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# WORKING IN AND WITH GREEN PRODUCT INDUSTRY: AN INDUSTRY PERSPECTIVE

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## ABSTRACT

*It is true that the Green Product has three audiences namely the scrutineers (the academicians), the industry (consisting of business operators of various levels and the governance group, including state) and the customers (including active and passive stake holders). Walking the talk with them with the offering for a firm is very difficult as the offering has blurs of norms ,subjective and objective coupled with conformity, differentiation and accountability to be accepted by the other two groups the scrutineers and customers of our country INDIA i.e. going 'GLOCAL'[1] )*

**KEYWORDS:** *Glocal, Enviropreneurial, Green Product, 3 Rs, 5rs, Lca (Life Cycle Analysis), Pslc (Product System Life Cycle) Optimal Value Proposition.*

## INTRODUCTION

The industry believes that the assets need to have value to be heard. Let us look into some figures of users of any industrial offering. Industry converts threat into offering (asset- inert or live) to be transacted and create value and there by churn growth and development for itself. The author is looking into the reason why Green Industry. Only if country develops 'Industry' develops. To a non -academic individual, the poverty reduction/ living standard is the parameter for growth and start of dreaming for honing his or her own entrepreneurial zeal as one progresses down the writing, this element of entrepreneurial will be enviropreneurial[2]. 'Enviropreneurial ' is defined as ' Organisation that pursues environmentally responsible policies, procedures and practices in the conduct of their business activities'.

Presently, LIFE (life Style for Environment announced on World Environment Day) coined by the Hon'ble Prime Minister and endorsed again in G20 set up, is making ripples among the nations to perform accordingly and meet the need of the sustainable global world. India, according to Hon'ble Prime Minister Modi will be the third largest economy3 way before 2045 announced by him in the global platform. The Gobal backdrop is that just 15% of the world's population consumes 80% of economically traded resources, where as the 33 % of the population who live in the poorest countries consume only 3 %.[4]

Glimpse to 'Standard of Living'[5]

| Some sectors/public utility services | % household without access to 2005-2006 | % household without access to 2015-16 | % household without access to 2019-21 | % household without access to(Decline ) average annual rate reduction2005-2006 | % household without access to (Decline) Average annual rate reduction 2015-16 to 2019-21 |
|---|---|---|---|---|---|
| Cooking Fuel | 52.9 | 26 | 13.9 | -2.7 | -2.4 |
| Sanitation | 50.4 | 24.4 | 11.3 | -2.6 | -2.6 |
| Drinking Water | 16.4 | 5.7 | 2.7 | -1.1 | -0.6 |
| Electricity | 29 | 8.6 | 2.1 | -2 | -1.3 |
| Housing | 44.9 | 23.5 | 13.6 | -2.1 | -2 |
| Asset* | 37.5 | 9.5 | 5.6 | -2.8 | -0.8 |

*ownership of devices like radio, TV, telephones, computer, animal carts, cycle, motorbike, refrigerator, etc. Modified from data presented by TOI, July 21, 2023

Therefore, the poverty is shading out

slowly; India is in a position to look towards 'Quality of Life'

One approach, called engaged theory outlined in the journal of *Applied Research in the Quality of Life*, posits four domains in assessing quality of life: ecology, economics, politics and culture.[6] As stated ecology and sustainability is the future of any society. Standard indicators of the quality of life include wealth, employment,the environment, physical and mentahealth, education, recreation an d leisure time, social belonging, religious beliefs, safety, security and freedom.[7] **The challenges/threats are converted into opportunities and this is business.** The opportunities the Quality of Life offers now will be following

*Marketing Oppurtunities*

The test in management is in making the threats into oppurtunities.

