European Commission



QUALITY OF LIFE AND MANAGEMENT OF LIVING RESOURCES

"Marketing Sustainable Agriculture: An analysis of the potential role of new food supply chains in sustainable rural development"

SUS-CHAIN

QLK5-CT-2002-01349

Desk study on consumer behaviour towards sustainable food products

National report – Belgium

By Isabelle Vackier, Anne Vuylsteke, Wim Verbeke Guido Van Huylenbroek

SUS-CHAIN deliverable no. 9.5

Desk study on consumer behaviour towards sustainable food products

BELGIUM

SUS-CHAIN WP3 National Report (deliverable 9.5)

Isabelle Vackier (Department of Agricultural Economics, Ghent University) Anne Vuylsteke (Department of Agricultural Economics, Ghent University) Wim Verbeke (Department of Agricultural Economics, Ghent University) Guido Van Huylenbroek (Department of Agricultural Economics, Ghent University)



Table of contents

Part I: Definition of sustainability for food products	. 1
Part II: General food consumption trends	. 3
Part III: Consumer behaviour towards sustainable food products	.4
1 Consumers of sustainable food products	.4
1.1 Consumers' values, needs and motivations	. 5
1.2 Information, knowledge and uncertainty	10
1.3 Availability of products and behavioural control	14
1.4 Decision-making process: attitude and consumption behaviour	14
1.5 Socio-demographic profile	17
<u>1.6</u> Social embeddness	20
2 Barriers for consumption of sustainable food products	20
<u>3</u> Possibilities to remove the above-mentioned barriers	22
Part IV: Strategies to stimulate sustainable consumption	25
References	26

Part I: Definition of sustainability for food products

A recent Belgian report about sustainable consumption (Bruyer et al., 2003) includes an extended overview of the meaning and content of "sustainable consumption", which is added to this document as annex I. The proposal of the definition takes not only the product itself into account but also the production process and the destination of the product and its accompanying waste. Furthermore, the output of a sustainable production method must provide enough to satisfy the basic physiological needs of people.

"Elements for a future view with respect to sustainable agri- and horticulture in Flanders" (Reheul et al., 2001) is a reference text to open the discussion about sustainable agriculture and sustainable consumption of agricultural and food products. Sustainability is hereby defined as a combination of three aspects: economic (profit), ecological (planet) and social (people) aspects. The economic aspect has to do with the price for food products. On the one hand, a fair price should be paid to agricultural entrepreneurs to make their company profitable. Food products should on the other hand also be payable for all consumers. The ecological component involves care for the natural and animal production factors, the living environment in general and the quality of life for humans (food safety and quality). The social component finally concerns on the one hand an integration of agriculture in the priorities and needs of the society/citizens (in other words what is social acceptable) and on the other hand an appreciation and support for the agro-sector from the society but also from the government (a sustainable supporting policy).

'Ethical' or sustainable aspects can be situated on different levels: products, marketing, company and country (Crane, 2001). The first sustainable aspect implies that the complete lifecycle of the product should be considered, which includes all steps from production until consumption, as well as the nature of the product itself. Secondly, a sustainable aspect can be linked with marketing. The coffee brand Douwe Egberts (Sara Lee) with its yearly action in favour of Belgian waifs is an example of marketing related to ethical aspects. Third, a sustainable aspect can be situated on the level of the company. A company like the Body Shop gives the purchase of cosmetics an ethical dimension. The last level is the country, which is associated with the product or the producer. An indication of the origin on the product can give a higher value to this product, for example for consumers who prefer to buy home-made products.

These different aspects of sustainability lead potentially to product differentiation and could be communicated to the consumers. Mathijs (2003) distinguished four systems in Flanders that make

product differentiation possible: government protection, sector labels, distribution brands and private labels, and direct contact with the consumer. An example of government protection is the prescription of the requirements for organic farming and regional products by the European Commission. Second, sector labels are defined as private labels that are initiated by the sector itself. In Flanders, integrated chain management exists for milk (IKM), pork (Certus), beef (Meritus), veal (BCV veal), poultry (Belplume) and fresh vegetables (Flandria). Third, supermarket chains commercialise a large share of what they sell through own distribution brands and private labels. An example is 'Quality Chain Carrefour'. There are however also retailers who prefer to work with existing sector labels. The fourth group of ways to differentiate includes farmer's markets, farm gate sales and other forms of short supply chains, which all aim to minimise the distance between farmer and final consumer.

Part II: General food consumption trends

Consumer preferences and habits change rapidly, also with respect to agricultural and food products. Mathijs (2003) observed several recent food consumption trends. First of all, the basic needs of most consumers are satisfied. Therefore, the demand for more diversity and new products is increasing. However, consumption patterns diverge: one group of consumers has an increasing wealth and therefore seeks for additional value while another segment gets poorer and seeks the lowest price. Socio-demographic changes, like the ageing of the population, the decreasing size of the family and the participation of women in the labour force, result in shifts in food consumption behaviour. Many consumers want to save time and look for convenience products such as prepared meals and cut vegetables, but there is also a trend towards increasing importance of food services. The purchase of food in the supermarket is a general trend. Furthermore, the purchasing process and the experiences and possibilities attached to the process become more and more important. Food safety became an important topic since the food crises, consequently resulting in the demand for more information on the origin of products or on the production process. Finally, an increasing segment of consumers consciously buys ethical or sustainable products (organic, fair trade, animal welfare, ...). For instance, almost one quarter of regular meat consumers judge taste as less important than animal welfare when making meat consumption decisions (Verbeke, unpublished).

Basically, there is no indication that consumption trends in Belgium differ from general trends observed in other countries. It has to be noted that the amount and sequence of food safety crises in Belgium was quite spectacular. In result, it can be assumed that Belgian consumers may be particularly aware and conscious of food safety issues. Nevertheless, studies show that behavioural changes are less pronounced with every new crises that emerges (e.g. the reduction of meat consumption was stronger after the BSE crisis than after any consecutive crises) (Verbeke & Vackier, 2004). This may be the result of growing indifference among consumers, namely the reaction that "all food is at risk, though inevitable".

Part III: Consumer behaviour towards sustainable food products

1 Consumers of sustainable food products

The purchase and consumption of food products by consumers is the result of a complex decision-making process. In this text, the conceptual framework shown in figure 1 will be used to explore consumer behaviour towards sustainable products. It shows that the three main determinants are behavioural control, needs and motivations and finally information.



Figure 1

Conceptual framework to investigate consumer behaviour towards sustainable food products (according to the consumer behaviour model of Jager, 2000)

1.1 Consumers' values, needs and motivations

Human values are often referred to as relatively stable beliefs about the personal or social desirability of certain behaviours and modes of existence, while needs refer to internal forces that drive our actions. Products have a certain capacity to satisfy one's needs (Jager, 2000). Consumers choose products through an interaction of personal needs and the possibilities that these products offer to satisfy these needs (the need-satisfying capacity of products). People are motivated to invest cognitive effort in a decision-making process (reasoned processing) when an important personal need is not satisfied, while automated processing or habitual behaviour occurs when consumers have low motivation due to satisfied needs (Jager, 2000; Bontinckx, 2002). Research shows that Belgian consumers do not feel able to integrate all the parameters of sustainable development in their decision-making process or in their choices of purchased products. Each choice is integrated in a personal consumption dynamic which aims at the satisfaction of psychological needs (Bruyer et al., 2003).

