.30 hrs. Stay in Helsinki Overnight.
. <b>16-10-73</b>	•	•	Left Yvaskola at 07.30 hrs. Arrived at Helsinki at 08.00 hrs. Left Helsinki at 18.00 hrs. Arrived Stockholm at 19.00 hrs.
£6-10-73	to 17-1	0-73	Stay in Stockholm
18-10-73	•	•	Left Stockholm at 07.00 hrs. Arrived at Sundsvali at 9.00 hrs. Stay at Sundsvali overnight.
19-10-73		•	Left Sundsvali at 08:00 hrs. Arrived at Goteborg at 10:00 hrs. Stay at Goteborg overnight.
20-10-73		•	Left Gateborg at 10.30 hrs. Arrived at Dusseldorf at 18.00 Ehrs.
'20-10-73 t	o <b>22-</b> IC	-73	Stay at Dusseldorf.
23-10-73	•		Left Dusseldorf at 18:00 hrs. Arrived at Stutgart at 19:00 hrs.
. 23-10-73 t	0 24-10	-73	Stay in Heidenheim.
25-10-73	•		Left Stutgart at 09:00 hrs. Arrived at Milan at 11:00 hrs. Stay at Verona overnight.

I			2
26-10-73	•	•	Left Milan at 17.00 hrs. Arrived Rome at 19.00 hrs. Stay in Rome overnight.
27-10-73	•	•	Left Rome at 18.00 hrs. Arrived New Delhi at 11.00 hrs.
			-
:Sd/-(A. Par	•		Sd/-(S. G. Prabhu)
Chief Pro	ject O <u>f</u>	fice	Sr. Project Officer
			- 41 -
			Sd/-(R, K. Pillay)

# APPENDIX VI

(Vide Para 6.17)

Details of foreign tour undertaken by the Chairman of HPC from 29th August to 29th September, 1973

The Chairman left Delhi on August 29, 1973 and returned back on September 29, 1973. He joined the HPC Team in Vancouver after his visit to various countries. He was in Vancouver with the Team from September 12 to September 19, 1973. He left Vancouver for U.S.A. and other countries on September 19, 1973. The details of his tour are given below:—

Date			Places
(1)			(2)
August 29, 1973	•	•	. Delhi to Bombay
August 30, 1973			. Bombay to Rome
August 30, 1973			. Rome to Milan, Milan to Verona
Sept. 1, 1973			. Verona to Milan back
Sept. 1, 1973			. Milan to Geneva
Sept. 2, 1973			. Geneva to Dusseldorf
Sept. 4, 1973			. Dusseldorf to Heidenheim (Via Stuttgart)
Sept. 5, 1973			. Heidenheim to Zurich
Sept. 5, 1973			. Zurich to Geneva, Geneva to Aix-Le-Bain
Sept. 6, 1973			. Aix -Le-Bain to Geneva Back
Sept. 6, 1973			. Geneva to Paris
Sept. 8, 1973			. Paris to Montreal
Sept. 12, 1973			. Mentreal to Vancouver
Sept. 19, 1973	•		. Vancouver to Beloit
Sept. 20, 1973			. Beloit to New York
Sept. 23, 1973			. New York to Amstordam, Amstordam to Warsaw
Sept. 25, 1973			. Warsa to Copenhagm
Sept. 26, 1973			. Copenhagm to Geneva

(I)		(2)
Sept. 27, 1973		. Geneva to Rome . Rome to Bombay (29-9-73)
Sept. 29, 1973	•	D 1 . D 11:

The following officers of NIDC joined the HPC team in Vancouver, Canada for discussions with H.A. Simons (International) Ltd.:—

- 1. Shri Kan. D. Mariwalla—Chief Consultant.
- 2. Shri I. S. Bhathal—Project Manager.
- 3. Shri T. Panchapakesan—Senior Engineer.

The total expenditure incurred by the team of three officers and the Chairman of Hindustan Paper Corporation was Rs. 1,43,147|-.

# APPENDIX VII

# (Vide Para 6.23)

Details of visit of HPC's team to Finland and other countries during February-March, 1975 for the Purchase of machinery for Kerala Project.

The Hindustan Paper Corporation Limited team which visited Japan, Canada, USA and Europe in February-March 1975 consisted of Shri M. L. Zutshi, Chairman-cum-Managing Director, Dr. A. Panda, General Manager (Technical Services) and Shri B. Misra, General Manager (Engineering Services). The details of visits of the team were as under:—

Date of Visit	Name of Company	Remarks
I	2	3
19-2-1975 .	. Mitsubishi, Tokyo	Discussions of Financial participation.
20-2-1975	. Oji Paper Co. Ltd., Kasugai, Japan	VisitIto Mills. Continuous diges- ters. Hardwood pulping.
21-2-1975 .	. Ataka & Co. Ltd., Tokyo	Discussions on financial parti- eipation.
<sup>2</sup> 2-2-1975 .	. Daishowa Pulp Mg. Co. Ltd., Iwanuma, Japan	Mill has Voith's twinwire Former
24-2-1975 to 28-2-1975	(a) Sanwell & Co., Var.couver, Canada	Discussions with consultants
	(b) H. A. Simons, Vancouver, Canada	-do-
3-3-1975 . to 5-3-1975 .	. (a) Dominion Engg. Works Ltd. Montreal, Canada	Discussions with Dominion on Papriformer.
	(b) Stadler & Hunter Ltd. Montreal, Canada	Discussions with consultants.
6-3-1975	. Southland Paper Mills Houston, U.S.A.	Mill visit to see Papriformer
10-3-1975 .	. K F W, Frankfurt, W. Germany	Discussions with KFW on financial assistance.

1		2	3
11-3-1975	•	. J. M. Voith Gmbh Heiden- heim, W. Germany	Discussions on Duoformer and visit to workshop.
12-3-1975	•	. Hallsta Paper Mill, Hallsta, Sweden	Mill visit to see Duoformer arda Refiner pulping.
13-3-1975	•	. (a) Ekono, Helsinki, Finland	Discussions with consultants.
14-3-1975	•	. (b) Jaakko Poyry & Co., Helsiaki, Finland	<b>-</b> do-
		(c) Metex, Helsinki, Finland	Machinery suppliers. Discussions on offers.

# APPENDIX III

# Summary of Conclusions/Recommendations

S1. No.	Reference to para No. in the Report	Summary of Conclusions/Recommendations
(1)	(2)	(3)

1

# **Objectives**

1.11—1.13 The Committee note that the Industries (Development and Regulation) Act permits the Government to take over units which remain closed for at least over 3 months under special circumstances. Under the present legislation, there is no power to take action before any unit has actually fallen sick.