Problems of Environment

| Oppurtunity | Depletion of Natural Resources | Disposal of wastes with concurrent pollution | Despoliation of the environment | Energy inputs and costs |
|---|---|---|---|---|
| 1. | Development of new sources or substitutes | Energy generation from waste and recycling | New industry based on biotechnology | Development of new technology |

| | | | | |
|---|---|---|---|---|
| | | process | | |
| 2. | Oppurtunities for fine ceramics, rare metals, metal alloys and high performance plastic. | Savings in costs on scarce inputs by recycling of products | Agrochemical Industries Pollution control equipment like scrubbers,etc | Use of alternative sources of energy in product operations or production processes |
| 3. | Products improving productivity of present systems | Recycling centres | Subsidies on manufacture and marketing of ecologically benign products | Efficient products in terms of energy consumption |
| 4. | Technologies improving agricultural resource base like high yield crop varieties, wasteland development, pest control measures | Alternative packaged goods<br><br>Packaging materials based on biodegradable products | Development of new industrial processes | Efficient living environment |
| 5. | Agriculture service equipment like those for weather forecasting , storage and transport. | Reusable products | Health products based on genetic engineering | Information technology for productivity, energy and resource efficiency |
| 6. | Acquaculture | Oppurtunity for high-tech products to clean oil slick and space equipment | Marketing of packaged environment | New energy base in non-conventional sources, such as plants and fossil fuel. |
| 7. | Water resource management | Detergents based on biodegredable products. | | |

Adopted from: Management and Labour Studies,Vol 15,No.2. April 1990- Atul Parvatiyar: Ecological Perspective in Marketing.

**Problem**

The Problems in fructifying these opportunities are the following:-

**First:** The prima-facie problem exists in incongruity in the way academic view the green product versus the way industry view*s* and again the way customer*s' look at* it. According to Ottoman[8], in the industrial perspective, it seems that the definition or legislation surrounding a green household cleaning product does not exist, in the industrial perspective According to Ellington, Hailes and Makower[9]; the following are the characteristics of green product:

- Are not dangerous to people or animals.
- Do not damage the environment in manufacture, use or disposal.
- Do not consume a disproportionate amount of energy in manufacture, use or disposal.
- Do not cause unnecessary waste.
- Do not involve unnecessary cruelty to animals.
- Do not use materials from threatened species or environment.

A group of researchers namely, Durif, F., Bolvin, C., and Julien, C.,worked on comparative definition pertaining to Green Products, a snap shot of the relevant portions are being stated below.

Some of the examples of green product definitions in the industrial perception are being enumerated below[10]:-

Some examples of green product definition in the industrial perception (includes)

| Source | Denomination | Definition |
|---|---|---|
| www.etiquette.ca Canadian Social Enterprise | Responsible product Ecological Product ( house cleaning product) | In order to be considered responsible a product must standout with at least one of the four following criteria : respect for the environment, social economy,firm with a social vocation, respectful towards employees.<br>Respect for the environment:<br>a) Biological product(rejecting the smallest amount of toxic matter in the environment)<br>b) Eco-efficient product( optimisation of recyclable resources or renewable resources)<br>c) Product with a an entire lifecycle paired to basic environmental concerns,<br>d) Product with a lifecycle which contributes directly and voluntarily to a ecosystem regeneration.<br>Biodegrable product accepted by an official lable in 30 days. Product that comes in a recyclable wrapper( or box)<br>Product which does not evacuate strong OVC(Organic |

| | | |
|---|---|---|
| | | Volatile composition) |
| www.human village .com Consumer and enterprise association | Green Product | Product conceived for it to be the least harmful for the environment..Product with planned recycling,. Product which is identifiable due to an official logo. Product that must respect the 3 Rs, ie., reduce, reuse and recycle. |
| www. consoGlobe. be Online store | Green Product | Officially labelled biological product. From ecoconception or socially responsible. From fair trade and labelled. Product permitted energy savings. Recyclable product (eco-materials). Natural product: not tested on animals. Non polluting and healthy product. |
| www. leportailbio.com. Online store | Ecological product (housecleaning product) | Product that is non-toxic for the environment. Product made of bottomless resources (no fossil, no minerals) Product not containing any chemicals organic components (from the oil Industry) Plants that is plant based with clean and renewable resources. Product made with essential oils. |
| www. aboneobio.com Online store | Ecological product | Product made with washing plant bases. Efficient product. Biodegradable product. Product that preserves resources. Product not tested on animals. Product that may contain natural allergens. |
| Converging Magazine ( industrial Reviews) (July 2008, Vol 6, number 7, P22) | Green intitiatives | Use or promote sustainable materials. Have 'green' credentials. Better manages waste and/or work with recyclable, compostable or biodegradable materials, wherever possible. |
| MCI( Magazine Circuit Industrial) Industrial Review | Green Product | Non-toxic product. Biodegradable product. Product ecologically inclined ( if only the product does not contain any NPE (nonphhenoxyethoxylate). Product that uses bio-technologies. |
| Grail Research - Monitor Group (Bio-store network) | Green Product | Made of recyclable or re-usable material/packaging. Energy efficient/uses renewable sources of energy. non-toxic in nature. Contributes less to greenhouse gas emissions. Has received Green certification. Requires less water for manufacturing/use. Manufactured by a socially responsible company. Grown or manufactured locally. Not tested on animals. Free-range/produced from animals that are allowed to roam freely. |

