Title: "Market friendly means of promoting sustainable exports: How successful are ecolabels in promoting sustainable exports from developing countries to developed countries" Lessons from the Indian leather footwear industry?

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Abstract

This paper tries to understand whether importers in the North are able to push exporters in the South towards sustainable production, with the help of a case study of the Indian lather industry. After providing a short description of the global leather footwear industry, the first section provides insights into the competitive advantages of different countries, characteristics of developing country exporters and the difference between large and small European buyers of Indian leather footwear. The subsequent section provides an insight into the different chains of influence that exist in trying to make international trade more sustainable with the help of a broad understanding of the means, their effectiveness, their constraints and a few examples of such chains of influence. Section four studies whether ecolabels are in a position to be suitable indicators of sustainability. Further it delves into understanding the perspectives of consumers, producers and regulators on whether ecolabels are useful in promoting sustainable exports. The explanation of how ecolabels conflict with brand dynamics is quite interesting. The policy measures provide clear options for targeting sustainable production. Suggestions include use of eco-elasticity indicator, toolbox approach to environment policy, introducing comprehensive sustainability labels, maintaining a level of mandatory legislations as well a constructive effort to increase transparency in supply chains. The appendixes include the research methodology adopted for the paper, the reason for choosing Europe as destination for the research, a brief about types of ecolabels and a small description of integrated product policies.

I. Introduction

There is substantial work done on environment and trade linkages. Further sectorial work that looks at the effect of environmental regulations on the exports of leather and textiles industry have also been undertaken¹. However there appears substantial emphasis on mandatory regulations and cost-benefit analysis of ecolabels, both of which have been left out of this paper. Further researchers have seldom taken a holistic view of voluntary ecolabels, i.e. whether they are useful in reducing pollution, whether they are useful in increasing exports and whether they satisfy all participants in the entire value chain, i.e. exporters, importers, final consumers and regulators. This paper evolves from the perspectives of decision makers in the business community as well as regulators, regarding voluntary mechanisms of promoting sustainable production. It is often seen that systemic ideologies (views, reservations, bias, opinions etc) are often ignored in such research. This paper tries to fill that void.

This paper is structured as follows:

Section 1 provides a brief introduction of the Indian leather footwear industry, with emphasis on the export sector.

Section 2 tries to study the methods used to promote sustainable production in exports from South to North, using the chains of influence approach. These are namely government-to-government, civil society to government to importers, civil society to importers to exporters etc.

Section 3 delves deeper into understanding the use of ecolabels as market friendly means of promoting sustainable exports. This implies that ecolabels should serve two purposes; increase exports and promote sustainable production. With the help of qualitative

¹ For details of environment and trade related work (including leather industry related) refer International Institute of Sustainable Development (www.iisd.ca)

participatory interviews with leather exporters in India, the paper tries to understand the problems that result in poor utility of ecolabels to render this role.

Section 4 suggests targeted policy measures to promote sustainable production.

II. The Indian leather footwear Industry: An overview²

With a turnover of US\$ 4billion, the Indian leather industry exports US\$ 2 billion worth of leather and leather products (50 percent of its total production). Compared to the last two decades, where a mere 20 percent of Indian exports were in the form of value added products, today 80 percent of Indian exports are value added products. The value addition is to the tune of 200 percent to 500 percent. Further, the industry, mostly comprised of small and medium enterprises, employs more than 2.5 million people. More than 80 percent of the total produce by value in the Indian leather sector originates from small and medium enterprises. The Indian leather industry contributed export earnings of Rs.8650 crores (US\$ 1800 million) in 2002-03. Leather products are within the top ten exports earners for India and account for approximately 2 percent share of the global market. India is the second biggest leather producer in the world after China, however it does not even figure in the top ten countries in leather footwear exports.

In 2003, Out of a total of US\$ 2094 million of exports of leather and leather products by India, footwear and footwear components accounted for US\$ 750 million, i.e. more that one third.

Approximately 80 percent of the leather footwear is sold with the help of middlemen i.e. agencies, buying houses, trading exporters and country stockists, while 20 percent is sold either through direct relationship between European retailer and Indian manufacturer or manufacturers having their independent overseas offices. Less than 10 percent of the Indian manufacturers have long-term (over 5 years) contractual relationship with a European buyer. This is because the footwear industry is very fashion conscious and trends in the industry keep changing. Hence buyers prefer to avoid excess reliance on select suppliers, but prefer cherry picking in the market. This sourcing tendency is similar to most fashion products including garments.

