CHAPTER VII

ROLE OF GOVERNMENT - AN ANALYSIS
Bird's-Eye View of Chapter-VII

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CHAPTER - VII
ROLE OF GOVERNMENT - AN ANALYSIS

INTRODUCTION

Both the Central Government and the State Governments have been actively involved in the working of the Paper Industry. All major areas of industrial activity such as licencing, provision of financial assistance, pricing, distribution, market, promotion of research and development and training, import as well as indigenous supply of raw-materials, fiscal incentives, environmental concerns, etc are being formally or informally monitored, guided and controlled by the Government. But, beginning from 1990 (following liberalisation of the economy) some of the controls, hitherto imposed on the Industry, are being gradually eased out. With this background, an attempt is made in this Chapter to evaluate the role of the Government in some of the areas of interest to Paper Industry.

INDUSTRIAL POLICY OF THE GOVERNMENT AND THE PAPER INDUSTRY

a) The Industries (Development and Regulation) Act, 1951

The Industries (Development and Regulation) Act, 1951 vests the Government with powers for regulation and control of industrial undertakings. The Act provides for a system of licencing in respect of industries included in the First Schedule to the Act. Item 24 of the First Schedule relating to the Paper Industry reads as follows:
Item 24. PAPER AND PULP, INCLUDING PAPER PRODUCTS.

i) Paper - writing, printing and wrapping;

ii) Newsprint;

iii) Paper board and straw board;

iv) Paper for packaging (corrugated paper, kraft paper, paper bags, paper containers and the like);

v) Pulp - wood pulp, mechanical, chemical, including dissolving pulp.

b) Industrial Policy in respect of the Paper Industry

The Industrial Policy Resolution of 1956 formed the basis for the approach to industrial organisation and development in India in a systematic form. This Policy Resolution categorised industries into three as -

i) those the future development of which would be exclusive responsibility of the State (Schedule 'A'),

ii) those in which the State would generally take the initiative in establishing new undertakings but private enterprise was expected to supplement the effort of the State (Schedule 'B'), and

iii) the remaining industries, the development of which would ordinarily be undertaken through the initiative and enterprise of the private sector.
While 'chemical pulp' was included in schedule B, the Paper Industry fell in the last category. Under the Industrial Licencing Policy announced in February 1970, following the Report of the Industrial Licencing Policy Inquiry Committee, 'large industrial houses' as defined in the Report were expected to participate in the development of 'core' and 'heavy' industry sectors. The list of 'core' industries included newsprint while paper figured in the 'heavy' industry sector by virtue of the scale of investment.

As a further development, the Government identified in February 1973, certain core industries of importance to the national economy while announcing important decisions relating to Industrial Policy. Large industrial houses were eligible to participate in, and contribute, to the establishment of industries such as 'Paper and pulp including paper products' (Item 15).

In view of its capital intensive nature and inclusion in the core sector, the Paper Industry enjoyed certain special exemptions with respect to the licencing provisions of the Act. These are as follows:

a) Manufacture of writing, printing and wrapping paper from agricultural residue, waste paper, etc (not involving the use of forest-based raw-

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materials) is exempt from the licencing provisions provided no import of equipment, raw-materials or technical knowhow is involved (excluding MRTP/FERA companies and articles reserved for the small scale sector). In such cases, only registration with DGTD is required, and, 

b) Industrial undertakings engaged in the manufacture of "paper and pulp, including paper products" are exempted from obtaining an industrial licence for effecting substantial expansion provided the articles are not reserved for manufacture in the small scale sector and the undertaking does not fall within the purview of the MRTP Act or the FERA, and installation of additional machinery is not involved.

The Industrial Licencing Policy in respect of paper has been further liberalised in February 1985, whereby manufacturers have been given flexibility (broad-banding) to take up the manufacture of any variety of paper and pulp including paper boards within the overall licenced capacity in line with the market demand. For this purpose, the items have been grouped as: "all varieties of paper and paper grade pulp, including paper board/straw board". This flexibility has been permitted to facilitate full utilisation of capacity resulting in higher volume of production at reduced costs.

2. Vide Notification dated November 1, 1975 
3. Vide Notification dated November 1, 1975 
4. Vide Press Note dated February 8, 1985
In March 1985, the manufacture of (a) writing, printing and wrapping paper from agriculture residue, waste paper and bagasse; and (b) cotton-seed linter pulp were included in industries for which no industrial licence was required under the provisions of the Industries (Development and Regulation) Act if the following conditions were fulfilled:

i) the industrial undertaking does not fall within the purview of MRTP Act or FERA;

ii) the article of manufacture is not reserved for the small scale sector; and

iii) the industrial undertaking is not located within specified urban limits;

This was a further liberalisation of the delicensing provisions of the Notification dated November 1, 1975.

c) Reservation of Paper Products for Small Scale Sector: A large number of paper products have been reserved for manufacture exclusively in the small scale sector. (A list of such items are given in Appendix - III).

5. Vide the Press Note dated March 16, 1985
FISCAL INCENTIVES FOR THE PAPER INDUSTRY

Apart from the general fiscal concessions such as tax relief and incentives for the units set up in backward areas, the Paper Industry is entitled to special reliefs in excise and customs duties. These incentives/reliefs are discussed in the following paragraphs.

a) CENTRAL EXCISE DUTY

Central Excise Duty consists of a basic excise duty with, in some cases, special or additional excise duties. In the case of the Paper Industry, basic excise duty is leviable on all sorts of paper and paper boards. In general, the excise duty was leviable as indicated in the following table (till the end of the financial Year 1982-83).

