

Government of India Policies and Small Size Paper Plants

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India is the singular country in the world where there is great upsurge by private entrepreneurs to set up small size paper mills. There is shortage of paper of all varieties in the Indian market. Prices are going up. With all-round industrial development and improvement in standard of living, requirement of paper and board for country's population is going to increase by leaps and bounds in the years to come. Present per capita consumption of nearly 1.5 Kgs. for paper and board, excluding newsprint, is extremely low and India is almost at the bottom of the ladder. In China, per capita consumption is 10 Kgs. Our per capita consumption may go over 2 Kgs. by 1988-89 but we cannot expect to reach this

figure of China for decades to come. Paper shall always remain a high priced commodity in our country and people shall have to restrict its use, as far as possible. Even then, under conditions when the use is restricted, country would need per year 2.5 million tonnes of paper and board by 1988-89. Population of India, by that time, may reach 900 million. Besides paper and board, country shall need minimum 700,000 tonnes of newsprint per annum, 90,000 tonnes of straw board and 250,000 tonnes per annum of dissolving grade pulp. One need not talk about paper grade pulp as this has never been taken into consideration by planning agencies of Government of India while considering the future growth of the paper industry in the country.

So, what is going to happen ? With present installed capacity of paper and board of nearly 1.25

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million tonnes, additional capacity of nearly 1.25 million tonnes has to come into operation by 1988, if we have to avoid what we call 'Paper famine'. So, nearly 150 thousand tonnes per year additional capacity must be added to the paper industry in India over the next 7-8 years if we are to avoid paper famine. Even if two new units of Hindustan Paper Corporation in Assam come into production in the next 7-8 years, these may add capacity of only about two hundred thousand tonnes. When these public sector units come into strea, the existing large size paper mills in private sector in West Bengal and Bihar shall face acute shortage of bamboos and hardwood as source of supply from Assam State shall be cut off. Still, balance of nearly one million tonnes capacity has to be created. For large mills, gestation period is 5 years and for small mills it is 2 to 3 years. Who is going to do so, private sector or public sector? What will be the future raw materials for such capacity? How much fibrous raw material on sustained yield basis can be available from Indian forests without starving the existing mills? What shall be the sort of investment needed per year to meet this challenging job? After all, paper is a basic commodity and an essential commodity needed for the masses. Just like our country always thinks of self-sufficiency in foodgrains, we have to think of self-sufficiency in paper and board. Already there is some talk of imports. That is an easy solution but this would mean heavy drain on foreign exchange resources and international prices of paper and board are much higher than Indian prices.

For additional capacity of 1.25 million tonnes to be created in the next 8 years i.e. nearly 150 thousand tonnes additional capacity per year, we need investment of nearly 225 crores of rupees per year for or total of 2000 crores if large size mills are to be constructed. So, in other words, in the next decade we have to earmark nearly 2000 crores for development of paper industry so that people may not be starved of this essential commodity. Even if this scale of investment can be made available, there is no difference of opinion that our forests have reached a point where they cannot supply fibrous raw materials for the pulp and paper making at economical prices and on sustained yield basis. In fact, there will hardly be any sites left in this country to set up large size mills based on forests raw materials after the present schemes of Hindustan Paper Corporation in areas like Assam have matured. Can wood of Himalayan forests be used for paper making? Its present day cost is nearly Rs. 1700/-per tonne. Wood from far off Himalayan forests can be available for paper industry at around 1700 rupees per tonne and the prices are constantly rising. Should this wood be used for making doors and windows, furniture and other useful items for the community or should it be wasted for pulp and paper making? There can be no two opinions that we cannot afford to waste our scarce national wealth for making such low price commodity like paper, overlooking other social uses and benefits from the National forests. After all, paper is the classical 'throw away' product which is thrown after it has been used.