Qualitative research from 2002 (Bontinckx, 2002) reveals what needs are important in the purchase decision of ecological products and it seemed that ecological criteria did not play a (considerable) role. The motivations that are intrinsic for ecological consumption, are different according to the personal values of the consumers. Three basic motivations are savingsupervision, protection-health and the need of belonging to a group. Two other types were also coming forward, however less evident: the need to distinguish and the need to try out new technologies. These needs match very well with the Belgian inventory of motivations (Vyncke, 1992), which shows high resemblance with Maslow's hierarchy of needs (Maslow, 1954). Saving and supervision belong to the survival motivation which satisfy physiological needs. Protection and health are part of the need for security, certainty, protection and stability, while the sense of belonging to a group corresponds with the social motivation. Furthermore, the need to distinguish fits into the ego-motivation, where respect and appreciation by others is important. The need to try out new technologies with the aim to find the most comfortable way of living belongs to the hedonistic motivation. We can conclude that there is a wide diversity of motivations to choose for some kind of ecological product. This is however not necessarily the consequence of environmental concern, but often a consequence of the need to save money, to give priority to health, to feel integrated in a social group, to distinguish from the others or to look for the most easy and comfortable way.

Very similar results were found in recent qualitative research with respect to quality meat consumption (Demey et al., 2003). This study reveals the values associated with the purchase of "superior" meat quality, a term used to denote quality beyond mandatory legal standards. All respondents who purchased a certain kind of superior quality meat (labelled meat, meat purchased in special butcher shops or at the farm gate) agree that the sensory aspects of meat are of utmost importance and this can be linked with the hedonistic value 'enjoying the meal'. "Security" is also an important value for all consumers who buy a certain kind of superior meat quality. Consumers who buy organic labelled meat also attach much importance to values like "protect the environment" and "respect for all living creatures". Buying at the farm gate puts the value "social contact" in focus and for some respondents the price benefit links short supply chain with "economic well being".

Starting in 1999, an extensive research (Vannoppen et al., 2001a, 2001b, 2002) about consumers' motivations to buy specific products related to certain initiatives with a link to sustainable agriculture was carried out. The following five initiatives were investigated: a meat label (Coprosain) sold at butcher shops, organic labelled dairy products (Fermière de Méan) sold through a short supply chain, labelled fruit from integrated production (Fruitnet) sold in the supermarket or directly at the farm gate, farmers' markets, and food teams (short supply chain) with organic labelled food products. Customers of each initiative were interviewed to discover their motivational structure. In each motivational structure, three main clusters were found. Health and the security that the product is not harmful from a personal health perspective is the first cluster. Second, a hedonistic cluster points to the value of enjoying a meal. And the third cluster comprises several values linked with objectives for the benefit of the community. The first two motivational clusters pertain more to individualistic values, while the third cluster has to do with more collective values, such as care for the environment, creation of employment, animal welfare. The most notable findings are reported in the following paragraphs.

For both initiatives with organic labelled food products, the health cluster is dominant but the motivations related to the benefit of the community were also more pronounced in comparison with the other initiatives. The value linked with the preservation of the environment is thanks to the organic label. However, stimulation of employment and the economic development are important values contributing to the motivation for the benefit of the community thanks to the short supply chains. This short supply chain also contributes to the health cluster since the direct relationship with the producer gives trust and security about the quality of the products. For all the initiatives

except for the first one (sales point is butcher in comparison with short supply chain for the other cases) social contact is also mentioned as an important value. This is relevant on the personal level but also on the higher societal level. This is why this value belongs to the motivation for the benefit of the community. Consumers who buy at farmers markets attach much importance to the hedonistic cluster, due to the taste of the products but also to the pleasant sphere at the markets. Finally, the motivation to buy in some kind of short supply chain is also often related to practical, money- and time-saving reasons, which are very important for the modern consumer.

Research that investigated consumer behaviour towards farm products (VLAM, 2003c) reveals two values that are important for consumers buying farm products. This type of consumer finds the direct contact with the farmer an important aspect to purchase farm products. However, these consumers are also sensitive to the price of products. Farm products are indeed often cheaper than similar products in the supermarket. Additional evidence for the economic reasons to buy products on the farm is the fact that a higher percentage of farm shoppers also shop in a discount-type supermarket.

Another study (Cera-Foundation, 2001) reports very diverse motivations of Belgian consumers to purchase organic products. The most important motivations to purchase organic products for the first time are advice of family and friends (almost 1/3), an article in magazine or newspaper i.e. mass media publicity (24,7%) or fear for food safety such as food poisoning (23%). The main reasons to keep buying organic products are health (34,7%), concern for the environment (25,8%), personal beliefs (13,7%) and the better perceived quality of these products (12,6%). The motivation related to the concern about the environment has gained importance since the past, due to the fact that many consumers associate care for the environment with health or quality. 21,7% of the consumers claim to buy organic food products out of habit, which means that they have satisfied needs with respect to the consumption of food products due to the organic label.

Furthermore, the research of Bontinckx (2002) finds a distinction between consumers who purchase "ethical" products (e.g. animal welfare, fair trade) and consumers who buy ecological products (e.g. organic) with respect to need satisfaction. "Ethical consumers" tend first to look for a personal sensation with the hope of long-term results without any real worrying about the efficiency of the choice made, while consumers who are interested in eco-consumption are looking for concrete results at the local level and this is related to a totally different profile of motivations.

De Pelsmacker et al. (2003) investigated the impact of personal values on consumer buying intentions for coffee with a fair-trade label. Respondents who found the fair-trade aspects of coffee important were more idealistic in comparison with other respondents. The relation between fair-trade labels and striving for a better society is evident. Respondents who attach a lot of importance to the fair-trade label (only 11%) have less civic spirit than respondents who did not attach any importance to fair-trade. The items that determine civic spirit are obedience, politeness, cleanness and self-control.

Table 1 gives an overview of values and needs that are mentioned in four studies about sustainable food products. Two needs are mentioned most: the need to take care of personal health, to have some security and the need to save money. Security associated with their health is consumers' main motivation to buy sustainable products. Although the motivation to save money is coming forward in these four studies, we may not conclude that this can be simply associated with the purchase of sustainable products, since these are often accompanied by a price premium. However, this motivation is very valuable for the short supply chains, which can offer their products at a very competitive price.

Collective motivations (e.g. care for the environment, creation of employment, ...) are broadly mentioned in the research of Vannoppen (1999) (table 1). We have to take into account that the respondents in this research are already regular customers who buy some kind of sustainable products. To stimulate non-buyers to shift towards sustainable consumption, it is possible that other than these collective needs (for the benefit of the community) should be addressed. Most of the non-buyers will attach only low importance to values associated with the benefit of the community. Therefore, these values are not translated into needs for these consumers and consequently there is no motivation present for this type of needs. Besides the (un)satisfaction of needs, it is necessary to take the importance of values into account. Individualistic needs, such as security about health consequences, hedonistic and social needs and as mentioned before the need for economic reasoning could be used to stimulate sustainable consumption, depending on the sustainable aspects of the product.