² Data in this section is sourced from Federation of Indian export organizations, India and India and Council for Leather Exports, India

According to interviews of US and European buyers undertaken by H. Schmitz, as enumerated in IDS Working Paper 100, the competitive advantages of four footwear producing countries are as below

Country	Competitive Advantages	Suitable Markets		
China	- Cheap source of footwear	Huge price-driven orders		
	- Reliable product quality	from US discount retail chains.		
	- Strong in coping with massive standardized orders			
Brazil	Capable of supplying substantial volumes of quality branded products, not requiring particularly innovative design	Middle class retail chains		
India	Capable of responding to small to medium size orders of leather shoes which sell on price rather than quality	Price- driven medium size markets		
Italy	Innovative design, high quality fashion	Small and high fashion orders from boutiques		

Table 1 Competitive advantage of different countries in the global leather industry³

The global trade in leather goods has grown almost tenfold in the last 20 years. However the industry (specifically the raw leather processing industry) is one of the most polluting in the world. It is highly input oriented, requiring extensive processes to arrive at the final output in the form of usable leather.

Compared with other developing countries, the Indian industry has been quick to respond to regulations regarding environmental pollutants in general and azo dyes in particular.

³ Hubert Schmitz and Knorringa (1999) "Learning from Global Buyers" Working Paper 100, November 1999, Institute of Development Studies

Amongst other measures, an eco-labelling scheme has been set up in India. This has, however, not been widely adopted, primarily on account of inertia and want of promotional efforts.

Characteristics of developing country exporters and their European buyers

The North South dimension in the international footwear chain is quite similar to that of other industries. Multinational companies from developed countries own brands that are successful in developed and developing countries, while brands of developing countries seldom exist in developed countries. Nearly 98 percent of the total exports of India's leather footwear industry are in the form of developed country brands or brands which are not popular at all (branding for the sake of a name tag and products which are not bought for their brands). Thus one can conclude that majority of India's exports reach final consumers who are not even aware of the manufacturers of their footwear. An interesting observation in retail outlets in four European countries, of companies sourcing from India revealed that no sampled footwear incorporated the label "Made in India" on the shoe. On the other hand one could easily come across "Made in Italy" and "Made in UK" labels. This clearly reveals the low status value attached to Indian leather footwear. However the case is similar for China, Brazil, Vietnam and all major leather footwearexporting countries in the South. India faces immense competition from China in the large buyer segment. However India has niche advantages in providing small lots and maintaining an acceptable quality.

European buyers of Indian exporters can be classified as large buyers and small buyers. This table brings out the differences between the European small buyer and the large buyer and their characteristics.

	Large Buyer	Small Buyer
1	Definition:	
	Order size above 36000 pairs per	Order size less than 20 percent of total

Table 2. Differences between large and small buyers of Indian leather footwear

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9	They are very cautious regards social issues	They are seldom in a position to effectively tackle social concerns
10	Barely 2 percent of Indian exports	98 percent of Indian exports go to small
	go to big buyers	buyers
11	Big buyers set their own	Small buyers do not set any process norms,
	environmental and social norms	but their product norms relate to statutory
	which have product and process	requirements of the respective destination
	elements	country
12	elements Verification processes include third	country There are seldom any verification
12	elements Verification processes include third party certification, personal visits	country There are seldom any verification processes. Self-certification by exporter is a
12	elements Verification processes include third party certification, personal visits and laboratory tests. Self-	country There are seldom any verification processes. Self-certification by exporter is a norm. Risk of non-compliance, similar to
12	elements Verification processes include third party certification, personal visits and laboratory tests. Self- certification is acceptable	country There are seldom any verification processes. Self-certification by exporter is a norm. Risk of non-compliance, similar to large buyers, remains with the exporter.
12	elements Verification processes include third party certification, personal visits and laboratory tests. Self- certification is acceptable subsequent to establishing a degree	country There are seldom any verification processes. Self-certification by exporter is a norm. Risk of non-compliance, similar to large buyers, remains with the exporter.

The degree of influence reduces as the economic value of the order reduces and vice versa. As the size of the seller increases big buyers approach him for bulk orders. Hence he removes small buyers to accommodate big buyers, thus increasing his dependency on big buyers.

III. Methods of promoting sustainable exports from South to North: Chains of Influence⁴⁵ Approach

There exist several methods of influencing sustainable production. The chains of influence are the various pressure tactics used by different stakeholders in promoting sustainable production. These chains of influence, if well used can change the effect of environmental and social factors on international supply chains. They are as follows:

Supranational Institutions \rightarrow Domestic Government \rightarrow Exporters

International intergovernmental bodies, or governments of other nations push for better environmental legislation in a particular country, which affect the exporters of that country.

Tal	ble	3.