The Committee reiterate their recommendation made in part 2.19 of their 63rd Report on National Textile Corporation that the preventive measures proposed to be taken may be finalised and implemented expeditiously so as to obviate the danger of units becoming sick and, therefore, having to be closed, thus creating a national loss. The Committee would like the Government to consider suitably amending the IDR Act to achieve this objective.

The Committee also note that the Industrial Development Bank of India has been made an apex body under which all the financial institutions will function. Under the new structure, these institutions would build up a team of technical personnel, accountants, marketing managers, financial experts, engineers, auditors and experts in other fields, from amongst whom the financial institutions would nominate directors on the boards of the companies to whom they lend funds, to represent the interests of the financial institutions and keep a watch on

the "going on" in these companies. While this is a step in the right direction, the Committee stress that IDBI and the financial institutions should select the experts for the proposed team with due care and thought so as to ensure that, when nominated to serve on the Board of Directors of any borrowing company, they act as true "watch-dogs" of the financial institutions in the national interest and perform their functions without fear or favour. They expect that the representatives of the IDBI and the financial institutions nominated to serve on the Board would attend the meetings of the Board regularly and take active interest.

2 1.19 and 1.20 The Committee note that the Hindustan Paper Corporation was asked by the Government of India to examine the question of taking over of the Thakur Paper Mills, Samastipur, which remained closed for two-three years. The Corporation was of the view that the Mill could be taken over. The Committee find that the State Government ultimately decided to hand over the Mill to a private party.

The Committee feel that it is an interesting situation where the State Government was interested in handing over an undertaking which it had a majority investment of over Rs. 24 lakhs out of total paid-up Rs. 39 lakhs and which was technically sound and could be revived to a private party instead of the HPC a Public Undertaking especially when HPC was of the view that it could be taken over. The Committee recommend that the reasons why the Central Government could not take over the mill or persuade the State Government to take over the mill under the Industries (Development & Regulation) Act should be gone into and the Committee apprised of the results.

**(1) (2) (3)** 

# Demand and Production of Paper

**3** 2.16

The Committee are surprised to note that no scientific survey of the demand for the different varieties of paper was ever conducted in the country. The Committee, therefore, stress that Government should without further loss of time conduct a scientific survey for different varieties of paper so as to plan the future development of paper industry on right lines and take correct investment decisions therefor.

2.17

The Committee understand that the present installed capacity is of the order of 1.04 million tonnes. Letters of intent have been issued for a capacity of 2 million tonnes during 1975, 1976 and 1977. Additional capacities of 1,40,000 tonnes, 60,000 tonnes and 80,000 tonnes are likely to be commissioned during these years some other schemes already approved are likely to come to fruition during the period following 1977. According to the Corporation it may thus be possible to meet the demand of 1.33 milliontonnes by 1978-79. Since Paper Industry has a long gestation period, the Committee recommend that Government should monitor progress of the projects which are to be commissioned during these years so as to ensure that these projects actually come up and commissioned on schedule so that the demand for paper is fully met and scarcity conditions donot develop in this essential commodity.

The Committee also find that as against the present installed capacity of 1.04 million tonnes the production during 1974 has been of the order of 8,37,000 tonnes only. The Committee would like Government to go into the reasons for the production being less than the installed capacity and see that the capacities already installed are utilised to the maximum extent.

2.18

The Committee have observed from the report prepared by Consultant of the Food and Agricultural Organisation of United Nations that the production of paper and paper boards in the world is estimated to result in a deficit, in 1978, of 16.1 million metric tonnes (11 million mt. in the developed countries and 5.1 million mt. in the developing countries) which will have devastating impact on education, communications and commerce in the developing countries.

The Committee are, therefore, of the opinion that in view of this it is all the more imperative for the Government/HPC that effective steps are initiated without loss of time to meet the anticipated shortage of paper and paper board in the world so as to minimise the harmful effect which the shortage of paper may otherwise have particularly, on education for the people in this country.

They would suggest that the anticipated shortage of paper in the world in 1978 should in fact be viewed both as a challenge and an opportunity and no efforts should be spared to achieve self-sufficiency in this field before that date and also to enter the export markets in a big way.

8 2.19

They stress that HPC, which it is stated would account for only 20 per cent of the capacity by the end of the Fifth Plan period, should play a leading and more vigorous role in the growth of paper industry in the country. It ensure that the various projects which are unimplementation are commissioned schedule and the new projects which are under investigation are finalised expeditiously taken up for implementation well in time to cope with the growing demand for paper in the country in the years to come.

Demand and Production of Newsprint

7 2.36-2.37

The Committee note that at present against the total demand of 1,50,000 tonnes of newsprint

in the country, NEPA Mill is the only working newsprint unit in the country which produces 55,000 tonnes per annum and rest of the requirement is being met by import. They also note that expansion programme of NEPA Mill raising its capacity to 75,000 tonnes per annum is under implementation and according schedule expected to be completed by 1975-76, and the Hindustan Paper Corporation, is implementing a newsprint project in Kerala will produce 80,000 tonnes of newsprint October, 1978. Against the estimated demand of 2,50,000 tonnes by 1979-80 indigenous production of newsprint both from NEPA Mill and Kerala Project is expected to be around 1,50,000 tonnes only.

Government had already issued letters of intent for manufacture newsprint of extent of 2,20,000 tonnes per annum to 5 units. The Committee stress that serious efforts should be made to ensure completion of the NEPA Expansion Project without avoidable delay and also accelerate the progress of completion of the public sector project in Kerala so that the country's dependence on imports could be reduced to the extent of newsprint production from these mills. Since it takes about six years to plan and build a paper mill, unless the project which have been licensed, are completed and commissioned on schedule, the Committee feel that the possibility of even the present demand projections 1979-80 not being met is not ruled out and the gap between demand and availability might thus be widened further. The Committee would therefore like that the schemes for which the licences have been issued are monitored regularly to see that the projects come up in time and are commissioned according to schedule.

The Committee are informed that indigenous production is likely to be short of requirements

in the near future partly because of lack of investment and partly due to non-availability conventional raw materials. The Committee recommend that Government and HPC should examine the constraints in the way of further increasing the capacities for production of newsprint and formulate a long-term plan to remove and provide infrastructural constraints facilities in the areas where raw materials for newsprint are available. The Committee recommend that while locating the future newsprint projects, care should be taken to see that they are situated in areas where raw materials for newsprint are available and infrastructural facilities have been established.