Table 1

		Bontinckx,	Demey et	Vannoppen,	VLAM,
Values	Needs	2002	al., 2003	1999	2003c
Care for the environment/	Benefit of the community				
animal welfare (ecological	(collective)		Х	Х	
criteria)					
Creation of employment/	Benefit of the community			v	
economic development	(collective)			^	
Saving –supervision – economic	Survival motivation				
well being – money and time		Х	Х	Х	Х
saving					
Protection – health – security	Security, certainty, protection	v		Y	
	and stability	Λ	Λ	Λ	
Sense of belonging to a group	Social motivation	Х			
Social contact	Social motivation		v		
	Benefit of the community		Λ		Λ
Distinguish from the others	Ego-motivation				
Try out new technologies / find	Hedonistic motivation				
the most easy and comfortable		Х			
way					
Enjoying the meal (taste)	Hedonistic motivation		Х	Х	Х
Pleasant purchase sphere	Hedonistic motivation			Х	Х

A last remark concerns the frequently used concept of 'involvement' in consumer research studies. The relevance of investigating consumer involvement pertains to its function as a motivational force. The extent to which a consumer is involved in a product influences the consumer's decision process for this product. High involvement leads to extensive problem-solving, while low involvement associates with routine, habitual or impulsive decision making (Engel et al., 1986). In the consumer behaviour model used in this research, involvement denotes the consequences a decision has for ones need satisfaction. The less important the consequences of a product purchase on the person's need satisfaction, the lower this person's involvement towards this product, the less motivated the person is to invest cognitive effort in making a decision. That person is more likely to use heuristics that apply less complex information in making a decision. These heuristics can vary from automatic heuristics (occurring with automated behaviour) to more complex heuristics (occurring with systematic processing), as will be discussed further.

1.2 Information, knowledge and uncertainty

In the qualitative research of Bontinckx (2002), the concept of sustainable consumption was not spontaneously reported by consumers, even if they declared to be sensitive to e.g. environmental issues. When providing an explanation of the concept of sustainable development, consumers perceived it as utopian, even contradictory. Consumers could not simultaneously associate three global-scale dynamics together, i.e. environment, ethics and socio-economic aspects. On the contrary, they spoke of more specific terms. Sustainable development was associated with environmental issues and sometimes with economic relationships between North and South. Even the concept of an ecological product is unclear for consumers. Consumers mostly thought about one facet of ecological products, e.g. a product with less waste, products that make energy savings possible, a product that is better for health, ... (Bruyer et al., 2003; Bontinckx, 2003). This is confirmed by a study about the profile of organic consumers (Cera-Foundation, 2001), where a rather high awareness and recognition of the organic label was found. There is also another study (VLAM, 2003a) that finds a yearly increasing awareness of the label for organic products in Belgium. However, the comprehension of this label was not optimal (Cera-Foundation, 2001). Most consumers defined organic products as "products cultivated without pesticides and without chemical fertilisers". Other popular terms to define an organic products are "natural products" or "products without additives or colorants". Verbeke & Viaene (1999) also found a large contrast between knowledge and perception of labels and the exact labelled product features. Consumers pretended to know beef quality labels, but failed to recall labels and remember the exact characteristics of quality labelled beef. The latter was partly due to high numbers of unofficial and doubtful labelling initiatives undertaken in the previous years. Furthermore, this consumer confusion is also due to the difficult task of communication around meat. The research further indicated that providing information through labelling, aiming at regaining consumer confidence in beef, still had a long and difficult way to go. Problems with knowledge at the consumer level point out that communication should focus primarily on spreading factual information rather than on building image around the label. In an environment that is dominated by uncertainty, the consumer seeks primarily for some kind of rational support to his/her purchase choice. This requested rational support and guarantees can not be delivered unless a waterproof system of identification, traceability and control is established.

Despite considerable efforts from government and industry, consumer interest in information relating to traceability remains fragmented. Clearly, some segments of the population are highly interested in information, though are not willing to undertake efforts to actively gain information. This was exemplified by an evaluation study on beef traceability, which showed that unexpectedly few meat consumers were willing to engage in information acquisition through calling for a free information leaflet (Verbeke et al., 2002). Given this situation, it can be assumed that traceability has a very limited potential as an offensive marketing tactic (e.g. for winning new consumers or markets through providing traceability information), though should mainly be considered as a defensive self-control system within the chain.

According to the consumer behaviour model of Jager (2000), the availability of clear information on the products to choose from is an important factor in the decision process. The less information available and the more complex and contradictory this information is, the more uncertain consumers may be regarding what products to choose. Uncertainty will lead to use of social information, which means that consumers will look at other people to get an indication of the best outcome. The relative uncertainty about availability and the need-satisfying capacity of products will also stimulate social processing. Considering the above-mentioned results, the conditions that cause uncertainty are present for many consumers in the food purchasing context. The need for clear, objective information has often been proposed as a strategy to stimulate consumers in making conscious purchase decisions. Although the research of Bontinckx (2003) revealed that one possible motivation to purchase sustainable products is 'belonging to a group' (social motivation), we can conclude that social processing will not often lead to the purchase of sustainable products, if we take the (small) market share of all kinds of sustainable products into account. However, if we consider short supply chains like purchase at the farm gate as one kind of sustainable consumption, this could have a high potential with respect to this uncertainty concept. As mentioned before, buying at the farm gate is linked with the value of social contact and the relation of trust with the producer (Vannoppen, 1999; Demey et al., 2003), which could indicate that consumers buy food products on the farm to compensate for the uncertainty about products with respect to information and knowledge.

Research about the awareness of sustainable labels in general and a specific fair-trade (Max-Havelaar) and organic label (Gordier, 2003) revealed that both unaided and aided awareness of students about sustainable labels was very low. However, the fair-trade label seemed to be an exception with high awareness, while the organic label scored much lower. Furthermore,

respondent's comprehension of ethical labels was tested. Most consumers know more or less what ethical labels mean but do not completely understand the content of these labels. However, consumers do understand that an ethical label points to an ethical characteristic of the product, irrespective of their comprehension of this label. This product aspect can than be taken into account in the purchase decision. The study concludes that ethical communication in the form of a label is effective with respect to comprehension. Therefore education of the consumer to stimulate profound understanding of the label would be unnecessary.

This could not be confirmed by one study of Vannoppen (2002), which investigates consumption of fruit with a label (Fruitnet), which stands for integrated production, in two points of sales, the supermarket and directly from the producer. In both points of sales, consumers did not refer to the label Fruitnet or to the integrated production system. They did not know the name of the initiative. For both retailer cases, consumers perceived the fruit as a tasty and healthy product. However, the difference between both outlets concerned the fact that consumers who bought directly from the producer were aware that the producer undertook some special care for his products. Purchase direct from the producer can better elucidate the higher value and the specific quality in comparison with the supermarket. Consumers share the vision of quality with the producer through the direct contact between them. These consumers were furthermore aware of the fact that this special care of the producer had a positive impact on the environment. Through organising farm-gate sale the producer can use his environmental friendly production as a sales argument. It can be concluded that the personal contact between producer and consumer is more convincing than the Fruitnet-label, since there was not even awareness of this label.

