

INDIA

India today presents a unique scenario with increasing human population and rapid economic growth putting immense pressure on natural resources including forests. Considering and going by available Forest Maps, it is inferred that about 41 percent of the forest cover in the country has already been degraded and dense forests are losing their crown density as well as productivity. Moreover, at present 70 percent of forests have no regeneration and more than 55 percent are prone to fire.

Severe scarcity of wood is also apprehended. The annual fuel wood requirement in India is estimated to be about 200 million tones. Considering growing capacity expansions of the wood based industries in the country, requirement of woody raw material in years to come would be exponential. Currently, even as per the Government's own estimates, it is 82 million CUM. Therefore, undoubtedly there is an emerging imbalance between demand and supply of wood in the country. It is estimated that by the year 2010, while demand will go up to 95 million CUM., supply will not go beyond 70 million CUM. It is feared that the gap between demand and supply of wood raw material is bound to rise from 24.5 million CUM in 2010 to 52.3 million CUM in 2020.

The pulp & paper industry is particularly plagued by inadequate availability of quality raw material and escalating cost of wood. At present supply is supplemented from other sources such as agro-forestry. In absence of the Government's enabling policy for promoting Industrial Plantation, IPMA Member Mills have taken initiative on hand and approx. 0.25 million ha. of degraded land of marginal farmers has been scientifically utilized to grow pulpable varieties of trees. Also, courtesy India's liberalized industrial and trade policy, industry is able to import wood pulp, waste paper etc. to meet its raw material needs to an extent.

Environmental Governance

The Government of India's new instrument of governance is called National Environment Policy (NEP) 2006 which seeks to:

- Encourage adoption of science-based and traditional sustainable land use practices.
- Promote reclamation of wasteland and degraded forestland.
- Encourage watershed management strategies, for arresting and reversing desertification, and expanding green cover
- Promote sustainable alternatives to shifting cultivation where it is no longer ecologically viable.
- Encourage agro-forestry, organic farming, environmentally sustainable cropping patterns, and adoption of efficient irrigation techniques.

Government is also considering registration of nurseries and forest reproductive material.

Handicaps for the Indian Paper Industry

The most striking handicap is the conspicuous absence of a dedicated industrial plantation policy which can help build up a robust raw material base for the wood based industries. Though the industry is meeting substantial part of its current requirement of wood based raw material from the farm/agro-forestry, these sources can not be said to be dependent models from economic sustainability point of view, as the wood production / procurement rates are quite high compared to international benchmarks. Government's afforestation policy - GOI (Government Of India) has set a target of achieving a 33 percent green cover by 2012 as against 23 percent forest cover at present. This would require afforestation of nearly 34 million ha in the next 4 years which is quite a gigantic task, more so when the pulpwood plantations of less than 2 mn ha asked by the IPMA (the Paper Mill Association) since so many decades for developing captive plantations has not materialized so far.

- Government's Biodiversity Act - Under this act, the paper companies cannot claim land for plantations. Instead Joint Forest Management (JFM) of existing forests are advised. Joint Forest Management (JFM) mechanism does not permit participation of private industries in afforestation.
- Government's Tribal Rights Act - Forest lands / Forest produced by the inhabitants (tribal) are now regularized. This act creates further pressure on natural forests.

New Mechanism for Resource Mobilization – MSP

Despite the handicaps, the Industry is pursuing the Multi Stakeholder Partnership (MSP) model as briefed below:

- The MSP model has been developed for augmentation of existing land resources by involving the Government Departments as the owner of the resources, inhabitants/users/local community dependent on these resources for their daily livelihood and the Industry proposing to organize effective use of these resources for meeting the raw material requirement.
- The MSP framework is proposed in a fashion that it is:
 - Not a lease document, but
 - Legally enforceable MoU partnership between
 - Company/user group, public or private
 - Local community
 - Forest department/land owning agencies

This model is awaiting Government's consideration at the Cabinet level for approval.

Industry's Recent Hallmarks

Notwithstanding the above, the Industry continues to make its serious efforts in plantations to report the following important hallmarks:

- 250 000 ha of farm forestry plantations
- Multiple species worked upon Eucalyptus, Casuarina, Leucaena, Acacia
- successes in bio-technology based on research on Clonal multiplication
- 3 to 5 time increase in wood yield through Clonal technology

A few significant projects by IPMA Members are worth mentioning which have been recognized or merit recognition by the Government authorities and/or other International Schemes for improvement of planting stock through Tree Improvement Programme. These are as below:

- ITC Ltd Paperboards and Specialty Papers Division
 - 7 projects already registered with UNFCCC to generate cumulative CERs to the extent of about 1.4 million.
 - 80 000 ha. of plantation with a potential to sequester 12 million tons of carbon, reducing 43 million tons of CO₂ having a carbon credit value of US \$ 172 million in the first commitment period ending in 2012. The Project is under development but presently utilized to reduce CO₂ foot print and ITC is a carbon positive company.
- TNPL – its bio-methanation project is first CDM project implemented in the paper industry to generate 37 000 CERs a year. TNPL has about 82 955 CERs to its credit.

- JK Paper - The World Bank's Bio Carbon fund has signed an Emission Reduction Purchase Agreement (ERPA) that will enable small and marginal farmers to earn additional revenue through carbon credits. JK Paper Ltd. project covering 3500 hectares of severely degraded lands of marginal farmers for afforestation stands approved as a first ever project of its kind by World Bank.
- A P Paper Mills – Over the last 10 years, it has promoted farm and social forestry on more than 55 000 ha of degraded lands of small and marginal farmers and is developing a PIN to enable these farmers earn additional revenue through carbon credits.

Overseas Acquisition

- Ballarpur Industries Ltd. has recently acquired 97.8 per cent equity in Sabah Forest Industries (SFI), Malaysia.
 - SFI is the largest integrated paper & pulp facility in Malaysia with a 144 000 MT Paper plant and a 120 000 MT Pulping unit.
 - SFI has forest concessions of 289 000 hectares valid upto 2094. The enterprise value is US\$ 261 million.

New Vistas

Forest Stewardship Council (FSC) certification is becoming a non trade barrier for Indian paper companies. As bulk of the raw material is obtained from farm and agro- forestry, the farmers (huge numbers, running into hundreds of thousands with small holdings) find it practically impossible to form groups and obtain the FSC certificate. Though the farm forestry is a sustainable model promoted by the paper industry, the FSC principles and criteria are difficult to be satisfied for issuing of certificate. In this connection, GOI is thinking to establish Indian Forest Stewardship Council to help the process of certification.