India is the only country in the world that is seeing great upsurge for setting up of small size paper mills. This activity is unprecedented in the history of development of any country in the world. All this is happening in the private sector and various entrepreneurs need to be praised. Why such an unprecedented activity to set up small scale pulp and paper mills in India? Are all these projects on a strong footing when viewed from an overall state of Indian pulp and paper Industry? Are these projects long term future oriented? Do these projects recognise the constraints posed by scarcity of fibrous raw materials, capital and skilled labour. All in all the answer can only be an affirmative YES. This is because private sector will never pursue projects that are non-profitable. Financial institutions will not lend term loans unless they are satisfied that the projects are going to be profitable ventures and they are sure of their loans being repaid. Does it not appear odd that the large industrial houses in the country who own some of the largest paper mills in India are not involved in any new schemes to build large pulp and paper mills. The obvious answer is that these seasoned enterprising houses know that large pulp and paper mills are uneconomical. Messrs Hangal Paper Consultants Pvt. Ltd., New Delhi, have recently undertaken to prepare a "State of Art" report on mini paper plants under operations or under construction in this country so that whatsoever is being done in India for development of paper industry, because known to other developing countries of the world. It is certain that the idea will catch up. FAO has already started talking in terms of small scale paper projects of 50 tonnes capacity. Finnish Government is engaged in designing small size pulp mill. Of course, by small size they mean 100 TPD capacity. In fact, Western technologists, pulp and paper machinery manufacturers in Western countries still do not believe that it is possible for 5 or 10 TPD mini paper plants to be economically viable. There is a big credibility gap in this respect. Report going to be prepared by Messrs Hangal Paper Consultants Pvt. Ltd., is expected to clear the air.

If future development of paper industry in India is by setting up of small size units, which are best suited for our socio-economic conditions and main fibrous material is agricultural waste, investment needed for additional capacity of 1.25 million tonnes for next decade may be only around 1000 crores and all the activity could be in private sector. So, saving in capital involvement shall be of the order of 1000 crore in next decade. Government of India shall not be faced with setting up of uneconomical capital intensive units like being set up at present by Hindustan Paper Corporation. These units are going to suffer losses in their balance sheet for decades to come unless, of course, Government decides to raise the selling price of paper to such an abnormal extent so as to make a sheet of paper out of reach of a common man in India.

Our national Government, no doubt, took timely decision, nearly a decade back, to encourage setting up of small size mills but the encouragement being given to these units is rather lukewarm. Even now the Government is under influence of vested interests

represented by large size mills, foreign consultants, foreign plant and equipment manufacturers who constantly hammer in the ears of our planners that small size paper mills shall, in the long run, become sick units and thus have no future. In fact, foreign consultants and foreign machinery manufacturers, who can only manufacture large size plants, hardly know the economics, technology or feasibility of small size mills under socio-economic conditions of a country like India. Technology of pulp and paper making developed in the West was mainly for use of wood and very few foreigners can understand the real economic conditions in a complex country like ours.

Reference needs to be made to recently concluded International Seminar on Appropriate Industrial Technology held under the auspices of UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION in Vigyan Bhawan, New Delhi from 20th to 25th November, 1978. One of the subjects discussed was "Appropriate Technology for Paper Industry in Developing Countries of the World". Agenda related to technology and economics of small size paper mills. It is apity that no accredited representatives of small paper mills in India got opportunity to attend this conference. Of course, the Managing Director and Chairman of Hindustan Paper Corporation were present there and the subject was mini paper plants. This shows the importance that Government of India attached to such subjects of national importance. It is, however, heartening to note that this international forum paid much attention to the subject of mini paper plants and numerous recommendations have been made which will be of great interest to our country as well as to other developing countries of the world.

What should be done by Government of India to promote the interests of mini paper plants in this country? Our national Government no doubt needs to be congratulated for taking a lead in the matter. Present Janata Government is laying emphasis on smaller size plants rather than giant complexes created by imitating the western technology. One can only expect that the present Government will go into details and take steps so that numerous mini paper plants that are mushrooming all over the country have a stable and bright future. In the opinion of the author, the following need to be considered by our Government :

(i) Why limit the various incentives like excise duty concession, waiver from production control order to annual capacity of 10,000 tonnes only? When FAO is thinking that 50 tonnes should be the size of a mini paper plant, why not make the existing concessions applicable for production upto 15,000 tonnes per annum. As at present, many entrepreneurs who have entered the field of pulp and paper industry by setting up small size mills do not consider expanding and stabilising their present operations beyond a capacity of 10,000 tonnes per year, but they think of starting a new Company to set up another mini paper plant. It is felt that 15,000 tonnes per year capacity shall be economically much more viable and a 15,000 tonnes per year capacity unit could also

afford to have a chemical recovery plant costing nearly one crore of rupees. Second hand Paper Machines of good quality in capacity range of 50-60 Tons per day are available in Europe and North American Continent, while smaller size Paper Machines are difficult to obtain.