Table 2 gives an overview of the studies with respect to awareness and comprehension of sustainable characteristics of products. Furthermore, the table includes three proposed strategies that could stimulate sustainable consumption through the determining factors 'uncertainty, information and knowledge'.

Table 2

Overview of awareness and comprehension of sustainable aspects and the impact of three proposed strategies to obtain greater knowledge

	Bontinckx, 2002 (sustainable products)	Cera-Foun- dation,2001/V LAM,2003a(or ganic label)	Verbeke, 1999 (beef quality label)	Gordier, 2003 (sustainable labels / fair trade label)	Vannoppen, 2002 (fruit label for integrated production)
Awareness of the sustainable characteristic of the product	-	+	-	- (sustainable) +(fair trade)	-
Comprehension of the sustainable characteristic of the product	-	-	_	+	- (supermarket) + (farm gate)
Providing factual, objective information			+	-	
Building image around label / Higher awareness			-	+	-
Providing (subjective) information through social contact			+		+

- low awareness/comprehension - negative impact

+ high awareness/comprehension - positive impact

Furthermore, we should mention that several information sources and media can play a considerable role in providing information to consumers. Not only mass media, such as television, radio and newspaper, can have a large impact on consumer's decision-making process. The development of consumers' knowledge is often also influenced by personal addressed information media, such as supermarket magazines directed to their regular clients. However, the credibility of this information source could be a barrier for an actual effect on consumers' decisions. Other information sources, such as consumer organisations but also friends, family and other acquaintances, have a higher credibility and consequently higher impact.

1.3 Availability of products and behavioural control

Behavioural control indicates whether the consumer can easily consume a certain product or whether its consumption is difficult or impossible. The availability of sustainable products is only one aspect that has an influence on consumers' behavioural control with respect to sustainable consumption.

Only a few studies report results about availability of sustainable products. One study about organic products states that consumers are aware of the fact that organic products are available in many sales points, whereby diet shops and shops with natural food products are mentioned most frequently. However, supermarkets take the second place, which is more important in terms of availability since this outlet enables it possible to combine shopping for both regular and organic products (VLAM, 2003a). Although almost all food products and even prepared meals are available in organic form, the most frequently purchased organic products are eggs (40%), vegetables (39%), fruit (33%), bread (28%), yoghurt (26%), meat (25%) and cheese (23%) (Cerafoundation, 2001). The latter study also reports that consumers claim that a higher availability could increase their consumption of organic products. De Pelsmacker et al. (2003) report that the low market share of fair trade coffee in Belgium could be due to the inefficient distribution of fair trade coffee and lack of visibility in the shops. Fair trade products were in the past only available through specialised shops (*Wereldwinkels*), but two years ago it was decided to aim for a broader public. The fair trade products are nowadays available in supermarkets, bulk consumption organisation such as schools and organic shops. This enabled a growing market share of fair trade products, especially fair trade coffee, but this did not lead to a decreased sales in the specialised shops (De Standaard, 2003).

1.4 Decision-making process: attitude and consumption behaviour

The research of the market research agency INRA in 2002 (VLAM, 2003a) shows that more than half of the respondents belief that organic products are healthier. However, the statement that organic products are necessary for health is only believed by 40% of the respondents. The belief that organic production is important to preserve the environment is the second important belief. The statements that organic products have a better taste, have a higher energy value and are important to feel good, receive the lowest belief percentage. The link between organic products and food quality, animal welfare and reduced food risks is believed in by 44 to 47 % of the

respondents. 64% of the respondents state that organic production should be controlled officially to be credible. 41% of the respondents claims that the origin of organic products cannot be controlled and 35% find organic products only a fashion trend. All these percentages are higher among the group of regular organic consumers in comparison with the non-organic consumers, except for the last two beliefs. However, there is a substantial number of non-organic consumers with a positive attitude towards organic products.

In 1997 and 2002, a consumer survey about the image of agriculture was conducted (Saenen, 2002). Different statements gauge the attitude of consumers with respect to animal welfare, the environment, sustainable agriculture, organic agriculture,... The respondents of 2002 were in general much more positive about agriculture in comparison with 1997. With respect to both animal welfare and the environment, consumers have a positive image of the farmer and agriculture in 2002, while this was still negative in 1997. The statement about "sustainable" agriculture ("Products bought directly form the farmer are better") is less appreciated in 2002 as compared with 1997. The statement that fruit and vegetables should be cultivated throughout the year has a low average, which means consumers understand the need of seasonal consumption. However, whether consumers know what products are cultivated in what season is another question. After factor and cluster analysis four segments were obtained. 24% of the respondents had an overall negative attitude towards agriculture. Another 22% of the respondents are satisfied with the present kind of agriculture. 26% of the respondents have a common positive attitude, while 29% of the respondents have a positive attitude with focus on organic and sustainable agriculture. The latter declare to pay attention to ecological packaging, the origin of the food products and the absence of GMO's. Only the segment with the negative attitude claims to be prepared to pay more for ecological and animal friendly products. Both the overall negative segment and the segment in favour of organic and sustainable agriculture buy regularly organic food products. The overall negative segment probably has the strongest motivation to buy sustainable products since they have unsatisfied needs when considering food products from common agriculture. Sustainable products have a high need-satisfying capacity for this type of consumer.

The attitude towards organic products is in general more favourable in comparison with regular products for both organic and non-organic consumers. Organic products are perceived to be better with respect to taste, quality, safety, impact on health and on the environment. A more negative attitude is found for the aspects price, appearance and conservation. A reduction of

price seems to be the most important argument to increase the consumption of organic products. Furthermore, the availability, evidence about origin and information about the production methods could hereby also play a role. A very high percentage of consumers is concerned about the consequences of food on their health. However, organic products provide a solution for only a limited part of the consumers, since also 80% of the non-organic consumers have an attitude that is characterised by concern. This could be due to the fact that a high percentage of non-organic consumers do not believe that organic production is strictly controlled (Cera-foundation, 2001).

De Pelsmacker et al. (2003) investigated consumer buying intentions for coffee with a fair-trade label. The label was judged as important as the flavour and almost as important as the brand. However, the fact that buying a specific type of coffee is often a matter of habit was also confirmed in this study by the importance of the constant in the coffee preference equation (only 28% of the variance is explained by the explanatory variables). Only 10 % of the respondents were willing to pay the actual price premium for fair-trade coffe, which is 27%. A price premium of 10 % is acceptable for 35% of the respondents. It is clear that most people do not want to pay the actual price premium for a fair-trade label. 50% of the respondents have apparently other priorities than fair-trade aspects when they buy coffee. The other 50% do take fair-trade into account when purchasing coffee, of whom 11% think fair-trade is all-important (fair trade lovers). This is about the same proportion of the sample that is willing to pay a high price premium. However, this 11% does not stroke with fair-trade buyers in reality, due to two reasons. Firstly, the 11% fair trade lovers should be considered as a market penetration potential but not as a market share, because it is not known how much coffee they buy relative to the rest of the population. Nevertheless, the gap with the less than one percent market share of fair trade coffee in Belgium is substantial. As mentioned before, this could be due to the inefficient distribution of fair trade coffee, lack of visibility in the shops and/or inadequate promotion. Secondly, the results are based on the assumption of extensive, equal and correct information for all respondents and availability of fair-trade coffee in the same way as other known brands. In reality, this is certainly not the case. De Pelsmacker et al. (2003) also report that an increasing competition on the "good cause label" market could be the cause of the low market share of the fair trade label products. An increasing number of products carry "green", "bio", "social" or "fair trade" labels. Idealistic consumers are increasingly faced with the choice between these labels. Could it be that the 10% very idealistic consumers have to divide their attention between all these "good cause label" products, resulting in poor market shares for some of them? Or are some of these labels like "green" or "bio" simply more attractive because they appeal more to the immediate personal wellbeing than social or fair trade products?

