

Full Length Research Paper

Green marketing or green wash? A comparative study of consumers' behavior on selected Eco and Fair trade labeling in Sweden

Atiq Uz Zaman*, Sofiia Miliutenko and Veranika Nagapetan

Environmental Engineering and Sustainable Infrastructure, KTH, Sweden,

Accepted 23 June, 2010

Green marketing is in the focus of present marketing strategy due to the pressure that comes from inclined environmental awareness in the global climate change. Different initiatives have been considered to support environmental programme and practices and one of the meaningful business initiatives is eco or fair trade labeling. Eco-label provides the information of product contribution in the context of environmental burden to the consumers. Different label initiatives are available in the present business market as a provider of 'white goods', however, the basic principles of the label initiative are ignored in most of the business practices. The study compared eight selected eco-brands which were used on the Swedish market. Comparison was based on environmental justice and ecosystem services perspectives. The study showed that most of the eco brands do not comply with environmental justice and ecosystem services in their label policy initiatives. Moreover, there is a gap between policy and practices. Questionnaire survey showed that environment is an important criterion for consumers while purchasing consumer products. Eco-label is an important tool; however, this tool is not communicating to consumers to its expected role.

Key words: Green marketing, eco-label, consumer behavior, environmental justice.

INTRODUCTION

The world summit on sustainable development (WSSD) in Johannesburg in 2002 has been used as a benchmark (Wapner, 2003) of accelerating the global environmental politics. Marketing strategy in Europe and other parts of the developed world has been shifted from the traditional to the sustainable green marketing strategy after WSSD. However, environmental marketing policy appears as 'green wash' rather than 'green hope' (Lightfoot and Burchell, 2004) in the last decade. Over-consumption in the developed world and related environmental problems raised a number of environmental movements and reactions in last few decades. Eco-labeling is one of the initiatives that started several decades ago in order to mitigate impacts from our consumption patterns by promotion of environmentally friendly products. Eco-

labeling can be seen as a representation of the trend to deregulate environmental protection by allowing industry to make the decision of whether or not to apply for the label and allowing consumers to decide to shop accordingly (Gertz, 2005).

Appearance of environmentally concerned consumers and new eco-products formed new "green market". The emergence of this market caused a lot of expectations that many consumers in most of the European countries would switch for "greener" products. However, this movement was slowed down by lots of unclearness and contradictions in eco-labeling schemes as well as by conflicts between different labeling initiatives.

There are lots of different eco-labels which try to deliver environmental claims, but they are often unclear and that makes it harder for the consumers to perform their decisions. Thus consumers cannot be sure which environmental problems are addressed by the product or how environmentally friendly their choice is. The study aimed to identify the weakness of eco-label initiatives in

*Corresponding author. E-mail: atique@kth.se. Tel: +46-720 250 199

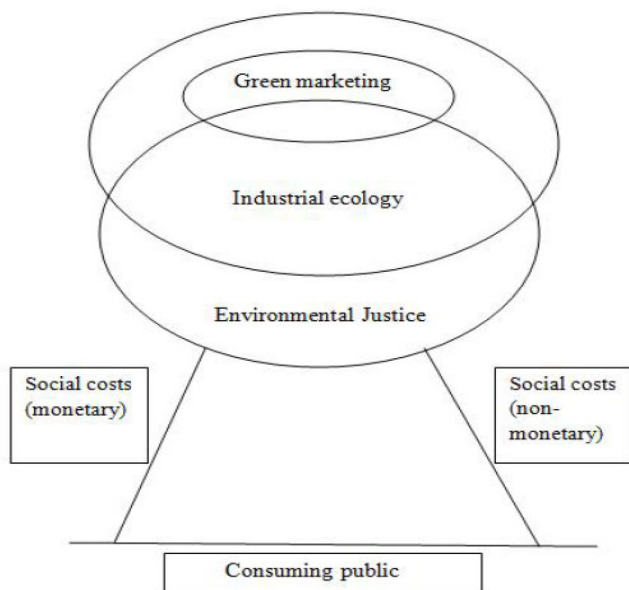


Figure 1. A conceptual relationship among industrial ecology, green marketing and environmental justice (Oyewole, 2001)

the context of environmental justice and ecosystem support perspectives by comparing some selected eco and fair trade labels used in Sweden. Eco-level initiatives were primarily taken to consider equity context as a whole (social, economical and environmental). However, these initiatives sometimes failed to fulfill the prime aim and sometimes company use eco-level initiatives as a medium of green wash rather than green marketing. Therefore, in this study we tried to relate ecosystem and environmental justice with the context of eco-level initiatives. Moreover, the study aimed to compare the efficiency of different label initiatives based on a pilot survey among consumers of eco-products.

