

The dualism of eco-labels in the global textile market. An integrated Indian and European perspective¹

Marthe Hårvik Austgulen, and Eivind Stø National Institute for Consumer Research, Norway
P.O. Box 4682, Nydalen, 0405 Oslo, Norway, marthe.h.austgulen@sifo.no; eivind.sto@sifo.no

Archana Jatkar, CUTS International, Jaipur, India

D-217, Bhaskar Marg, Bani Park, Jaipur 302016, Rajasthan, India; aj@cuts.org

1. Abstract

The main topic of this paper is the dualism of eco-labels and environmental standards in the global textile market. The paper is built upon a triangulation of data and methods, including interviews with stakeholders in Norway and India, Indian workshops and a consumer survey from five European countries (Norway, Sweden, Germany, France and the UK).

Through the stakeholder interviews it became evident that there is no substantial pressure from consumers, public authorities, design institutions or environmental organisations for eco-labelled clothing and textiles. This lack of knowledge and engagement among consumers is verified by the quantitative survey in five European countries.

Despite the lack of pressure from other stakeholders, the textile and clothing firms interviewed are to a varying degree taking measures to enhance the environmental standards in their supply chain. This means that the Indian textile industry has to prepare themselves for a change in the global regime for textile production towards more transparent sustainable standards. It also seems that the textile industry has started this process because to increasing extent Indian producers are certified by various labelling schemes.

The global textile retailers are however sceptic to use eco-labels actively in the marketing of their products and they definitely prefer global labels. This represents a problem in the consumer market because the national labels are well known and trusted among consumers, while the regional and global labels are not to the same degree recognised and identified by the consumer

The tendency to political consumption in the textile and clothes market in Europe is rather weak. It is possible to identify a health dimension, but the main parameters in the consumer choices are price, quality and design.

Keywords: eco-labels, environmental standards, textile value chain, political consumption

¹ This article is written within a project financed by the Norwegian Ministry of Foreign Affairs and the Norwegian Embassy in India. It is a cooperation between CUTS International in Jaipur, India and SIFO, The national Institute for Consumer Research in Oslo, Norway

2. Introduction and objectives

The main theme of this article is the sustainable challenges in the global textile chain, and the potentials of various labelling regimes to meet these challenges and contribute to a substantial reduction in the environmental impact of the production and consumption of textiles and clothes.

The environmental challenges caused by the textile and clothing industry are significant. Taking the sector as a whole, the areas of greatest impact in a life cycle perspective are the large quantities of water and pesticides required for growing cotton, impacts on water linked to natural fibre production, emissions to air and water arising from producing synthetic and cellulosic fibres, and the significant use of non-renewable resources for synthetic fibres (Fletcher 2008). The sector's contribution to climate change is dominated by the requirement for burning fossil fuel to create electricity for heating water and air in laundering. Other major energy uses arise in providing fuel for agricultural machinery and electricity for production and cultivation of fibres and for transportation required for distribution (Allwood et al 2006, DEFRA 2007). The main GHG-emissions are CO₂ from energy use, and CH₄ and N₂O from cotton production (Mardal 2011). Another major environmental impact arises from the high and continuously growing waste volumes.

Due to the phasing out of the textile quota regime in 2005, the trade of textiles is now freer than for many years. As a result the outputs from the sector are increasing while the prices are dropping. As an example, The Norwegian import of clothing and accessories increased approximately 600 per cent in value between 1976 and 2008, and during the same time-period we have seen a significant change in the international trade patterns. At the middle of the 1970s, the majority of the Norwegian import came from its neighbouring countries. Today very few clothing and textile products are produced in Norway, and the import from Asia dominates the market. In addition to a large increase in the value of the import, the volume of the import has increased significantly and the prices have decreased. This increase has also contributed to put the sustainability of the textile chain on the political agenda. It has taken time, but sustainability issues in the clothing and textile sector is now being given increased attention from scholars from many disciplines, from the fashion industry and from the textile industry itself. One of the most popular solutions proposed is the use of eco-labels on clothing and textiles.

Our main objective in this article is the dualism of eco-labels and environmental standards in the global textile market. On the one hand the labels may function as necessary guidelines for consumers in the complex market for textiles and clothes. The knowledge of environmental impact of textile production is limited among consumers world-wide and the labels may be welcomed in the production-consumption dialogue. However, on the other hand labels may function as a trade barrier, and may keep producers in the Third-World out of vital markets in Europe and North-America

Our main research questions will be formulated in the following way:

- To which degree is there a common understanding of the environmental problems of the textile production and consumption among stakeholders in Norway and India?
- How do stakeholders in Norway and India evaluate various eco-labels, and other relevant tools, to meet these challenges?
- To which degree are these challenges known among European consumers, and how do they evaluate eco-labels as a relevant tool?
- Is it possible to identify pressure for consumers or their organisation and to find tendencies to political consumptions in these matters among European consumers?

3. Theoretical perspectives

We will contribute in two theoretical discussions; one is about the performance of new governance, the other is the concept of political consumption. They are both relevant for an actor oriented approach to the textile chain.

The shift from *Government to Governance* and the new regulatory state, presents a substantial development in legislation, regulation and public policy in Europe (Majone 1996; 1999, Olsen, 2002). To some degree it represents a deregulation of public policy; in other areas we have witnessed a re-regulation. The main idea behind the concept of governance is to involve stakeholders to take responsibility for the political, economic and juridical development in societies, in dialogue with political authorities on European, national and local levels. In the White Paper on European Governance for the EU (COM (2001) 428 final) the document defines the main principles of governance as: *openness, participation, accountability, effectiveness and coherence*.

The “classical” stakeholder concept was developed within the management theory dealing with the relationship between business firms and corporations on the one hand, and their environment on the other. It was an expansion of the well-known *shareholder* concept. Firms have to take into account not only the interests of their shareholders, but also their stakeholders. In his important book “*Strategic Management: A Stakeholder Approach*”, Freeman defines stakeholders as “*any group or individual who can affect or is affected by the achievement of the firm’s objectives*” (Freeman 1984).

Within the concept of New Governance, one of the most popular and common forms of regulating environmental issues is through voluntary measures like eco-labelling (Boström and Klintman 2008). Consumer actions are regarded as private, but the consumers are at the same time to be shaped as responsible. This strategy has proven to be successful within other retail sectors, like the European Energy label which has changed the market for household appliances (Stø and Strandbakken 2008), and the Nordic Swan and the German Blue Angel which has been a success for products like household chemicals, paper and paint (Rubik and Frankl 2005). However, this has not - so far - been the case for the textile sector. It is possible to identify a large number of labelling schemes for textiles in the European market (Stø and Laitala 2011), but the availability of eco-labelled clothes and textiles for private purchase are limited. This constitutes the point of departure for this paper, in which we seek to answer why eco-labels for clothing and textiles have not become more successful as tool in the market dialogue..

In line with the shift from “old governance” to “new governance” since the late 1980s, there has been an increasing focus on the responsibility of the consumer, and the term “political consumption” has become well known. Traditionally politics and consumption has been considered as two very different activities. Consumption has, in the liberal society, always been connected to the private sphere. The consumer uses their own private funds in order to maximize their own benefits. Politics on the other hand has always been connected to the public sphere. Opposed to consumption, where the actions are directed to increase self-interest, politics is directed towards the general interest (Sørensen 2004:34).

