

# Preface

The pulp and paper industry is an environmentalist's nightmare. It is not difficult to understand why. It has an insatiable appetite for wood and bamboo and can easily eat away a nation's forests. It then uses huge amounts of another equally precious natural resource — water — to 'cook and clean' its raw material. Its use of water is so high that it puts all other water guzzlers to shame. To make its product 'fair and lovely' it puts in high quantities of bleach, which then emerge as toxins in the huge quantities of wastewater and sludge it discharges. This effluent smells, and is suspiciously coloured. All in all, bad news.

But it is precisely for these reasons that any change for the better in this sector is good news. A comparison of the 1999 and 2004 ratings shows that this polluting juggernaut is beginning to mend its ways. Even more exciting is the possibility of great news in the future. The rating shows that this environmentally sunset sector can become a sunshine one.

For this its leaders will have to do much more than what they are doing today. They will, so to speak, have to bite the bullet, to really show how Indian industry can be a true-growth sector. How it can break free of the growth-without-jobs syndrome that plagues it today.

There is a possibility to make the industrial growth model — that the world is seeking — work: a model that enjoins the fate of small and poor landholders to the future of large and globally competitive industry. This is a model which uses the labour opportunities in the informal and agricultural sector to exemplify what sustainable development truly is — putting money and resources in the hands of the poor.

The analysis by GRP clearly shows that trees planted for the pulp and paper sector can provide a fascinating model of growth with jobs in the country. Roughly 1.1 million hectares of land is required to supply the five million tonnes of dry raw material the industry currently requires. This, in turn, could provide employment to over 0.55 million farming families in growing and harvesting wood in a sustainable manner. But it requires the laggards in industry to follow the best practices of their competitors — sourcing up to 90 per cent of their wood from the farmers they work with.

Then there is the other raw material opportunity, to collect and recycle the millions of tonnes of wastepaper in the country. For this it will have to re-think its wood-supply model and build links with the millions of *kabadiwallas* — waste collectors who work efficiently in the informal sector — turning them into sourcing managers. Just think of the amazing possibilities this grand alliance possesses.

Then there is the equally contentious and vexing challenge of water use. This sector does not take away water from

the hydrological cycle — in other words its use, however, destructive, is not consumptive. It uses water in its process and discharges almost all the water as effluent.

Therefore, the key is to improve the quality of effluent so that it can be reused to irrigate crops. For this, industry will have to realise that answers to pollution control do not lie in building more effluent treatment plants. The answers lie in strategies that make it water-prudent. The more water it uses, the higher the costs of cleaning up. Therefore, the first challenge is to reduce its total water use. Industry then needs to carefully segregate the clean water from the polluted and coloured effluent. If industry leapfrogs from chlorine to non-chlorine bleaching technology, even its so-called polluted water will be clean.

Very few realise that the chlorine challenge is related to the water challenge. We must promote the reuse of effluent for irrigation because it is prudent. But we cannot allow effluent water loaded with chlorine compounds to be used. Currently, the regulations for disposal of effluents on land are pathetic. They are designed to provide a loophole for industry to discharge their untreated water in the name of irrigating crops. Therefore, if the effluent of this water-intensive industry has to become a reusable resource, much more will need to be done.

Then there is the challenge of its neighbours, who, as we say, do not as yet live in peace. But industry must realise that they are the true barometers of its performance. The problem is that current regulations are made without an ear to the ground or an eye for detail. The water standards are classic. They are designed for discharge into water bodies, assuming that the waterbody has an assimilative capacity. But with the uptake of water increasing, there is less water in the rivers. Now in this situation, when a paper mill discharges its massive effluent, the standards quite frankly are not worth the paper they are written on. The industry can meet all the regulations but will still not satisfy its neighbours, who live downstream.

It is they who have provided the trigger for change. They have protested against coloured water, foul smell, mounds of lime sludge. Sometimes they have won. Their victory has paved the way for change.

As has, to some extent, the Green Rating Project. When Anil Agarwal designed this tool he must have known its potential to work democracy, to bring change. We believe we have done something to become the check and balance to industrialisation that Anil talked about. But we will leave it to you to judge the truth.

— Sunita Narain