METHODOLOGY AND METHODS

The methodology used in the study was literature review and a case study of selected eco-labels used on the Swedish market. Comparative study has been done in order to analyze the criteria for considering eco-label and business policy and practices. Therefore, selected eco-labels were analyzed by considering the following issues: green marketing, ecological preservation (ecosystem support), environmental justice and environmental sustainability context. Moreover, a pilot survey was conducted among eco-product consumers (Swedish citizen as well as non-Swedish citizen) in Sweden. Outcome of the pilot study was considered as the justification of the efficiency and recognition of eco-labels by the consumers.

The study was primarily based on secondary data like literature review. Primary data were collected by pilot case study and analyzed to support the conceptual framework. The study followed a theoretical framework developed by Oyewole (2001) conceptual relation among industrial ecology, green marketing and environmental justice (Oyewole, 2001) make it clear how eco-label through green marketing can be a tool to ensure equity in different socio-

economic and environmental perspective. Figure 1 shows the relationship between green marketing, environmental justice and industrial ecology as per Oyewole (2001).

Conceptual framework

Green marketing

The concept of 'green marketing' is the business practice that considers consumers concerns with regards to preservation and conservation of the natural environment (Coddington, 1993). Green marketing that has been previously and primarily focused on the ecological context has been shifted to more sustainability issues in the marketing efforts and main focus now is in socio-economic and environmental context. Whereas, green market is identified as a part of market segments based on the 'greenness' of the consumer (Charter et al., 2002; Simintiras et al., 1994). Therefore, green marketing is now dealing with fair trade of socio-economical benefits as well as environmental responsibilities through the green business.

Environmental product declaration (EDP)

Different green marketing tools are available without a common communicating framework. The lack of reliable communication tools is anticipated to become an important barrier to design and sell products with improved environmental performance (Zackrisson et al., 2008). Therefore, a common declaration practice was necessary and ISO/TR 14025 provides a guideline on environmental product declaration. The concept of environmental product declaration (EPD) is the quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards (GEDnet, 2004). The intent of an EPD to provide the basis of a fair comparison of the environmental performance of products. EPDs are based on ISO/TR 14025 (ISO, 2000) and have been made operative in countries including Finland, Italy, Japan, Norway, Poland and Sweden (EDP 2009).

Eco-labeling

Eco-labels have emerged as one of the main tools of green marketing (Rex and Baumann, 2007) by conveying information about consumers' demands for environmental protection (Bruce and Laroia, 2007) through product labels. As a resource protection tool (Charles, 2009) eco-label ensures that, concise and specific measures have been taken for certain product in order to avoid or limit undesirable externalities on the ecosystem and the environment (Boude et al., 2005). However, the concept of "white goods" (Bleda and Valente, 2009) through eco-labeling does not ensure environmental sustainability all the time. There are different types of eco-label such as mandatory (EU energy label) and voluntary (eco-label) are available in practices based on different environmental context (environmental preservation, climate change, carbon credit, environmental performance, ecological etc.). Voluntary labels are classified according to the ISO standard into three groups: type I (ecolabels-most often research one), type II (self-declared environmental claims) and type III (environmental product declarations where quantified environmental information is presented in a standardized way) (Leire and Thidell, 2005).

Environmental justice

"Environmental justice" has been defined as "the pursuit of equal justice without discrimination based on race, ethnicity, and/or

Table 1. Selected European eco-labels and key features.