Traditionally, environmental policy makers has relied heavily on “command-and control” environmental regulations, which stipulate mandatory products or process standards (Jordan et al 2004:162), separating politics from consumption. The “new” environmental policy instruments (NEPIs), namely eco-labels, voluntary agreements, eco-taxes and tradable permits, has however grown significantly in Europe the recent years (Jordan et al 2004:162).

Eco-labels are market-based, cost-effective, flexible and consumer-driven instruments which includes the consumer and consumption patterns in the solution to environmental problems.

By making the consumer socially responsible, she cannot simply pursue rational self-interest goals in her market transactions. According to Michelle Micheletti (et al 2004:xiv) “the ideal-type Egoistic Economic Man must be modified to an ideal-type Responsibility Taking Political Consumer, who applies values other than purely self-interested ones in consumer choice situations”. Micheletti (et al 2004:xiv) defines political consumerism as “consumer choice of producers and products with the goal of changing objectionable institutional or market practices”.

The structure of the textile industry, with a large share of the production in developing countries combined with international trade regulations, makes it difficult for single nations to regulate the production process or import of clothing and textiles across national borders, and the governments are thus more dependent on softer mechanisms like the new environmental policy instruments (NEPIs) (Austgulen and Stø 2012).

Boström and Klintman (2008:28) define green labelling as “based on the standardization of principles and prescriptive criteria. This type of eco-standard is market-based and consumer-oriented, and it relies on symbolic differentiation”. However, eco-labels include various symbols, schemes and institutional and legal arrangements. We can distinguish between mandatory and voluntary labels in the following way (Rubik 2002, Stø and Laitala 2011):

- Mandatory labels like the EU energy label, relevant for household appliances and chemical products.
- ISO-type I eco-labels which relies on a third-party certification, like the EU-flower, the Blue Angel and the Nordic Swan (ISO 14024: 1999).
- ISO-type II eco-labels which relies on self-classification by industry and/or retailers (ISO 14021: 1999).
- ISO-type III eco-labels which relies on quantitative environmental product declarations (EPD) (ISO 14025: 2006).

The main focus of this paper is ISO-type I eco-labels.

4. Data

The paper is built upon a triangulation of data and methods: i) Interviews with various groups of stakeholders in Norway, ii) quantitative and qualitative survey of producers/manufacturers/suppliers in India, iii) Stakeholder Workshops in India and iv) a consumer survey (2012) from five European countries

Norwegian stakeholders. We made a strategic selection of the informants based on existing knowledge about the Norwegian stakeholders in the textile and clothing sector. In total we conducted 17 interviews with 23 informants, a balanced representation of businesses, design institutions, labelling organizations, political authorities and NGOs. The majority of the interviews were conducted from June to September 2011. They were all semi-structured, using a detailed interview guide throughout the interviews. This method encourages the informants to talk freely about the pre-decided themes, and allows them to focus on what they consider to be most important. Some of the flexibility of qualitative interviews lies in the fact that the interview guide can be, and should be, adjusted according to the informants' knowledge and interests (Repstad 1987). The interviews lasted from half an hour to one hour.

Indian Stakeholders. A total of 105 manufacturing and exporting firms consisting of small, medium, and large scales, as a representative sample, were surveyed from the following major production locations in India: NCR (Delhi, Gurgaon, and Noida), Ludhiana, Panipat, Coimbatore, Tirupur, Ahmedabad, Mumbai, and Surat. The selection of these clusters is a purposive one as they are the major centers of T&C production. The firms' owners/managers were interviewed face to face regarding the firms' adoption of environmental standards, their trade impacts, and others.

Indian Workshops. To match up with the research and surveys described above, five capacity building programmes were conducted to gauge further understanding on environmental standard and eco-labelling in Indian stakeholders. The target audience for these programmes were a cross section of stakeholders such as manufacturers, exporters, processing units, dye houses, retailers and others in the supply chain of textile and clothing sector from major textile production centres in India viz Delhi, Mumbai, Ahmedabad, Tirupur and Ludhiana.

These programmes covered a range of issues – from basics of sustainable production and consumption in textiles and clothing sector to environmental compliance issues to trade impacts of environmental standards on Indian textiles and clothing. Prominent eco-labels popular with Indian exporters/manufacturers such as GOTS (Global Organic Textile Standard), EU Flower and Oeko Tex 100 were discussed.

The European consumer survey. The survey includes data from five European countries: France (FR), the United Kingdom (UK), Norway (NO), Sweden (SE) and Germany (GE). The data was collected through TNS' web panels (CAWI) in the respective countries. The panels consist of pre-recruited selection of respondents who are willing to participate in surveys and who have access to computers with internet. The respondents' background characteristics are already known, and are used to target the survey to the existing target group. The panel samples are pre-stratified by age, gender and residence, and the respondents are randomly selected within these groups. The sample includes approximately 1000 respondents from each country. The final selections are weighed by age and gender per country. The data were collected in the period from 14th to 21st of March 2012.

5. Empirical results: The stakeholder interviews and workshops

In the analysis of the data we will return to our research questions above. In the stakeholder section we will concentrate on the understanding of the environmental problems, potential pressures from consumers and eco-labels as a tool to meet the challenges (Austgulen and Stø, 2013). We will compare the stakeholders' perspectives in India and Norway along these three dimensions.

5.1 A common understanding of the environmental problems?

This is a complicated question. On the one hand there seem to be a sound agreement among the stakeholders both in Norway and India that the textile and clothing industry are facing severe environmental challenges. However, compared with other consumption areas such as food, paper and household appliances, the environmental understanding of the negative impact of textile and clothes production has been limited. This may be one of the reasons for the lack of holistic initiatives. We may anyway conclude that there is an increasing understanding of the environmental impact of the textile production among stakeholders. At the same time it is also possible to identify substantial differences among stakeholders. This was especially the case in Norway.

In Norway, the knowledge seems to be more specific within the design community than among the other stakeholders. Among the representatives for the green fashion there is a substantial knowledge of the environmental impact of textile and clothing production. Among our informants, this is definitely the group who possesses this knowledge and understanding to the greatest extent. In addition to land use, pollution, pesticides, water use, energy and chemicals the design community also focused on three other crucial factors, not mentioned by the other informants: i) The large *amount* of textile and clothes, ii) The environmental impact of the *use phase* of textile and clothes, and also the disposal phase, and the iii) The uncertainty linked to LCA-studies of clothes, especially the relationship between various fibres such as cotton, synthetic fibres and wool.

The Indian survey and workshops show that textile and clothing manufacturers are aware of the environmentally impact of the textile production along the value chain; and they have also identified the necessary steps to meet these challenges (Table 1). However, the industry also lacks resources to take the necessary steps to adopt these practices at a greater scale. They claim to have good sense of responsibility towards maintenance of environmental safety, for which they take adequate care for proper disposal of waste material and follow necessary norms and processes. Around 25% of the respondents stated that they have installed a water treatment plant for proper treatment of waste process water before discharge. Also, approximately 10% of the companies consciously try to minimize the usage and consumption of water in their production. Some companies have also started recycling the water after treatment for conserving the scarce resource.