2.39 The Committee also recommend that the production of newsprint in the country should be stepped up and imports in future kept to the barest minimum. They would stress that adequate care should be taken to see that the newsprint produced by NEPA Mill is properly utilised and is not allowed to deteriorate as a result of stock piling etc.

The Committee note that NEPA Milfs and Hindustan Paper Corporation are both engaged in manufacture of newsprint. According to the Ministry, is has not so far thought that it was time to consider merger of the two organisations. The Committee feel that in the interest of better co-ordination of the two newsprint manufacturing units, Government should consider at the

Raw Materials

The Committee recommend that there should be a meaningful coordination between Hindustan Paper Corporation and the State Forest Corporations so that the latter can so arrange their programme as to meet in full the requirements

appropriate time the desirability of having one set-up to look after the manufacture of newsprint.

9 2.40

3.24-3.25

10

of raw materials for the projects of HPC. A watch should also be kept on the working of Forest Corporations to make sure that these subserve the larger objectives of providing essential raw materials for the paper industry. The Committee need hardly stress that the location of future paper/newsprint projects should be sufficiently close to the source of raw materials so as to reduce the cost of transportation of raw material to the minimum and thereby ensure production of paper/newsprint at economic cost.

11 3.26

The Committee are informed that though in pursuance of the recommendations of National Commission on Agriculture, forest development corporations have been formed in many states, the paper industry as such is not being associated with these schemes. The Committee would like Government to impress upon the State Governments and the forest development corporations the importance of associating the paper industry with the implementation of the programmes of forest development corporations.

12 3.27-3.30

The Committee would like that the Corporation should ensure that their arrangements with the State Governments for the supply of raw materials for its present and future projects are finalised early so as to enable it to have an assured and continuous supply of the raw materials for their projects.

13 3.31

The Committee feel that the Corporation should while concentrating its activities for the present on the implementation of the paper projects already in hand should take care in coordination with the State Forest Development Corporations that the programme of afforestation is co-related with the future demand.

14 3.32

The Committee would like Government to examine the possibility of developing the Bastar and adjoining areas which have the potential for

raw material for paper industry. The Committee would like that Government should prepare a perspective plan for the development of paper industry and should also have a shelf of schemes consistent with the availability of raw materials best suited for paper/newsprint manufacture. The Committee also desire that Corporation should keep itself abreast of technological advancement made in the world for the manufacture of paper/newsprint so that they could be suitably adopted for paper manufacture in the country.

15 3.33

The Committee note that while bamboo is the main and important raw material for production of paper, because of shortages developed in the availability of bamboos, hardwoods are being used upto 40 per cent for pulp. In addition, there are a number of other products like jute sticks, conifers straws, bagasse etc. can be used as raw materials for paper. regard to jute sticks, it has been stated because these are used as fuel, the question of finding alternative sources of fuel and problem of finding machinery for collection, transport and storage on economic cost have to be considered. The Development Council for Paper, Pulp and Allied Industries is reported to have set up a Committee to examine these problems. Committee hope that the body set up by the Development Council will conclude its examination soon and suggest ways and means of solving the problem of collection, transportation and storage of these products in the interest of making jute sticks available to the paper industry.

16 3.34

The Committee note that bagasse is being used by paper industry for the production of ordinary varieties of writing and printing paper. It has been suggested by the Comporation that in order to popularise the use of bagasse for the production of writing and printing paper. Government should make it obligatory on all the

new sugar mills to have coal fired boilers and to make all the bagasse available with them to the paper industry for making paper. The Committee feel that in view of the considerable improvement in the position of coal, Government should consider the feasibility of making it a condition for the new sugar mills to be licensed to have only coal-fired boilers and to release the bagasse for use by the paper industry. The Government should also consider ways and means of introducing coal-fired boilers in place of the existing (bagasse fired) boilers in the sugar mills.

17 4.26 4.27

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The Committee would like the ernment to examine the arrangements and conditions for supply of bagasse by Mysore Sugar Mills to the Mandya Mills and whether there has been any failure or breach of contract by the Sugar Mills in supplying the required quantity of bagasse to the Mandya Mills because of which they had to go in for supplies from distant places and, if so, take suitable action therefor. They also recommend that the Corporation should work out the bagasse requirements of the Mandya Mills with reference to the present capacity and future expansion, identify the nearest sources of supply of bagasse and enter into firm commitments with the suppliers on a long term basis so as to ensure that its production is not affected on account of shortage of this essential raw material.

18 4.28-4.29

The Committee are informed that one of the reasons for under-utilisation of capacity was power shortage cuts which ranged between 10 per cent and 60 per cent during 1974-75. In view of the fact that power situation is now comfortable in the Southern region as stated by the Deputy Minister of Energy in answer to Lok Sabha Unstarred Question No. 1330, dated the 28th January, 1976, the Committee feel that it should not be difficult for the Government/Corporation to take up successfully the question of

power supply with the State authorities and enter into firm commitments with them in regard to power supply to the mills.

The Committee are also informed that, in general, the policy of the Hindustan Paper Corporation is to generate its own power in its captive power plants and it has plans to instal turbo generator set for its own power generation in the Mandya Mills. The Committee would like that the Ministry of Industry and Supplies/Corporation should, in consultation with the Ministry of Power, critically examine the need economics of the proposed power plant for Mandya Mill in the context of the comfortable power position in the Karnataka State and take a final decision in the matter in the larger interest of economic and efficient working of the Mill.

19 4.30

The Committee are informed that hand turbine which was purchased in 1962 could not be commissioned due to some accident and since then the mill has been dependent on the purchased power. As they have already commended the Corporation should first decide expeditiously whether or not installation of a captive power plant is absolutely essential for the mill and if it be so, the Corporation should determine in consultation with the whether or not the old turbine, after repairs, can be put to economic use to meet the power requirements of the Mill. In case the old turbine cannot be put to economic use. The Committee have no doubt that the Corporation/Government would take urgent action to dispose it of in the best public interest.

20 4.31

The Committee are distressed to note that the shut down of the machines during 1974-75, which was higher than that during the two pre $_{i}(1) \qquad \qquad (2) \qquad \qquad (3)$ 

ceeding years, caused a shortfall of 2000 tonnes in the production of paper equivalent to sales value of Rs. 90 lakhs and a reduction in profit to the extent of Rs. 40 lakhs to the Mill. The Committee would like the Corporation to investigate the various causes for the shut down with a view to determine as to how far the causes could have been avoided by timely and preventive action and fix responsibility for the lapses if any. The Committee recommend that conclusive measures should be taken to keep the shut-down hours to the minimum and save the mill from loss in production.