Eco-labels	Product category, initiatives
Svenskt Sigill	Poultry and dairy products, foods and homemade items.
EU Eco-label	Indoor paints and varnishes, Copying and graphic paper, Footwear.
Forest stewardship council	Forestry and wood product.
KRAV	Organic production (import and export).
Fair trade	Agricultural products (bananas, coffee, dried fruits, wine grapes, nuts, juices, spices etc), and some manufactured products (cotton).
Dolphin safe	Tuna-fish.
Marine stewardship council	Marine food.
Nordic Svan	67 different product groups (from washing-up liquid to furniture and hotels).

socioeconomic status concerning both the enforcement of existing environmental laws and regulations and the reformation of public health policy" (Chavis, 1993). Environmental justice (EJ) is a holistic effort of social and environmental movements which is trying to establish equity among people on the earth. It is strongly believed that EJ started when the protest took place against PCB (Polychlorinated biphenyl) landfill in Warren County, North Carolina in 1982. There are different ways to address environmental justice (Agyeman, 2005).

According to the Commonwealth of Massachusetts (2002) "Environmental justice is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies and the equitable distribution of environmental benefits."

Ecosystem services

Ecosystem services are the processes through which natural ecosystems and the species that make them up, sustain and fulfill human life (Daily, 1997). Economic theory recognizes four kinds of capital: human, financial, manufactured and natural. Ecosystem services are the equivalent of 'natural capital' (Chee, 2004). The Millennium Ecosystem Assessment (2005) as "the benefits people obtain from ecosystems." These benefits include food, water, timber, cultural values, etc. and are the outcomes sought through ecosystem management. Ecosystem services are the goods or services provided by the ecosystem to society and provide the basis for the valuation of the ecosystem. The study tried to consider these entire conceptual themes and to co-relate with practical applications and gaps on the business market. Therefore, the study analyzed eight selected eco-labels used on the Swedish market. The comparison was based on environmental justice and ecosystem support context.

Selected eco and fair trade labels

A market study in Stockholm was done in order to choose the most popular eco-labels in Sweden. As the result of this study, the chosen eco-labels were Svenskt Sigill, EU eco-label, Forest Stewardship Council, Marine Stewardship Council, Fairtrade, Dolphin safe, KRAV and Nordic Svan. Table 1 shows the features of selected eco-labels. The study was based on several analytical baseline criteria and these criteria were selected to support the

conceptual framework. It was analyzed whether these criteria were followed by the selected eco-labels or not. Moreover, the efficiency and recognition of eco-labels are analyzed by a pilot survey among different types of consumers.

The baseline criteria are as follows:

1. Environmental protection from "cradle-to-the grave"
2. Sustainable management of natural resources
3. Labor standards
4. Corporate social responsibility
5. Communication with consumers
6. Transparency within product supply chain

Selected brands analyzed by the above criteria whether the policy instrument performed by the company complied with the national and international standards. Moreover, the study identified the gap between the policy and practice of the studied eco-label brands.

RESULTS AND DISCUSSIONS

Criteria analysis

Criteria are analyzed by the relevance level with ecosystem support, environmental justice and credibility of the company policy and practices and three different levels are considered such as (i) high level of relevance by symbol☺, (ii) relevance with gap by symbol☹ and (iii) no relevance by symbol☹ (Table 2).

Reflections of criteria in the selected case study

Fair trade

The main principle of fair trade is the fair share of profit among the bottom level of supply chain to alleviate poverty by guaranteeing trading fairness for better living and sustainable farming practices promotion. However, limitations of labeling scheme as short supply chain coverage cannot ensure objectives achievement and thus fair trade principle cannot be guaranteed throughout the whole supply chain. There are also failures in communication with consumers. This labeling scheme is

Table 2. Criteria analysis of selected European eco-labels.