Sample Size (n=105)	
We properly dispose the waste products	20
We try not to harm the environment	18
We have sense of responsibility to preserve the environment	10
We maintain eco-friendly environment	5
We recycle the waste products	5
We follow the necessary norms	3
We use latest technology	3
We do not waste materials unnecessarily	3
We strictly follow eco-label norms	3
We try to avoid pollution	2
Others	12
Don't Know Can't Say	21

Table 1: Environment Friendly Activities among Indian T&C industry

The Indian survey also captured the awareness and compliance level of others in the supply chain such as the knitters, spinners, weavers and ginners as they are most important suppliers to textiles and garments manufacturers. About 39 – 40 per cent of the textiles and garments companies surveyed state that they insist on their suppliers to follow eco-friendly practices (about 50% according to industry associations surveyed). Out of which approximately 16 per cent of raw material/input suppliers are less cooperative and may resist on usage of eco-friendly cultivation and practices. Furthermore, the survey points that textile companies feel that although the suppliers are aware of the standards and the compliance requirements, they are not interested in making the extra effort required for compliance.

5.2 Lack of pressure from consumers and other actors along the value chain

This question was raised in different ways in Norway and India. In Norway the main interest was put on the domestic market, while the Indian stakeholders were more concerned about the global market. There was also a discussion on demand for eco-labelled products in domestic market in India. Stakeholder participants underlined that even though some brands like Tata's Westside did try to promote some eco-labelled articles in the Indian market, it is largely lacking in the domestic market. Further, consumers in general are not ready to pay more for an eco-garment, except in the case of baby wear.

In Norway all stakeholders are pointing at the crucial role of consumers in the market for sustainable clothing. There is an agreement that this pressure is missing, and that it really will make a difference if consumers take their responsibility. There might be different opinion about the realism of this pressure, but consumers' practices in other sectors have shown the potentials.

In addition, the retail-clothing companies interviewed in this project do not experience a strong pressure to strengthen the environmental requirements on their products, neither from the government nor from environmental organizations. This is probably correct, but we have anyway witnesses that the industry and retailers have taken measures to improve the production process. This might be difficult to understand, *what is motivating the companies when the pressure is lacking?* We have found answers along three dimensions:

- 1) *Corporate social responsibility.* The first factor, stated by all informants representing the retail industry, is their responsibility to improve the environmental standards in the supply chain. All companies interviewed focus on corporate social responsibility, and have developed their own codes of conduct and corresponding lists of restricted chemicals.
- 2) *Competitive advantage.* Another important motivation for the corporate retailers to produce more eco-friendly garments and to use eco-labels is the competitive advantage it may give compared to other companies. Of the companies interviewed in this project, H&M has distinguished itself as the most active corporate retailer in this regard. H&M underlined the competitive advantage and their own economic interest as important motivating factors.
- 3) *Image building and reputation.* Even though the pressure from consumers, the government and others stakeholders are fairly low, it is important for the corporate retailers to have a good reputation, and they do not want to be connected to scandals like the Brent Spar scandal in 1995 and the Nike sweatshirt scandal in 1997. A company's reputation is hard and time-consuming to build up, but it only takes one scandal to destroy. One impression we got through the interviews with the industry is that the companies are increasing their environmental focus as a preparation for the future.

In India it is possible to identify two key driving factors for textile and garments companies for adopting environmental standards and various eco-labeling schemes. The first is *"Better acceptance of products in international market"* and *"Consumer recognition and demand"*. Almost one third of the interviewed stakeholders have ranked *'Better acceptance of product in International market'* as the most important reason for subscribing to environment standard.

During the survey, when prompted with a list of other possible driving factors for compliance, the stakeholders also cited other factors such as improvement in quality, protection of environment/ecosystem, better working conditions for staff, as the other driving factors for obtaining certification as per environmental standards. Correspondingly, the industry associations view almost all the factors as almost equally important, which emphasizes the importance of these standards.

5.3 Evaluation of eco-labels

To which degree could eco-labels be an effective tool in the textile market dialogue? The various actors, both in India and Norway don't agree on this matter, and their positions reflect their interest. There are strong arguments for international standards. However, it takes time to develop such standards also as an international recognised label. National and regional labels are trusted and well-known by consumers, but are opposed by other stakeholders.

It is possible to identify a large number of relevant labels for the textile sector (Stø and Laitala, 2011). It is worth mentioning the classical eco-labels such as the Blue Angel in Germany and the EU Flower. Furthermore, the Cradle-to-Cradle label, Better Cotton Initiatives, the GOTS initiative to develop a global organic textile and various other organic labels like the EU label and the Swedish Krav. Other relevant dimensions could be the social aspects of Fair Trade and the health dimension in the Eco-Textile 100 label.

In Norway, and other European countries, there seems to be a jungle of labels out there, but it is really difficult to find the trees! Thus, you have to search very thoroughly to find any eco-labelled clothes in the shops. The large numbers of labels are probably not big a problem for the consumers, because very few labels are found in the market. However, it might represent a challenge for the industry and the retailers. Both GOTS and the Nordic Swan are working to minimize the jungle effect.

When asked if they use eco-labels on their products, all the retail-clothing companies we talked to mentioned that many of their suppliers are certified according to Öeko-tex standard 100. However this is not an organic or an environmental label. The label certifies that the textiles are tested for harmful substances, including substances that are prohibited by law, regulated by law and substances which are considered to be harmful to health, but which are still not regulated (Stø and Laitala 2011). According to informants from Voice Norway it gives no competitive advantage to use the Öeko-tex 100 label.

Both the Varner group and H&M do sell some garments labelled with the EU-flower. The majority of garments labelled with the EU flower is children's and baby garments, and the main target group for eco-labelled clothing are parents with small children: This indicates that there is a market for eco-labelled textiles and clothing for small children and babies, but according to our informants the potential for expanding the use of eco-labels to clothes for adult are limited. The industry representatives argues that none of the existing eco-labels are fully good alternatives, and they cover different aspects. When the consumer knowledge about the eco-labels in general is low, there should be a better coordination between the different labels in order to get the message through to the consumer.

Another major implication regarding the existing eco-labels is the discrepancy between the different stakeholders regarding their preferences of regional or global labels. Global companies like H&M would like to use global or at least regional labels like the EU flower on their products. The foundation for Eco-labelling in Norway will however rather place their focus on smaller regional labels like the Nordic Swan because the consumer knowledge about this label is already high. These conflicting solutions to the challenges connected to labelling create another barrier for the success of eco-labels.

In India some major issues associated with compliance to the eco-labels are:

- There is a jungle of eco-labels that exists making Indian T&C manufacturers bewildered as to which environmental standards/eco label to adopt.
- The small and medium enterprises (SMEs) in India need substantial cost for upgrading their level of technology in order to meet foreign environmental standards.
- Lastly, the cost of compliance is considerably higher for Indian T&C firms

Incremental cost of environmental compliance faced by Indian T&C firms is one of the deterrents to opt for environmental certification. Around forty textile and clothing firms (out of total 102) have indicated that their production cost increased by 5-15 per cent with environmental compliance. Similarly, approximately 10 firms showed that their production cost increased by 15-25 per cent with environmental compliance while around two firms indicated that their production cost increased by 25-35 per cent with environmental compliance.

