

Balancing Commercial and Environmental Conflicts - An Approach to Pulp and Paper Business Sustainability in Latin America

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Pulp and paper industry is facing, as many times in the past, a nervous moment of many worries. The depressed market for pulp brings emotion to overcome rationality. This is not different in relation to so many times in the past. Will future be a repetition of the past? Do these cycles may bring any substantial change in the market share in years to come? What driving forces will shape demand for quantities and qualities in the 21st century? How much end-use requirements will change? How much these changes are going to hurt or to favor some of the production regions around the world? What about globalization, how free trade could promote the wood/pulp/paper business? Emerging pulp and paper producer countries: how will they be affected by the volatility of the market? How much environmental and social issues will impact the pulp and paper industry, usually very demanding on natural resources? All questions very difficult to give brief answers! One thing is true: no matter what happens, paper business is a healthy and growing business and consumers will show the overall behavior they are showing everywhere for any specific consumption product: higher and higher demand for quality and price. At the same time, a growing concern about environmental issues.

- I -

The Pulp & Paper Business Arena

There are lots of concerns about major causes of the incredible volatility of the pulp & paper business. Some analysers believe that reason is because the business is very much fragmented, covering the world with many different companies, from very small to huge ones. However, fragmentation is a natural thing. Nature is a typical example of well-balanced fragmentation (many stars, many continents, many lakes, many animals, etc). When something become very large, there is a danger for natural causes to destroy it, because its impact in the whole. Have we thought about this?

Typical features of the pulp and paper industry are:

- scale of production;
- distribution systems;
- raw materials;
- capital requirements;
- technology;
- human resources;
- market instability/cycles;
- environmental impacts;
- financial return (low ROI along the 1990's).

Many forces are acting and driving our business. Some are external, very dynamic, variable in intensity from time to time. Others are new and others are not playing yet!

The most significant driving forces affecting our today business are:

- a)- cost / cost / cost
- b)- price / price / price
- c)- production scale and production-oriented minded industry
- d)- competition
- e)- globalization
- f)- social trends
- g)- environmental trends
- h)- fiber supply
- i)- population growth
- j)- exchange rates
- k)- economic factors
- l)- Asian economical growth
- m)- technology / automation
- n)- recycling
- o)- threat of substitutes
- p)- emotionality

Others forces you do not see them now, but just because you do not see, it does not mean that they do not exist.

Moreover, the forces do not act independently, they are completely connected and engaged.

Let's see fiber supply:

⇒there is no doubt that the growth of population (predicted 9 billion by year 2030, from today 6 billion) is a major component of paper consumption;

⇒new technologies and alternative products may change the arena in some extent;

⇒globalization favors the trade: which are mostly feasible to trade (wood, market pulp, paper, finished product?);

⇒how much recycling could grow? Do not forget, we can substantially raise recycling by speeding up collecting, transportation and the use of the fibers (one single fiber may be recycled more than once a year);

⇒cost: some countries in Latin America may have wood at a cost of 90 to 120 US\$/adt of finished market pulp;

⇒social and environmental issues are playing very strongly, no matter where you are. They are global trends, and forestry and recycling are very sensitive to these issues.

Because of the lack of balance among the main driving forces, the today most significant and growing concerning trends are:

- a)- downsizing and cost reduction;