.21 4.32-4.35

The Committee note that a team of engineers of the Corporation was sent to Mandya in early July, 1974 to examine the working of the engineering division and it started looking into the engineering problems of the paper machine. Before it could move over to the boiler house, the boiler broke down. The team which analysed the causes of the break-down of the boiler came to the conclusion that it was due to the absence of qualified supervisors. The Committee were informed during the evidence that the boiler was old and was not maintained properly. The Committee feel the condition of the plant/ boiler should have been properly examined at the time of taking-over the mill before determining the amount to be paid.

The Committee feel that as the break-down of the boiler occurred within 6-7 months of the take over of the mill by the Corporation, the enquiry into the causes of the break-down should have also gone into the question of security and safety of the equipment and whether it was not due to sabotage or any other extraneous reasons. The Committee would, therefore, like the Corporation to look into this aspect of the matter, if not already done, and take adequate

security measures in the interest of the safety of the plant and equipment.

The Committee suggest that whenever a private unit is taken over by Government, the Government/Management should immediately identify the critical items of machinery and equipment and take all possible precautions to guard the critical equipments against sabotage or careless handling.

The Committee would like the Undertaking to draw a lesson from this experience and make individual engineers/supervisors responsible for the implementation of the maintenance schedules. The review of the implementation of the maintenance schedules to be placed before the Board periodically.

4.36 to 4.38

:22

The Committee note that though as an integrated pulp and paper mill there was no overall unutilised capacity, all the sections of the Mandya Mills did not, however, have the matching capacity. A scheme costing about Rs. 69 lakhs has been proposed for addition of balancing equipments.

The Committee also note that while orders for balancing equipments to the extent of over Rs. 19 lakhs were placed in 1974 and 1975, action in regard to the balance of items is vet to be taken. Even in cases where orders have been placed, the delivery schedules in certain cases have not been adhered to by the suppliers. The Committee see no reason why all the orders for the balancing equipments could not be finalised and the entire equipment not obtained on top priority basis. They recommend that the Corporation should finalise orders in all the remaining cases without delay and ensure that supply of equipments is made according to a time-bound programme which should be adhered to strictly. They also recommend that the Corporation should

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not hesitate to enforce the penalty clause in the supply orders in cases where avoidable delays in adhering to the delivery schedules have occurred.

The Committee need hardly emphasise the urgency and importance of providing balancing equipments in the Mill to remove bottlenecks for the optimum utilisation of the available machine capacity. The Committee recommend that the Corporation should ensure that all civil and erection works are completed and the balancing equipments pressed into service without delay so that the heavy investment made to remove the imbalances starts yielding return at the earliest. The Committee would like the Corporation to ensure that the balancing equipments would be suitably integrated with the proposed expansion programme so as to ensure that the investment being made now is not rendered infructuous after the expansion.

23 4.49

to

4.53

The Committee note that а expansion of the Mandya Mills costing about Rs. 32 crores was drawn up by the Corporation as it was recognised that the sick mills cannot survive unless it is expanded to an economic and reasonable size. The State Government Karnataka had agreed to make available eight forest areas adjacent to the mills which were expected to yield about 1,40,000 tonnes of air-dry bamboos for a period of 20 years commencing after regeneration of bamboo forests and during the period of process of regeneration, the Corporation was to be allowed to extract such quantities as would be available.

They also learn that after the gregarious flowering of bamboos in 1974 the Government of Karnataka informed the Corporation that it was not possible for them to fulfil their earlier commitment. The Government of Karnataka have

now agreed to allocate five such forest areas to the Mandya Mills as on regeneration would yield 73,000 tonnes of bamboos that too only for a period of 5 years. As the regeneration is expected only in about 1982, the Government of Karnataka have also agreed to make available 25,000 tonnes of bamboos. 20,000 tonnes of reeds and 10,000 tonnes of hard-woods in the interim period. The Committee are informed that on the basis of the availability of forest raw materials in interim period, the Corporation is preparing scheme for immediate expansion of Mandya Mill which will then be sent to the Government of India for consideration and approval. The Committee feel that the expansion plan should be such as to raise the capacity of the mill to economic and viable size and it should be possible to persuade the State Government to agree to supply the forest raw materials on a long term basis for the expansion of the mill to an economic size.

The Committee feel that in view of the past experience of the Corporation/Government with the Government of Karnataka who have once gone back on their commitment made in 1973 in this regard, it would be advisable to make sure that the new commitment made by the State Government to allot forest areas of bamboos on regeneration and bamboos, reed and hardwoods in the interim period is irrevocable before any expension plan is implemented.

The Committee feel that the five year period for the duration of lesse as agreed to by the State Government is not adequate in view of the heavy investment which the Corporation would be making on the expansion programme. They recommend that the Government/Corporation should have the duration of lease extended to a period of 20 years as originally envisaged.

The Committee also recommend that Government | Corporation should carefully examine the financial viability of the new expansion scheme on the basis of current availability of raw materials before its sanction and implementation.

**24 4.64** 

to 4.65 The Committee note that the Hindustan Paper Corporation proposes to procure a second hand paper machine from abroad to reduce the project cost of the proposed expansion of the Mandya Mill. The Committee feel doubtful as to how far the claim of the Corporation that the old machine, as compared to the new machine, would yield a gain of Rs. 32 lakhs a year on cost of production @ Rs. 150 per tonne could be sustained.

The Committee note that the paper machinery industry in the country is capable of producing small size, medium size and large size plants of capacity ranging from 20 tonnes to 150/200 tonnes per day and its capacity utilisation during 1975 has been around 50-55 per cent. The Committee would like that the Government should critically go into the economics and advisability of consistent with their policy of encouraging use of indigenous machinery taking into account all the relevant factors and take a decision in larger and long term interest of the nation and the paper industry. They need hardly stress that when indigenous capacity to manufacture paper machinery is available in adequate measure, maximum amount of machinery should be obtained from indigenous sources.

**25** 4.79

The Committee note that the cost per tonne of paper produced by Mandya Mill has gone up from Rs. 2936 per tonne in 1973-74 (9 months) to Rs. 3748 per tonne in 1974-75. The Committee, find that the cost of production includes an ele-

ment of selling and distribution expenses. They are unable to appreciate the rationale of allocating selling and distribution expenses to cost of production as such expenses do not constitute even indirect overheads on production. They would recommend that the Bureau of Public Enterprises should issue standing guidelines as regards the items which should be taken into account while calculating the cost of production.