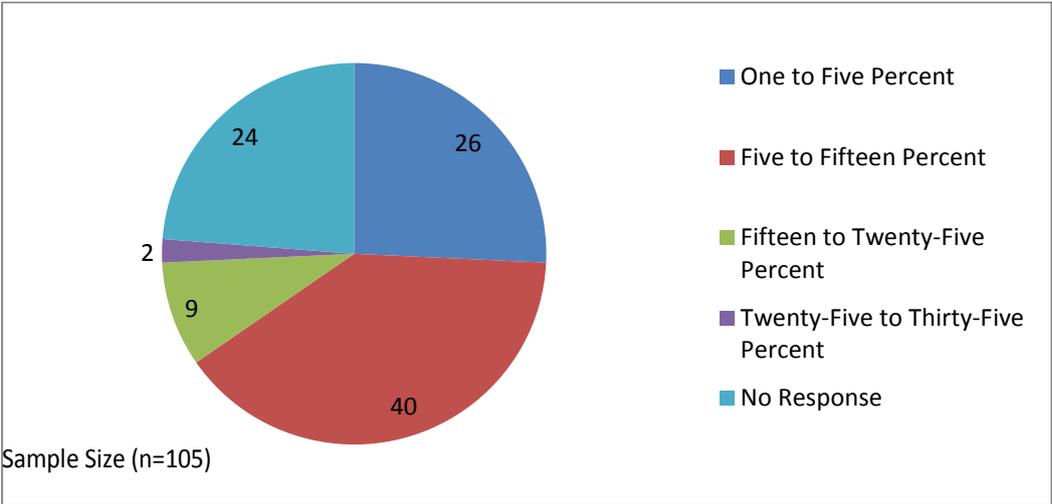


Figure 1. Indian T&C firms facing Incremental Cost of Environmental Compliance

The stakeholders in these programmes held across major textile production centres in India have expressed their concern about proliferation of eco labels and how difficult it is from producer as well as consumer perspectives. There was a general demand of harmonisation of eco-labels so that there are fewer hassles at the factory levels for implementation and compliance. A majority of stakeholders felt that the plethora of eco-labels in the market – each having its own standard & criteria – is actually inhibiting them from assimilating the labels in their working.

It is argued that harmonisation and mutual recognition of different eco labels would be beneficial for all stakeholders. It emerged clearly from the discussion that there is a need to rationalise the existence of different eco-labels and emphasis was made to harmonise them to a single common denominator or at least a single eco label for a particular region/sector so that compliance becomes simple.

Some stakeholders commented that the embracing of eco-labels and sustainability efforts have led to improvement in their way of working. However, others were waiting for incentives to be inculcated in the process to encourage the eco-compliances in the sector. Buyers/ Brands are not ready to provide higher prices to a supplier who is eco-certified, or who takes initiatives in environmental compliance. For instance, an example was cited by Freelook Fashions; a dye house based at Tirupur, who invested Rs 1 core in water recycling facility, but did not get any benefit from his buyers for his initiative. This highlights the need for making incentive mechanism to be built in the eco- compliance process. Further, these T& C firms do not have a ready access to subsidized credit for acquiring green technology so that they can upgrade their present level of technologies.

6. European consumer survey

In the analyses of the consumer survey in Norway, Sweden, Germany, France and UK we will more or less follow the same design as in the chapter above. We have to make some adjustments because the questions are not identical. Thus, we will start with the question of environmental considerations among consumers when they are buying textiles and clothes and continue with their consumer practices. At last we will address the relevance of labels in the market dialogue.

6.1 Environmental considerations among consumers, towards political consumption?

We will build this section on two questions from the consumer survey (Austgulen, 2013). The first question relates to environmental considerations when buying clothes, the second to the evaluation of the best strategy to reduce the environmental impact of textile consumption.

Overall, a fair share of the respondents in all countries states that they try to think of the environment when they buy clothing and textiles (Figure 2). From 23 per cent of the Norwegian respondents to 37 per cent of the Swedish respondents answer that they either moderately or strongly agree with the statement. However, 46% in Germany and 42% in Norway neither agree nor disagree on this statement. Based on Figure 2 we can see that the Norwegian respondents are the ones that report to be the least concerned about the environment when buying clothes and textiles. The respondents from Germany, France and Sweden are the ones most concerned. More women than men, and more old people than young people, state that they try to think of the environment.

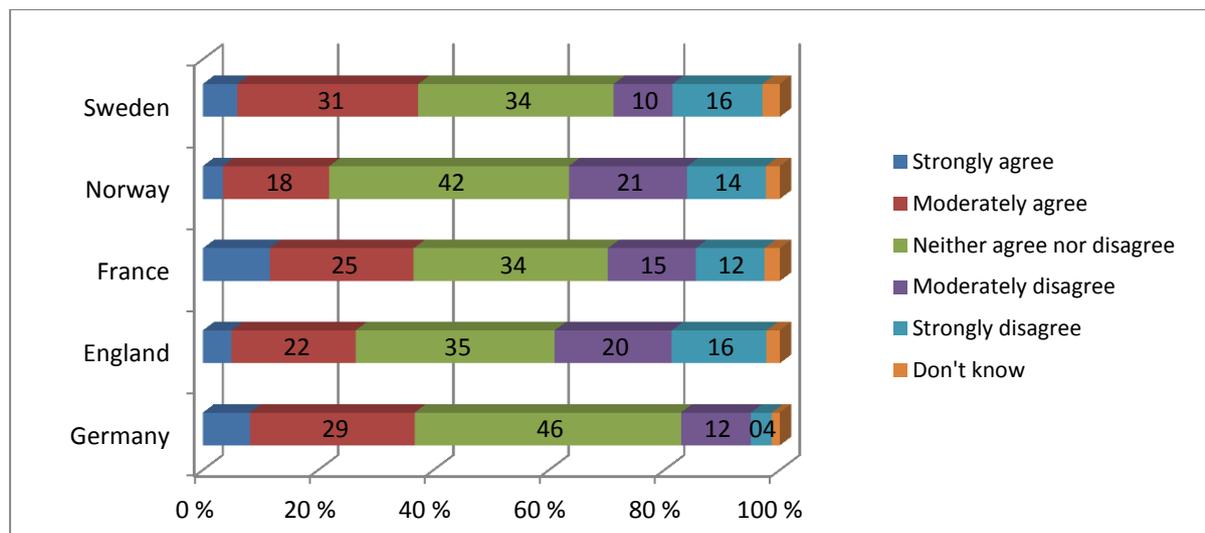


Figure 2: "I try to think of the environment when I buy clothes and textiles". Per cent proportions. N= 5169.