Means	Multilateral environmental treaties
	Bilateral and regional trade agreements
Examples	Basel Convention on Transboundary Movements of Hazardous Wastes
	Convention on International Trade in Endangered Species (CITES)
	Rotterdam Convention on Trade in Hazardous Chemicals (PIC)
Constraints	Trade effecting regulations are governed by WTO rules
Effectiveness	Since most treaties relate to global environmental problems, they may
	be inadequate to deal with sector specific issues

⁴ In these tables there is an attempt to distinguish between mandatory and voluntary regulations. In a chain where the government is mentioned, it implies mandatory provisions. While in a chain where government is not mentioned, it is a voluntary requirement. In such cases the government may play the role of a facilitator. E.g. Setting up an ecolabel scheme

⁵ Though media is an important participant in the chain of influence, it is a medium to exercise influence. Hence it not incorporated separately.

Civil society \rightarrow Domestic Government \rightarrow Exporters

Members of the civil society influence the government to enact legislations that affect the behaviour of exporters.

Table 4

Public Litigation, Campaigning for new legislation
In Tamil Nadu, a state in South India, the Velur Citizen's Forum was
one of the first active people's organizations to engage in a legal battle
against the tanneries for contamination of underground drinking water
due to tannery effluents. In 1996 the Supreme Court ruled in their
favour resulting in closure of several tanneries. This cause a spark in the
industry regards the need for more constructive approach to the
environment problems. Further the State Pollution Control Board also
became stricter in enforcing environmental regulations on tannery
pollution.
Shifting of industries due to excess environmental regulation is a matter
of concern.
Pressing problems can be best tackled using this chain of influence.
However for promoting best practises, this method may be inadequate

Civil society \rightarrow Importers \rightarrow Exporters

Civil society stakeholders target importers to modify their sourcing practises and make them more sustainable. This pattern is common in organic foods. This in turn affects exporters.

Table 5

Means	Use of pressure tactics such as using consumer organizations and mass media. Collaborative approaches such as capacity building on Corporate Social
	Responsibility projects
Examples	In 2000, PETA (People for the Ethical Treatment of Animals) launched a mass campaign for a blanket ban on leather products from India on account of cruel treatment of cows in Indian slaughterhouses. This resulted in several companies included big brands such as Gap, to stop purchasing from India. Subsequently the Indian government approached PETA for a collaborative approach to improving Indian animal handling methods, Subsequently PETA called off the campaign, since a constructive effort to improve animal conditions was forthcoming.
Constraints	Effectiveness of voluntary initiatives is in a best endeavour form; hence effective implementation has to be secured.
Effectiveness	Sector specific issues are well tackled. However this chain is more relevant for organizations with public faces. Small companies, especially those dealing in industrial markets may be less affected.

IV. Why aren't ecolabels popular?

Though a comprehensive study on the usefulness of different stakeholders and their tools, in promoting sustainable production is required in the field of B2B exports from South to North, this section restrict its scope to understanding the two questions (using the leather footwear industry as a case study):

- whether ecolabels, can suit as good indicators of sustainability and
- what is the **potential** of ecolabels as a tool to increase the **value** of imports from India to Europe.

Ecolabels in the paper refer to third party environment certification i.e. type three labels⁶. E.g. Indian Ecomark, European Ecolabel and the German Blue Angel.

Good indicators of sustainability encompass a holistic concept of sustainability, which takes into account social and environment issues as well as problems that are specific to that region.

The word "**potential**" unlike "success" is more forward looking. This research involves a survey to understand the views of relevant stakeholders regarding ecolabels. The use of the word "success' would make this research adopt a historical perspective.

The use of the word "**value**" implies an increase in exports due to increase in price, increase in volume or both.

Are ecolabels good indicators of sustainability?

The following table enumerates the key concerns raised by buyers' regarding Indian footwear exports, as revealed in the interviews of Indian exporters and European buyers.

Table 6. Success of ecolabels in addressing concerns of exporters

No.	Concerns	raised	regarding	the	Indian	leather	Do ecolabels provide the
	industry						solution

⁶ Refer Appendix 3 for details on types of ecolabels

1	Animal Mistreatment	No
2	Child Labour	No
3	Poor health and safety conditions and low ventilation in factories (sweat shops)	No
4	Minimum wages	No
5	Azo dye content in footwear ⁷	Yes
6	Pentachlorophenol (PCP) Content ⁸	Yes

From the above table it is clear that ecolabels do not serve as comprehensive indicators of sustainability.

What is the potential of ecolabels as a tool to increase the value of imports from India to Europe?

Though ecolabels are inadequate as comprehensive indicators of sustainability, this is however inadequate to render them useless as sales promotion instruments in leather footwear export markets. The research involved comprehensive interviews with relevant stakeholders i.e. Indian sellers, European sellers (retailers/wholesalers and like) and regulators regarding the usefulness of ecolabels to promote ecofriendly exports. The resultant output revealed the low popularity of ecolabels amongst consumers, business's as well as regulators. Perspectives from these three stakeholders are listed below.