The Committee expect that with the steps: now taken and provision of balancing equipment and keeping strict and effective control on overheads, it should be possible to utilise the capacity in the mill and reduce cost of production. The Committee also recommend that the Corporation should review the norms so far obtaining in the various elements of production and revise them suitably on the basis of improvements in techniques and with reference to addition of balancing equipment and work out standard costs of production for purposes of cost controls. The Committee recommend that the cost data and analysis of the variances form the standards together with a report on remedial measures taken should be placed as a regular item on the agenda for the Board's meeting so as to enable the Board to review all aspects of the matter from time to time.

**26 4.80** 

The Committee note that while the cost of production of white printing paper in Mandya Mills is Rs. 3205 per tonne, under the orders of the Government it is required to be sold at a controlled price of Rs. 2750 per tonne. The Committee would like the Corporation not to spare any efforts to bring about reduction in the cost of production of white printing papers consistent with the quality specifications so as to be within the standard level and avoid loss on this account.

27 4.81

While the Committee are happy at the reorganisation of the marketing system by the Corporation after the take over of Mandya Mill, they feel that in the field of paper where demand is much more than the supplies, it should not be necessary to have a very large marketing set up. They would, therefore, like the Corporation to keep this aspect in mind while determining the size of the marketing set-up, and ensure that the marketing expenses are kept to the minimum.

28 4.82

The Committee find that the Corporation is setting up depots to meet the requirements of smaller consumers. They would like the working of depots to be kept under constant and continuous review and necessary improvements made in the light of the experience gained to ensure that paper is available easily to all the smaller consumers at a reasonable price.

They recommend that the marketing expenses vis-a-vis sales turn-over and the working results of the depots should be reviewed from time to time and the report of the review should be placed before the Board periodically to enable it to device remedial measures to bring the marketing expenses down whenever they happen to go up beyond a reasonable limit.

.29 4.83

The Committee would suggest that, after a unit is taken over by Government, Government| Management should take that opportunity to explore the possibility of evolving a wage system with built-in incentives in which the accent should be on productivity.

The Committee further suggest that immediately after take over, the Management should also review the sales and purchase procedures of

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the private units to make sure that there is no surreptitious margin built into these procedures so that these do not operate to the deteriment of the public sector.

30 4.87 to

4.88

The Committee note that stock verifications done during the years 1973-74 and 1974-75 indicated shortages of coal to the extent of 800 tonnes (of the value of Rs. 1.02 lakhs) and 987 tonnes (of the value of Rs. 1.53 lakhs) respectively.

The Committee feel that in the absence of weighbridge at the siding of the Mandya Mills and also of a suitable device for measuring issues and utilisation of coal, the possibility of pilferage between the Railway siding and the Mills premises or within the premises itself cannot be ruled out. They are not happy at the complacent attitude adopted by the Management towards the heavy shortages of coal from year to year. They would recommend that the Government/Corporation should have the shortages investigated and take action against those found responsible for the shortages. The Committee see no reason why it was not found possible to instal weighbridge if it could help to control the pilferages. They would also like the Corporation to identify the various other loopholes in the handling of coal at various stages and take positive measures to plug them without loss of time. They would also like to be informed of the action taken in the matter.

**3**1 4.95

The Committee note that though orders for supply of alum were placed at the negotiated rate of Rs. 363 per metric tonne on M/s. Solar Chemicals for supply at 100 to 150 metric tonnes per month from August, 1973 to July, 1974, even before the completion of the stipulated supply upto February, 1974, the rate was increased to

Rs. 450/- per metric tonne in April, 1974. The rate was again raised to Rs. 510 in May, 1974—and was further raised to Rs. 730|- in August, 1974—every time much before the completion of the supply according to the originally agreed rate. The Committee fail to understand why the supply order was not got executed and why no action was taken against the firm for not completing the supply.

32 4.96

to 4.98 The Committee are informed that the increase in rate in April, 1974 was allowed after testing the market through limited tender while a

the market through limited tender while subsequent increase in May, 1974 was allowed merely on the basis of a survey carried out contacting reputed firms. However, the further increase to Rs. 730|- per metric tonne was allowed after ascertaining the market trend through advertised enquiry. The Committee are not convinced of the reasons adduced by Corporation for deciding the supply order in favour of M|s. Solar . Chemicals. Thev would like that the matter should be got thoroughly investigated through C.B.I. with a view to determine how far the settlement made with the Solar Chemicals for the supply of and the increase in rates allowed to the firm were justified and why no action was taken against the firm for not completing supply according to the orginally agreed rate and fix responsibility for the lapses and Com-

33 4.99

The Committee are informed that the guidelines about the purchase procedure have been issued and procedure is being streamlined. The Purchase Committee has been asked to tighten its control. The Committee recommend that the Corporation should ensure that the procedure for purchases is implemented in letter and spirit and all deviations from the purchase procedure in the case of major purchases together with the

mittee informed.

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reasons therefore should be brought to the notice of the top management of the mill and the Board. The purchase procedure should also be reviewed from time to time and modified if necessary in the light of experience gained.

## Nagaland Pulp and Paper Project

**34** . 5.23

The Committee cannot but express their unhappiness over the fact that the cost estimates originaly prepared by the consultants (NIDC) were unrealistic, incomplete and did not take full care of all aspects of the project. They would like that the matter, as to why the estimates were unrealistic, should be enquired into with a view to fixing responsibility. They feel that if the cost estimates prepared by the consultants had been thoroughly scrutinised by the Ministry before these were approved, deficiencies which have been noticed subsequently, could have been detected right at the beginning and rectified. In this connection the Committee would like to invite attention to their recommendation contained in para 118 of their Fifteenth Report (Fourth Lok Sabha) on Financial Management in Undertakings and reiterate that the importance of estimates in the detailed project report being as realistic as possible needs hardly any emphasis as the project report forms the very basis on which Government approve the project and the capital outlay. It is essential that the estimates take into account all foreseeable items of expenditure and are based on correct data so as to obviate the necessity of revision of estimates frequently.

**35** 5.34

The Committee recommend that when the revised estimates vary so widely from the original estimates as has been in this case, the Investment Board of the Central Government should go into the reasons for such wide variations, fix

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responsibility for it as it seriously affects the economic parametres on the basis of which the Project is sanctioned and issue necessary guidelines to all concerned to obviate recurrence.

