

Please attach these additional pages to the report of the Global Competitiveness for Indian Paper Industry by **Jaakko Pöyry**

Short and long term strategies

Project Number 52A0087
Final Report

For industry improvement

Short term

- Import of waste paper without duty + development of domestic recovery systems
- Increase plantations (possibly 100 % FDI) – will take 7-8 years to grow – review raw material policy and agree on reforestation. Possible incentives for forest plantation establishment could be a combination of the following actions
 - allocated degraded forest land for industry for plantations, and charge later based on cuttings (eg. 2-3 USD/m³)
 - tax deductions/partial reimbursement of plantation costs for industry
- Increase of fillers and pigments in paper production
- Adapt international best production and process practices
- Develop policy for whole forest industry cluster including machinery and chemical suppliers + converting and end user industries
- Review overall policy and ensure consistency of all intervening regulations in line with the cluster approach
- Small paper mills:
 - evaluate possibilities for fibre raw material base change (eg. from agro to waste paper/market pulp, especially if meeting of environmental standards is not possible)
 - specialization possibilities for more profitable grades
- Forward integration of paper mills to conversion should be possible in eg. printing papers (envelopes, stationery, etc.), corrugated materials, cartonboards and tissue products.

Long term

- Industry restructuring and consolidation – will ensure competitiveness also during international recessions
- Full utilisation of plantations
- Large scale and cost competitive mill investments (possibly with foreign partners)
- Global expansion of sales in large scale
- R&D
- Integration/combination of wood/agro/waste paper as fibre raw materials

Forest plantation establishment

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Incentive programs - examples

Incentive programs for forest plantation establishment have been used in many countries to successfully stimulate the development of industrial plantation resources.

Advantages of captive plantations include: securing wood supply, control over wood quality and price. On the other hand plantations tie capital and include risks like forest fires, etc.

Brazil, Chile and New Zealand are examples of countries where plantation incentives and favourable government policies have contributed to plantation expansion. Uruguay and Indonesia have more recently established plantation incentive programs.

The most common types of incentives offered to private investors are

- direct subsidies
- tax deductions
- subsidized loans

Key elements of the successful plantation incentive programs are

- clearly stated objectives
- identified priorities
- established guidelines for the development of the estate
- provision of technical and research support

removal of impediments to investment

identification of most appropriate form of incentive to attract committed investors

provision of administrative support to allow efficient allocation of incentives and to ensure that the stated objectives are achieved

Functioning of the Insititute

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The institute has world-class R&D facilities and institute is continuously upgrading these facilities keeping in the view of requirement of the industry.

1. Manpower

The permanent strength of scientific and technical manpower who are directly involved in research is just 23 which is the lowest when compared to similar national level institutes in India and abroad. There is a need to strengthen the scientific man power area.

2. Interaction with the Industry

During the last 4 years the institute has made remarkable improvements in increasing the interaction with paper and allied industry, which is reflected by large number of sponsored projects from industry and increase in number of member mills.

3. Internal Revenue generation

Despite small strength of manpower, Institute through networking and vigorous interaction has succeeded in improving the internal revenue generation from Rs. 2 million in 1996 to 11 million in 2001. The institute should be in a position to become self sustaining to meet its entire recurring expenditure in the near future.

4. Consultants and Advisors

Most of the national and international institutes do have part time consultants and advisors to help the Director and senior level scientists in planning of the research programmes and marketing of the services and technologies of the institutes. Presently the Director and some of the senior scientists are devoting more than 60% of the time in non-productive administrative work. Engagement of the consultants, advisors and management experts (MBAs) should strengthen the hands of the Director.

5. International Projection of the Institute

Institute has been making efforts to extend the services to other countries. The present level of participation of scientists in international conferences, meetings and forums is not adequate and for improved international networking, there should be frequent participation by CPPRI scientists in international forums and Government. should support such participation through cess funding.

SWOT analysis for CPPRI

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Strengths

- Up to date and well maintained research facilities
- Educated and trained personnel
- Experience and know how especially in non wood pulping and environmental management

Opportunities

- Widening services including the whole supply chain from fibre raw materials to finishing, converting and printing
- Increase cooperation with paper mills by offering training as well as mill process optimisation and troubleshooting services.

Sell services and consultancy projects to international clients eg. in non-wood pulping and papermaking, desilication, biomethanation, etc.

Facilitate international technology transfer

Weaknesses

- Cooperation with paper mills - could be further improved
- Narrow funding base (mainly Government)
- More funding/paid contract work from industry would be required
- Scope of services - could be wider including the whole supply chain
- Locational disadvantages
- Small number of scientists and engineers -

Threats

- Isolation and competition from paper industry's R&D
- Losing international perspective (depends on budget for travel/cooperation with international research organisations, paper companies, conferences/trade fairs)
- Duplication of research efforts by industry association and other R&D organizations in the country

Revenue generation from Research Activities and by Consumer Services

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Year	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
Revenue generation (Rs Lacs)	34.43	46.95	59.92	54.81	55.85	108.71

