

Base Paper on Role of Forestry in Productivity

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INTRODUCTION

The forestry raw material has been a basic input in the production of paper since a long time. Starting from Papyrus, Bhurjapatra and palm leaves, the World's progress in production of paper has been fantastic. The paper industry, one of the most capital intensive one, has today an installed capacity of 23.5 million tonnes per annum of paper, board and news print put together though the actual production was barely 1.6 million tonnes during 1985 (68%). The projections made of paper production by the end of seventh plan indicate that the total requirement of paper in India will be of the order of 2.8 million tonnes per annum. The extrapolations made about the requirement of paper by 2000 A.D indicate that it would be of the order of 4.2 million tonnes (inclusive of paper, board and news print). These estimates are however, most optimistic. If we compare the per capita consumption of paper within the country to the World's averages it reveals a great difference. Paper consists of two varieties of cultural (writing, printing etc) and industrial (wrapping, packaging etc). This comparison per caput is erroneous because in the Indian conditions maximum consumption of paper is of cultural variety and is directly linked with the spread of education. The average Indian consumes less industrial paper than writing and printing ones while those of the advanced countries do consume apart from writing and printing a large quantity of industrial paper. This erroneous comparison leads to certain assumptions regarding the total utilisation of paper and its likely demand. Further high cost of paper leads to consumer resistance. These are some of the factors which should be considered before any in depth study is made.

The total forest area in the country is 668 lakh hectares and officially forms 22% of the total

land area. This percentage, however, is deceptive and according to the survey by NRSA the total productive vegetational cover is almost half of what is represented in this measurement. The forestry productivity in India is estimated at less than half a cubic metre per ha per year as against 2.5 cubic metre per ha per year in Europe and 2.3 cubic metres per ha per year in U.S

The Development Council for Paper, Pulp and allied Industry had taken up a study of all the factors and suggested certain measures to improve the efficiency of the existing paper mills and creation of new paper mills. The strategies for development and growth in the paper industry include use of variety of raw material, making the low grammage of paper from the same raw material and by technical innovation, utilise such methods as would give higher output per unit of input. Pursuant to these decisions several mills came up both in small and large sectors utilising the variety of raw material. By and large, most of the mills producing roughly over 60 tonnes per day have been using forestry products as basic raw material for their product. Requirement of this raw material is presently met with mostly from natural forests.

ROLE OF FORESTRY

The natural forests have been and are being managed in a manner as to produce certain quantities of wood annually, which meets the demands of the market, people and industry based on actual annual production in forests. The two basic raw materials for paper are (a) Bamboo and (b) Woods. While the bamboo is ideally suited and can be used 100% for manufacture of paper today, no mill in India is functioning, utilising 100% woods, as most of pulp-

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Wood production consists of mixed hardwoods (unlike Pines). The present level of technology probably does not permit this and many a mill have devised various combinations of mixing woods and bamboos. This practice is being followed by and large for some time. In fact before 1979 for almost over a decade no new mills using forestry resources came up, while after 1979 barely few new paper mills using forest resources have come up. The entire requirement of all such large sized mills comes from natural forests. It would however be realised that very soon natural grown woods/bamboos would not be adequate to meet this demand of raw material by the paper industry. In fact it is already observed that most of the Mills are not producing to full capacity for want of raw material and are also not able to optimise production by higher growth in capacity. The Plantation Forestry is the only solution which must be resorted to. At present these plantations are raised by the Government on their own lands with their own efforts or through the institutions like forest corporations, utilising institutional finance. For various reasons the industry itself on its own, would not and/or could not raise its own captive plantations. It is worthwhile noting that some people (due to extension policies adopted by Government) raised trees crops on their own, hoping that this would be ultimately utilised by the Industry. In some cases a tie-up for such purchases was well organised but in a majority of cases this was not. This lead to various mal-adjustments.

The GOI have also in the meanwhile relaxed restrictions on the import of raw material like Pulp, wood chips, waste paper etc. This policy has yielded results in making the raw material easily available, to some extent, and has helped in saving the cut from the forests. However, this position cannot be expected to last long and it would be in the interests of the industry to establish necessary backward linkages and to grow pulp yielding tree crops and bamboos.