**3**6 5.25

The Corporation feels that because of the dispersed locations of the various sections of the mill, and the difficulties which would be experienced in repairs and maintenance during rainy season, the down-time will be rather high, making it not possible to run the mill to full capacity, and the capital costs on treatment and disposal of effluent would be substantially higher than earlier estimated. The Committee regret to note that "this mill would not be among the more profitable ones", and in the opinion of the Chairmancum-Management Director of HPC, "it will never make profits in all probability". They cannot but express their deep concern over the bleak future thus projected of this mill which on present indications would turn out to be a losing concern in all probability and thus become a permanent liability. The Committee recommend Government/Corporation should seriously urgently look into the problems of maintenance, down-time and effluent treatment and disposal which have upset the profitability of the Mill so gravely and spare no efforts to find a satisfactory solution with the help of experts to these known problems.

**37** 5.26

to 5.31 The Committee note that the Nagaland Pulp and Paper Mill was conceived by the State Government Nagaland sometime in mid sixties and out of the two sites, at Tuli and Naginimara, considered suitable by the experts, the site at Tuli was selected by the State Government for constructing the mill.

The Committee are constrained to observe that even though the project was examined by many

experts at various stages, the question of suitability of site was either side-tracked, or not subjected to any scientific study to determine the effect of site on the economics and efficiency of the project. It is all the more regrettable that NIDC which were appointed consultants for the project also overlooked the question of suitability of Tuli area for the project and did not bring out the inherent disadvantages of the site which it is now pointed out, will have serious effect on the economics and efficiency of the mill.

In view of the difficulties involved in shifting the mill to any other site as also the fact that an expenditure of nearly Rs. 3 crores has already been incurred on civil and other works at Tuli, the Committee are led to the conclusion that location of mill at Tuli is fait accompli. There imperative need to resolve the difficulties and defects that arise at the present site. As alrady recommended by the Committee in para 5.25 of this Chapter, they would like the Government/ Corporation to earnestly look into the problems of maintenance, down-time and effluent disposal which are likely to upset seriously the profitability of the mill and spare no efforts to find satisfactory solutions to these problems so as to offset the locational disadvantages of the project and thus prevent this mill from becoming a permanent liability.

**38** 5.32

The Committee need hardly point out that the selection of site for location of public sector enterprises should be made in the larger public interest after a thorough and critical appraisal of the merits and demerits of all the possible sites and the location should be such as well, on balance, be most conducive to the efficient and economic running of the project, and not such as would make a project a permanently losing proposition. The Committee need hardly stress that

the Investment Board is expected to critically and thoroughly go into the suitability of location of a project before according approval thereto. They would like the Bureau of Public Enterprises to bring this matter to the notice of all the Ministries and public undertakings for their future guidance.

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5.33 and 5.34

The Committee are informed that a landside occured in September, 1974 near the Digester Experts Committee, House of the mill. The which was appointed by the NIDC (the consultants) to go into the matter came to the conclusion "the so-called slips to the hillock sides are essentially the sliding of the loose excavated soil dumped on the hillock sides caused by rain As regards the site being in an active earthquake thrust zone, the Experts Committee stated that there need be no fears on this account as long as structures and formulations designed making allowances for earthquake as per ISI codes, which they were advised, was being done. The Experts Committee were satisfied that the site was suitable from an engineering point of view.

The Experts Committee have made recommendations for taking certain additional protective measures to protect the hillock sides from further damage. The Committee would like Government to take all necessary protective measures to safeguard the structure of mill and plant. The Committee would like to be informed of the concrete measures taken in this behalf.

40 5.35

The Committee note that the date of commissioning of project which was originally fixed as December, 1976 has been revised to October, 1977. They regret to note that in the agreement with the consultants (NIDC) no specific timeschedule was stipulated for the completion of the

project, with the result that the consultants could not now be held responsible for the delay. The Committee take a serious view of this ommission in the agreement and would like the matter to be investigated with a view to fix responsibility for the lapse.

The Committee find that the Ministry still apprehend that there may be some slippage even in the revised date of commissioning. If serious and concerted measures are taken by the Corporation and the Government render all possible assistance to the Corporation in overcoming the constraints that may arise in the execution of the project, it should be possible to avert any further slippage in the date of commissioning of the mill.

# Kerala Newsprint Project

41 6.8 and 6.9 The Committee note that the National Industrial Development Corporation, a public sector undertaking, was appointed in August, 1973, as turn-key consultants for the Kerala Newsprint Project on the strength of its collaboration with M|s. Simons (International) of Canada inspite of the fact that NIDC did not have the requisite expertise in paper technology. While the idea to develop an Indian organisation into a consultancy organisation in the field of paper and pulp industry in appreciated, in the opinion of the Committee, the choice of NIDC which admittedly did not have the requisite expertise in this field was not right.

42 6.10

Now that the Hindustan Paper Corporation has been entrusted with the implementation of the Newsprint Project and a number of other projects, it appears to be more appropriate if the consultancy service and expertise for paper technology are developed under the H.P.C. The

expertise, if any, available with the NIDC could also be suitable absorbed by the HPC.

43 6.11

The Committee have found that in the case of fertilizers, several parallel agencies in the public sector have been developed for designs and consultancy with the results that not only the efforts of these organisations get diluted and difficulties are faced in taking final decisions about designs but there is also avoidable duplication and heavy unnecessary overheads. The Committee feel that it is time that Government consider all aspects and take a decision about the location of design and consultancy services for paper in the public sector so that it could be squarely entrusted with the responsibilty of development and execution of projects.

44 6.12

The Committee are informed that the Hindustan Paper Corporation approached the reputed firms of foreign consultants to quote their fees and ultimately in 1975 appointed M/s. Sandwell & Co. Limited, Vancouver (Canada) as its consultants for the Kerala Project and this arrangement has also been approved by the Government of India. The Committee hope that the Corporation had kept in view the difficulties 'experienced by NIDC with M/s. Simons & Co. before finalising the terms and conditions of agreement with M/s. Sandwell & Co. and ensure that such problems had been taken care of, so that the terms and conditions are in the best interests of Corporation and the country and the technology selected is most uptodate.

45 6.26 and 6.27 The Committee note that within a month after the appointment of NIDC as turn key consultants in August, 1973, the then Chairman and officers of the Corporation went on a tour of foreign countries including Canada in August, and September, 1973, it has been stated that the purpose of the tour was to have joint discussions with

NIDC, the turnkey consultants, and their collaborators M/s. H. A. Simons on the various aspects of the project.

The Committee regret to observe that the Corporation had not taken even the elementary precaution of varifying whether or not a agreement existed between the NIDC and M/s. Simons of Canada, before the choice of NIDC as consultants for newsprint project was made.