- b)-** re-structuring, meaning dinosauring or consolidation (bigger and bigger; big is beautiful, the "highlander syndrome"). The purpose is to have a more global and less fragmented industry.
- c)-** scaling up of production through adaptation of technologies. There are good improvements in minimum environmental impact mills;
- d)-** "aging" of the human resources, who are becoming fewer but more qualified (few opportunities to just graduated or young people);
- e)-** technology is changing to the hands of suppliers;
- f)-** business is giving low returns to investors (low profit business?);
- g)-** feelings plus emotions are becoming important players in the business. One of the challenges is not competition, but attitude to face the business/commercial conflicts.
- h)-** focus on capital (some companies are acting like banks and banks are also owners of some companies);
- i)-** environmental issues (the industry has achieved good level of competence and thanks to this, there are good signs of recognition from overall stakeholders);
- j)-** maturity of some markets, such as Europe and North America are forcing to change the commercial arena;
- k)-** potential for growth in Southern Hemisphere, mainly in highly-populated countries (seen as market and raw material suppliers);
- l)-** Latin America countries show good potential to grow paper consumption (over 5% a year). They are second to nothing in terms of providing fibers from high quality plantation forests;
- m)-** competition, to guarantee a seat in the next century flight. Competition has three main arenas: country x country, business manufacturing segment x business manufacturing segment; company x company. There is no reliable crystal ball to predict the future, but the next century players, they will be surely fewer;
- n)-** Most important issues to the business now are: low cost, better margins of profitability, better balance in the offer/demand ratio of products, fiber supply, environmental and social responsibility, and listening and respecting the stakeholders.

Emerging Countries

At the same time, emerging countries are opportunities to sell to the not very much used to consume paper population, they are considered threats because of competition in the three mentioned levels.

Latin America is a golden opportunity to the paper business, both to raise domestic consumption or to manufacturing pulp and paper with the aim of exporting.

Most of countries are now facing economical and political stability and growth. Improvements can be seen everywhere.

The World Arena and The Environment

Growing interest in protecting world's health have led governments, non-governmental organizations (NGO's), industry and ordinary people to make moves in different directions. Many times these moves are conflicting and in opposition. There are many ways to solve conflicts and the most recommended is the dialogue and a gain/gain spirit of negotiation. The different stakeholders are suggested to talk to find the common ground and the minimum common denominator acceptable for all parts. Emotions for sure are part of the game, but we cannot lose the control.

Many governments have signed agreements to guarantee improvements in environment and to achieve sustainability.

The concerns for a better world with improved quality of life implies in changes of attitudes. Changes are sometimes difficult to be achieved unless you force them. This is understandable by everybody.

What do we have today influencing the economics of our life style in the pulp and paper industry? Let's consider those linked to environmental issues:

- **Agenda 21:** an intergovernmental commitment to protect the environment. It also brings effects on forestry, recycling and on consumers' rights. It has strong recommendations for stricting legislation.
- **Free Trade Agreements:** the use of environment as trade barriers or extra-taxation is in opposition to free trade, but it's still a move that countries may use from time to time. When a country implement a national environmental policy, it may have as consequence some or many effects on trade. To compensate the extra pressure the new policy/legislation is bringing to the domestic industry, the country may look for compensations and protectionism to the local producers. Stringent environmental legislations and company's commitments with environment lead to raised costs (both capital and operational costs). How to compensate this, at least during the learning period? Thus, it is inevitable that the difference in the implementation of environmental commitments by the different countries will bring conflicts. This is mainly due to the difference in speed and quality between the environmental upgrading among countries.
- **Country Taxation Policies:** Environment is a potential new source of income to governments. Since water, air, soil, energy are considered common resources to all society, those exhausting them are eligible to pay taxes!! New taxation policies such as those based on "payer user" and "payer polluter" concepts are becoming often. Additional costs are being added to product cost.

- **Product Eco-Labeling Schemes:** Eco-labelling was created with the aim to provide to consumers the rights of choice to purchase products with minimum impact to environment. It is a consequence from the proposals of Agenda 21.

The green labels must be reliable, non-discriminatory and accepted by all stakeholders involved in the process of manufacturing, distributing, selling and purchasing. Only with the involvement and participation of all stakeholders in commenting and helping the criteria development process, we may assume that the process is non-discriminatory and do not restrict free trade. The process shall also respect the differences and do not impose standards to force countries, such Latin American, to follow other continent processes of manufacturing or legislations.