Consumer perspectives: Reasons for low popularity of ecolabels amongst consumers in four European countries

Consumer organizations in all four countries were used a proxies for the view of the consumers.

⁷ In India, select azo dyes and PCP are prohibited for use in the leather industry, resulting in no added advantages by applying for ecolabels.

⁸ See above footnote.

Representations from consumer organizations and ecolabelling organizations revealed that consumers were unwilling to pay a higher price for ecolabelled footwear, which are more expensive than non ecolabelled footwear.

The leather footwear industry is best described as a fashion industry. In consonance with the normal phenomenon of fashion trends, footwear in general, do not have a long shelf life. Hence buyers are not so concerned about their eco friendly status. Further ecolabels do not contribute as status symbols or fashion statements.

There is no direct contact between the skin and leather footwear. In European markets as well as in India, there are strict regulations, which ban hazardous substances such as pentachrorophenol (PCP) and select azo dyes. Further the levels of formaldehyde and select heavy metals such as lead and chromium is also restricted by maximum residue legislations. Thus consumers are protected against hazardous substances and don't need special ecolabelled shoes for their safety.

An individual as a concerned citizen acts differently vis-à-vis an individual as a consumer. A consumer is more selfish, rational and believes in maximisation of value. On the other hand a concerned citizen may be concerned about how the shoes are manufactured. However during the purchase of shoes an individual seldom exercises his virtuous self, thus revealing higher preference for style, comfort and price over ecolabels.

In European countries the level of trust that citizens impart on the government is high. Hence consumers believe that the government will automatically ban any harmful chemical, without them having to exercise any purchasing choice.

Business Perspectives: Reasons for low popularity of ecolabels amongst sellers

In the four European countries surveyed (In addition to India) the number of ecolabels granted for shoes were as follows

Table 7. Footwear	Ecolabels in	select	countries
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Germany	The Netherlands	Belgium	UK	India
3	2	1	0	0

The approximate market share of ecolabelled footwear was not even 0.5 percent of total European footwear market.

The European and Indian businesses revealed the following problems regarding ecolabels

Ecolabels hamper innovation

Selected retailers interviewed, complained that ecolabels were quite backward looking and stymied innovation. The argument was that the time taken for granting an ecolabel was approximately 4 months. Further the label is generally valid for one year. The footwear industry is a highly fashion conscious industry and often companies' change their shoe patterns every year. Ecolabels are not given for the whole company, but for individual lines, there is a risk that the ecolabelled footwear may not live a shelf life of one year. Further the designing cycle starts one year in advance and there is seldom enough time to comply with ecolabels. Hence after receiving an ecolabel there is no guarantee that the footwear will remain on the shelf for two months. Thus companies do not want to invest in ecolabels when their production lines are so flexible and product innovation is so fast.

Ecofriendly production results in poor product quality

Select companies have tried experimenting with eco friendly products and have not been satisfied with their performance. Vegetable dyes are less fastening than their synthetic counterparts. Secondly vegetable dyes cannot be used for very dark finishes since they do not give the texture provided by synthetic dyes. There have also been attempts to replace synthetic glue with organic glue. However organic glue is less durable and four times more expensive. Thus ecofriendly products in the leather footwear industry are less efficient. The second corollary is that there could be lack of information about competent ecofriendly products, if any.

Companies are unable to pass on higher expenses

Retailers are aware that consumers are unwilling to bear any additional costs of ecofriendliness for footwear products, the way they are willing to pay more for organic food.

Ecolabels ignore social issues

Environment is not a big cause of concern in the footwear industry, unlike the case for industries such as fishing and mining. The bigger concerns relate to social issues such as child labour and animal mistreatment. Since ecolabels are unable to take care of these issues, they are not useful for buyers.

Ecolabels conflict with brand dynamics

Several companies have been particularly wary of ecolabels due to the following brand related problems.

- Brand Dilution

Companies invest huge amounts of money in establishing their brands. An ecolabel would require them to invest additional money in conveying what the ecolabel stands for. Since most companies have fixed advertising budgets, they would be required to divert funds from advertisements for their own footwear label. Further having a shoe with two labels will dilute the attention procured by the single label that was present earlier.

- Brand Diffusion

Branding as a subject is quite advanced. Companies align their brands to very precise meanings. Ecolabels are to be used by companies along with their own brands. This results in two brands on one particular product i.e. the footwear brand and the ecolabel. Often ecolabels do not match with what the brand is trying to convey resulting in brand diffusion. For example Benetton has always tried to convey a rebel image. A ecolabel on its clothing may diffuse this image.