6.28 46

The Committee note that while the three officers of Hindustan Paper Corporation left India on 26th August, 1973 and returned on 28th October, 1973 (65 days) after visiting as many as 9 countries (Japan, Canada, USA, UK, Finland, Sweden, West Germany, Holland and Italy), the Chairman of the Corporation left India on 29th August, 1973 and returned on 29th September, 1973, after visiting 8 countries (Italy, Switzerland, West Germany, France, Canada, USA, Poland and Denmark). He was with the team of officers only for 8 days from September 12 to September 19,1973 at Vancouver (Canada). For other days, his itinerary was different from that of officers. The total expenditure on the tour is stated to be about Rs. 1.5 lakhs. The Committee are not clear as to why the Chairman of the Corporation followed a different itinerary than that of his officers. The Committee understand that the then Chairman of the Corporation who was part-time left the Corporation in January, 1974. The Committee would like to draw attention of Corporation to their comments about the appointment of the Chairman of the Corporation in their 40th Report (1973-74) on 'Role Achievements of Public Undertakings'.

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advantage in as much for the first time the 6.31 Hindustan Paper Corporation was able to get first

It has been claimed that the tour was

hand knowledge about the use of hard woods for pulp and paper making, formation of pulp sheets, types of twin wire framers and operation of certain machines and processes. The Committee are not sure whether the advantages claimed to have actually been realised are commensurate with the expenditure incurred and time spent.

The Committee also note that within less than two years after the first tour by the Chairman and the officers of the Corporation, a team of three officers including the new Chairman-cum-Managing Director went on another tour of six countries for 24 days from 19th February to 14th March, 1975. The total expenditure incurred on this tour is stated to be about Rs. 1.06 lakhs. It has been stated that as a result of their visit two consulting firms were invited to India and out of them one was finally selected. The second tour it is claimed enabled the undertaking to finalise its consultancy arrangements in place of the NIDC.

The Committee are not clear as to how such foreign tours were at all approved by the Ministry. They would like that all aspects of the tour in August-September, 1973 including the necessity for the tour, the benefits derived, therefrom, the composition of the team, the itinerary followed by them should be thoroughly investigated and the Committee informed of the action taken against those who found not to have acted with probity and prudence expected of high executives of a public sector undertakings.

48 6.32

The Committee need hardly point out that precious and scarce foreign exchange should not be allowed to be wasted on long, leisurely and unnecessary tours. They recommend that Government should critically scrutinise proposals for foreign tours received from the public under-

takings and only if they are satisfied that a proposed tour is absolutely necessary in the larger interests of the public undertaking, they should allow a minimum number of officers to go abroad for a short duration to visit specified places for specific purposes. The officers who go on tour should be asked to submit, on return, detailed reports on their tour to the Board of Directors and the administrative Ministry concerned who should evaluate the reports critically. Committee would like the Bureau of Public Enterprises to issue suitable guidelines to all the Public Undertakings and the also administrative Ministries concerned in this regard and review the guidelines from time to time in the light of experience gained.

49 6.39 and 6.40 The Committee regret to note that the original estimates prepared by N.I.D.C., the turn key consultants, for the Kerala Newsprint Project in 1971 for a capital outlay of Rs. 30.86 crores were revised to Rs. 39.08 crores in 1973 as a result of reappraisal by the HPC and again revised to Rs. 82.88 crores in 1974 representing an increase of 113 per cent over the revised cost of the project.

The Committee cannot but conclude that it was because of the choice of NIDC who had not the requisite expertise in paper technology consultants for the project that the estimates of the project proved unrealistic and incorrect and had to be revised. The Committee hope that at least the revised estimates now prepared complete, realistic and have taken into account all the foreseeable items and there will not be any occasion for further revision. The Committee would like Government to ensure that arrangements for preparation revision of mates are such that responsibility could be fixed for any lapses in this regard.

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50 6.41

The Committee find that the approval to the revised estimates was given by the P.I.B. subject to the condition that utilisation of pulping techniques for hybrid eucalyptus is carefully examined and necessary precautions taken to arrest the fungus attack on eucalyptus. The Committee are informed that the Expert Committee appointed in July, 1973 examined the question of utilisation of hybrid variety of eucalyptus recommended installation of three pulping streets instead of two as originally envisaged without involving revision of capital cost. The Committee are also informed that the question of fungus problem has been referred to another Expert Committee associating the Dehra Dun Forest Research Institute. The Committee would like to be informed of the findings in regard to fungus problem and the action taken in pursuance thereof as this raises a very basic question about the raw material to be used for paper manufacture.

6.52—6.57 'During the course of examination of the Nepa Mills in 1973, the Secretary of the Ministry of Industrial Development informed the Committee that besides expanding the capacity of Nepa Mills, a project was coming up in Kerala under HPC which would be completed by the end of 1976. The Ministry stated that the project could not have been completed by the end of 1976 since it would have taken 3 to 3½ years from the date of final clearance of the project.

The Committee are also informed that:

(a) Agreement with the State Government on the assistance required including allotment on long term basis of forest areas was signed only on 7th October, 1974;

- (b) The major portion of the land had been taken over by HPC only by the middle of 1975 for the site preparation operations;
- (c) Arrangement for foreign exchange was made only in the month of August, 1974;
- (d) In February, 1974, Simons formally backed out of collaboration with NIDC and HPC had to cancel its consultancy arrangement with NIDC and had to make alternative arrangement for foreign collaboration; and
- (e) Orders for major plant and machinery are yet to be placed.

The Committee are surprised as to how without taking these important factors into account the date for commissioning could have been given out as 1976.

The Committee are informed that a number of preliminary items of work had been completed and the project is now expected to be commissioned by 1978.

The Committee need hardly stress that it is imperative on the part of the Corporation to ensure that the completion of project is not delayed more as there is a commitment made with the Kerala Government on which the Corporation are dependent for the supply of raw materials.

The Committee would like the Ministry to keep a close watch over the progress of the project and render all assistance to the Corporation in overcoming constraints, if any, so as to enable the Corporation to adhere to the revised schedule.

### Cachar and Nowgong Projects

7.27—7.29 The Committee note that the project estimates prepared by the National Industrial Develop-

ment Corporation for the Nowgong and Cachar projects in 1971-72 for Rs. 32 crores and Rs. 31 crores respectively for an annual capacity 50,000 tonnes had first been revised by the Hindustan Paper Corporation to Rs. 88 crores for a capacity of 80,000 tonnes and thereafter to Rs. 115 crores for an annual capacity of 1 lakh tonnes and submitted to Government in May, 1974. The increase in cost has been stated to be due to not only the increase in capacity but also factors like incorporation of latest technology, provision of additional machinery and equipment and price escalation. The Committee feel that the initial project itself should have been based on plants of economic size of 1 lakh tonnes capacity instead of 50,000 tonnes and revising the mates from time to time thus losing more than two or three years in the process.