Analysing the Definitions of Industrial Perspectives one finds:

The definition of "Grail Research Monitor Group' is most comprehensive among all the above but has the last line 'Free-range/produced from animals that are allowed to roam freely' which refers to animals who also feed on inorganically grown grasses or foods..

One has to note that there are some important distinctions between the academic and industrial perspectives.

At first, the authors while they considered the definitions given by academia as many as 35 found only one case of 'Certification References' i.e., third party endorsement as a condition to refer a product as 'Green". in Industrial definitions certification is a sine qua non requirement.

Secondly, the notion of animal protection appears many times in the Industrial perspective, mainly being sensitive to the fact that a green product should not have been tested on animal. This aspect is missing in the definition of the academia.

Third fact being industrial perspective shows reverence to the concept of 3Rs (reduce, reuse, and recycle) whereas the academia states 5 Rs (refrain, reduce, reuse, recycle, redesign)

Incidentally, one must mention that working in India is much more difficult now with ESG ( environmental, social and governance) scoring systems. Which again could be either industry-specific or industry agnostic. The industry specific scoring systems assess issues that have deemed material of the Industry at large. In case of Industry-agnostic ESG scores tend to incorporate widely accepted factors across industry i.e., issues of 'Climate Change', Diversity Equity and Inclusion (DEI) and human rights. The ESG rating platform determines a weighting for each measurement criterion, then, they assess an organisation's performance against each criterion[11]. The Securities and Exchange Board of India aim to enhance disclosure on ESG standards. It has mandated that BRSR will be applicable to the top 1000 listed entities (by market capitalisation) for reporting on voluntary basis for the FY 21-22 and FY22-23. In India we are going GLOCAL (a concept of global practices being implemented with local flavour) Industry-Agnostic Factors will be-[12]

A) Environmental: 1) Water Use, 2) Resource and Bio-diversity, 3) Waste generation and recycling and 4) Energy Emission.

B) Social: 1) Employee Management, 2) Supply Chain Management, 3) Communities and 4) Customers.

C)Governance : 1) Board Composition,2) Board Independence,3) Funtioning and experience, 4) Management track and record and control, 5) Disclosure and shareholder relations, and 6) Compliance and controversy checks.

The customers' perspective in a 7 level scale from 1 the least to 7 the highest (strongly agree) the

**TABLE: SHOWING EXCERPTS OF STATISTICAL COMPUTATION)**

| Factors | Means | Maximum score |
|---|---|---|
| ( Ranks respectively 1st, 2nd, 3rd, 4th) | | |
| Biodegradable | 6.13 | 7 |
| Non-toxic for nature | 6.11 | 7 |
| With minor-impact on environment | 6.09 | 7 |
| Safe for the planet (3Rs) | 6.09 | 7 |

| | | |
|---|---|---|
| 6.09 7 | | |
| (Ranks respectively,16th, 20th, 21st, 22nd, 23rd ) | 4.8 | 7 |
| Product not tested on animals | 4.6 | 7 |
| Product certified by an independent entity | 4.39 | 7 |
| Product made locally | 4.32 | 7 |
| Hypoallergenic Product | 3.91 | 7 |
| Product made locally Product certified by manufacturer | | |

The divergence is visible between the way the Industry see and the way the consumer perceives and behaves.

To industry the certification and product not being tested are of importance along with the carbon miles covered all these are of less importance to the consumers.

It is true that on the first 4 there exist some convergence where as on many there is divergence of views among the academia, industry and consumers. Therefore, for practitioners to walk on this tight and thin rope accompanied on self guiding principles and governmental laws of ESG is also becoming difficult.