- Brand Cannibalisation

Since ecolabels are given to individual product lines and not for all ranges, companies are unable to procure ecolabels for each and every footwear line. This results in ecolabelled footwear to compete with non-ecolabelled footwear. Often consumers question whether footwear without an ecolabel are made in an environmentally unfriendly manner. This would result in poorer sales of non-ecolabelled footwear.

- Corporate identity

Select companies want to promote the complete organization as being socially responsible and environmentally conscious. Since ecolabels are given to individual products lines, the company is unable to advertise the ecolabel for company promotions, unlike environment management systems such as ISO 14000 series. Thus ecolabels conflict with corporate identity statements. Hence quite a few companies prefer being endorsed for company wide environmental measures and not product specific measures.

The following table provides a brief understanding of the effect of ecolabels on buyer seller relationships, which render ecolabels to be less popular with businesses.

Variables	Effect of procuring an ecolabel on exports		
Increase in sales volume	Yes, for large buyers only if there is no/negligible price		
	premium. Further price, quality and style have a		
	forbearing.		
	No for small buyers.		
Price Premium	No, there is no market for ecolabelled Indian shoes in		
	Europe		
Conversion from short	Yes, intangible advantages exist, and client relationship		

Table 8. Effect of ecolabels on commercial aspirations of business

term to long term buyers	improves.
Conversion from B2B to	Yes, However Indian brands are not known in European
B2C exports (unbranded to	market. A niche entry can be made, but the market is
branded)	easily encroachable.

There exist substantial differences between the environmental and social concerns of large and small buyers, and the resultant verification processes. (Refer points 11 and 12 in Table 2, Section 2). Thus there is no commercial basis for adopting an ecolabel by an Indian exporter for promoting exports since ecolabels are primarily consumer labels and Indian producers, on an average do not have any popular consumer brand of footwear in Europe. Hence Indian producers find it convenient to focus on what the buyer wants, instead of ecolabels.

Regulatory Perspectives: Clarifying the role of ecolabels

Most environmentalists and regulators expect ecolabels to reduce pollution. This is a flawed concept in itself. Ecolabels do not reduce pollution. This will appear as a paradox to a number of policy makers dealing with environmental issues, but the arguments follows. Ecolabels are leadership labels. They are used to introduce best practises in environment management. Ecolabels are useful to indicate to industries, emerging practises for sustainable production. Ecolabels are beyond pollution control. They look at product life cycle management. Pollution reduction is to be tackled by domestic regulations and not by ecolabels.

Further ecolabels are consumer labels and not producer labels. They are expected to change consumer behaviour, on account of which producer behaviour may alter. Hence ecolabels should be used where consumers can exercise rational and selfish choice. Hence organic food labels are very successful in Europe since consumers are concerned regarding their own health.

Thirdly regulators are not expected to mass popularise ecolabels. Ecolabels are niche products that serve niche markets. This is factored in the ecolabel design. The moment most companies in that particular industry reach the levels of the ecolabel, the same would be upgraded to a higher level.

Fourthly ecolabel is not an alternative to environmental legislations. Environmental legislations are expected to reduce pollution. Ecolabels are more general while environmental regulations are more customised to geographic locations. This results in several instances where ecolabel criteria are lower than environmental regulation criteria. The case of the Indian ecolabel for footwear provides an interesting example. One of the ecolabel criteria for footwear is to obtain the "No Objection Certificate" of the State Pollution Control Board. The State Pollution Control Board in Tamil Nadu has imposed strict regulations for restricting the level of TDS (Total Dissolvable Salts) that are found in industrial effluent of tanneries because they pose a hazard to potable ground water, which is scarce in the state. This criterion can barely be met by 5 percent of the tanneries. However these tanneries could easily qualify for the ecolabel if they existed in another state. This clearly reflects on the possibility of domestic legislations to be higher than ecolabel legislations.

V. Policy Measures

The following represent concrete approaches to promote sustainable development via sustainable production. This paper steers away from conventional broad generalisations regarding policy options, and targets few select and novel solutions, that would prove to be of immense value for environmental policies of developing countries.

Environmental toolkit approach

Regulators in developing countries need to look at a comprehensive toolkit of policy options to choose from. These include mandatory legislations, voluntary tools such as ecolabels, moral persuasion as well as apt application of deterrents and incentives.

The following examples would provide clarity to the toolkit approach Mandatory Instruments: Ban on use of certain chemicals Voluntary instruments: Ecolabels Moral Persuasion: Separation of wastes before disposal Incentives: Subsidies on purchase of waste treatment facilities Deterrents: Penalties on disposal of wastes without treatment

The environment toolkit is gaining immense popularity in Europe and holds tremendous promise for developing countries. Another important element of the environmental toolkit is differentiating the targeting strategy for sustainable production as per products and market conditions.