Consumers' rights have to be preserved. Consumers' rights associations and codes are been developed everywhere. In the past decade, a great number of labels have been proposed. However, most of them are far from the original concept of being transparent, negotiated with all interested parts and adapted to the local and specific conditions of the region. These facts mislead the consumer and are used to build commercial barriers, mainly in relation to emerging countries. There is an urgent need to promote an open dialogue with the interested parts, including representatives of the industry and governments from the emerging producers countries.

The trend is not to establish a worldwide label to a single product. Each country, better knowing the own reality and the country's agreements in favor of environment, could develop the own label. To be reliable, these labels have to follow internationally recognized criteria, such those been developed by ISO subcommittee # 3, TC/207, and part of the ISO 14000 series of standards. Also, the label criteria shall involve a discussion among the different interested parts (government, NGOs, industry, consumers).

The most accepted labels are:

-Self-declaration Scheme: (type 2 label), according to this, an open commitment is made by the manufacturer and consumers have the right of the transparency. This scheme is in line with ISO 14000 standards for eco-labelling.

-Third Part Audited Scheme: (type 1 label), according to this, the criteria and environmental indicators are developed via negotiation with all interested parts, usually coordinated by the national or international standard organization. It is a multi-criteria scheme developed with the participation of third parts. Also, the label is given to the applicant by a third part organization, after auditing the compliance of the criteria.

- **Environmental Certification Scheme**

Environmental certification is surely the most recognized way to prove to the society that you are doing your best efforts to favor environment. A certification is a way to prove you are in accordance to the legislation; you have evaluated your environmental impacts and working to minimize them

and; you have a continuous environmental improvement program, supported by an environmental policy given to public knowledge.

Certification schemes have been directed to ISO 14001 certification of environmental management systems. This standard is reliable, well recognized by ordinary people and a good proof that the company is working to follow the state-of-the-art in terms of environment. ISO 14001 gives to the company a certificate, but cannot be related to the product. It is a certificate to the company not a green label to the product. You are not allowed to stamp your certificate in your product packaging. Green labels or eco-labels (type 1) involve the participation of third parts to define the criteria and performance indicators.

- **Forestry Certification Schemes**

Since early 1990's, when Rainforest Alliance started its "Smartwood Program", there has been a move to provide green labels to wood products and certificates to environmentally and sustainably managed forests.

Forest certification schemes are based on performance standards set by third-parts with participation of interested parts.

The International Standards Organization (ISO) is a worldwide federation of national standard bodies responsible for standardizing internationally trade goods and services under the scope of ISO 14000. A technical document about sustainable forestry is being developed by about 50 delegates from 22 countries. The objective is to provide to the forester, the required information to work for achieving ISO 14001 certificate to the forest enterprises. It has to be stated that ISO 14001 is an Environmental Management System (EMAS) and again to remember, the certificate is not an eco-label / green label.

On the other hand, the FSC-Forest Stewardship Council is the first international accrediting organization to develop a process to set principles and criteria for forest management and a user's guide for performance standards and management systems, which can be adjusted regionally, for certifiers. Established in 1993, the FSC has the goal of "setting a worldwide standard for good forest management by promoting widely recognized and respected principles of Good Forest Management". The principles and criteria set by FSC are meant to apply to all types of forest and a special principle has been developed to plantations. Many NGO's have worked together with the industry to set the principles and criteria. For this reason, the FSC scheme has worldwide reliability and increased acceptance.

To avoid generalization, FSC has established offices on major forest-based countries, to adapt the criteria and indicators to the local conditions, hearing social, economical and environmental interested parts.

- III -

The Pulp and Paper Business and the Environment

Pulp and paper industry is an activity very much dependent on natural resources. Consumption of wood, water, energy and generation of

wastewater, solid residues and air emissions are high. For several reasons, along the history of the business, the image of this industry deteriorated till the year 1992, and from that time onwards great efforts have been placed to revitalize it. In recent years, the industry has improved dramatically in terms of environmental performance and this has been rewarded by a better image. However, we still have concerns about the environmental performance in relation to this business sustainability. Let's call this forces in conflict.

