Sustainability and Organics

An explorative case study of the Swedish organic dairy sector from a sustainable marketing perspective

Sarita Bhagat

Master Thesis Series in Environmental Studies and Sustainability Science, No 2012:031

A thesis submitted in partial fulfillment of the requirements of Lund University International Master's Programme in Environmental Studies and Sustainability Science (30hp/credits)







Sustainability and Organics

An explorative case study of the Swedish organic dairy sector from a sustainability marketing perspective

Author: Sarita Bhagat

A thesis submitted in partial fulfilment of the requirements of Lund University International Master's Programme in Environmental Studies and Sustainability Science

Submitted 15, October, 2012

Supervisor: Dr Bodil Elmqvist, LUCSUS, Lund University

bodil.elmqvist@lucsus.lu.se

Co-Supervisor: Molly MacGregor, LUCSUS, Lund University

molly.macgregor@lucsus.lu.se

Abstract

Organic farming, considered as an agricultural practice, is supported by the CAP as an initiation for promoting environmental friendly method. The CAP supports the growth of a consumer-driven organic market. Organic farming is a sustainable practise that benefits the environment; market supports economic growth and society benefits in terms of health and quality of food. A large number of Swedish organic farmers have adopted organic farming practices, which is evident by large number of utilized agricultural land under organic farming. The Swedish dairy sector plays a dual role of maintaining a varied landscape and at the same time contributing to the nations' economy. Moreover, the organic dairy products are the largest consumable organic products in Sweden.

An attempt has been made to explore the organic development in Europe, by considering the Swedish organic dairy sector as a case-study. The policies and regulations framed under the EU have been scrutinized to understand the organic development. Further, a study and analysis of the various organisations involved in the Swedish organic dairy sector leads to the conclusion that the organizations are very much collaborated with each other and the market is dominated largely by two dairy companies, Arla Foods and Skånemejerier. However, this collaboration and exchange of information is limited only till the production side. There is a communication gap between the consumers and producers, that only a limited group of dedicated green consumers purchase organic products. Thus, the marketing strategy needs to be improved that shall ensure the involvement of all important stakeholders, like retailers in the decision-making process.

Market orientation model has been used for analysis. It is observed that the Swedish organic dairy sector truly fits into the market orientation model, which is generally adopted by companies as an important corporate marketing tool. The author suggests that the companies need to adopt a sustainability marketing approach that includes all the stakeholders while encompassing the triple bottom line approach. A market-focused sustainability framework has been proposed in this regard. This framework helps the companies to devise marketing steps that take into consideration the social and ecological systems. Such an integrated approach is a necessity to ensure a sustainable organic system. The framework is just a small step to bridge the gap between the consumption and production sides, but in the end, purchasing behaviour is based on ethical motivations of consumers.

Keywords: Consumption and production, stakeholders, sustainable marketing, organic dairy production, Sweden.

Acknowledgements

LUMES has been a fantastic journey. A new beginning each day, filled with hopes and new experiences. Writing a thesis has been a task in itself, for it left me sometimes remorse, sometime joyful, someday pondering over thoughtless issues and yet helped me realize many dreams. The process was a self-learning experience and I have evolved as a person. I am glad though that this journey was accompanied by some fantastic people and I am grateful for their constant love, support and care.

I want to thank Ingegerd for giving me the opportunity to experience of what it is to be at LUMES. Thank you Stephan, for your constant guidance and encouragement, in the initial days of choosing a thesis topic. You gave me all the time to follow my passion.

I would like to express by deepest gratitude to my two great supervisors, Bodil and Molly for being patient, supportive and most importantly listening to me, no matter how many times I confused them. This thesis would have been so incomplete without you two. Thanks again Bodil and Molly for all the productive sessions and motivational talks!

I am grateful to Jan Eksvärd, Anna-Karin Modin Edman (a delightful discovery of belonging to first batch), personnel at Arla Foods and Skånemejerier, who gave their valuable time and information for building up my case study.

This journey would have been incomplete without my family and friends back home. Thank you Mom and Dad for supporting me and let me follow my dreams. Nandita you lightened my mood whenever I thought of giving up. Prasad, you have been a true friend, guide and teacher. You believed in my potentials more than I did. I owe you for just being there! Also, my earnest appreciation to my second family in Sweden, Parveen, Shilpy, Amol, Arun and Chinmay thank you for cheering me up during summer and thesis period with fantabulous meals and good company.

Last but not the least, thank you my lovely comrades, who shared and laughed with me for two beautiful years. LUMES Batch 14 you have been the best family ever, that I shall cherish the wonderful memories for life. Love you all!!!