TABLE-7.1
RATE OF CENTRAL EXCISE DUTY (UPTO 1982-83)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Rate of Excise Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Writing &amp; Printing Paper</td>
<td>25% ad-valorem</td>
</tr>
<tr>
<td>2.</td>
<td>Paperboard and all other kinds of paper</td>
<td>40% ad-valorem</td>
</tr>
</tbody>
</table>

Source: Figures in the table are extracted from the cost accounting records of MPM

From the above table, the following points may be observed:
i) The basis for levy of excise duty was `ad-valorem' and not `specific';

ii) Levy of excise duty was moderate at 25% in respect of writing and printing paper as it was a paper product of common use. However, paper boards and other varieties of paper were charged with a fairly higher rate as compared to that of white printing paper.

The basis for duty was altered in 1983-84 from `ad-valorem' to `ad-valorem-cum-specific' rates in an effort to combat tax-avoidance by adopting a uniform rate for most varieties of paper and paper boards as indicated in the following table:

**TABLE - 7.2**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Rate of Excise Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Writing &amp; printing paper</td>
<td>10% ad-valorem plus Rs. 1,430 per mt.</td>
</tr>
<tr>
<td>2.</td>
<td>Kraft paper and paperboard</td>
<td>10% ad-valorem plus Rs. 1,810 per mt.</td>
</tr>
</tbody>
</table>

Source: Figures in the above table are extracted from the financial statements of MPM

From the above table, it can be observed that:

i) A slight variation as regards the classification of paper products was made for the purpose of levy of the duty;

ii) The duty-structure was a combination of ad-valorem and specific;
iii) Rate charged on ad-valorem basis was reduced and kept at the same level ie, 10% in respect of both the classes of paper products.

iv) However, specific duty levied on kraft paper and paper boards was very high as compared to that of writing and printing paper.

In 1984, in response to the critical state of Paper Industry troubled by rising cost of inputs and need to encourage production, the basic excise duty on writing, printing and kraft paper was reduced by Rs. 425 per tonne. The duty was, however, raised again in 1985-86 and 1986-87. The rates effective for the three years since 1984-85 are presented in the following table:

**TABLE-7.3**

**RATE OF CENTRAL EXCISE DUTY (1984-87)**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Rate of Excise Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1984-85</td>
</tr>
<tr>
<td>1.</td>
<td>Writing and printing paper</td>
<td>10% ad-valorem plus Rs.1,005 per mt.</td>
</tr>
<tr>
<td>2.</td>
<td>Kraft paper</td>
<td>10% ad-valorem plus Rs.1,385 per mt.</td>
</tr>
<tr>
<td>3.</td>
<td>Paper board</td>
<td>10% ad-valorem plus Rs.1,810 per mt.</td>
</tr>
</tbody>
</table>

**Source:** Figures in the table are extracted from the cost accounting records of MPM
An analysis of the duty structure prevalent during the three years period (1984-87), as presented in the above table, reveals the following points:

i) Paper products were classified into three groups for the purpose of levy of duty;

ii) Ad-valorem rate of duty was same at 10% with respect to all the varities of paper products and this rate had remained unchanged during the entire three year period;

iii) Specific excise duty was reduced by Rs.425 during 1984-85 as compared to 1983-84 in respect of writing and printing and kraft paper. However, in respect of paper board, the duty continued to be levied at the pervious year's rate of Rs.1,810 per tonne. In respect of writing and printing paper, the specific excise duty was rised by 19.90% during 1985-86 and by 7.88% during 1986-87, as compared to the preceeding year. In respect of kraft paper, the specific excise duty was rised by 14.44% during 1985-86. However, during the following year, the rate of increase in the levy was reduced to 7.25% only. In respect of paper board, the rate of excise duty remained unchanged during 1984-85 and 1985-86. However, it was rised by 10.5% during 1986-87. This indicates a lack of consistency in the levy of the duties.
The Paper Industry has been demanding further reduction in the excise duty to stimulate demand.

**Excise Duty Relief**

A variety of reliefs in excise duty are available to the Paper Industry. These reliefs serve as a subsidy. Because, the manufacturers can charge consumers the entire excise duty leviable and retain the difference between the duty and concessional rate. The pattern of excise reliefs is indicated in the following paragraphs.

i) **Excise duty relief for small paper mills:**

Small paper mills which utilise secondary raw-material (other than bamboo, hardwood, softwood, reeds or rags) to the extent of not less than 50% and which do not have pulping plants for bamboo or wood pulp were eligible for the concessional rates of excise duty. The details are furnished in table-7.4 presented below.
### TABLE - 7.4
**EXCISE DUTY LEVIAIBLE ON SMALL PAPER MILLS (1984-86)**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Rate of excise duty leviable for slabs of production not exceeding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3,000 MT</td>
</tr>
<tr>
<td>1.</td>
<td>Writing and Printing Paper</td>
<td>Rs.275 per MT</td>
</tr>
<tr>
<td>2.</td>
<td>Kraft paper, kraft liner and corrugating medium, of a substance equal to or exceeding 65 gsm.</td>
<td>Rs.275 per MT</td>
</tr>
<tr>
<td>3.</td>
<td>Others</td>
<td>Rs.560 per MT</td>
</tr>
</tbody>
</table>

**Source:** Notification No.25/84-CE dt. March 1, 1984, as amended by Notification No.92/84-CE dt. April 18, 1984.

From the above table, it is evident that:

i) Paper products of small scale sector were grouped into two classes for the purpose of levy of excise duty at concessional rates;

ii) In view of the fact that the sizes of the units widely varied, four convenient slabs of production were prescribed for the levy of duties;

iii) The concessional rates were based on the slabs of production determined according to the total quantity of clearances of all varieties of paper and paper boards during the preceeding financial year;
iv) Writing and printing papers as well as kraft papers of certain varieties continued to be levied at a lower rate as compared to that on other paper products.