Eco-labels/Criteria	Environmental protection from “cradle-to-the grave”	Sustainable management of natural resources	Labour Standards	Social Responsibility	Communication with consumers	Transparency
Svenskt Sigill	☺	☺/☺	☺	☺	☺	☺
EU eco-label	☺	☺	☺	☹	☺	☺
Forest stewardship council	☺	☺/☺	☺/☺	☺/☺	☺	☺
KRAV	☺/☺	☺/☺	☺	☺	☺	☺
Fairtrade	☺/☹	☺/☹	☺/☺	☺	☺	☺
Dolphin-safe	☺	☹	☹	☹	☺	☺
Marine stewardship council	☺	☺/☹	☺/☹	☺/☹	☺	☺
Nordic Swan	☺	☺	☺	☺	☺	☺
Ecosystem support-col 2&3	Environmental justice-col 4&5		Credibility of the labels-col-6&7			
☺-high relevance	☺-relevance with gaps	☹-no relevance	☺/☹- policy/practice			

failing to distinguish between companies that are entirely committed to fair trade and those that have simply added a fair trade product to their range. It does not help to reduce conflicts in consumer choices between environmentally friendly product and product ethically attractive. Even though many farmers do use traditional and sustainable techniques, there is no clear distinction between them (Thomas, 2007).

Forest stewardship council (FSC)

The main objective of FSC is in accordance with sustainability principles, “meeting the social, economic and ecological needs of present and future generations” by promoting environmentally appropriate, socially beneficial and economically viable management of the world’s forests. In general, main principles, such as biodiversity protection, rights of indigenous people, labour standards, reflect integration of environmental justice and ecosystem support perspectives. However, the loopholes are found in the fact that the principles of the scheme are general and thus objectives cannot be achieved indeed. There are evidences for transparency criteria compliance, for instance dialog between FSC and 3rd parties taken place and certificates were withdrawn from companies which violated the FSC’s mandate.

KRAV

KRAV mainly focuses on organic production and based mostly on International Federation of Organic Agriculture Movements (IFOAM) rules. It complies well with transparency criteria and was the first control organization at the international level to be accredited as IAP (International Accreditation Program). KRAV scheme is among the highest recognized and has high credibility

according to researchers conducted (Nilsson et al., 2003). Though, still there are some gaps in criteria for environmental concerns. There is a tendency for “over packing” the products with both paper and plastic films, which are not the best expression of environmentally friendly production (Menghi, 1997).

Furthermore, there is weak integration with social issues and environmental justice. “Organic” production is defined as process where environmental and social concerns are integrated as well as in KRAV standards social responsibility named among four pillars of KRAV credit values, together with sound natural environment, sound care for animals and good health.

Dolphin- safe labeling

Dolphin-safe tuna labeling was one of the many responses to concerns about tuna-fishing practices in which fishermen encircled dolphins with their nets, frequently entangling and killing the dolphins. But still this label did not manage to realize the ecosystem support and environmental justice on practice. Concerning the environmental justice perspective, Dolphin-safe leads to social costs to the government’s actions. It has already been noted that many fishing fleets moved their operations to the western pacific. Indeed, foreign fishing fleets, which could not always afford to fish so far away from home ports, argued that they bore very high costs as a result of the embargo and the pressure to change fishing techniques (Mitchell, 2007). From the perspective of ecosystem services, the only emphasis on the ‘dolphin-safe’ technique damaged other parts of the ecosystem (for example, turtles) (Frisk, 2008)

Nordic swan

One of the most credible nationally recognized

certification schemes (97% of Swedes both recognizing it and understanding what it stands for). As prime criteria Nordic Swan includes environmental, quality and health arguments and environmentally sound products and services. Life cycle assessment principle can be considered as one of the main strengths of the initiative as well as good transparency scheme with involvement of variety of stakeholders. It was criticized for product groups' choice. It claims to control products which are related to highest environmental impacts or the broad scope of use and the labeling initiatives of these product groups could make a difference but the potential of direct influence on the total environmental load in society is limited by the fact that the label does not cover areas such as transportation and food products (Reinhard et al., 2001).

EU flower

EU flower is one of the few label initiatives, which aimed to cover environmental impacts during the product's whole life cycle. Moreover, it complies with transparency criteria.

The main critique for this labeling initiative is procedural and organizational problems as a weakness as well as short product lifecycles. Among the various issues concerning sustainability, 'consumer health and safety' is already considered, however, ethical issue like fair trade is not considered yet.

Svenskt sigill

This is an initiative which envisages cultivation of crops in an organic way, currently involving around 620 farms. The aim is to conserve traditional way of farming in Sweden and at the same time promote biodiversity, reduce the impact of fertilizers and pesticides and ensure a safe circulation of nutrients between city and countryside while ensuring production quality. Social functions are carried out as well, such as protection of cultural heritage (Nilson, 2002). This is example where eco-system support perspective found its reflection. Though there is no any direct connection with environmental justice perspective. As well as, there are weaknesses still such as permission of use of pesticides and fertilizers.