**Second:** Business research institutes and governments are putting their heads together to develop this LCA or 'eco-balances' to evaluate the '*cradle to grave*' implications of different products that are in the market. The first LCAs in the late 1960s and early 70's mainly concentrated on comparative energy consumption of different materials, even for the packaging materials also. But LCAs go far beyond studies of energy balances. They are also used to evaluate resource requirements of and environmental impacts. Each LCA has three parts:

a) First, an inventory of energy, resource use, and emissions during each step of the product life,

b) Second, an assessment of the impact of these components; and

c) Third, an action plan for improving the products' environmental performance.

As LCA is still a relatively new concept, most to date have focused on the inventory stage only[13]. The concept finally getting its shape in the establishment of '*New Decision Boundary'* the Product System Life Cycle (PSLC) which defines the new extended decision boundaries that marketer must address when responding to the ecological challenges posed by *consumption*. While working of organic vegetable marketing, it became very difficult to guarantee whether the seed beds were organic or not. Thus PSLC was drawn to question.

Third; Substantial cost increase in the product is expected as R &D has to be done not for modification of the formula but de-novo formulations. Thus the process and implementation all need a change the situation of adaptability is questioned as change need to be technology driven. Life Cycle Accounting (LCA) that will address the costing of the product may not be

liked by the consumers. It has to be understood that this( LCA) incorporates the view that the true cost of a product, vis-à-vis the environmental cost, includes even non-monetary factors[14]

Fourth: Image that recycled products and recycling technology will have on consumers- Recycled products in India on FMCG category has not received favourable response. In a very up market locality of Salt Lake in Kolkata when people were told that the water will be recycled and then potable water will be supplied the response was not very favourable. The author in his own project regarding consumer preference on carry bags found out that products made out of recycled plastic where often taken at discount and consumer preference for such products were comparatively less to those made out of virgin plastic as raw material.

Fifth: Government regulations and taxation may not be encouraging-In most of the cases, not going green does not cause any cost to the firm as government (Except the pollution Control Board) in every state invokes regulation at firm level but not at the consumer level thus in the downstream process and at consumer end there is lack of governmental regulations or even if the regulation exists it is not executed as the government is worried about its votaries.

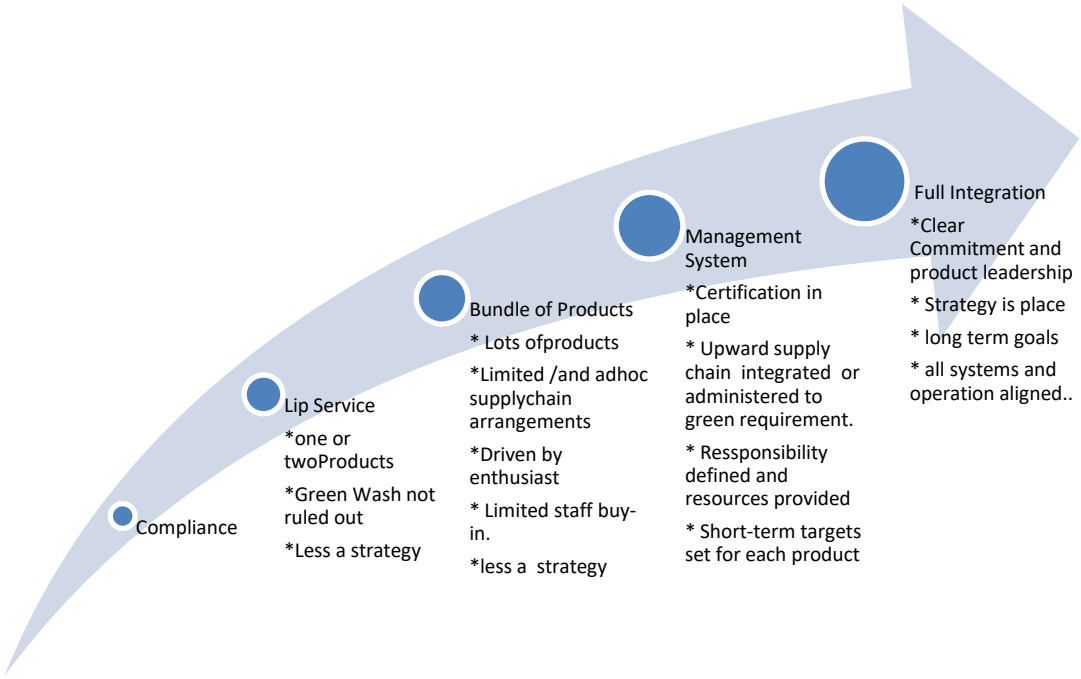
Sixth: Public Issues and Green Products- It has to understand that the Government's role is to ensure food for all in India. Under the circumstance there has to some tradeoff between the 'Shades of Green' and Votaries. The Central Government for the first time tried to balance between the market strategy and Business Strategy and brought three acts to the fore-front by bringing three acts. **The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020:** It prohibited state governments from levying any market fee, cess, or levy on farmers, traders, and allowed electronic trading platforms for the trade of farmers' produce conducted in an 'outside trade area'. The act tried to break the monopoly of government-regulated mandis and allow farmers to sell directly to private buyers. **Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020:** It envisaged a national framework for contract farming. It provided a legal framework for farmers to enter into written contracts with companies and produce for them. The written farming agreement, entered into prior to the production or rearing of any farm produce would list the terms and conditions for supply, quality, grade, standards and price of farm produce and services. **Essential Commodities (Amendment) Act, 2020:** It removed cereals, pulses, oilseeds, edible oils, onions and potatoes from the list of essential commodities. It advocated deregulating the production, storage, movement and distribution of above mentioned food commodities. It also removed stockholding limits on such items except under "extraordinary circumstances".. The three acts would have given boost to green farming/organic farming on long term but farmers through intoxicated with non-green farming (GMO seeds, chemical fertilizers and chemical pesticides not considering the cost on environment as a whole) had numbers backed by opposition to force the Central Government to withdraw the amendments[15].