The above scheme was in operation till 1985-86. However, the small paper mills repeatedly represented that the excise relief based on the slabs of production was acting as a disincentive to increased production. Following this, a new scheme was proposed for the year 1986-87. According to the new scheme, small paper mills whose clearances did not exceed 24,000 tonnes in the previous financial year would have to pay duty at the rates specified for successive slabs of clearance, as indicated below:

**TABLE-7.5**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Quantity</th>
<th>Rate per tonne (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>First clearance up to an aggregate not exceeding 3,000 tonnes</td>
<td>300</td>
</tr>
<tr>
<td>2.</td>
<td>Clearances of an aggregate not exceeding 4,500 tonnes immediately following the clearances specified in S.No.1</td>
<td>650</td>
</tr>
<tr>
<td>3.</td>
<td>Clearances of an aggregate not exceeding 4,500 tonnes immediately following the clearances specified in S.No.2</td>
<td>1,000</td>
</tr>
<tr>
<td>4.</td>
<td>Clearances of an aggregate not exceeding 4,500 tonnes immediately following the clearances specified in S.No.3</td>
<td>1,200</td>
</tr>
</tbody>
</table>
EXCISE DUTY LEVIAIBLE ON SMALL PAPER MILLS (1986-87) (Contd.)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Quantity</th>
<th>Rate per tonne (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Clearances of an aggregate not exceeding 4,500 tonnes immediately following the clearances specified in S.No.4</td>
<td>1,500</td>
</tr>
</tbody>
</table>


From the above table, it can be observed that:

i) As against four 'levels of production' prescribed under the earlier scheme, the new scheme prescribed five 'slabs of clearances' for the purpose of levy of duties;

ii) The new scheme had done away with the classification of paper products (as was prevalent under the earlier scheme) for the purpose of levy of the duties.

These concessional rates of duty were, however, not applicable to high value speciality papers viz, cigarette tissues, glassine, grease-proof paper, coated paper (including waxed paper) and paper of a substance not exceeding 25 gsm.

ii) Excise duty relief for utilisation of unconventional raw-materials

Paper and paper board manufactured out of pulp containing not less than 50% by weight of pulp made from unconventional raw-materials was eligible for a concessional rate of excise duty as shown in table-7.6. Till March 1, 1984 the
term 'unconventional raw-material' included bagasse, jute stalks, cereal straws, elephant grass, mesta (kenaf) and waste paper. The definition was amended since March 1, 1984 to include all materials other than bamboo, hardwoods, softwoods, reeds or rags (i.e., by exclusion of conventional raw-materials).

**TABLE - 7.6**

**EXCISE DUTY APPLICABLE FOR UTILISATION OF UNCONVENTIONAL RAW-MATERIALS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Writing and printing paper</td>
<td>7% advalorem plus Rs.645 per mt</td>
</tr>
<tr>
<td>2.</td>
<td>Kraft paper, kraft liner and corrugating medium, of a substance equal to or exceeding 65 gsm</td>
<td>7% advalorem plus Rs.900 per mt</td>
</tr>
<tr>
<td>3.</td>
<td>Others</td>
<td>7% advalorem plus Rs.925 per mt</td>
</tr>
</tbody>
</table>

**Source:** Central Excise Notification No. 26/84-CE dated March 1, 1984.

From the above table, it can be observed that:

i) The scheme provided for a uniform concessional rate of 7% advalorem plus different rates of specific duties for all the three categories of paper products;

ii) Writing and printing paper manufactured by utilising unconventional raw-materials was levied the lowest specific duty whereas kraft paper, etc and other paper products were levied with a higher rate.
The excise duty exemption for mills using unconventional raw-materials has been amended with effect from April 1, 1986, to provide for a uniform concessional excise duty of 10% advalorem plus Rs. 700 per tonne. The exemption is now available only for large integrated pulp and paper mills having their own bamboo/wood pulp plants and excludes small paper mills with clearances below 24,000 tonnes. The exemption also does not apply to cigarette tissue, glassine paper, grease-proof, coated paper (including waxed paper) and paper of a substance not exceeding 25 gsm.

iii) Excise Duty Exemption for Bagasse-based Paper Mills

In order to encourage utilisation of bagasse which has potential for being a major raw-material, a special exemption has been granted to writing and printing paper of bagasse-based paper mills. Unbleached varieties of paper (kraft paper) containing not less than 75% by weight of pulp made from bagasse are exempt from the whole of the excise duty leviable thereon. The Notification No.191/80-CE dated December 9, 1980 as amended by Notification No.142/81-CE dated July 8, 1981 and Notification No.285/83-CE dated December 7, 1983, (providing for this exemption) initially in force till December 31, 1986, has now been extended indefinitely.