These numbers can be seen in relation to the results from the Euro-barometer from 2012 (149-151) on a question about environmental impact and purchasing decisions. The consumers were asked whether the environmental impact of a product/service had an influence on their purchasing decision during the week prior to the interview. 29 % of the respondent said that the environmental impact influenced their purchasing decision while for the large majority of 69 % the environmental impact had no influence on their choice. The percentages of the respondents answering "yes" were the following for the respective countries: 29 % in Germany, 22 % in the UK, 33 % in France, 24 % in Norway and 40 % in Sweden. These results thus correspond to the results from our survey on environmental considerations when buying textiles and clothing.

The relevance of the next question about choice of strategies (Figure 3) may be linked to two objectives. The first is an indication of how consumers evaluate various parts of the life-cycle process of textiles. The second is the importance of labels as tools to reduce the environmental impact of textiles, and will be comment below, under 6.3.

It is interesting to note that many respondents in all countries think that buying fewer clothes were the best strategy. This could be an indication that there is some understanding among consumers that the production process of textiles and clothes is environmentally problematic. There also seems to be an understanding that the use-phase is challenging, and around 1/3 of the respondents choose extending then life-span of clothes as their primary strategy. At the same time, very few respondents think that washing clothes less often is the best strategy for the environment; although many Life Cycle Assessment studies on clothing show that the use phase is the most energy demanding phase (Dahllöf 2004 and Madsen et al. 2007 in Laitala and Klepp 2012: xx).

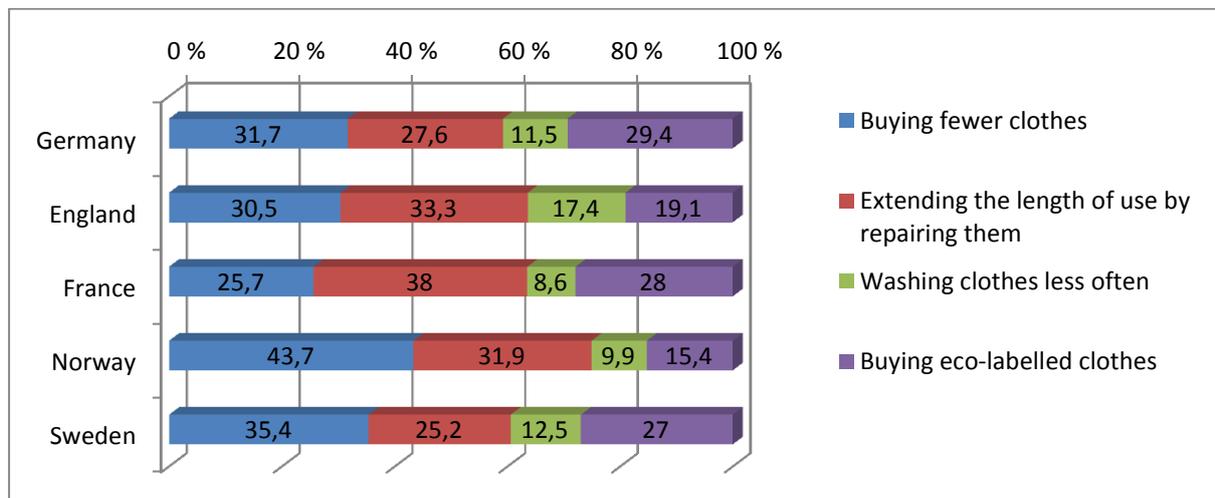


Figure 3: «Which of the following strategies do you think are the best for the environment, and which are the worst?». Numbers shown are the percentage who answered that the respective strategy is best. Per cent proportions.

6.2 Consumer practices

When we move to reported consumer practices (Figure 4 and 5) the relatively positive picture established in 6.1 is definitely questioned. These figures are based upon questions where consumers are asked to compare the environmental aspects with other aspect of textiles. In figure 5 we compare environmental aspects with price, quality and design: in figure 4 we are searching for political textile consumption.

Consumption of clothing and textiles is, for many, a part of their daily life and routines. Clothes satisfy a wide variety of the consumers' needs as they define a person's role in social groups or are a part of a person's expression of life-style. According to Arnt Meyer (2001:320) consumers' general textile decision process follows a specific order: at first, consumers take those products into consideration that they like because of their visual appearance (colour, shape, style). Second, they try on the product (fit, wearing, and comfort) and check the price in relation to performance. The most important criteria in terms of cost and benefit are thus appearance, functionality and price (Meyer 2001:321-321).

Figure Figure 4 illustrates the respondents ranking of some of the different considerations he/she can take when buying clothing and textiles. The figure shows the percentage that has chosen the respective consideration as their first priority. The trend is similar in all countries, price, quality and durability and design are the most important considerations. Environment is

together with fair trade the least important consideration in all countries. There seems to be only slight differences between women’s and men’s textile and clothing related preferences. There were no significant differences in their ranking/preferences for fair trade, environment or price, but women were significantly more concerned about colour than men, and men were significantly more concerned about quality and durability than women. There were no clear differences in their concern over design.

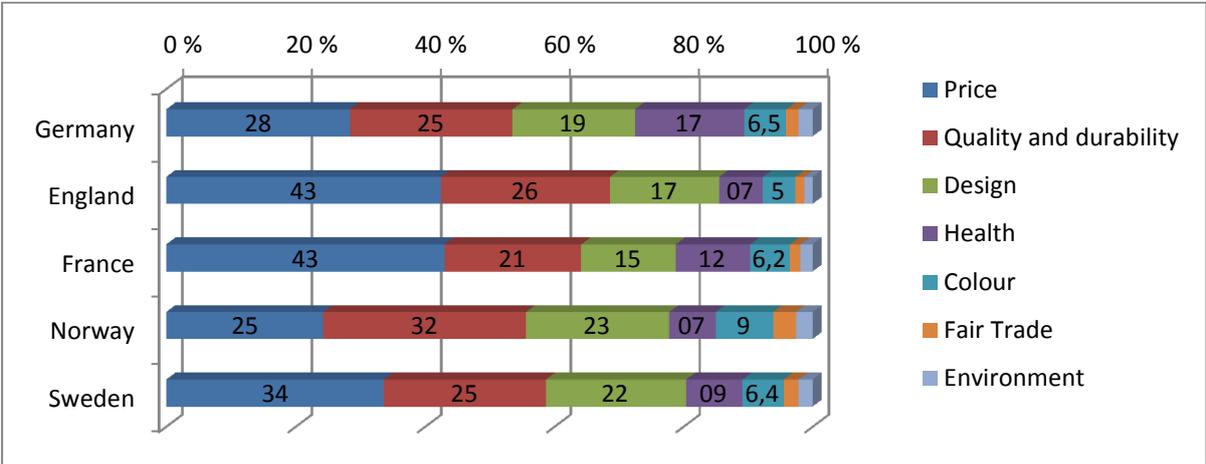


Figure 4: “Think about the last time you were buying clothes for yourself or someone in your household. How concerned were you about the following aspects?” Numbers shown are the percentage who answered that the respective interest is their first priority.

It is possible to find elements of political textile consumption in our data, but only about 10% regards Fair Trade or Environment as very important when they are buying textiles.. Most of the respondents regard price, quality and durability as very important or important considerations when buying clothes and textiles. The least important considerations are fair trade, health and environmental considerations. Nearly 80% of the respondents regard price or quality as important, compared with below 50% for Fair trade and environment.