Seventh: Capital cost involved in recycling set-up or change of production process-The firms find that paying the penalty for not maintaining the parameters are cheaper than incorporating or availing technology that are pollution free. More over in certain industry such as tanneries a 100% pollution, free technology is absent and the industry though known to be the worst in polluting cannot be closed as it provides a lot of employment to less skilled workers and their families.

Eighth: Lack of proper accounting system of natural resources-It has to be understood that Life Cycle Accounting has not found a sound knowledge base among the accounts practitioner since the Institute of Cartered Accountants of India and Institute of Cost and Works Accountant of India are grappling with the issue and is yet to discover a knowledge base to handle this issue.

Ninth: Fast changing rules on such green products-Green Product is a concept of *relativity* and so a thing that is green today may not be looked much benign in later years as with change of technology it becomes a polluter. In west owing to better waste management technique (land filling being a practice and good recyclability of plastics) plastics are more preferable to paper as paper do not biodegrade when land filling is practiced[16].

**Problems to be surmounted[17]**




Modified the diagram of Sustainability Maturity Model sourced from page 172 The Green Executive

The pathway for an executive handling is shown, the compliance refers to legal compliance and hardly being green, slow working on the periphery , as long term orientation in the green and QOL demands, again the work will not be easy as the polluting marketing executives and the whole the value chain for long will understand the global change. So, a snap shots (Lip service and orientations are brought into) in terms of some product being replaced by services and this has implication on products ( no paper retail process in retail outlets of the product), The bringing a few or locally outsourcing green product absolutely ad-hoc and having product managers to handle the green product , this is Bundle product stage. Over time and space trying to elevate the place and scope of product manager of green to green category mana gers. This means the category planning and implementation with focussed short-term target. Finally integrating the supply chain with upwards and downward and involving the top and bottom staffs of all levels.

**Ethical Imperatives**

**Handling the question why the business is for? This would involve the following:**

1) Margaret Thatcher, Ronal Reagan (politicians) and Economist Milton Friedman converging on one bottom line market.

2) Society is the inception or business the inception?

3) Can one solve the problem of environment if GLOCAL approach is PROFIT?

**Summary**;

Full green integration is possible only when the consumers' demand and Indusrty push matches and optimal value proposition[18] , the intersection point of three what the user want, what the specific firm provides and what the competitors provide is derived for a green product as conformity, differentiation and accountability will be in place.

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