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iv) **Excise Duty Exemption for New Units**

In order to offset the high capital cost and consequent interest burden of new large integrated pulp and paper mills and to encourage further investment in the industry, a scheme for exemption of excise duty has been drawn up for new units commissioned after April 1, 1979. The salient features of this scheme are as follows:

i) **eligible products are paper and paper boards (excluding cigarette tissue, glassine, grease-proof paper, coated paper, waxed paper and paper of a substance not exceeding 25 gsm);**

ii) **the qualifying period is first clearance of production effected between April 1, 1979 and March 31, 1987;**

iii) **the excise duty relief is available for a period of 5 years;**

iv) **the rate of exemption from excise duty is 50%;**

v) **the extent of total exemption which can be availed of is limited to 30% of the value of the capital investment in plant and machineries;**

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vi) the factory should have a plant attached thereto for making pulp from bamboo or wood\(^9\), and

vii) the paper-making machinery should not have been utilised earlier\(^9\).

v) Other Exemptions

Apart from the special exemption schemes with specific objectives as detailed in the preceding paragraphs, there are also exemptions for products such as newsprint, hand-made paper, concessional white printing paper supplied to the educational sector, straw board and mill board manufactured by sun-dry process, etc provided under various notifications of the Central Excise Tariff.

b) CONCESSIONS OF CUSTOMS DUTY

Under Section 12 of Customs Act, 1962, goods imported into the country can be subjected to customs duty based on the value of the goods or a specific rate. The Central Government has also been empowered to levy, in addition to basic customs duty, auxiliary and additional duties. The details about basic customs duty on paper and paper-making materials are furnished in table-7.7.

8. In other words, it should be an integrated pulp and paper plant based on forest raw-materials.

9. In other words, factories with second hand equipment would not be eligible.
# TABLE 7.7

**BASIC CUSTOMS DUTY LEVIABLE ON PAPER AND ALLIED PRODUCTS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of Article</th>
<th>Rate of duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Paper and paper board, all sorts</td>
<td>100%</td>
</tr>
<tr>
<td>2.</td>
<td>Pulp</td>
<td>40%</td>
</tr>
<tr>
<td>3.</td>
<td>Waste paper, and paper board, fit only for use in paper-making</td>
<td>100%</td>
</tr>
<tr>
<td>4.</td>
<td>Paper machinery</td>
<td>40%</td>
</tr>
</tbody>
</table>

**Source:** Figures in the table are extracted from the cost accounting records of MPM

From the above table, it is evident that:

i) The Government intended to discourage import of finished paper as well as waste paper (used in paper-making). Hence a hefty rate of 100% duty was levied on the import of these products. This was considered essential to promote indigenous Paper Industry and to protect it from the onslaught of cheap foreign paper. This is also intended to help to conserve foreign exchange as well as explore the sources for waste paper indigenously;

ii) However, capital items like paper-making machinery required for establishment and/or modernisation of the paper mills as well as pulp whose domestic supply was inadequate and its import was
economical as compared to the import of finished paper, the Government levied a lower rate of customs duty on these two items.

i) Exemptions for Paper-making Materials

In order to supplement domestic raw-material resources and to reduce the pressure on natural forests which are already depleted, the Government has been permitting and even encouraging the import of certain varieties of raw-materials required for the manufacture of paper. The following concessions in customs duty are available in this regard to the Paper Industry.

a) Pulp: Wood pulp imported for the manufacture of paper and paper board was earlier subject to a reduced customs duty. Pulp derived by mechanical or chemical means from any fibrous vegetable material has since been exempted completely from the customs duty and the additional duty\(^{10}\).

Wood pulp imported for the manufacture of newsprint was already exempted from the whole of customs duty and additional duty. Import of pulp for newsprint would now be covered by the general exemption.

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b) **Wood Chips**: Wood chips imported for the manufacture of paper have been entirely exempted from customs duty.

c) **Waste-Paper**: Waste paper and waste paper board (of the specified categories given in Table 7.8) imported for the manufacture of paper and paper board were exempt fully from customs and additional duty upto April 1987. However, at present, these materials are subject to customs duty of 10% ad-valorem.

### TABLE - 7.8

**CATEGORIES OF WASTE PAPER AND BOARD EXEMPT FROM CUSTOMS DUTY**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>White shavings and cuttings.</td>
</tr>
<tr>
<td>2.</td>
<td>Computer print outs and other types of continuous stationery.</td>
</tr>
<tr>
<td>3.</td>
<td>Kraft and corrugated cutting/waste/boxes/bags of all varieties including sack kraft waste.</td>
</tr>
<tr>
<td>4.</td>
<td>White and coloured ledger/letter sheets.</td>
</tr>
<tr>
<td>5.</td>
<td>Old and over - issue newspapers/magazines/catalogues.</td>
</tr>
<tr>
<td>6.</td>
<td>Board cuttings and waste.</td>
</tr>
<tr>
<td>7.</td>
<td>Tabulating cards and its waste of all varieties.</td>
</tr>
<tr>
<td>8.</td>
<td>Office waste.</td>
</tr>
<tr>
<td>9.</td>
<td>Coloured shavings and cuttings.</td>
</tr>
<tr>
<td>10.</td>
<td>White and coloured cuttings.</td>
</tr>
<tr>
<td>11.</td>
<td>Telephone and trade directories.</td>
</tr>
<tr>
<td>12.</td>
<td>Manila waste including milk cartons.</td>
</tr>
</tbody>
</table>

**Source**: Notification No.219/84-CUS dated August 10, 1984.
ii) Paper-Making Machinery for Bagasse-based Mills

Paper-making equipment imported for the manufacture of newsprint, and writing and printing paper from bagasse (to the extent of at least 75%) is subject to a concessional rate of customs duty of 30%. This is yet another incentive for encouraging utilisation of bagasse\textsuperscript{11}.