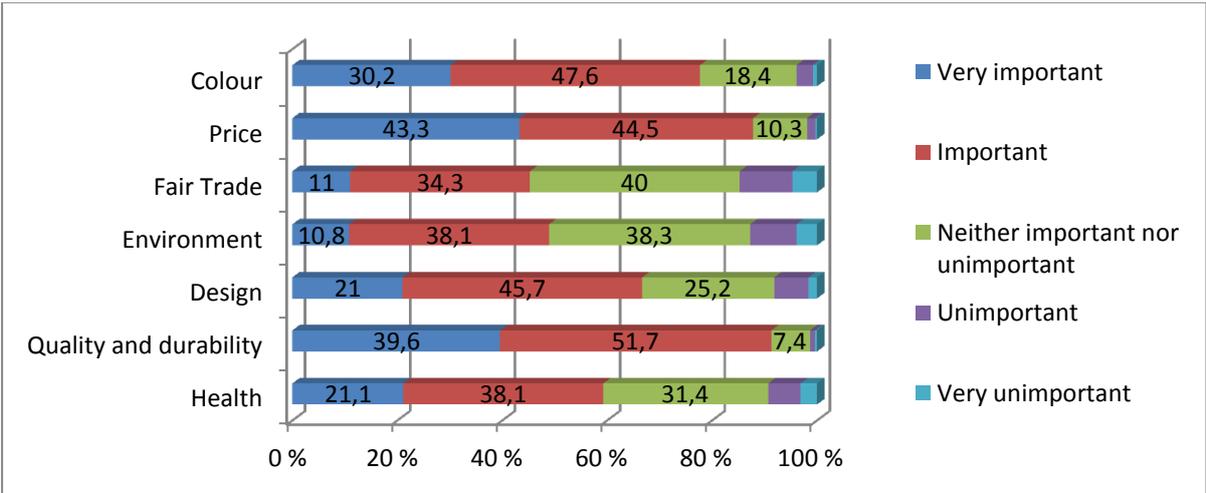


Figure 5: “Considerations when buying clothing and textiles”. Per cent proportions. Respondents answering “don’t know” have been excluded. Total N = 5076.

6.3 Consumer knowledge and trust in eco-labels

We will start with consumer knowledge of vital eco-labels, before we move to the understanding of labels, the use of these labels and the trust in information provided by the labels.

In order to understand the consumers' attitudes towards (eco-)labelling of clothing and textiles, it is necessary to examine the respondents' attitudes to labelling of products in itself. In order to get an impression of whether the respondents have an active approach to product labelling we asked the respondents to consider the statement "labelling helps me make better choices when I am shopping". Figure 6 illustrates that a large share of the respondents in all countries answered that they strongly or moderately agreed with the statement. Based on the number of respondents who answered that they strongly agreed with the statement, the French respondents are the most positive to the use of eco-labels, while the Norwegian and English respondents are the least positive.. By comparison, a Eurobarometer survey from 2009 on Europeans' attitudes towards the issue of sustainable consumption and production shows that almost half (47 %) of EU citizens said that eco-labelling plays an important role in their purchasing decisions, and that eco-labelling plays a more important role in the purchasing decisions of women, the over 38 years-old, those with the highest level of education and the self-employed (Eurobarometer 2009:18, 20).

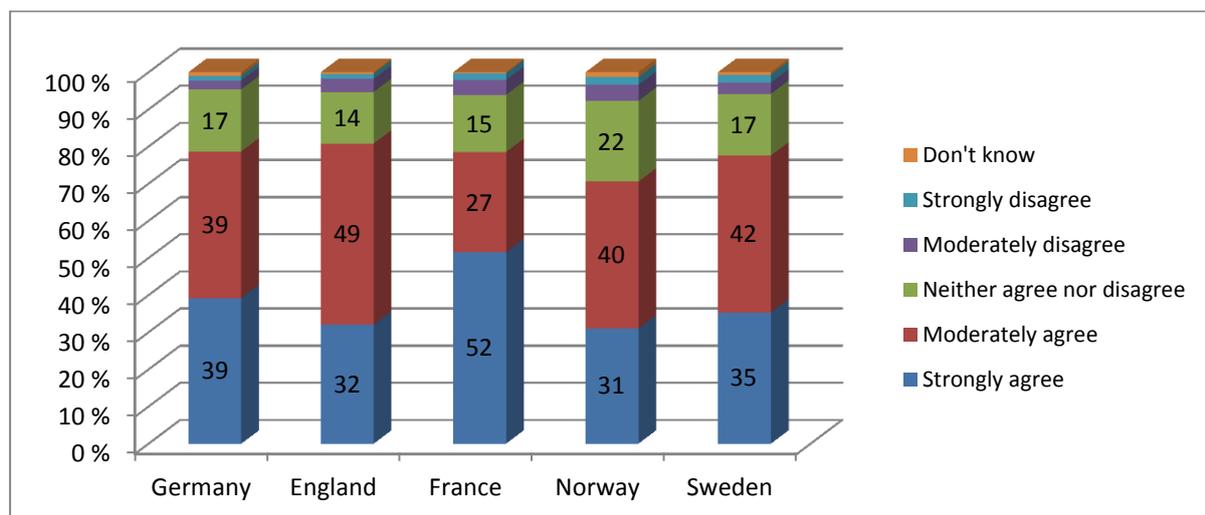


Figure 6: "Labelling helps me make better choices when I am shopping". Per cent proportions. Total N= 5194. Sign. $p < .000$ (Pearsons Chi-Square).

Another way of studying the respondents' general attitudes to labelling is to connect it to a question of trust. Labelling is in itself an attempt to create trust among the consumers, and labelling schemes are used to document certain characteristics of the product and to certify this documentation. There are reasons to believe that people will have greater confidence in certain labels than others, so general questions like the following must therefore be interpreted as a more general attitude to labels as a communicative tool. We asked the respondents to consider the statement "I trust that the information on labels on products is true". A significant share of the respondents in all countries answered that they either strongly or moderately agreed with the statement, ranging from 37 per cent in Germany to 64 per cent in Sweden. Few respondents (ranging from 11 per cent in Sweden to almost 20 per cent in Germany) disagreed with the statement. However, quite a few of the respondents answered that they neither agreed nor disagreed. The response pattern is illustrated in Figure 7