Another research with respect to a fair-trade label (Gordier, 2003) finds a more positive attitude towards a labelled product (fair-trade and organic label) in comparison with the same unlabelled product. The study also investigated the perceived consumer effectiveness (PCE), which is the extent to which the consumer believes that his personal efforts can contribute to the solution of a problem, in this case the improvement of the environment, the North-South relation and conditions in the developing countries. It seems that consumer's PCE is in general not very high but the PCE with respect to the environment is the highest. Concerning the purchase decision, consumers do not attach much importance on ethical product characteristics. Traditional elements such as price/quality are more determining. Ethical communication does not lead to a higher purchase intention.

The research of Verbeke & Viaene (1999) about a beef quality label indicated that consumers are rather critical towards beef quality labels. The better quality of labelled beef is often questioned. Consumers who have experienced beef with a quality label express a significantly more favourable attitude towards labelled beef. The market share of this beef quality label was only 7%, whereas about one quarter of the respondents claimed to purchase labelled beef. Additionally, claimed knowledge of beef labels contrasted largely with the ability to name a beef label. These research findings illustrated the gap between claimed and actual knowledge. Similar gaps between attitude towards some kind of sustainable products and the purchase behaviour for these products can be noticed.

1.5 Socio-demographic profile

Quantitative research with a description of consumers in terms of socio-demographic characteristics, has been carried out mostly with organic products. In a research of 2001 (Cera-Foundation, 2001), it seems that women were more susceptible for organic products than men. Consumers from the city buy more often organic products in comparison with persons who live at the countryside. With respect to age, most organic consumers are between 25 and 45 years old. Less organic consumers are present in the age class of +55, which is surprising since this group is generally more sensitive to health and quality. Education level does not have an influence on the consumption of organic products. The presence of children in the household does have a clear

impact. More than a quarter of the organic consumers have children aged less than ten years. Remarkable is the smaller amount of organic products for both the lowest and the highest income classes. Another research with respect to the consumption of organic products has been carried out yearly since 1998 (VLAM, 2003b) (Table 1).

The socio-demographic profile of respondents who already consumed at least once an organic product is shown in table 1. Regarding gender and age, similar results are obtained as in the above-mentioned study. Notable is the decreasing trend for the social class. The lower the social class, the higher the amount of respondents who consumed at least once an organic product, with the exception of social classes 5-6 in 2000 and 2002. For the living environment, no conclusions can be drawn since the figures over the five years are largely inconsistent.

The study about the image of agriculture (Saenen, 2002) identified four segments in terms of socio-demographic characteristics. No significant differences were found regarding gender and age. The segment with the overall negative attitude towards agriculture was associated with the highest education level, the city as living environment and a significant higher percentage of respondents without acquaintances who were linked with agriculture. A higher percentage of farmers and persons with the lowest education level was present in the segment with the common positive image about agriculture. The segment that is satisfied with the present kind of agriculture consists of more persons living at the countryside, with a low education and having relatives and other acquaintances who are active in agriculture. And finally the segment that is interested in organic and sustainable agriculture had a significant higher percentage of respondents who live in the city, with an average education and with relatives and acquaintances who work in the area of agriculture.

Table 3

		1998	1999	2000	2001	2002
Gender	Male	88	89	76	98	83
	Female	112	110	121	102	120
Age	15-34 years	104	108	98	104	105
	35-54 years	114	100	113	112	113
	55 years or more	82	92	86	83	88
Social class	1-2	116	127	119	134	113
	3-4	108	108	96	101	98
	5-6	92	85	106	93	110
	7-8	86	77	76	73	90
Living	5 big centres	82	108	110	107	143
environment	urban + secondary	94	104	94	101	90
	rural	122	88	97	93	100

Profile of the Belgian population who consumed at least once an organic product $(Index=100)^{*}$ (VLAM, 2003b)

^{*}> (<)100: Within this socio-demographic category, there are relatively more (less) respondents who consumed at least once an organic product.

In the study of the fair-trade label for coffee (De Pelsmacker et al., 2003), people in the 31 to 44 age group, male and higher educated respondents are relatively more present in the segment of consumers who find fair-trade very important. The age group is in line with the profile that fair-trade organisations see as their target group. The research about farm products (VLAM, 2003c) also investigates the socio-demographic profile of consumers who buy products directly on a farm. With respect to age, there is a relative higher percentage of older consumers who buy products on the farm, which is the opposite of the above-mentioned results. Furthermore, a one-person-household consumes less farm products than household of two or more persons. The upper social class (profession-income-education) buys less products directly on a farm, which is probably due to the fact that they lack the time to visit farm shops.

In sum, consumers who are most sensitive to sustainable products are mainly women, middleaged, higher educated and with the city as living environment.

1.6 Social embeddedness

The purchase and consumption decision are not only determined by elements described in the previous paragraphs, but these decisions are in many cases also a consequence of the entire society, the social embeddedness. Elements such as the satisfaction of basic needs and socio-demographic changes were already mentioned, but in this paragraph the importance of events and other elements will be discussed.

A first element that had an important influence on the entire society when it comes to food are the food crises and scares encountered by the European and Belgian agriculture. These led to an increased consciousness on the link between food and health and further to stonger consumer demands for attributes such as traceability, animal welfare and labels and hallmarks.

A second element that has to be taken into account is the fact that consumers are not the only actor in the food supply chain. Retailers for example want to guarantee their market position and margins. In recent years, they noticed that there were possibilities to differentiate themselves by adding organic and fair trade products to their assortment. Although these elements are not requested by their entire clientele, these products were introduced in the shop as a part of their marketing strategy. In results, these products are now available for everybody. Fair trade coffee was for example only available in specialised shop (Wereldwinkel) until its introduction in the supermarkets two years ago. This makes the product much more available for the time-saving consumer who prefers buying all his purchases at once in the supermarket.

2 Barriers for consumption of sustainable food products

Only when consumers have a certain need that is important to them and that is unsatisfied by the purchase of non-sustainable products, they will be motivated to purchase sustainable products. When all needs are satisfied by their current purchase of non-sustainable food products, consumers will lack this motivation and in their next shopping they will buy food products in an automated or routinised (habitual) manner. Habit is found as one of the most important obstacles to purchase organic products (Cera-foundation, 2001). In this case, consumers do not take their attitude, positive or negative, into account. When considering the four segments in the

study about the image of agriculture (Saenen, 2002), one segment was typified as satisfied with the present kind of agriculture. Consequently, this segment does not consider the purchase of sustainable food products.