**HUMAN RESOURCE DEVELOPMENT IN PAPER INDUSTRY**

a) Training Facilities

Training of personnel for the Paper Industry was started in 1930 by Titaghur Paper Mills and subsequently, through the Cellulose and Paper Branch of the Forest Research Institute, Dehradun. The Institute of Paper Technology (IPT), Saharanpur is the first institution set up with the objective of imparting systematic training to technical personnel required for the Paper Industry. It was established in 1964 with the assistance from the Swedish Government and the Swedish International Development Association (SIDA). The Institute had been working under the administrative jurisdiction of the Department of Technical Education, Government of Uttar Pradesh. It had been awarding a Post-Graduate Diploma and a Post-High School Certificate in pulp and paper technology. In 1978, IPT was merged with the University of Roorkee. The Institute, at present, offers the following programmes:

\textsuperscript{11} Notification No.217/81 - CUS dated September 26, 1981.
a) Bachelor of engineering degree course in pulp and paper (4-year course);

b) Post-graduate diploma course in pulp and paper (2-year course); and

c) Post-graduate diploma course in process instrumentation (2-year course).

b) Man-power Requirements

The Paper Industry has always faced difficulty in obtaining floor level technicians with a background of pulp and paper who have a diploma level education. The Industry has been able to manage with technical personnel from other disciplines who are put through on-the-job training. With the expected growth of the Industry, it is essential to provide facilities for adequate manpower training. This will facilitate improvement of operational performance and upgradation and/or adoption of new technology.

According to a study carried out by The Institute of Applied Manpower Research in 1977, the average employment in the Paper Industry is 78 persons per 1,000 tonnes capacity or 3.2 persons per Rs.1,00,000 worth of production. More than 80% of the employment is in production departments and the research and development accounts for only 1% of the
total task force. In terms of educational qualifications, pulp and paper specialists are only 4% of the total. Employees with less than high school level education constitute 75% and engineering graduates account for about 8%. Additional man-power inputs, therefore, will have to be more skilled workmen, supervisory officials with a background in pulp and paper technology and other engineering disciplines, and degree holding professionals for production and engineering functions, managerial personnel for related administrative functions, and R & D personnel with post-graduate degrees. There may not be much difficulty in obtaining shop floor technicians (with in-plant training), management personnel and general graduates. But the Industry is finding it difficult to obtain technical personnel with specialisation in pulp and paper technology. With the existing base for training in pulp and paper technology confined to the IPT, it may not be possible to meet even the replacement demands of the Eighth Plan, let alone the additional requirement due to capacity growth. It is necessary therefore to re-orient in-plant training by designing suitable short-term courses for personnel from other disciplines. It is also essential to create new training facilities at the levels of diploma, as well as at post-graduate and doctorate levels. The facilities at the IPT should be suitably upgraded so that it can concentrate on degree and post-graduate teaching and research. Diploma level training can be imparted through regional polytechnics. It has also been suggested that at least two more institutes on the IPT pattern could be established, one in the southern region and the other in the eastern region.
In this regard, it may be relevant to note that the projects of Hindustan Paper Corporation in the North-Eastern region have been experiencing severe shortage of man-power. In fact, one of the main reasons for the very low capacity utilisation of Nagaland project is the acute shortage of man-power which is inadequate to keep the plant operating on a three shift basis.

c) National Institute for Paper

One of the objectives of setting up the chemi-mechanical pulping plant of CPPRI at Saharanpur was to upgrade the training facilities of the IPT, and the location was accordingly chosen at a site adjacent to the IPT. Suggestions have been made that the IPT should be merged with the CPPRI to form a National Institute for Paper. IPT being a part of the University of Roorkee enjoys certain facilities in common with other engineering disciplines including a Computer Centre, Instrumentation Centre, Employment Bureau, etc. Moreover, the University of Roorkee is empowered to confer degrees on successful candidates where as the proposed National Institute would not be able to do so unless it acquires the status of a "deemed university" through appropriate legislation.

On the one hand, it was felt that if the IPT was reduced to a sub-serviant status, its educational standards might suffer. On the other, there was a difference between education and industrial research. In any case, the CPPRI is in a formative stage and is yet to establish itself fully and stabilise
its activities. It was considered therefore that the upgradation of the IPT may be carried out independent of the setting up of a National Institute of Paper which could be taken up at the appropriate time.

ENVIRONMENTAL ISSUES

The Paper Industry is one of the major industries having a very high degree of impact on environment - both from the point of view of consumption of raw-materials as well as disposal of waste products. Since India is passing through a critical stage of development, it is essential to ensure management of environmental problems at the very onset.

Environmental pollution control was introduced in India through legislative measures, notably the Water (Prevention and Control of Pollution) Act, 1981. Boards have been set up at the Central and State levels to administer the provisions of these Acts. Standards for air and water pollution control have been laid down. As paper-making is a water-intensive process and therefore, in the absence of recycling facilities, the water pollution load would be very high. It has been estimated that the total waste water discharge from all Mills in India is as high as 200 million gallons per day as compared to 7 million gallons per day by pulp and paper mills in the USA; whereas the production is of the order of 1.5 million tonnes in India and 60 million tonnes in USA. As a result, the pollution load per tonne of production is also higher as most of the mills have not installed adequate facilities for
waste water treatment. This is particularly so in case of small paper mills. The problem of developing appropriate recovery and effluent treatment systems for small paper mills has, therefore, assumed urgency with cue emphasis on inplant controls, chemical recovery and waste water recycle. It is also necessary to continuously monitor and reassess existing standards for pollution control on the basis of empirical experience. This would ensure that the least cost alternative consistent with environmental requirements is adopted by the Paper Industry.

