Pulp Mills and Tree Plantations: A Duo in Power

The dispossession, deforestation and pollution caused by the pulp and paper industry is tied to a dynamic of ever-increasing scale, concentration and capital intensiveness which has characterized the industry since the Industrial Revolution. Crucial to this dynamic are attempts by the industry and its allies to refashion the political and physical infrastructure through which they work, capturing subsidies, managing demand, centralizing power, and evading, digesting and regulating resistance. In such a context, the claim that the industry helps society meet its pre-existing needs "more efficiently" makes little sense.

Some common but false assumptions about the pulp and paper industry are that:

* Pulp and paper companies do not alter society's goals and needs but leave them untouched; they merely provide wealth, goods and jobs which help society do better what it is doing already.

* It is merely the drive to do so efficiently and competitively which causes such firms to increase the size of pulp and paper installations and to seek cheaper production sites around the world.

* Any social and environmental disruption which results from this expansion requires at most some adjustments to the market apparatus or state regulatory systems, not a rethink of the industry's scale, structure or political relationships with the rest of society.

Despite these claims, the industry's current drive towards larger scale and global expansion cannot be explained solely by "economics". But neither is it being driven by a political conspiracy of unseen masterminds in transnational corporation boardrooms acting with the careless ease of omnipotence. Social structures sensitive to the needs of pulp and paper elites are built, expanded and improved upon only through the political efforts of a multitude of agents with different interests and motivations, working together in an ad hoc and sometimes uncoordinated fashion in interaction with an ever-varying background of resistance and of the varied qualities of land and natural materials.

The evolution of pulp and paper technology has always been intertwined not merely with profit or efficiency but with the attempt of small elites to rearrange structures of power in their favour.

The switch from rags to wood as a raw material reinforced papermakers' reliance on large, highly-mechanized mills -- for one thing, the chipping equipment and stone grinders used to process logs produced too much pulp for small paper mills to absorb. Yet the more that the pulp and paper industry invested in huge, wood-adapted pulp and paper machines, integrated with the timber industry and decoupled from any other source of raw materials, the less inclined the trade became to consider any other approach. Today, 90 per cent of paper pulp is made of wood, either by grinding it up or chipping and boiling it in strong chemicals. Large quantities of fresh water and energy are required for the process, which consumes annually the rough equivalent of the timber that would cover 20,000 square kilometers of wooded land.

Status competition among early twentieth-century newspaper magnates in North America and Britain

to build ever-bigger paper machines contributed further to growth in scale. By 1975, major machine manufacturers' investment in large machine tools had made it difficult for them to produce for anyone but the largest paper investors. Access to the dominant stream of papermaking knowledge was now restricted not just to capital, but to big capital. Today, most of the pulped wood used to manufacture newsprint, packaging board and writing paper today flows from a small number of sprawling plants, shining with expensive, computer-assisted machinery and costing up to US$1 billion or more apiece.

One consequence of the fact that almost all new investment in pulp is large-scale is that any surge in demand inevitably results in more investment in productive capacity than is actually required to meet it. This in turn leads to a savage boom-and-bust cycle. In 1993, for example, after one bout of overinvestment, pulp prices dropped to half of what they had been four years previously, leading to rampant losses, cost-cutting, closures, mergers and takeovers. It is not surprising that the industry feels pressure to create new demand in a way which might moderate future price dips. Large scale can be a cause as well as an effect of efforts to reorganize society in ways friendly to a few central actors.

The giant pulping machines characterizing today’s industry have to be run nearly 24 hours a day if the massive debts incurred in their construction are to be paid off on schedule. This reinforces the mills' need for secure, convenient access to huge supplies of water, wood – and enormous, contiguous, dedicated areas of land. Today’s gigantic pulp mills find it almost impossible to share the landscapes they occupy with local communities pursuing a variety of agricultural, fishing and subsistence-gathering activities. They work far better with simplified, compact populations of factory-friendly trees than with, for example, native woodlands reserved for a variety of uses.