When consumers have the motivation to purchase sustainable products (due to unsatisfied needs when non-sustainable products are bought), reasoned processing will occur. A good example is the segment with the overall negative attitude towards agriculture in the agricultural image study (Saenen, 2002). When reasoned processing is occurring, the attitude will then have an influence on the purchase behaviour. Consequently, a negative attitude is an undesirable condition. In general, consumer's attitude towards some kind of sustainable communication is often less favourable. This is due to the fact that it is often perceived as incredible or unreliable, as a consequence of confusion and scepticism (Verbeke & Viaene, 1999; Gordier, 2003). Furthermore, a negative attitude is often caused by the high price premium for sustainable products. Price is indeed found to be one of the most important barriers to purchase organic products (Cera-foundation, 2001; De Pelsmacker et al., 2003).

A positive attitude towards sustainable products is a good starting point to stimulate sustainable consumption. However, a positive attitude does not always result in the desired behaviour. This is due to the fact that two other factors determine the decision-making process, social influences and perceived behavioural control. As mentioned above, the determinant for social influences is uncertainty about availability and the need-satisfying capacity of products, due to a lack of clear information. However, this uncertainty and consequently social influences could also lead to the desired behaviour through direct contact with the food producer (see also above). Perceived behavioural control concerns among other things the availability of products on the market.

In sum, we identify four main barriers for sustainable consumption. First, **lack of an unsatisfied need** with respect to sustainability leads to habitual purchase behaviour, which excludes new products such as sustainable products. Second, a **negative attitude** towards sustainable products will never lead to sustainable behaviour. Third, **the lack of clear information** about food products in general and specifically sustainable products could have a negative impact on the decision-making process due to uncertainty and social influences. And finally, **availability** of sustainable products is determining for the consumer's ability to purchase sustainable products.

The research of Verbeke (1999) can serve as an example to clarify the different barriers. The condition of unsatisfied needs is present for 57% of the respondents since they judged beef

quality labels as necessary (need recognition). 43% of the respondents will not even consider buying beef with a quality label since they lack the motivation due to their satisfied needs with respect to beef purchase. However, the market share of this beef quality label is only 7%, which is considerable lower than the reported 57% of consumers who are 'motivated' to buy this label. Different barriers are responsible for this low market share. First, as mentioned in the section about information, knowledge and uncertainty, the environment with respect to beef meat is dominated by uncertainty, due to unclear and doubtful information. Second, in the section about the decision process, it was mentioned that consumers were more critical towards beef quality labels. This negative attitude will not result in the purchase of beef quality labels. Finally, availability of labelled beef was limited to some particular supermarkets and butchers. Hence, the limited distribution intensity (availability from a consumer perspective) clearly performed as a barrier in this specific case.

3 Possibilities to remove the above-mentioned barriers

Changing the driving forces of consumption behaviour provides opportunities to remove the above-mentioned barriers.

A first option is the change in need-satisfying capacities of products. Certain pervious-fulfilled needs may become unsatisfied when the need-satisfying capacities of non-sustainable products are reduced, while other important needs may become satisfied through the change in need-satisfying capacities of sustainable products. For example, the purchase of sustainable products can be presented as a mean to distinguish him/herself from others, to keep or improve their social status. In this case, the ego-motivation (respect and appreciation by others), which is rather important for many people, is addressed. On the other hand, non-sustainable food products could be presented in such a way that needs become unsatisfied, such as the need to take care of the environment. In both cases, the purpose is to change the decision-making process from automated to reasoned information processing. As already mentioned before in section 1.1, the need to save money and the need to take care of health are the needs that could be used to convince most consumers.

Secondly, changing consumer's behavioural control could have a positive impact on different barriers for sustainable consumption. This is possible through changing the resource demands of products, using laws, prices and information, or changing the abilities of consumers (consumer

resources), using for example taxes, subsidies or consumer education. Most sustainable products have a price premium, which is often responsible for the negative attitude. Since a fair price for the agricultural entrepreneurs is a condition for sustainability, it is often not possible to reduce the sales price. However, by means of subsidies and propagation for sustainable products and taxes for non-sustainable products stimulation of sustainable consumption could be supported. In the qualitative research of Bontinckx (2003), consumers with motivations to buy ecological products based on the need to distinguish and the need to try out new technologies, accept taxes and rules as strategies to stimulate sustainable consumption. On the contrary, consumers with a motivation on economic basis do not accept this principle but favour the system of financial incentives. Education or providing information is another strategy to change a negative attitude. Consumers can be made aware of the advantages of sustainable products and disadvantages of nonsustainable products. Furthermore, clear and objective information could clear off scepticism about sustainability, but also confusion about this concept and the three different aspects (economic, ecological and social). In this way, uncertainty about the products to purchase will be removed, resulting in individual processing. Better informed consumers are in general more prepared to change towards environmentally friendly behaviour (Joossens & Brouyaux, 2003). Moreover, consumers do not have the adequate knowledge and skills (cognitive capacity) to identify ecological products. Therefore, it is necessary to help them through setting up systems by which these products can be recognised. This could be done by very clear and recognisable labels or by grouping these products in specialised shelves in the stores (Bontinckx, 2002). Furthermore, an increase in availability of sustainable products will also improve consumers' behavioural control.

Since a combination of a reasoned and individual decision-making process leads to the best outcome, the proposed possibilities to remove barriers for sustainable consumption envisage to change consumer decision-making from automated to reasoned processing and from social to individual processing. However, since food purchases occur very frequently, we can not expect that consumers deliberate very extensively for each food purchase. After deliberation and consequently the purchase of a sustainable product, consumers will need heuristics to develop a new routine in buying these sustainable products. Heuristics are behavioural rules that are used to reduce complex ecological themes to a level that can be used in consumers' daily life. A Belgian research about an information campaign of beef quality labels (information leaflet, Verbeke et al., 2002) revealed that consumers indeed search for simple heuristics to use in their purchase decision. The information leaflet gave detailed information about the indicators on beef labels,

features of the traceability system, its guarantees and its initiators and controllers. The strongest objections to the leaflet were among those who expected to find a list with trustworthy beef outlets. Some respondents also hoped to find information about how to judge quality at the point of sales. These two consumer demands can be seen as heuristics that reduce the cognitive effort needed in their purchase decision process.

Bontinckx (2002) finds that according to the opinion of the consumers other actors should be responsible for ecological products, especially the producers. Moreover, consumers think all products that are available on the market should be ecological and meet with norms that are set up and controlled by the government. Consumers also claim that this should not only involve the economic actors, but also the consumers themselves. In that case, stimulation of ecological behaviour makes use of the "moralising technique", which compels certain behaviour.