Marine stewardship council (MSC)

This label initiative aims fish stock preservation by sustainable fisheries management. It failed in sustaining its standards as it is not applying them evenly. It is criticized for its inability to certify fisheries in developing countries and its lack of attention to labour problems in the fishing industry (The ecologist, 2007). The MSC initiative sees

'free markets' as means for efficiency and has been criticized for that as in most of developing countries regulation cannot yet be replaced by democratic institutions of free market. So issue of fair trade share is not addressed in the MSC policy level. This can cause situation when small-scale fisheries are opposed to large-scale fisheries and their environmental and social consequences such as losing control over coastal resources. Small fisheries will lose their autonomy as well as possibility of getting fair share in trade profits (Kurien, 2000).

Results of the pilot questionnaire survey

The results of the questionnaire showed that 50% of Swedish citizens have chosen environmental concerns as their choice criteria when buying any product, which can be compared with 25% of foreign consumers. Only 33% of the consumers consider labour standards as important criteria for eco-labeled product and 57% of the interviewers include animal care instead (Figure 2). The study of Nilsson (2003) concludes that environmental aspects include many dimensions such as animal welfare, health, ethics and taste.

In a number of studies it has been shown that health and environmental concerns are major reasons why people become aware of eco-labeled products. The fact that environmental concerns are higher among the consumers than the social concerns can probably be explained by the fact that compared to the fair trade products, the market exposure of eco-concerns has been greater and over a long time duration. However, it was also observed that other consumers could be positive towards a fair trade product without showing the same positive attitudes towards an eco-labeled alternative. These consumers are ethical but not necessarily environmentally friendly. 100% of Swedish respondents usually check where the product was produced, while there are 17% of the foreign residents who do not check the place of production (Figure 3). It was also seen from the Figure 3 that about 40% of the consumers care about the local production and labour standards. It is observed that KRAV is the most popular eco-label among Swedish citizens (Figure 4). The same results were also proved by the study made by KRAV which revealed that 93% of the consumers in Sweden are familiar with this label. Another label that is mostly used by the Swedish consumers is Nordic Svan. Fair trade and Sveskt sigill take third and fourth place respectively. The biggest difference that can be observed between Swedish and a foreign consumer is that the most bought eco-label by foreign consumers is fair trade (Figure 5). Does it mean that they are more concerned about the social aspects than the environmental ones?

The received results can be explained by several reasons:

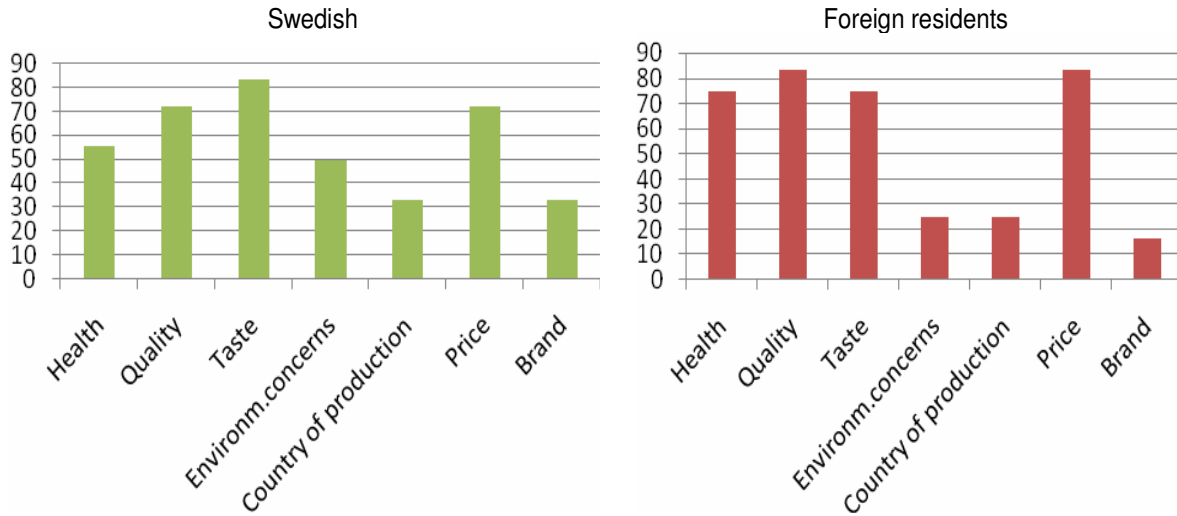


Figure 2. Consumers' product purchasing criteria.