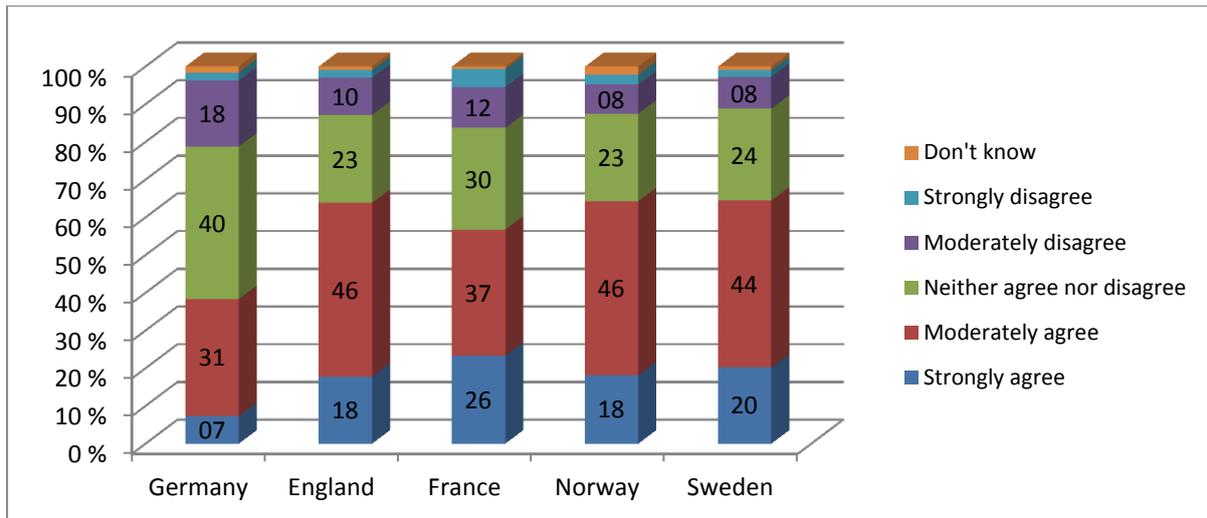


Figure 7: "I trust that the information on labels on products is true". Per cent proportions. Total N= 5175. Sign. p<.000 (Pearsons Chi-Square).

A third and a very important indicator of consumer knowledge about and attitudes towards labels is whether there are many labels they do not know the meaning of. We often speak about "a jungle of labels" and that it as a consumer can be hard to manoeuvre in that jungle. As mentioned, labels have become a popular way of informing the consumer and to make him responsible for both social and political issues, but the whole purpose with the single label is lost if the consumers do not know it or do not understand what it means. We therefore asked the respondents to consider the statement "There are many labels I don't know the meaning of".

Figure 7 shows that a large share of the respondents answers that they agree with the statement. The most confused consumers can be found in Sweden and France, and the least confused can be found in Germany. The national differences are statistically significant.

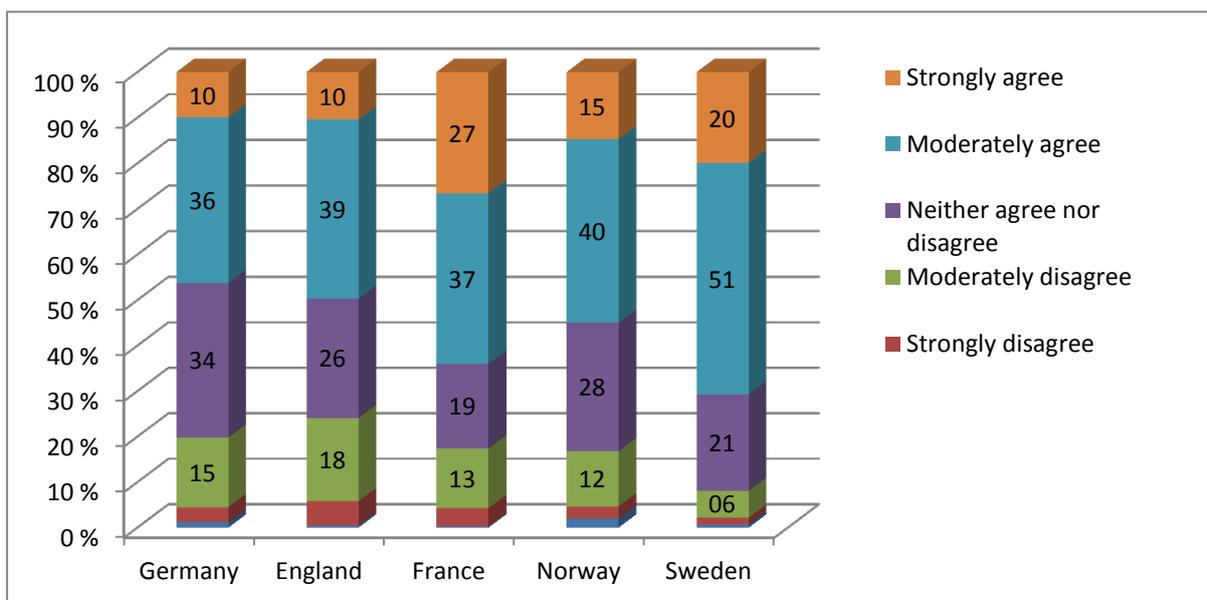


Figure 8 "There are many labels I don't know the meaning of». Per cent proportions. Total N= 5189. Sign. P<.000 (Pearsons Chi-Square)

Overall, these statements reflecting the general attitudes towards labels indicate that a large majority of the respondents use eco-labels as a guide for their purchasing decisions. A

majority of the respondents also report that they trust the information on the labels, but a substantial share of the respondents expresses uncertainty when asked to consider the trust statement. A majority of the respondents also expresses confusion over the existing labels as there are many labels that they do not know the meaning of. The combination of confusion because of “a jungle of labels” and a weak mistrust to the information on the labels might weaken the meaning and effect of the labels in general. It is however important to consider the above mentioned results as general statement, which can be challenging for the respondents to answer correctly to. In the next section we will examine the consumer knowledge of some of the largest eco-labels (in general and for clothing and textiles) on the European market.

6. Discussions

This article addresses one important tool to meet the environmental challenges in the textile value chain, the use of international standards with the main focus on environmental and social labels. Within the concept of new governance labelling schemes seems to play an important part, as an alternative or supplement to regulation. However, labels are usually only focusing on one aspect of the consumption process, the shopping behaviour. Furthermore, the labels only include information about the production processes.

We are aware that consumption is a process that also includes the use of clothes, the maintenance of clothes and textiles and the disposal phase. They all contribute substantially to the environmental impact of textiles. This is to some degree reflected in both the stakeholder interviews and in the European consumer survey. The level of textile consumption is the real environmental challenge. This level is difficult to regulate and the labels and other environmental standards will have limited effects on these matters. It is also problematic to regulate the textile production because of complex global value chain of these products.

It is in within this perspective our study most be understood. Label is an important tool in the producer-consumer dialogue, but is it not realistic to build an environmental strategy within the textile sector on labels alone.

However, experiences from other sectors have shown that both voluntary and mandatory labels may contribute to change consumer behaviour substantially. This has been the case for the mandatory European energy label on household appliances and for the success of the Blue Angel in Germany (paper and paint) and the White Swan in the Nordic countries (paper and household chemical). These successes are, however, based upon cooperation between the main stakeholders in industry, retail, governments, NGOs and consumers. Our study shows that there might be elements of this cooperation with the textile sector, but it is reasonable weak.

It is also a challenge that there seems to be conflicting labelling strategies among the main stakeholders. The global textile retailers are sceptic to use eco-labels actively in the marketing of their products for several reasons. They are afraid that the consumers will not understand or misunderstand the labels, and the global companies definitely prefer global labels.

This represents a problem in the consumer market because the national labels are well known and trusted among consumers, while the regional and global labels are not. The findings from the consumer survey indicate that national/local labels like the German Blue Angel, the Nordic Swan, the French NF Environment and the British Soil Association is fairly well known. However, regional and global labels like the EU-flower and GOTS is not very well known in any of the five countries, and fewer consumers associate these labels with environmental concerns.