In addition, today’s big mills demand the construction of roads or waterways which run straight from cutting site to port or factory instead of a web of slow systems of transport linking one local area to another. They favour the growth of mill towns where everyone works for the industry rather than communities with diverse livelihoods. All this provides incentives for propagating an ideology which privileges a supposedly "global" demand for pulp over varied local demands for individual farm plots, diverse native woodlands, clean water and air, and the maintenance of fine-grained craft practices which make possible local control over native forests and wetlands.

The pulp and paper industry often justifies its preference for large-scale, single-centred systems over many-centred social mosaics by claiming that they help release latent economic "efficiencies". However, the demand which is to be met “efficiently” had to be created first, and landscapes homogenized by political means, before this talk of “efficiencies” could begin to make sense. From the point of view of a farmer in, say, South-East Asia, the engineering of today’s centralized pulp and paper systems entails uncompensated losses of water, soil, fodder, fish, transport, or livelihood generally – hardly a gain in “efficiency” from perspective.

As native forests are exhausted and local resistance provoked, pulp and paper industries are turning increasingly to industrial tree plantations to furnish large amounts of fresh, uniform raw material on a smaller land base, avoiding conflict with other land uses. Although industrial plantations currently supply about a quarter of world demand for pulpwood(2000 figure), this proportion is bound to rise, given deforestation, the limitations of recycling (fibres can only be reused a few times before disintegrating into dust), and the resistance of much of the industry to non-wood materials.

This shift to plantation pulpwood provides more incentives for the industry to move raw fibre production to new regions, especially to the South. In countries such as Brazil and Indonesia, trees such as eucalyptus or acacia grow faster, land is cheaper, and companies are able to benefit from

lower-cost labour and severer political repression than in the North. All this entails low prices for wood, which, as Robert A. Wilson of the Anglo-French conglomerate Arjo Wiggins Appleton remarks, is "the strategic driver in the industry . . . the key competitive differentiator."

Pulp mills are often integrated with the new Southern plantations. This is not only because it makes more economic sense to combine wood and pulp production than to keep them separate, and to export fibre in the more concentrated form of pulp than in the watery form of wood chips, but also because environmental regulations are looser in the South than in the North, foreign aid subsidies easier to obtain, and consumption, especially in the Asia-Pacific region, likely to grow faster. Thus Brazil and Chile, for example, none of whom have been traditionally strong in the pulp and paper industry, are now among the top ten exporters of pulp, their principal customers being in industrialized countries. Indonesia‘s production of pulp rose from 980,000 tons in 1987 to 8 million tons in late 2000.

In sum, today's large pulp and paper firm, like a biological organism, is constrained by its inheritances -- including immense, unwieldy machines and a reliance on wood fibre -- and owes its survival largely to a whole array of actors behind the scenes: consultancy companies, technology suppliers, industry associations and alliances, bilateral agencies, State investment and export credit agencies, multilateral agencies, national governments, research institutes and NGOs, with which it has evolved in cooperation or symbiosis. Like a plant or animal, such a company does not adapt passively to a fixed environment, but, with the help of its allies, constantly recreates it -- undermining forms of power necessary for stewardship of local land while extending the realm of uniform rules of exchange; constructing new financial, physical, legal, and cultural networks by which resources and subsidies can be pumped to central locations and new forms of influence exercised over workers and resisters; recanalizing customs and dreams into forms satisfiable through paper consumption; and attempting to substitute public relations for the risks of democratic debate. Large, destructive technologies, rocketing consumer demand and the growing phenomenon of globalization are products less of "economics" than of politics.

Excerpted and adapted from: “Pulp, Paper and Power: How an Industry Reshapes its Social Environment”, Larry Lohmann, 1995, The Corner House, http://www.thecornerhouse.org.uk/document/pulp.html ; Mercado mundial de la celulosa, http://www.papelnet.cl/celulosa/mercado_mundial.htm ; “Timber Market Trends: Global and Southern Perspectives”, Bob Abt and Fred Cubbage, http://natural-resources.ncsu.edu/wps/wp/fps/ABTCUBBA.PDF