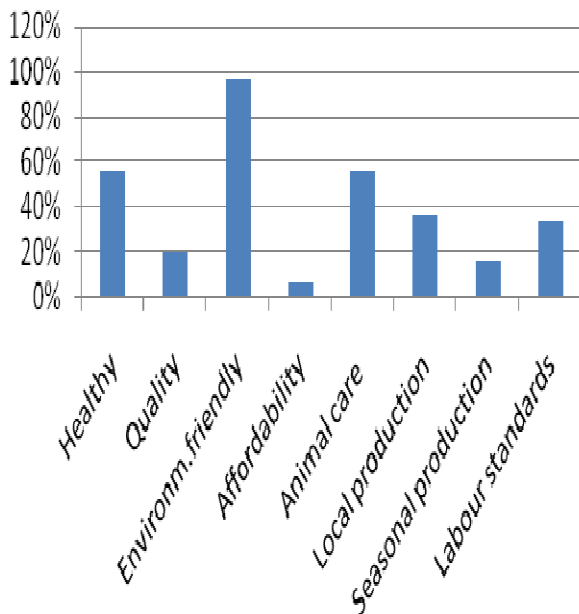


Figure 3. Comparison of consumer interest frequency in different criteria.

1. Fair trade is more recognized internationally, and foreigners simply not getting enough information about such Swedish labels as KRAV, Nordic Swan and Svenskt sigill (as the result of information gap).
2. Swedish consumers are more trusty with their national labels, independently on which issues they are concerned with and since fair trade label is not Swedish, people do not trust it so much.
3. There is a higher consumption level of eco-marketing in Sweden in comparison with other countries.

Key messages from questionnaire survey

The consumers are generally more concerned about ecosystem support perspective. Lower interest in environmental justice perspective can be explained by the smaller extent of awareness about these problems. But not all who are concerned about the "people" aspect are concerned about environment. Different local and national programmed can be taken to make the eco-level initiatives successful. On one hand, a credible nationally recognized eco-labeling program which integrates environmental justice (EJ) and ecosystem services (ES) perspectives would be a suitable tool to assist consumers in identifying credible schemes, but on the other hand, it is difficult to guarantee the credibility of the program (Nilsson, 2002).

Conclusions

Having performed the study, it was seen that there is no any eco-label that completely integrates both EJ and ES perspectives. From the literature analysis of the policy level and actual implementation of the most used eco-labels in Sweden, we may assume that those labels that have the highest level of EJ and ES integrations are Nordic Swan, KRAV and EU eco-label. But as it was discussed, they have many gaps in the implementation stage. Dolphin safe and marine stewardship council (MSC) lack the integration of environmental justice concept and moreover are also not effective in the ecosystems protection. The biggest weakness of the labeling schemes is that life cycle approach is not taken into consideration in most of the labels. Only selected elements of the production processes are considered, but not the whole chain. Most of the failures of the eco-