Part IV: Strategies to stimulate sustainable consumption

Considering the four elements of the marketing mix, product, price, promotion and place, we can draw some conclusions based on this report. A coherent and integrated marketing mix for sustainable products may have a good chance for success. It means that the four P's, eventually plus the P of people (important as personal information source and for personal reassurance) should be combined and integrated to satisfy consumer needs for sustainable products. The first element, product, is obvious. The product should intrinsically be sustainable or at least should contain some sustainable aspects. In this respect, it is important to look beyond the core (or intrinsic) product. It means that other product attributes like packaging, branding or labelling, as well as product image should match the sustainable character.

With respect to price, the price premium of sustainable products is a frequently mentioned barrier. Policy measures can specifically address this price disadvantage of sustainable products through systems of taxes (for non-sustainable products) or incentives (price bonus for sustainable products), eventually combined with support measures for sustainable production practices.

Sustainable products can be promoted to the broader public through communication efforts. Through providing information, certain features of products can be addressed, the need-satisfying capacity and the values linked with sustainable products can be presented, etc. We have to take into account that the message presented in communication, that tries to make sustainable products attractive, corresponds with the real features and the effective need-satisfying capacity of sustainable products, since the consumption experience of sustainable products will have a feedback impact on the attitude and the needs and motivations of consumers. In this report, it is rather clear that, although there are a lot of initiatives that try to provide information to the consumer, the consumer perceives a lack of clear information adapted to a common everyday level.

The fourth element of the marketing mix concerns the place of purchase. This relates to the availability of sustainable products, which has been shown to be one of the barriers to purchase and consumption. Efforts in terms of logistics and transport, as well as the broader distribution policy including intensity, chain management and organisation deserve attention.

References

Bontinckx, C. (2002). Attitudes et comportements de consommation et développement durable, étude qualitative.

Bruyer, V., Zaccaï, E., Rousseau, C., Recht, P., Delbaere, P. & Kestemont, M.-P. (2003). Criteria and impulses for changes towards a sustainable consumption: Approach per sector. First intermediary report, january 2003.

Cera-Foundation (2001). Biologische land- en tuinbouw: de stille doorbraak voorbij!? Horizon, 32p.

Crane, A. (2001). Unpacking the ethical product. Journal of Business Ethics, 30(4), 361-373. De Pelsmacker, P., Driesen, L. & Rayp, G. (2003). Are fair trade labels good business? Ethics and coffee buying intentions. Working Paper, January 2003.

De Standaard (2003). Winkelt u al fair trade? De Standaard / Fair trade magazine naar aanleiding van 'Week van de fair trade 6 > 11 oktober'. 3 oktober 2003.

Demey, V., Verbeke, W., Gellynck, X. & Viaene, J. (2003). Consumer versus producer expectations and motivations related to "superior" quality meat in Belgium. In: Food Quality: a challenge for North and South. 1 August 2003, Forum of the IAAS Congress Belgium.

Engel, J.F., Blackwell, R.D. & Miniard, P.W. (1986). Consumer behaviour. Fifth edition. The Dryden Press, Japan.

Gordier, A. (2003). Het effect van ethische communicatie. Student thesis.

Jager, W. (2000). Modelling consumer behaviour. PhD thesis, University of Groningen. www.ub.rug.nl/eldoc/dis/ppsw/w.jager/thesis.pdf

Joossens, L. & Brouyaux, A. (2001). Leefmilieu: de consumenten leven mee ... De Wakkere Consument, 89,.

Maslow, A.H. (1954). Motivation and Personality. New York, Harper & Row.

Mathijs, E. (2003). Marketing food quality: the role of labels and short chains. In: Food Quality: A Challenge for North and South. IAAS Belgium vzw, August 2003, IAAS Congress Belgium.

Reheul, D., Mathijs, E. & Relaes, J. (2001). Elements for a future view with respect to sustainable agri- en horticulture in Flandres. Report for the governmental project 'Sustainable Agriculture'.

Saenen, R. (2002). Het imago van de landbouw(er) in Vlaanderen. Rapport opgesteld voor het VILT. Boerenbond, augustus 2002.

Vannoppen, J., Verbeke, W. & Van Huylenbroeck, G. (2001a). Motivational structures towards purchasing labelled beef and cheese. Journal of International Food and Agribusiness Marketing, 12(2), 1-29.

Vannoppen, J., Verbeke, W. & Van Huylenbroeck, G. (2002). Consumer value structures towards supermarket versus farm shop purchase of apples from integrated production in Belgium. British Food Journal, 104(10-11), 828-844.

Vannoppen, J., Verbeke, W., Vanhuylenbroeck, G. & Viaene, J. (2001b). Consumer valuation of short market channels for fresh food through laddering. Journal of International Food & Agribusiness Marketing, 12(1), 41-69.

Verbeke, W. & Vackier, I. (2004). Profile and effects of consumer involvement in fresh meat. Meat Science, 67(1), 159-168.

Verbeke, W. & Viaene (1999). Consumer attitude to beef quality labels and associations with beef quality labels. Journal of International Food and Agribusiness, 10(3), 45-65.

Verbeke, W., Ward, R.W. & Avermaete, T. (2002). Evaluation of publicity measures relating to the EU beef labelling system in Belgium. Food Policy, 27, 339-353.

VLAM (2003a). Resultaten Biobarometer 5de golf en posttest Bio-bloscampagne, INRA december 2002. Marketingcel VLAM, 13 januari 2003.

VLAM (2003b). Consumptie van bio-producten (1998-2001). VLAM Marketingcel.

VLAM (2003c). De hoeveklant doorgelicht. Studie- en ontmoetingsdag: Is er nog toekomst voor hoeveproducten, 20 oktober 2003, Heusden. Marketingcel, VLAM.

Vyncke, P. (1992). Imago-management. Handboek voor reclamestrategen. Gent, Mys & Breesch

Annex I: Definition of "sustainable consumption" (Bruyer et al., 2003)

4.2. DEFINITION OF "SUSTAINABLE CONSUMPTION"

4.2.1. International institutions

Agenda 21's chapter 4 (*Changing consumption patterns*) explains that non-viable production and consumption patterns are the main cause of the continuous degradation of the environment and that this scheme worsens poverty and imbalance (4.3.) between rich and poor countries. That's why the examination of the role and the impact of consumption and production patterns as well as unsustainable lifestyles should get a high priority level (4.13). A comparison between Agenda 21 and the Plan of Implementation decided at the Johannesburg Summit in 2002 may lead to three remarks: (i) *"compared to Agenda 21, the items of protecting sectors of the environment, joined with new topics (...) are all together reduced to a much smaller place (...); (ii) the topics of consumption and production have gained wording importance, promoted to a chapter of the same statute as the one on natural resources; (iii) while the approach of Chapter III ("Changing unsustainable patterns of consumption and production") stays quite homogeneous for the whole world (...) there are new chapters, not at all present as such in the Agenda 21, devoted to regional approaches' (Zaccaï, 2002b).*

In 1994 at the Oslo Ministerial Roundtable, the most commonly accepted definition of sustainable consumption was established as: *"the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations"* (quoted in Barber, 2002). As one can observe, the focus is mainly on environmental issues, even if "basic needs" and "better quality of life" are quoted.