Most governments in developing countries have a single environment ministry framing a common environment policy. There is greater need for customisation of policy approaches as per different sectors. The following is a brief example of which stakeholder should the government target to promote sustainable production, in given market environment.

 Ideal conditions for targeting buyers in a B2B market number of buyers are small. E.g. coffee industry buyers are big businesses. E.g Automobiles buyers are located in close geographic spaces. E.g Vineries

Ideal Conditions for targeting sellers
Number of sellers are small E.g. Petrol in India
Sellers are big businesses. E.g. Refrigerators in India
Sellers have a public face E.g. big brands such as Adidas and Nike

Ideal conditions for targeting final consumers
Products, which are of health concern. E.g. food products
Products, which permit consumers to exercise their rational and selfish motive e.g. textiles which are free from carcinogenic dyes.

It would be apt to introduce the highly popular concept of "Integrated Product Policy⁹" that forms the crux of the environmental policy framework of the European Union. The concept of Integrated Product Policy IPP comes from the trends of the 5th Environmental Action Program of the EU of 1992, that, in facing the subject of the Sustainable Development in terms of policy and implementation instruments, proposed a new approach based on the investment with responsibility of all the involved parties (authorities, citizens and enterprises).

The IPP revolves around the concept of integration:

 analytic integration that aims at the analysis of the environmental performances for the whole life cycle, considering the impacts on all the environmental themes/sectors of reference;

⁹ Refer Appendix 4

 implementative integration that aims at the integration of many typologies of environmental policy instruments at disposal for reaching the environmental objectives, trying to use the possible complementary synergies.

There is growing consensus in several European ministries that there is need to focus more on producers and less on consumers for promoting sustainable production. Marketfriendly mechanisms that require the consumer to exercise consumption choice as a virtuous citizen vis-à-vis a rational consumer have been unsuccessful. A simple example in the leather footwear industry reveals this trait. Parents are very conscious while buying leather footwear for infants, since some infants are habituated to putting their feet in their mouth. Hence parents may buy ecofriendly leather footwear for their infants. However infant leather footwear is a negligible percentage of the total footwear market, accounting for less than 0.1%. On the other hand parents are not concerned about ecofriendly footwear for their own feet. In Environment ministries and ecolabelling organizations, in all the four countries of the field research, have reiterated the same.

Eco-Elasticity: A new tool for understanding the responsiveness of industry to environmental regulation

Though use of market mechanisms may not result in optimal outcomes, there is no justification for introducing environmental legislation that is detrimental to enterprise. Regulators across the globe suffer from a policy bloc, which is a result of integrating the multi-polar views of consumer lobbies, business lobbies and environmentalists for framing a particular policy. On one hand the regulator has to ensure that legitimate demands of consumer and environment groups are taken care of, on the other hand they have to ensure that additional legislation does not stymie the growth prospects of the industry. There is a very thin line between the two. Inadvertently, policy makers (assuming that they are honest and devoid of business interests) tend to align with the environmentalists for three reasons, firstly to show that they are quite concerned about

their citizens, secondly to align to the interests of their vote banks and thirdly to show that they keep hands length from the business community.

Sometimes this results in creating a disincentive for businesses, which may result in their movement to greener pastures. In case of serious concerns such as carcinogens and ozone depletion, the government should prioritise sustainable production over efficient production if ever there is a conflict of interest between the two. However in a situation where the environmental legislation (introduced due to pressure from green groups) will not result in substantial advantages for the environment, but will drastically affect the costs imposed on businesses, there is need for reconsideration, as the economic incentive for entrepreneurship is lost. It is here that there emerges the need for additional tools to assess the effect of any environmental legislation on businesse. *"Environment Elasticity"* is an idea that can serve as one of the tools to study the above-mentioned dilemmas.

Industries have begun to pay attention to the environmental effects of their business and are trying to be more and more environmentally responsible. But different industries have different degrees of interaction with the environment. Most service sector industries such as financial services, insurance services have very little effect on the environment except indirect links via their investments. On the other hand select manufacturing sector industries such as cement, thermal energy, wood processing etc have greater impact on the environment. This is where the concept of eco elasticity comes in. Environment elasticity can be defined as the degree to which the establishment of a particular industry is influenced by environmental concerns. Environmental regulation plays a very important role in pollution intensive industries as leather, while it plays a very small role in industries such as insurance. Hence it is important to understand objectively, the degree to which environmental issues are important in that particular industry. A higher elasticity will mean that the industry is most likely to recede or migrate if environmental regulation is heightened, while a low elasticity would mean that the industry is least likely to migrate or recede if environmental regulation is heightened.