Forces in Conflict with Emphasis to Latin America

a)- Globalization and concentration

Globalization means to produce more to sell to larger markets. This is typically the ideal dream to the pulp & paper industry. To raise production to the maximum possible in a site. Scaling up of production has to be very much evaluated to avoid all the problems of concentrating demand of raw materials and generation of wastes. To be global also means to be bigger? The industry cannot stay living as a cannibal, eating or killing the smaller to become bigger and bigger. Are we sure about this life style?

Latin America countries are not rich in capital, thus, there is no way to follow this trend, unless being considered food to the big animals. In the first moment, this model could be loved also in emerging countries by the growth of the domestics. However in the long term, the chances of survival as individuals are close to nil.

There are limits to scaling up, generally ignored or misunderstood: market size, raw materials supply, source of capital, social impacts, distribution, environmental effects, etc.

The "highlander industry" has to re-think this philosophy of only getting benefits of the increased scale of production. According to this idea, only few very huge companies with enormous mills will remain in the future to benefit large and amazing profits. How to be sure this is the right model? World is changing faster than our attitude. Huge corporations also fail and die, with impacting social implications.

b)- Core business paradigm

The P & P industry believes in this paradigm. However, such paradigm is not compatible with sharp changes, because of scale of production and concentration of the business. We know from all gurus of administration that the success of a business depends on how fast to react to changes.

c)- Downsizing and social issues

Today's most common policy in the industry are the cost reduction programs. The most simple and fast way to reduce cost is to cut labour and to value automation as modernity. Human resources cannot be seen only as labour to operate machines. Emerging countries in Latin America are very sensitive to job generation. We have to recognize this difference in relation to Scandinavian countries, where labour is scarce and expensive.

Let's consider human beings as capital and to establish social and life quality indicators such those we have for productivity measurements and

financial evaluation of the business. Let's develop human competence and not human erosion.

d)- Networking / Alliances / Competition

Thanks to the new information technologies and the re-structuring of the industry, a global network will be developed. Alliances, mergers, acquisitions will lead to huge dinosaurs competing for the market and for natural resources.

Latin America countries will be incorporated to the net but playing we do not know yet what role. How to understand that global world does not mean a single-face world, but an entity of many different?

e)- Capital Requirements, Profits to Investors and Threat of Substitutes

At the same time production is scaled up, capital requirements grow to never suspected levels. Investors become more reluctant to place so much money in a today low profit business. This is a reality to countries with lack of capital to invest. Pulp and paper industry has to find new ways to demand less capital and to become less dependent on financing.

Production costs have to decrease to keep competitiveness: variable costs are the most difficult to be changed. Fixed, overhead costs and investment costs offer more opportunities. Distribution costs also provide good opportunities, changing geographic markets or ways to distribute products.

Since this business is completely dependent on price and cost, we need to find ways to influence prices, not only costs. Provided we accepted that pulp/paper prices have a commodity behavior, the success depend on controlling the offer/demand ratio. What really hurts balance are the gigantism of the new facilities and the production-oriented minded philosophy.

It is also important to consider what happens in the alternative products to paper:

Plastic has as main philosophy: "what can be done with plastic in a less expensive way?"

Telecommunications has as philosophy: "how to give easier life to the user?"

What kind of philosophy do we have in terms of giving value to the ordinary user?

f)- Trade

Trade tariffs are going down everywhere due to global markets. The industry gradually follows the trend of global orientation depending less on protectionism via trade tariffs.

Countries in near future are to have no power to protect the market via tariffs because trade agreements are eliminating this mechanism of protection. At the same time, paper prices are going down because this is a today's trend for any mature product.

Because of tougher competition, countries may be forced to use other mechanisms to protect local industry, such as those related to eco-protectionism (eco-labels, eco-tax, eco-penalties, eco-fines, etc).