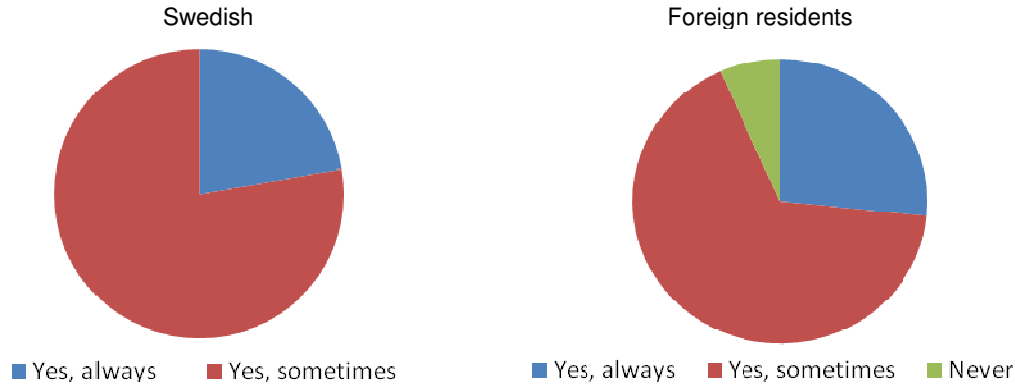


Figure 4. The frequency of the interest in the country of production.

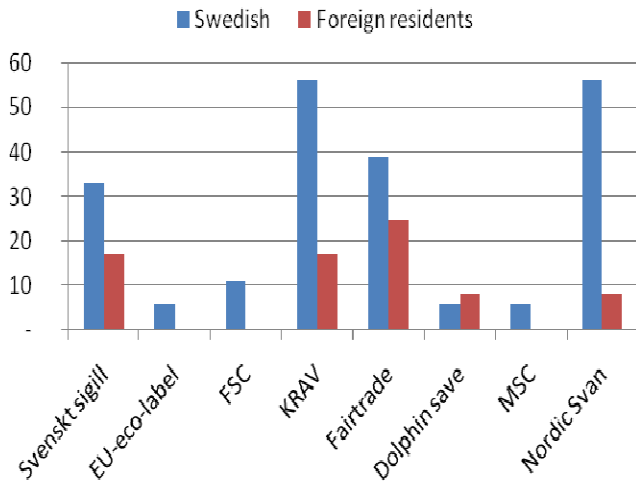


Figure 5. The frequency of the purchasing of eco-labels (comparison between Swedish and foreign residents).

labeled products are related with gaps in supply chain coverage. This limitation however, can cause damage to overall objectives of labeling initiative. There is a lack of trace ability and transparency in the current labeling schemes which does not help the consumer gain confidence in the products they buy. It is not possible for the average consumer to retain all the relevant information concerning the labeling on the products they buy. In spite of lack of integration of both EJ - ES perspectives, eco-labels initiatives have positive points as they are effective in the raising of consumers' awareness. The results of the studies show that environmental perspectives recently became more important and addressed in policies and consumers' behavior than 10 years ago.

REFERENCES

Agyeman J (2005). Sustainable Communities and the Challenge of Environmental Justice, NYU Press, ISBN: 9780814707111.
 Bleda M, Valente M (2009). Graded eco-labels: A demand-oriented

approach to reduce pollution, Technol. Forecast. Soc. Change., 76: 512-524.
 Boude JP, Charles E, Gouin S (2005). Label qualite´ et e´ colabel dans la pe´che artisanale, se´ rie rapport no R-Publications Amure., 3: 227.
 Bruce C, Laroya A (2007). The Production of Eco-Labels, DOI 10.1007/s10640-006-9028-9. Environ. Res. Econ., 36: 275-293,
 Charles E (2009). Eco-labeling: A new deal for a more durable fishery management, Ocean Coastal Manage., 52: 250-257.
 Charter M, Peattie K, Ottman J, Polonsky MJ (2002). Marketing and sustainability, Association with The Centre for Sustainability Design. UK: Centre for Business Relationships, Accountability, Sustainability and Society (BRASS).
 Chavis BF Jr (1993). 'Superfund: The Need for Environmental Justice, Equal Protection, and the Environment', Testimony before the Committee on Government, U.S. House of Representative, National Association for the Advancement of Colored People.
 Chee YE (2004). An ecological perspective on the valuation of ecosystem services, Biol. Conserv., 120: 549-565.
 Coddington W (1993). Environmental marketing, New York: McGraw-Hill.
 Daily GC (1997). Introduction: what are ecosystem services. In: Daily, G.C. (Ed.), Nature's Services: Societal Dependence on Natural Ecosystems. Island Press, Washington DC., pp. 1-10.
 EDP (2009). Environmental product declarations, EPD, <http://www.environdec.com> (accessed on 7th November).
 Frisk M, Testfakta (2008). Miljömärkt tonfisk hot mot sköldpaddor. Available on <http://www.testfakta.se/Article.aspx?a=53608> (Accessed on 25.09)
 GEDnet (2004). What is an environmental product declaration, EPD?, GEDnet, available on http://www.gednet.org/?page_id=13 (Accessed on 7th November 2009).
 Gertz R (2006). Eco-labeling-a case for deregulation. doi:10.1093/lpr/mgi010, available on <http://lpr.oxfordjournals.org/cgi/content/abstract/4/3/127> (accessed on 7th November 2009) Law Prob. Risk., 4(3): 127-141.
 ISO (2000). ISOTR 14025, Environmental labels and declarations-Type III Environ. label. Gen., ISO.
 Kurien J (2000). Are eco-labels the answer to sustainable fishing. Available on http://www.eurocbc.org/qn_ecolabels_the_answer_to_fishing_issu_e_newinternationalist_jul2000page1257.html (Accessed on 6th October 2008)
 Leire C, Thidell A (2005). Product-related environmental information to guide consumer purchases e a review and analysis of research on perceptions, understanding and use among Nordic consumers, J. Clean Prod., 13: 1061-1070.
 Lightfoot S, Burchell J (2004). Green hope or greenwash? The actions of the European Union at the World Summit on sustainable development, Global. Environ. Change, 14: 337-344.
 Menghi A (1997). Consumer Response to Ecological Milk in Sweden.SLU, institutionen för ekonomi. Uppsala. at: <http://chaos>.