From the consumer point of view it is also important to remember that buying clothes is a multidimensional choice, and more complex than washing detergent and tissue paper. For these products the environmental aspects has to compete with price and quality in the consumer decision making process, and the environmental aspects might be easier to understand than for textiles. For clothes we have identified colour, design and fashion as important parameters in addition to price and quality; and our study shows that social and environmental aspects is evaluated as the less important factors when people are buying clothes and textiles.

7. Conclusions

The main conclusion from this study is that the increasing understanding of the environmental impact of textile production and consumption not, so far, has been materialised in effective policy tools to meet these challenges. This is the case in both Norway and India. In Norway the various stakeholders may clearly see their own contributions to meet the challenges, but our main conclusion is that stakeholders are waiting for consumers' response in the market.

Both the consumer survey and the stakeholder interviews show that this is a problematic strategy. Through the stakeholder interviews it became evident that there is no substantial pressure from consumers, public authorities, design institutions or Norwegian environmental organisations for eco-labelled clothing and textiles in particular. This lack of knowledge and engagement among consumers is verified by the quantitative survey in five European countries. One exception to this trend is that there seems to be a willingness to pay for eco-labelled baby and children's garments. These products are regularly found in the shops and there is definitely a market in Europe.

From the producer survey in India and further interaction with a variety of stakeholders in the supply chain in the capacity building programmes, it is critical and urgent for Indian T&C firms to adopt foreign environmental standards in order to have increased market access and to penetrate in a given market say European market. However, the required credit for acquiring green technology is lacking in India. In other words, very few T&C firms have an access to subsidized credit, which is essential for upgrading their present level of technologies.

In regards to environmental standards and eco-label, the level of awareness among T&C firms is limited. Much more dissemination of information is required to support various environmental standards. In other words; there is a crucial need to do capacity building training programs on eco-labelling schemes in T&C sector. Interestingly, the survey finds that quite a number of firms have complied with REACH-European Environmental legislation, GOTS, Oeko-Tex, and SA among others. This may be because of burgeoning private standards and their marketing strategy.

Another conclusion is that Indian producers have to prepare themselves for new environmental standards and labelling regimes. The reason for this conclusion is that the large global textile players are taking initiatives to enhance the environmental standards in their supply chain. This is done in spite of the lack of pressure from other stakeholders and consumer demand. They are preparing themselves for the future challenges.

In line with this strategy we have also seen that Indian producers, to an increasing extent, are certified by various labelling schemes. The Indian survey shows that there is a positive relationship between eco-compliance and export volume. If Indian T&C firms adopt foreign environmental standards, then their export volume to Europe increases.

References

- Allwood, Julian M., Søren Ellebæk Laursen, Cecilie Malvido de Rodríguez and Nancy M. P. Bocken 2006. *Well Dressed? The Present and Future Sustainability of Clothing and Textiles in the United Kingdom*. University of Cambridge Institute for Manufacturing, Cambridge.
- Austgulen, M.H. and Stø, E, 2103. Barriers to the success of eco-labels for textiles, a report from stakeholders interviews in Norway. Oslo: SIFO, Project report 1-2013
- Austgulen M. H., 2013. Consumer perspectives on eco-labelling of textiles. Results from five European countries. . Oslo: SIFO, Project report 2-2013
- Boström, Magnus and Mikael Klintman. 2008, *Eco-standards, product labelling and green consumerism*. Palgrave Macmillan.
- Carrol, A.B. 1999. Corporate social responsibility. Evaluation of a definitional construct. *Business & Society* 38(3) pp. 268-295
- Dahllöf, L. 2004 LCA methodology issues for textile products. Chalmers University of Technology, Gothenburg.
- Eurobarometer, 2012. Europeans' attitudes towards the issue of sustainable consumption and production, analytic report by the European Commission
- Fletcher, Kate. 2008. *Sustainable Fashion and Textiles, Design Journeys*, London: Earthscan.
- Freeman, R. Edward 1984, *Strategic Management: A Stakeholder Approach*, Boston: Pitman
- Gandhi, SR. 'Disciplining Voluntary Environmental Standards at the WTO: An Indian Legal Viewpoint', *Working Paper*, No. 181, ICRIER, <www.icrier.org/pdf/WP_181.pdf>, June 2006, (accessed 21 April 2013)
- Jordan, A., Wurzel, R.K.W and Zitro, A.R., 2014. Consumer responsibility-Taking and Eco-labelling Schemes in Europe. In Michelletti, M., Follesdal, A., Stolle, D (eds) *Politics, Products and Markets. Exploring Political Consumerism. Past and Present*. New Brunswick: Transaction Publishers.
- Majone, G. 1996 *Regulating Europe* London and New York: Routledge.
- Majone, G. 1999 The Regulatory State and Its Legitimacy Problems. *Journal of West European Politics*, 22, pp. 1 - 24.
- Madsen, Jacob, Hartlin, Bryan, Perumalpillai, Shahila, Selby, Sarah and Aumônier, Simon. 2007. Mapping of Evidence on Sustainable Development Impacts that Occur in Life Cycles of Clothing: A Report to the Department for Environment, Food and Rural Affairs. Environmental Resources Management (ERM) Ltd. Defra, London.
- Mardal, Gisle. 2011. Climate Challenges Facing the Textile Sector. Master thesis. URL: http://www.norwegianfashioninstitute.no/public/file/46/a818db2eec3632e69eb21bddc235115d/Climate%20challenges%20facing%20the%20clothing%20sector_Gisle%20Mardal.pdf
- Micheletti, M. 2003 *Political Virtue and Shopping*. New York: Palgrave Macmillan
- Micheletti, M, Follesdal, A. and Stolle, D (eds), 2004 *Politics, Products and Markets*. New Brunswick and London: Transaction Publishers
- Nordås, Hildegunn Kyvik. 2004. The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing. Discussion paper No. 5. World Trade Organization. Geneva, Switzerland.
- Olsen, J.P 2002. Reforming European institutions of governance. *Journal of Common Market studies* 40, pp. 581
- Repstad, P. 1987. Mellom nærhet og distance. Kvalitative metoder i samfunnsfag. Oslo: Universitetsforlaget
- Rubik, F. and Scholl, G. (ed.) 2002: *Eco-labelling practices in Europe. An overview of environmental product information schemes*. Berlin: IÖW discussion paper Series, No. 162/02
- Rubik, F. and Frankl, P. 2005 *The Future of Eco-labelling. Making Environmental Product*

- Information System Effective*. London: Greenleaf Publishing
- Stø, Eivind and Kirsi Laitala, 2011 'Sustainable Standards in textile labels, an overview', unpublished SIFO Report.
- Stø, Eivind and Pål Strandbakken 2008, "The Future of Energy Labels in Europe. A consumer and stakeholder approach to the revisions of the EU Energy Label", paper presented at the ERSCP in Ålborg, Denmark.
- Sørensen, M.P. 2004. Den politiske forbruger. Copenhagen: Hans reitzels Forlag
- Windsor. D. 2001. The future of corporate social responsibility. *The International Journal of Organization*
- .