53 7.30

The Committee find that final investment decision in regard to these projects especially "in respect of their timing" is yet to be taken owing to the size of the investment funds required and the constraint of financial resources for there are competing demands. The Committee note that both the projects are situated in backward regions and are for the manufacture white printing paper where against an estimated demand of 7.5 lakhs tonnes by 1978-79 the present availability is only of the order of 4 lakhs The Committee feel that keeping view the policy of development of backward areas and the gap between the demand and availability of the white printing paper in country, the Government should take an early invesiment decision in regard to these paper The Committee need hardly point out that any further delay may result not only in the escalation of costs but may create difficulties in the conclusion of firm agreements with the State Government for assured supplies of raw materials for the mills at agreed rates.

#### Research and Development

54 8.22-8.25

The Committee note that the major problems identified in the paper industry at present are about commercial use of bamboo for mechanical pulp. problem of silicia in the pulping mechanical recovery section of straw based mills, use of bagasse for manufacture of newsprint, problem of collection, storage, transport etc. of agricultural residues such as rice, straw, jute sticks etc. increasing and optimising use of short fibred hardwoods in the country, economic extraction of long fibred pine and spruce growing in comparatively inaccesible areas etc. Although there are two research institutes in the field of paper technology, viz. the Forest Research Institute. Dehradun (Cellulose & Paper Branch) and the Institute of Paper Technology, Saharanpur, Committee feel that contribution made by these institutes has not been very significant and many substantial and urgent problems still remain to be tackled.

The Government are also contemplating to set up a Central Research and Development Institue for filling in the gaps in the existing R&D programmes.

The Committee feel that significant gaps exist between the demand and supply of paper, particularly newsprint. The Committee have, elsewhere in this Report, already emphasised the need for attaining self-reliance in paper production, as paper is vital for imparting education, dissemination of information and for carrying on business, industrial and governmental work. The traditional resource for manufacture of paper is soft wood, which unfortunately is not available at present in abundant quantities in the country. It is, therefore, imperative that research is intensified in order to develop processes for using hard

wood in larger quantities for the manufacture of paper. There is need for identifying and developing newer species of wood better suited to paper manufacture. There is need also for intensifying research in order to encourage the use of agricultural residues like bagasse, jute sticks etc. for paper manufacture.

55 8.26

The Committee feel that the Government should have drawn up much earlier a comprehensive programme for integrated and intensified research on paper manufacture. The concept of setting up a Central Research and Development Institute devoted to paper manufacture has come not a day too soon and it is imperative that it is put on the ground without delay. The programme for research should be pragmatic and relate to the requirements of the paper, industry. particularly of the Hindustan Paper Corporation which has been given a major role in the Fifth Plan of setting up paper plants in the There should be close coordination between the Central Research & Development stitute, the Forest Research Institute, Dehradun, and the Training Institution at Saharanpur that the experience gathered so far in the field is put to best use in public interest. There should also be co-ordination with UNDP programme which is underway for identifying suitable raw materials for paper manufacture. The Committee would like to be informed of the concrete measures taken by Government to implement a comprehensive national research programme for paper manufacture as per a time-bound programme to be drawn up in consultation with the Hindustan Paper Comporation, N.E.P.A. and other leading paper manufacturing units.

56 8.27

The Committee also suggest that there should be a procedure by which the achievements of the Research Institutions are publicised and are

available, to the paper industry as a whole in the national interest. The results of studies in regard to raw materials should also be fed back to the Agriculture and Forest Departments so that the latter may keep in view the needs of paper industry while determining the programmes for afforestation and regeneration of plantations.

57 8.28

The Committee are informed that the Corporation intends to set up R. & D. Wings at all plants. The Committee feel that the R. & D. units should besides taking steps for assimilation of the foreign technology and transfer of technology to the new units to be set up, should also be closely associated with the work of suggesting measures for increasing utilisation of capacity, effecting reduction in cost, improving efficiency and effecting economies. The Committee would like that a review of the activities of the R. & D. spelling out in specific terms its achievements and the expenditure incurred thereon should be suitably included in the Annual Report of the Corporation.

#### Financial Matters

58 9.8—**9**.9

The Committee would like that the Ministry/Corporation should critically examine the economics of projects particularly those which are still in the planning stage and satisfy themselves about their viability. The Committee would also like the Ministry/Corporation to keep a strict watch on the capital cost of the various paper projects which are under way, complete the projects expeditiously and commission them without delay.

59 9.10

The Committee would also like that the Corporation should introduce a scientific system of costing in all its projects so that analysis of the

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cost of production of paper may be made on correct lines and economies effected wherever necessary.

9.11 The Committee also recommend that the Corporation should right from the beginning ensure that there is no over-staffing in any project and the overheads are kept to the minimum.

As the wages in the Public Sector paper plants are generally high, there should be a built-in accent on productivity in the wage structure from the very inception to subserve the larger public interest.

9.12 Paper is highly capitalised industry. It is therefore necessary that strict financial control is exercised from the very inception. Care should be taken to see that the establishment and other overhead charges are kept within the norms which should be prescribed in this behalf. The Corporation should also introduce the system of management accountancy to assist the Management and the Board to take right decisions.

The Committee would like that Government representatives on the Board to pay attention to the aforementioned aspects more particularly to the necessity of ensuring that the expenditure on the projects under implementations does not get so inflicted as to militate against the viability of the project.

The Committee would like the administrative Ministry also to pay special attention to the functioning of the Corporation including recruitment of staff to see that there is no over-staffing at any stage, as large funds are being expended through it to develop large scale paper manufacturing units in the public sector.

63 9.15

The Committee regret to note that so far neither a detailed accounting manual nor a system of internal audit has been introduced in the Corporation. The Committee need hardly emphasise the importance of the internal audit as an aid to management which besides discovering irregularities if any, concurrently has the added advantage of bringing to the notice of the management the weak areas and help them to streamline financial procedures cutting out waste etc. Committee would therefore urge that the Corporation may immediately set up a compact internal audit cell with qualified personnel. The important points noticed by internal audit may be brought to the notice of top management and a report of the points together with action taken thereon may be placed before the Board of Directors from time to time.