After providing a broad idea regards the concept of environment elasticity it is necessary to understand how to measure it. Which variables do we consider? How do we establish a relative value that could facilitate comparison across all industries? This is the core research theme. How to measure environment elasticity of an industry? Two important variables are listed below:

- Cost of environmental compliance: If the cost of compliance/total sales is high the value of the indicator will be higher, otherwise lower
- Pollution level of the industry (Classified by relative scale on the basis of most polluting to least polluting industries): If the total average emissions of the industry i.e. air, and water are high, the value of this indicator will be high.

Environment Elasiticity i.e. Ee = Change in cost of environmental compliance/change in magnitude of environmental legislation

Cost of compliance is measured as both direct and indirect including time costs of management and additional man-hours, stringency, harassment effect etc

The eco-elasticity indicator will be used for public policy, which includes trade policy, FDI Policy, Industrial Policy and most importantly Environmental Policy. Commercial organizations will use the same to factor environmental policy in investment decisions.

Introducing comprehensive sustainability labels

The field research revealed that ecolabels were inadequate to deal with bigger social issues such as use of child labour, labour standards as well as factory sanitation. In countries like India and China, these social issues are of higher priority than environmental issues. Further NGOs are applying immense pressure on developed country importers to ensure that their suppliers comply with social standards. Hence there is growing need for labels that are more flexible and can validate a comprehensive number of social and other criteria. The Institute for Applied Ecology, Germany, has

introduced a new sustainability label, CSM 2000¹⁰, which provides scope for comprehensive labelling as per the request of the buyer. This includes quality standards, environmental standards and social standards. Exporters, to gain added leverage in markets where prices do not offer scope for competing, can use credible sustainability labels.

Government to project ecolabels as reference/leadership labels

Select European regulators express that ecolabels are hyped instruments in international trade. Countries have begun to realise that ecolabels cannot be mass promoted. They need to serve the purpose of leadership labels. This implies that companies may not apply for ecolabels but may follow the standards prescribed in the ecolabels as reference standards and accommodate them in their own supply chains. Further only those companies who are leaders in Corporate Social Responsibility (CSR) will adopt ecolabels for adding to their socially responsible image.

Mandatory legislations necessary for defence against environmental evils

Most importers instruct their suppliers to follow "law of the land." Thus domestic exporters especially smaller companies comply only with necessary regulations. Thus the government should not pass on its role towards sustainable development to market mechanisms. In the leather footwear industry, the government should ensure that adequate regulations exist that prevents companies from practising socially irresponsible production. The eco elasticity indicator (explained above) can be used as a good indicator for better understanding of threshold limit of environmental legislation.

¹⁰ For information on comprehensive sustainability labels refer to CSM 2000 Label, introduced by the Institute for Applied Ecology, Germany (<u>www.ecotex-consortium.org</u>)

Transparency in supply chains of exporters

In the field research, all buyers mentioned that they would prefer their suppliers to be more transparent. If suppliers are able to open their supply chains for scrutiny and establish transparent, well documented and clean sourcing practises, there would be no need for them to go in for any label. Good accounting practises, using a supply chain management (SCM) system and adequate documentation throughout the supply chain will prove to be better sales pitches than ecolabels.

Appendix 1. Research Methodology

This research paper uses an asymmetric, flexible and stakeholder oriented research methodology that integrates preliminary theoretical research with subsequent stakeholder interviews/dialogues. Subjective stakeholder representations form an important element of the research. Stakeholders are interviewed and subsequent interviews build up from data and inputs received from previous interviews.

Further stakeholders are expected to speak their mind and there is no attempt to restrict their general views on the subject. The interviewer is armed with in depth reading on the subject and a subjective questionnaire that guides the issues in the interview. An average interview duration extends beyond one hour. The interviewer then obtains all secondary material i.e. the research done by the stakeholder and embeds that in his work. Subsequent to the broad interview, specific and targeted questions are asked wherever information gaps are discovered.

For this paper, the researcher conducted an intensive dialogue with the stakeholders in the Indian leather industry, i.e. leather footwear manufacturers and exporters, merchant exporters, leather trade forums and relevant government and regulatory officials. This was in the form of comprehensive surveys, discussions and field visits which studied the key issues and problems faced by the industry and the utility of ecolabels in promoting exports of sustainable leather footwear.

The researcher engaged in face-to-face discussions with European buyers, eco-labelling organizations, non government organizations and policy makers responsible for establishing EU standards regarding environmental regulations on imported leather products and methods adopted to promote sustainable production and consumption.