(ii) Large mills that are forest based are constantly crying for concessions in royalty payable for the forest produce. Author has been a member of the Development Council for Pulp and Paper Industry for many years and royalty payable to the State Forest Department was invariably on the agenda of this august body during the last two decades. Large mills that are based on forest raw materials, have numerous advantages like having access to better quality fibre and in consequence they can make better quality products. The small paper mills are suffering from major disability in this respect. How can a mini paper plant of capacity 10,000 tonnes per year, using paddy straw or bagasse, compete in quality of its products with 200 TPD large size mill using bamboo as the major raw material. Government of India has to pay serious consideration to improve the competitiveness of small size mills, based on agricultural residues, in relation to the large size mills using national forest wealth. Minimum they could do was to allow certain concessions to small size mills that are not given to the large size units like free import of wood pulp, free import of waste paper, and free import of any other fibrous material for abroad for manufacture of speciality papers.

(iii) Debt equity ratio for small size paper projects should be extremely liberal. It is learnt that in Japan, in the early stages of development of industry, debt equity ratio was 1 : 5. If we cannot be so liberal, at least there should be wide difference between debt equity ratio allowed to mini paper plants as against large size units. Minimum debt equity ratio for small size mills, based on agricultural residues in backward area, should be 1 : 3. After all, these private entrepreneurs, who are going to set up mills in such areas, are going to be pioneers in opening up remote areas and in spreading industrial culture in new regions. Even a mini paper plant of 30 TPD is going to cost 7 to 8 crores of rupees. There should be well equipped workshops for all types of maintenance work near these mills. There should be paper converting industry as ancillary industry around these small size mills as these mills have potential to create employment opportunities for our unemployed youths to a much greater extent than large size mills. Setting up of these units shall also mean more income for farmers by sale of straw and jute stocks. In general, small size mills are going to accord directly or indirectly much more social benefit per tonne of production than large size mills. So, why not give them more encouragement by a more liberal debt equity ratio ?

(iv) It is a pity that there is no assistance being given by Government of India to upgrade the technical efficiency of large number of small size mills running in this country. These mills cannot afford to have high salaried technical staff. They cannot also afford to have elaborate laboratories to carry

on their R & D activity. Government of India has to step in and assist them in different ways. The Research Institutions of Government of India engaged in research in the field of pulp and paper have to be asked by our Government to pay special attention to solving the technical problems being faced by mini paper plants. It is a pity that while Governments in foreign countries like Finland and U.K. are paying attention to evolve appropriate technology for small size mills, our Government laboratories are rather lukewarm and not contributing in any significant way to development of appropriate technology for small size paper mills. In U.K., a standard design paper machine of small capacity is being developed by co-operation between Government and various machinery manufacturers. This machine shall be of a simplest possible design, but it shall be able to manufacture all varied types of papers and boards and the machine will be so designed that the capital cost per tonne of product is minimum and energy consumption is lowest possible. In some other countries of the world much attention is being paid to development of pulping process of non-polluting nature i.e. processes carried out with certain chemicals in such a manner so that no blackliquor, etc. is generated. Why our national laboratories are lagging behind? Why are they not taking equal interest, specially when our country is going to show the way to the rest of the world that small size paper mills are economically viable and technically feasible under socio-economic conditions prevailing in most of the developing countries?

It is felt by the author that the biggest drawback in setting up of small size paper mills in our country has been that the technologists, machinery manufacturers as well as paper mill engineers have been imitating the large size mills. The tendency has

been to scale down the size of the plant and equipment as used in large size mills these years. This has been a retrograde step in many ways and young generation of technologists as well as machinery manufacturers have forgotten that paper industry in India was developed by setting up of small size paper mills. What were the specifications of plant and equipment in Ballarpur Paper Mill Shree Gopal Division, when it started manufacturing "Sunlit Bond" on a 10 TPD capacity paper machine? What were the specifications of paper machine and pulp mill in Bengal Paper, Titagarh Paper when the Mill started operations as small capacity mill? Equipment like vacuum washers, high speed refiners, pressure screens, centri-cleaners or consistency regulators were unknown in those years. All these mills also had chemical recovery plants and chemical recovery efficiency of 73% was normal. Of course, these mills never had continuous causticising tanks. It will be good if our entrepreneurs for mini paper plants, technologists as well as machinery manufacturers turn the leaf backward and study the history of development of paper industry in our country. They should try to find out how these small 10-15 tonnes units were making good grade papers without use of forest based raw materials like bamboo.

It should be realised that nearly more than 100 mini paper plants are in operation or under construction in India as of early 1979. More and more such units are being planned in each state of our country. Our entrepreneurs who are second to none in the world are going to have big financial stake in such ventures. These units shall be providing essential commodity like Paper to millions of our countrymen in coming decades. Their problems deserve urgent consideration by our National Government.