Industrial Approvals and Pollution Control

With a view to checking and preventing air, water and soil pollution arising out of industrial projects, the following condition is imposed in the Letters of Intent for setting up of industrial undertakings:

"Adequate steps shall be taken to the satisfaction of the Government to prevent air, water and soil pollution. Further, such anti-pollution measures to be installed should conform to the effluent and emmission standards prescribed by the Government of the State in which the factory is located".

The intention of stipulating this condition in the letter of intent is to see that the entrepreneurs adopt pollution control measures to the satisfaction of the concerned state authority before the Government is approached for conversion of letters of intent into industrial licences.
It has been felt that in respect of certain industries with a high pollution factor, it is not only necessary to install suitable pollution control equipments, but also to identify suitable site and location of the projects. In order to give concrete shape to this requirement, the Governments have identified 20 industries which have a high pollution rating. In respect of these industries, it is considered necessary to stipulate specific sites where the projects could be located. The list of these industries include the paper, pulp and the newsprint industry as well. It has been decided by the Government that in respect of these industries, letters of intent would be converted into industrial licences only after the following conditions have been fulfilled:

a) The State Director of Industries confirms that the site of the project has been approved from the environmental angle by the competent state authority;

b) The entrepreneur gives a commitment both to the State and the Central Governments that he will install appropriate equipments and implement the prescribed measures for the prevention, and control, of pollution; and
c) The concerned State Pollution Control Board has certified that the proposal meets with the environmental requirements and the equipments installed or proposed to be installed are adequate and appropriate to the requirements.

RESEARCH AND DEVELOPMENT IN PAPER INDUSTRY AND THE ROLE OF GOVERNMENT

Till 1980, there was no exclusive organisation involved in the research and development aspects of Paper Industry. Research in the field of pulp and paper was mainly carried out by the Cellulose and Paper branch of the Forest Research Institute (FRI) and the Institute of Paper Technology (IPT), Saharanpur. In the context of need to augment research and development facilities, particularly in respect of utilisation of non-conventional raw-materials (an issue critical to the Paper Industry), a project for ‘Exploration and Identification of Alternative Raw-materials’ was taken up by the Government of India, in 1975 with the assistance of UNDP / FAO. The main objective of the project was to upgrade the laboratory and pilot plant research facilities of the FRI, training facilities at IPT, to organise and to initiate applied research in paper production and develop suitable technology relevant to the requirements of the Indian Paper Industry. The major activities of the project comprised of erection of two pilot plants (a thermo-mechanical pulping plant and a chemi-mechanical plant) and provision of sophisticated laboratory equipment at FRI and IPT. The project
commenced in 1977 and installation of laboratory equipment and erection and commissioning of the thermo-mechanical pulping plant at Dehradun was completed by 1980, while the erection of the chemi-mechanical pulping plant at Saharanpur was completed in 1981.

**Integrated Control of Research Activities**

The facilities of FRI and IPT were upgraded mainly with a view to improve their performance in the field of applied industrial research and training so as to achieve increased production of paper and newsprint in the Country. It was intended that the research activities initiated in the project would be further extended in the follow up period to infuse an industrial orientation, as the need for establishing a full-fledged research and development institute for the Paper Industry was recognised. It was suggested therefore that the down stream activity, after the pulp stage, may be incorporated with the UNDP project in order to have one central body for the entire Pulp and Paper Industry.

In this background, it was proposed that a research and development institute for Pulp and Paper Industry should be constituted, initially unifying the Cellulose and Paper branch of the FRI, the IPT and the facilities set up under the UNDP project. The Institute would also have to be in close touch with other industrial units. With regard to design engineering for pulp and paper machinery, the Institute would evolve the design, define the
parameters and lay-down specifications. However, the substantive work of
detailed design and manufacture of the prototypes would be entrusted to the
concerned design agency, consultants and fabricators. The Institute would
have to play an initiating and co-ordinating role in this field.

The Central Pulp and Paper Research Institute (CPPRI)

In the light of the above, the Government of India announced its
decision to set up a separate specialised, sector-oriented and autonomous
research institute for paper and pulp. Important features of the proposed
institute are described below:

a) The research and development facilities set up under the "Project for
Exploration and Identification of Alternative Raw- materials for the
Manufacture of Paper and Newsprint" at Dehradun and Saharanpur
may be unified to form a Central Pulp & Paper Research Institute.

b) It would be an autonomous organisation registered under the Societies
Act. Its membership would be open to all companies/corporate bodies
engaged in the manufacture, or otherwise interested in the
development, of paper pulp and newsprint and allied products.

c) The management of the Institute would vest with a governing council
which would include the representatives of the Industry, the
Department of Science and Technology, Council of Scientific and

Industrial Research and related research agencies such as the Forest Research Institute and the IPT. The President of the governing council would be appointed by the Government of India.

d) Under Section 9 of the Industries (Development and Regulation) Act, 1951, it was also proposed to levy a cess on the production of paper, in order to provide financial support for the research and development programmes to be taken up by the Institute.

e) Subject to appropriate rules to be passed by the Government, the actual administration of the funds, approval of research and development programmes and the grant of assistance for such programmes would be undertaken by a Committee of Direction to be set up by the Ministry of Industry. This Committee would include prominent scientists and technologists, representatives of the Industry as well as those of the concerned departments such as the Department of Industrial Development, Department of Science and Technology, Council of Scientific and Industrial Research and FRI.