Once we realise the need to have this backward integration, the question arises as to how this should be done. It is, therefore, necessary to institutionalise this area of activity and earmark roles to be played by different sectors. These plantations can be taken up by the Governments or by the Corporations or by the individuals with necessary advance tie-up with

the user industries. This must be accompanied by a phased (fair) proportional reduction of supplies from the natural forests, which need conserving. This realisation leads to several advantages viz., industries would get a *uniform crop* and it would be *nearer to its locations*. This also will lead to reduction in the haulage costs and enable the industry to pay a reasonable good price to the growers of wood, whether Governments, the Corporations or farmers.

The area for raising such plantations can be obtained from the waste lands both inside and outside the reserve forests (though technically the waste lands within the reserve forests are designated as degraded forests). There is a large extent of degraded forests, which requires high inputs. Such inputs are possible only when the user is willing to pay a price. Unfortunately to-day battle lines are drawn between Government and Industry leading to avoidable litigation. What is needed is a rational approach which while satisfying industrial needs would lead to conserving the natural forests. It is possible that the entire flow of the raw material needed by the industry can be obtained from the plantation crops (in a phased manner) leading to conservation of natural forests and making it available for alternate uses. Once the industry realizes and accepts the need to obtain its requirement of raw material from plantation crops, it is possible even to enthuse the farmers in raising such tree crops since these will then be attractive from the growers point of view. What is required is a marriage between the grower of raw material and its user. Excessive dependence on the Government sector has already caused enough harm to both Government and Industry and in the long run it will be detrimental to the industry itself. The very fact that some of the mills are shut down or not working to capacity (for want of raw material), is a testimony of lack of action at various levels. This being so any capacity expansion is almost ruled out without such backward linkage.

It is, therefore, necessary that in future paper industry should aim at linking production to the *available raw material* from a specific catchment located nearest to it and getting it from various sources. It is not out of place to mention that in several States (including the Andhra Pradesh) large scale planting of tree crops has been taken up by the private farmers. It is necessary to link this

production by farmers as also Forest Corporations, who have also raised similar tree crops plantations with the Industry. The industry should wake up to the fact that the days of cheap wood are over and it is in its own interest to actively associate with such growth of pulp yielding wood crops (including bamboos) either on their own or in joint sectors. It is also possible to institutionalise the entire gammut of wood production of the farmers to make it available to the industry at prices *fair to both the parties*. The State Governments have a great role to play in this task of growing of forests by suitably devising package of incentives and disincentives to both the users and growers so that a mutually beneficial relation develops.

Prime Minister has been instrumental in activating a very massive plantation programme to cover 5 million ha of land per year. The basic thing is not to wholly rely *on any single agency or a single method*. The job of afforesting 5 million hectares is massive one and calls for variety of approaches as also an all out effort to mobilize *all* resources, both human and fiscal. The extension activity needed for this is great. Such an activity must indicate to the growers concrete benefits likely to flow in addition to the abstract ideological concepts of environmental improvement. Flow in shape of finance arising of trees grown by an individual is better understood than the high pedestal talk of 'general public and societal advantages', however laudable they are. As a part of this overall strategy paper industry can play a great role in *motivating* the people, Government and Corporations

in creating such forests which ultimately would be available to them at prices *which are fair* to both the growers and the users. One such strategy to grow wood is to form the joint sector projects (as in Karnataka) while the other could be forming of tree farming cooperatives who can well look after the interests of growers. Yet another alternative could be monopoly procurement by Corporations from *all* growers to meet the industrial needs.

In all this activity availability of finance is a major constraint. It is necessary that institutional finance at a concessional rate be provided since all this activity is in areas with hardly any amenities or infrastructure. Alternatively soft loans can be made available for this purpose.

It is also necessary that all legal hurdles which act as disincentives in growing of trees be removed to make the tree growing activity attractive and in fact there is a case for granting additional incentives for short periods to tree growers, which apart from increasing the tree cover would provide monetary impetus for the persons growing tree crops.

Summing up, it is felt that active association with the industry, institutions or Government as well as the farmers would lead to converting degraded forest lands and other wastelands into green wood lots which not only would meet industrial requirement, but also create additional resources for expansion, which can contribute to the uplift of the local people and thereby reduce the burden on natural forests.