Latin America countries depend on exports to raise strong currency inventories and this protectionism is a threat to them.

g)- Raw material scarcity

What is the limit of growth? Water, energy, land and fiber supply are still very abundant, mainly in some Latin America countries. Firewood has proved to be an excellent alternative to fossil fuels to the pulp & paper industry located in these countries.

h)- Population growth

World average for population growth is 1.7% / year. This means that new jobs have to be generated and more people to be fed. Pulp and paper industry has to be sensitive to this. We cannot see people only as market / consumers or as labour.

Social issues are perhaps the most important environmental issue in Latin America countries. Key points to be considered are: generation of jobs, social taxes paid to governments, infra-structure and social investments, generation of foreign and strong currencies, quality of life to the surrounding community, good and reliable image to the different stakeholders, etc.

i)- Environmental issues

Being sustainable means to be economically viable, socially desirable and ecologically minimum impacting. Since economical circumstances are different, since people and cultures varies from region to region, and because ecological aspects are very much local, sustainability is a concept that can be defined globally but developed locally. Considering Latin America countries, the social aspects of environment cannot be discarded in any environmental impact evaluation. Those who work fast in this issue have much better acceptance by stakeholders.

Minimum impact technologies are welcome everywhere and they are not privilege of the rich countries. Considering the fact that emerging countries have still to solve many pollution problems, mostly related to domestic garbage and sewage, the industry is suggested to give a strong contribution not harming the environment with additional pollution.

Forces of Opportunities

My recommendation to Latin America countries is to have speed as the differential parameter, to compensate the lack of other important and vital features (capital, technology, information, market share, knowledge, education, etc).

What could be easily speed up?

- respect to the investors / capital ownership;
- business leadership;
- environmental leadership;
- strong local and multi-country industry associations;

- policy development;
- strategic view;
- information networking;
- recognition of eco-labels schemes;
- dialogue with Governments to the introduction of positive incentives for sustainable development;
- best environmental practices implementation / environmental commitments;
- environmental and social responsible care;
- social respect, including local cultures;
- communication to stakeholders/dialogue with NGO's;
- respect to employees/job generation;
- dialogue with legislators;
- dialogue with government environmental agencies;
- development of human resources;
- compliance with internationally accepted environmental standards;
- control and prevention of pollution;
- reduction on the consumption of energy, water, fiber;
- waste recycling;
- protection of watersheds;
- environmental impact analysis;
- ISO 14001 certification to the management systems;
- forest certification (FSC), or other local program, such as CERFOR in Brazil;
- implementation of technologies adapted to local sites (agroforestry, forestry for multiple purposes);
- development of R & D closely related to local problems;

However, the most powerful of all forces are the dialogue and the participation in all forums that could affect you or your business. Strong, active and up-dated associations are key forces (see the example of CPPA / Canada, AF&PA / USA, etc).

See also the example of Brazil:

- very active in searching consensus among the different players of the industry via associations, building a common view (business plus environment);
- very active in the European eco-label scheme;
- very active in ISO 14000 (TC 207);
- very active in ISO 14001 for sustainable forestry (TC 207/WG2)
- very active in international forestry forums (roundtables, CIFOR, Inter-governmental panels, etc);
- very active in forest certification (FSC);
- very active in dialoguing with Brazilian Government;
- very active in the International Chamber of Commerce, Eurocommerce, etc;
- very active developing eco-labels domestically;

- very active as partner in developing technical studies such as the "Sustainable Paper Cycle-World Business Council for Sustainable Development";
- very active in developing technologies through R & D;
- very active in building dialogue among the different forest-based industry via local and international associations;
- very active in dialoguing with non-governmental organizations;
- very active following local and international environment regulations and influencing them.

On the other hand, in Brazil and in most Latin America countries, social performance and social welfare are still weak points. People are most valuable resource and by the way, they are also consumers of paper. The Latin America market, consuming only 30 kg/inhabitant/year, offers an amazing potential for the pulp and paper industry growth. It is only a matter of being clever and wise, growing the business and respecting people, environment and investors. Provided cultural, regional and individuals differences be understood and respected; provided good transparency and dialogue be built; provided good will in all players; we will have a healthy, fruitful and long-term future.