Quantitative information of interviews conducted in India

Zone	Number of	Companies with	Companies with
	companies	turnover above US\$	turnover below US\$
	interviewed	45000/-	45000/-
New Delhi (North)	9	2	7
Chennai (South)	9	6	3
Mumbai (West)	3	1	2
Kanpur (East)	5	3	2
Total	26	12	14

Non commercial Organizations interviewed	Number
Government Pollution Control Departments	2
Environment NGOs	2
International Agencies	2

Quantitative information of interviews conducted in Europe

Country	UK	The Netherlands	Germany	Belgium
Commercial	6	5	5	2
Organizations ¹¹				
Environment NGOs	2	4	4	1
Relevant Ministries ¹²	2	2	2	4

Broad Methodology of conducting interviews

Average duration per interview: 1 hour (India), 1.5 hours (Europe)

Interview Format: Personal interview with the help of a Subjective Questionnaire, Interviewer to lead the interview.

 ¹¹ Commercial Organizations include Industry Representations
 ¹² Apart from individual meeting a small interactive group discussion was also held with DG Environment, DG Enterprise and DG Trade at the European Commission Office in Brussels

Average number of interviews per day: 1.8

Generalisations in research paper: Generalisations are made for views that are supported by more than 80% of interviewees

Appendix 2. Reason for selecting Europe for the research survey

The EU is India's biggest market for leather and leather products. It accounts for 65 percent of Indian leather exports. Germany alone accounts for 23 percent of exports to the EU. Stronger consumer lobbies and environment groups in the EU and the resultant increase in environmentalism has led more and more EU member countries to adopt stringent domestic environmental standards. Because of this consistent tightening of environment pollution norms, especially chemical residue in effluents, leather production has been shifting from Europe to countries like India and China. However, with the emergence of global environmentalism and new means of extraterritorial jurisdiction, some of these measures are being applied to leather and leather products that are imported from other countries as well. The argument is that poor environment protection in other countries imposes negative externalities for the importing country, whose domestic producers adopt stricter compliance. On the other hand as WTO rules impose restrictions on mandatory environmental regulations on exports, voluntary mechanisms such as ecolabels are gaining ground.

India initiated an ecomark scheme for leather and leather products along with 15 more products in 1991. However the scheme has failed to attract a single applicant after 12 years of its operation. Though the Indian eco-labelling scheme is based on a similar "life cycle analysis" criteria and adopts environment standards equivalent to those applied internationally, the European Union does not recognise its certification. This has led to low compliance with the Indian eco-label (called Ecomark) since it does not help in the export market, and the environmental consciousness of the domestic market is quite poor.

Thirdly, there are too many European environment labels, most of which are not harmonised, resulting in additional costs for exporters since all incur separate fixed and variable costs for certification, consultation and other expenses. A majority of Indian firms have financial and technological capabilities that are too limited to adopt multiple eco-labels. All this can allegedly lead ecolabels to become non-tariff barriers.

Hence, the focus area of this research paper is environmental labelling in leather footwear exports from India to Europe.

Appendix 3. Three types of ecolabels¹³: ISO

Type I labels compare products with others within the same category, awarding labels to those that are environmentally preferable through their whole life cycle. The criteria are set by an independent body and monitored through a certification, or auditing, process. Ranking products in this way requires tough judgement calls: consider two otherwise identical products, one air polluting, another water polluting. Which is superior?

Type II labels are environmental claims made about goods by their manufacturers, importers or distributors. They are not independently verified, do not use pre-determined and accepted criteria for reference, and are arguably the least informative of the three types of environmental labels. A label claiming a product to be "biodegradable," without defining the term, is a type II label.

Type III labels list a menu of a product's environmental impacts throughout its life cycle. They are similar to nutrition labels on food products that detail fat, sugar or vitamin contents. The information categories can be set by industrial sector or by independent bodies. Unlike type I labels, they do not judge products, leaving that task to consumers. Critics question whether the average consumer has the time and knowledge to judge whether, for example, emissions of sulphur are more threatening than emissions of cadmium.

¹³ Source: IISD (2004)

Appendix 4. Examples of Possible instruments and their components in Integrated Product Policies¹⁴

Instruments	Possible Components
Voluntary instruments	Voluntary agreements
	Self-commitments
	Industry awards
Voluntary information instruments	Eco- labels
	Product profiles
	Product declarations
Compulsory information instruments	Warning labels
	Information responsibility
	Reporting requirements
Economic instruments	Product taxes and charges
	Subsidies Deposit/refund schemes
	Financial responsibility
Regulatory instruments	Bans/phase-outs
	Product requirements
	Mandatory take-back

¹⁴ Source: Martin Charter, Young, Kielkiewicz-Young and Belmane (2001) "Integrated product policy and eco-product development" The Centre for Sustainable Design, UK, Greenleaf Publishing