- bibul.slu.se/sll/slu/forskningsnytt/FLN98-01/FLN98-01D.HTM (Accessed on 25.09.2008).
- Millennium Ecosystem Assessment (2005). *Ecosystems and Human Well-being: Biodiversity Synthesis*. World Resources Institute, Washington, DC.
- Mitchell L (2007). *Economics of Food labeling*. Online at: <http://www.ers.usda.gov/publications/aer793/aer793f.pdf> (Accessed on 25.09.2008)
- Nilsson H, Tuncer B, Thidell Å (2003). The use of eco-labeling like initiatives on food products to promote quality assurance- is there Enough credibility. Lund University.
- Nilsson H (2002). Total Quality Indicators for the Food Production Chain – Is there a need for more labeling. Published in "Proceedings for 5th International Conference on Chain and Network Management in Agribus. Noordwijk, Holland. Accessed on 1.10.2008 at: [http://www.iiiee.lu.se/Publication.nsf/\\$webAll/40A011460EC51678C1256EB000388E25/\\$FILE/Nilsson.pdf](http://www.iiiee.lu.se/Publication.nsf/$webAll/40A011460EC51678C1256EB000388E25/$FILE/Nilsson.pdf). Food Industry, pp. 6-8
- Oyewole P (2001). Social Costs of Environmental Justice Associated with the Practice of Green Marketing. *J. Bus. Ethics.*, 29: 239-251.
- Reinhard Y (2001). Evaluation of the Environmental effects of the Swan Ecolabel—final Analysis, available at: <http://www.norden.org/pub/velfaerd/konsument/sk/TN2001516.pdf> (Accessed on 5.10.2008)
- Rex E, Baumann H (2007). Beyond ecolabels: what green marketing can learn from conventional marketing, *J. Clean Prod.*, 15: 567-576.
- Simintiras AC, Schlegelmilch BB, Diamantopoulos A (1994) 'Greening' the marketing mix: a review of the literature and an agenda for future research. In: McDonagh P, Prothero A, editors. *Green management a reader*. London: The Dryden Press; pp. 413-434.
- Thomas P (2007). Report published in the *Ecologist* magazine on 1st April http://www.theecologist.org/pages/archive_detail.asp?open=y&content_id=898#1262 (accessed on 6th October 2008).
- Wapner P (2003). World summit on sustainable development: toward a post-Johannesburg environmentalism, *Global Environ. Pol.*, 3(1): 1–10.
- Zackrisson M, Rocha C, Christiansen K, Jarnehammar A (2008). Stepwise environmental product declarations: ten SME case studies, *J. Clean Prod.*, 16: 1872-1886.