f) The CPPRI would have its headquarters at Saharanpur. Apart from drafting schemes of applied research in close liaison with the Industry at its own facilities, it would also co-ordinate the research programmes to be taken up by the Cellulose and Paper branch of the FRI, the IPT and other scientific bodies engaged in similar work.
At the conclusion of the `Project for Exploration and Identification of Alternative Raw-materials', the CPPRI was registered as an autonomous organisation on November 11, 1980 under the Societies Registration Act. The objectives of the Institute are:

i) to promote research and scientific works connected with the Pulp and Paper Industry;

ii) to establish and maintain laboratories, pilot plants and workshops for pulp and paper research and conduct experiments;

iii) to publish periodicals on the activities related to the Industry;

iv) to encourage discoveries and acquire patent improvements; and,

v) to assist research work of any society, institute connected with Pulp and Paper Industry.

(Various sections of the CPPRI are given in Appendix-IV.)

OTHER AREAS OF GOVERNMENT'S INVOLVEMENT

Besides the above aspects of Paper Industry wherein the Government has been actively participating in the promotion and regulation and guidance, the Government is also playing a pivotal role in the following areas:

out a model in respect of land requirements for raising plantations for a Paper Mill with 50,000 tpa capacity based on wood resources.

Further, most of the existing plantations in India have been developed by the forest departments of various State Governments either independently or jointly with the paper mills. In respect of some States (like, Karnataka), the Governments have been leasing out degraded forest lands (called C & D class land) to the paper mills for raising pulp wood plantations on condition that the mills raised the plantations at their own cost and at the time of harvesting, handover to the Government a part of the produce in lieu of land rent and/or Government royalty. Besides, the National Waste Land Development Board (constituted in 1985 in the Ministry of Environment and Forest) has, as one of its programmes, leasing waste lands to forest-based industries for producing their own raw-materials.

b) Guidelines for Import of Second-hand Paper Machines: These guidelines were announced by the Department of Heavy Industry, Ministry of Industry on December 28, 1974, and reviewed on August 8, 1979, June 26, 1980 and again on April 1, 1981.

Paper and Newsprint Industry is one of the thirteen select industries which enjoy the facility of being permitted to call for global tenders in respect of import of capital goods, even if these are manufactured and
available indigenously. However, the selection of suppliers on the basis of such global tenders, foreign and Indian, will be subject to scrutiny by a committee set up in the Ministry of Industry. Further, comparison will be made between Indian offers and foreign offers on the basis of the landed cost of the latter ie, CIF cost\textsuperscript{13}.

c) Investment Requirements and Pattern: Setting up of a committee on investments for the Paper Industry by the Development Council (The Dabral Committee) in 1983, and the Committee on Modernisation and Re-building of the Existing Paper Mills (the Raina Committee) in 1984, are some of the exercises undertaken by the Government in this direction.

STATUTORY CONTROLS ON PAPER INDUSTRY

In addition to various incentives offered and promotional activities undertaken by the Government for the betterment of the Paper Industry, several controls are also exercised by the Government. The statutory controls in respect of pricing of paper and newsprint and their allocation/distribution amongst various categories of users have already been discussed (in detail in Chapter - V). To recapitulate, they include stipulation as to the production of different varieties of paper in specified percentages of total production, supply of stipulated quantity of white printing paper to

\textsuperscript{13} Para 40, Import Policy, 1985-88.
educational sector at concessional rates, fixation of prices at which domestic paper and newsprint are to be sold, removal of newsprint from the list of OGL and canalisation of the same through STC and subsequent decanalisation, fixation of quota of domestic and imported newsprint to be lifted by the newspaper/publishing establishments, etc.

But as already indicated, these controls have been gradually phased out in the light of recent liberalisation of the economy.

LIBERALISATION OF THE ECONOMY AND THE PAPER INDUSTRY

By 1991, the Indian Paper Industry had recognised the impending need to grapple with the increasing manifestations of competition on global basis. At that juncture, the Indian economy was just beginning to open up. Liberalisation was a new concept and an emerging reality on the Indian economic scene. Understandably, there was much debate as to the extent the new liberalisation policies would fructify and conjecture on the shape of things to come.

Today, the reality of international competitiveness is on our economy and the liberalisation measures are taking concrete shape in areas of industry, trade, commerce as also in monetary and fiscal fronts. The GATT Declaration has charted a new path for world trade providing India the
context of vigorously integrating with the world economy. In the process, while providing Indian industry many opportunities, it demands the industry to evolve strategies that would enable them to be internationally competitive. Most importantly, the progressive and time-bound lowering of tariff rates (under GATT) signals that Indian Paper Industry adopt a leap-frog approach towards future growth.

The vast Indian consumer market can only be a source of great attraction for international players. Consumerism is here to stay and the consumer goods industry with its attendant packaging-led opportunities is poised for a double-digit growth. Under free market conditions, both domestic and export markets should witness a tremendous surge in demand, particularly for packaging grades. Given an accelerated industrial growth, a forecasted GDP growth in excess of 5% and increasing literacy rates, domestic paper demand is approximated to grow by 75% to 50 lakh tonnes in the next five years.

Today, India is no more a captive market but part of the global market place. This realisation has been further reinforced by gradual reduction in customs duties. In the context of GATT, India is committed to reduce industrial tariffs in respect of raw-materials, intermediate and capital goods, with a few exceptions, to a level not exceeding 40%. The industry sources believe, therefore, that the customs duty on paper and paper board would be
regulated in the region of about 40%. However, it would be pragmatic for the Indian paper enterprises to strategise and plan to achieve a quality and cost competitive standing with customs duties in the region of 25%\textsuperscript{14}. Only such business entities would be able to position themselves to compete not only in the Indian market but also in the markets abroad.