On the other side, *"sustainable production concerns the supply side, focusing on the economic, social and environmental impact of production processes, while sustainable consumption addresses the demand side, focusing on consumers' choices of goods and services, such as food, shelter, clothing, mobility and leisure, to fulfil basic needs and improve the quality of life" (UN, 1998, quoted in OECD, 2002a: 11).* When we compare both these definitions, one can observe that the second one is more focused on the three traditional pillars of sustainable development whereas the definition of sustainable consumption sounds more "ecological": it sounds as if consumers may only have little impact, when purchasing products, on social conditions of people having produced the purchased goods.

4.2.2. The European Union

From a European perspective, during the nineties, most of the initiatives aiming at a product-oriented environmental policy began to be developed in northern European countries: in 1993, foundation of the Swedish "Ecocycle" Commission¹; in 1994, publication of the "Policy document on products and the environment" by the Dutch Ministry of Housing, Spatial Planning and the Environment (VROM); in 1996, the Finnish Ministry of Trade and Industry published a discussion paper on "Production, products and consumption patterns in sustainable development" and the same year the Danish EPA published the discussion paper "Intensified product-oriented environmental initiative"; in 1997, foundation of a Nordic IPP group (consisting of representatives from Denmark, Norway, Sweden, Finland and Iceland); in 1998, adoption by the Belgian Federal State of the new law on "Product standards aiming at the promotion of sustainable production and consumption patterns to protect health and environment"; in 2000 communication of the Government of Sweden about "A strategy for environmentally sound product policy"². According to Ernst & Young

¹ In 1997 the Commission published its strategy document which suggests a national strategy for eco-cyclic adaptation. *"Targets are specified on short term basis (3-5 years), intermediate term basis (10-15 years) and long term basis (25-50 years). The long term targets aim for a factor 10 dematerialisation of the goods produced, use of renewable energy and non toxic materials. (...) The eco-cycle commission specifically points out producers as having a main responsibility for product changes and changes of material usage patterns, although they also note that it is important that consumers demand environmentally benign products" (Magnusson, 2001 : 6).*

² In this document one can read that *"Increasing attention is therefore being paid to lifestyles, consumption patterns, the organization and planning of society and international cooperation. Ecological sustainable development is only possible if we apply an integrated approach and if all sectors of society (...) are involved in the solution"* (p. 5); *"An integrated product policy could also help Europe to gain competitive edge as a result of integrating environmental concerns. If clear, uniform guidelines and principle were in place, an integrated product policy would stimulate trade and improve the competitive position of European industry. It could therefore help to avoid conflicts between environmental policy and single market policy"* (p. 6). It is important to notice the argumentation based on the possibility of a reduction of conflicts between environmental concerns and the way the market functions and a possible gain in competitiveness for industry. The text also points out the importance of all stakeholders involved in product policy, i.e. everyone, and the flux of information required for ecological choices to be made by these players. The text notices also the importance of

(2000), "leading member states were those which had articulated a product policy strategy in a policy document (...) One point of particular note is the tendency to involve a range of stakeholders in the policy development process, through information networks or sector-driven consultation bodies" (p. 11).

After the studies carried out by Ernst & Young and SPRU in 1998 and 2000³, the European Commission published its *Green Paper on Integrated Product Policy* in 2001 where it is argued that the challenge is *"to aim at a new growth paradigm and a higher quality of life through wealth creation and competitiveness on the basis of greener products"* (EC., 2001b: 3). And the Commission specifies that *"the challenges of making product more environmentally friendly have to be taken up first and foremost by businesses and consumers"* (EC., 2001b: 3). This *Integrated Product Policy (IPP)* addresses above all the whole lifecycle of products. So one has to take into account the products prices. *"In principle, all products and services are included in the scope of this policy which is aimed at achieving an overall improvement of the environmental impacts of products. In practice, actions might address all or only certain products, selected on the basis of discussions with stakeholders because of their importance and their scope for improvement" (EC., 2001b: 5). At the European Union level, IPP (Integrated Product Policy) is defined as a tool: an approach aiming at lowering the impact of the life cycle of products on the environment. IPP is defined as a general frame which allows Member States, local authorities, companies and NGOs to develop their ideas and to spread every positive experience when considering ecologically-sound products on the one hand; on the other hand, as a lever to be exploited in the frame of punctual communitarian initiatives when they offer some interesting perspectives.*

4.2.3. Belgian federal level

At the Belgian federal level, the *Product Plan* is defined as an *integrated* (intégrée) approach even if the aim is a *complete* (intégrale) approach: the integrated approach is mainly focused on environmental issues while a complete approach takes into consideration social aspects (in a broad sense: North-South aspects and national aspects) as well.

European and Belgian IPP are mainly defined as instruments, or even as frames for the development of instruments of policy aiming at a reduction of the impact of products on the environment. Little concern about social aspects is present in such political frames, that is the reason why we propose a broader definition of sustainable consumption (based on our experience and the information gathered during the interviews and the focus groups) which takes into account all aspects of sustainable development.

4.2.4. Proposal of definition

Sustainable consumption may be defined as a form of consumption which takes into account not only intrinsic characteristics of a consumed product, but also the ways it is manufactured and used (and eliminated) understood in a broad sense: environmental and social aspects or even political ones. So, a *sustainable* consumption takes into account environmental criteria (minimisation of the environmental impacts of the consumed product all along its life cycle) as well as fairness ones (the social conditions of the people who have taken part in the manufacturing of the considered product). In this way, sustainable consumption is the reflect of a broadening of the concept of a product's *quality*: not only its intrinsic characteristics as a manufactured product have to be taken into account, but also the early stages of the product's manufacturing (the process production) and its end-of-life stage (elimination/recuperation/reuse/recycling). The notion of product then tends to be extended to the whole life cycle of the considered product; in this way a sustainable consumption is the witness of an integration of the three pillars of sustainable development in the

the insurance and bank sectors as financial resources providers: they have the possibility to take into account ecological performance of the industrial sectors. Concerning consumers: *"The first condition for environmentally appropriate behaviour on the part of consumers is that there must be environmentally acceptable alternatives on the market. The second condition is that they must have access to easily understandable, accurate and relevant information." Relevant information" in this context means information about the method of production, the product"s content and use and how it should be disposed of at the end of its life" (pp. 42-43).*

³ European Commission DGXI, *Integrated product policy*, a study analysing national and international developments with regard to Integrated Product Policy in the environment field and providing elements for an EC policy in this area, March 1998, Ernst & Young and SPRU; European Commission, DG Environment, *Developing the foundation for Integrated Product Policy in the EU*, Report by Ernst & Young, 23 June 2000. Concerning the study published in 1998, the authors have identified five core packages of policies (*"building blocks"*) : (i) measures aimed at reducing and managing wastes generated by the consumption of products; (ii) measures targeted at the innovation of more environmentally-sound products; (iii) measures to create markets for more environmentally-sound products; (iv) measures for transmitting information up and down the product chain; (v) measures which allocate responsibility for managing the environmental burdens of product systems. *"Each building block is a cluster of policies which share a common objective"* and *"taken together these specific measures organised within building blocks would form an Integrated Product Policy"*.

notion of product itself considered in its entirety. But quantitative aspects have also to be taken into consideration: sustainable consumption is a consumption that satisfies basic needs of people.