The opportunities underlying the Paper Industry's growth are already being manifested through a major shift to the new paper theatres in South America and South-East Asia. This poses a serious challenge to the industry leaders in the West. The paradigm shift is dictated by two fundamental changes first, the growth cycle of 6-7 years of tropical plantation trees competing most favourably against over 50 years' growth cycle of coniferous and other trees growing in colder climates, and, second, a more than competitive wage structure. In this perspective, India emerges as a strong contender in the Asian scene given various competitive advantages, beginning with its tropical climate which is suitable for rapid development of plantation-based raw-materials. The Indian Paper Industry has trained man-power at all levels whose skills can be further adapted, honed and applied to contemporary technology for making paper and paper boards of international quality at a relatively lower man-power cost. The Country also has vast res-

\textsuperscript{14} Customs duties on paper and paper board @ 65% prevalent upto 1994-95 was reduced to 40% in 1995-96 Budget and further reduced to 20% in the Finance Bill presented for discussion in the Lok Sabha on 18th May, 1995.

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erves of unemployed rural labour force which can be gainfully deployed for raw-material development. The potential for rapid growth would, for the first time, provide scope for a economic sizing of the units overcoming a major weakness that for long has plagued the Indian Paper Industry.

Today, different blocs and regions in the World are self reliant and produce paper and paper board almost meeting their regional demand. However, the raw-materials for production of paper and paper board such as pulp, recycled fibre and even wood/wood chips move from one region to the other. With the shift of plantation activities to countries with tropical climates, India can, with urgent strategise make use of this competitive advantage. In the interim, we have no option but to optimise the use of recycled fibre and imported pulp.

Paper Industry is capital-intensive the World over, but capital cost for modernisation, expansion and green-field new investments in India is comparatively higher. It is the result of higher customs duty on imported equipment, the quantum of which is significantly large. The high interest in the debt component also escalates the capital cost. Redemption of capital intensity during operations with high impact on depreciation and continuing high interest burden elongates the gestation. The only route to redemption of such high capital intensity is through financial restructuring of Industry with
larger components of equity and minimum reliance on debt on the one hand and induction of modern competitive technology, all-round resources productivity and efficient operations, on the other.

CONCLUSION

The economic sagas of countries like Japan and Korea and other South-East Asian countries have continuously demonstrated the win-win outcome of a Government and Industry partnership. The Indian Paper Industry readily acknowledges the catalytic role that the Government is playing in the larger context of economic reforms. Reduction in direct taxes, rationalisation of indirect taxes, removal of MODVAT restrictions as a prelude to VAT regime, reduction in customs duty on raw-materials and capital goods, reduction in interest rates and access to global financial instruments will surely encourage induction of economy of scale and achievement of greater efficiency.

However, there is an imperative need for industry-specific reforms and removal of restrictions. The Paper Industry has been urging the Government to remove all shackles on development of raw-materials in the Country using the appropriate bio-technology to assure a quantum jump. In this context, the encouragement provided to the Brazilian Pulp and Paper Industry by its Government, and the consequent success accruing from sustainable plantation development may be noted. Industry in Brazil made a
sizable investment in bio-technology-based plantations to achieve dramatic increases in yields, improvement in the fibre content and quality and a plantation cycle of six years. Today, Brazil is in an unassailable leadership position in terms of quality and cost. Hence, even in this Country, the Government and the Industry should be urged to adopt Brazil as a role model in this regard. With an intensive relationship between the Government and the Industry, this problem needs to be resolved on a priority basis and a policy framework developed for healthy growth of the Industry.

MAJOR FINDINGS

The major findings of this chapter are presented below:

i) Both the Central Government and the various State Governments have been actively involved in the development of Paper Industry in India. In fact, several earlier large integrated paper mills have been established by the Government;

ii) The Paper Industry has been accorded ‘core’ industry status by the Government under its industrial policy indicating its importance to the national economy;

iii) From time to time, the Government has been extending several fiscal incentives and reliefs to the Industry especially to the small paper mills and new units, for utilisation of non-conventional raw-materials, for import of paper-making materials and machinery, etc to enhance capacity utilisation and to reduce cost of production;
iv) The Government has relaxed licencing norms for establishment of certain categories of paper units and a large number of paper products have been reserved for manufacture by small scale paper mills;

v) The Government has been undertaking several measures for the promotion of research and development in the Paper Industry as well as training of man-power required for the Industry so as to improve the operational efficiencies of the industrial undertakings;

vi) Along with incentives, the Government has been exercising several controls on the Industry especially in areas of production, pricing and distribution of newsprint;

vii) The liberalisation policy pursued by the Government in recent years and consequent opening up of the economy has presented both opportunities and challenges to the Indian Paper Industry. The industry has been compelled to be more competitive with regard to quality and pricing of its output so as to retain the domestic market from the onslaught of foreign multi-nationals and to penetrate the over-seas markets.
SUMMARY OF THE CHAPTER

The role of the Government as manifested in the Paper Industry is considerable. Right from the licencing stage till the final stage of marketing of output, the presence of the Government, either encouraging or controlling, is all-pervasive. This only goes to indicate the importance of this Industry in our economy. However, by virtue of its own liberalisation policies initiated since a couple of years ago, the Government has been slowly moving out of the scene, leaving the field entirely for the Industry.