Table of Contents:

ABSTRACT	III
ACKNOWLEDGEMENTS	IV
LIST OF FIGURES	VII
LIST OF TABLES	VII
1. INTRODUCTION:	1
1.1 BACKGROUND	1
1.2 EUROPEAN ORGANIC SECTOR	1
1.2 PURPOSE OF THE STUDY	3
1.2.1. Aim of study	3
1.2.2 Research Questions	
1.3 RESEARCH DESIGN	
1.4 SCOPE OF THE STUDY	
1.5 STRUCTURE OF THE THESIS	7
2. LITERATURE REVIEW:	8
2.1 HISTORICAL DEVELOPMENT OF ORGANIC FARMING	8
2.2 WHAT IS ORGANIC FARMING?	
2.3. POLICIES AND MARKET INITIATIVES ADOPTED UNDER EU	
2.3.1 Regulation	
2.3.2 Policy Measures	
2.3.3 Inspection, Certification and Labelling	
2.4 ORGANIC MARKET AND CONSUMERS	
3. CASE STUDY OF THE SWEDISH ORGANIC DAIRY SECTOR:	
3.1 DEVELOPMENT OF THE SWEDISH ORGANIC SECTOR	
3.2 ORGANIC MILK PRODUCTION IN SWEDEN	
3.3 SWEDISH DAIRY SECTOR FROM AN ORGANISATIONAL PERSPECTIVE	
3.3.1. Lantbrukarnas Riksförbund (LRF) - Federation of the Swedish Farmers	
3.3.2 Swedish Dairy Association (Svensk Mjölk)	
3.3.4 Retailers and Consumers:	
3.4 THE SWEDISH ORGANIC MARKET	
4. ANALYSIS AND DISCUSSION	31
4.1 KEY FINDINGS:	31
4.2 ANALYSIS AND DISCUSSION	33
4.2.1 Market Orientation (MO)	33
4.2.2 Market-focused sustainability	34
5. CONCLUSION	38
REFERENCES:	42
APPENDIX	48
APPENDIX1: TRANSCRIBED INTERVIEWS OF PERSONNEL AT LRF, ARLA FOODS AND SKÅNEMEJERIER	48
ADDENIDIN 2: OLIECTIONIC OF THE CONCLINATED CLIDIVEN:	5.4

List of Figures

Figure 1: Structure of the working of certification in the EU, adapted from	. 15
Figure 2: The European Organic logos	. 16
Figure 3: Consumer responses for buying organic dairy products	. 29
Figure 4: Consumer responses for not buying organic dairy products	. 30
Figure 5: Components of Market Orientation Model	. 34
Figure 6: Market-focused sustainability Framework	. 35
Figure 7: Matrix for the corporations to assess their performance for adopting sustainable marketing	ng
or a market focused sustainability framework	. 36
List of Tables	
Table 1: Organic Regulations adopted under the EU	. 12
Table 2: Percent area under organic farming in the EU	. 13
Table 3: Structure of the Swedish Dairy sector	. 22
Table 4: Production of conventional and organic dairy products in Sweden	. 22
Table 5: Prices of conventional and organic dairy products in the retail stores	. 28

List of Abbreviations:

CAP Common Agricultural Policy

EU European Union

FAO Food and Agricultural Organization of the United Nations

IFOAM International Federation of Organic Agricultural Movements

KRAV Association for Control of Organic Production in Sweden

LRF Lantsbrukarna Riksförbund or Federation of Swedish Farmers

MO Market Orientation

UAA Utilized Agricultural Area

UN United Nations

WHO World Health Organization

CHAPTER ONE

1. Introduction:

1.1 BACKGROUND

The term 'organic' is no more a novice concept. Since the shortcomings of conventional form of agriculture and its consequences on health and natural ecosystem became familiar, many researchers and agriculture practitioners have reverted back to the old form of growing food, which uses natural resources and is less harmful to the environment. Cultivating food through organic method that follows the natural ecological cycle is one of them. Organic agriculture can be viewed as a post-modernism or post-industrialized alternative strategy changing the social structure and values of people (Michelsen, 2001). This is evident from the growing political interest, expanded network of stakeholders, alterations in the production system and infrastructure to meet organic requirements, development of standards and regulations for safeguarding the organic value, distribution of products and of course deepening this connection with the consumers (Lotter, 2003; Stolze, Piorr, Häring, & Dabbert, 2000; Sylvande & Floc'h-Wadel, 2000).

At present Europe and America hold the largest share of the organic market (Willer & Kilcher, 2012). Especially in Europe, the number of farms managed organically grew by 9 percent (o.8 million hectares) between 2009-2010 (Willer & Kilcher, 2012). So what makes Europe a favourable place that it accounts for almost 27 percent (ibid) of the world organic share? The present study is trying to explore the policies and market growth of organic products in Europe and trying to analyse its further implications with Swedish organic dairy sector as a case study.

1.2 EUROPEAN ORGANIC SECTOR

The European realm is surrounded with large forests and vast grasslands with suitable climate, making it a favourable place to carry out farming operations. Although farming is not the dominant occupation in Europe, it still considered as an influencing factor in shaping the EU's landscape and biodiversity (Tischner & Kjaernes, 2010). It further contributes to the European food exports and imports. The European State members have adopted a 'multifunctional' (Durand & Huylenbroeck, 2003) approach for agriculture which is also reflected in the objectives of the Common Agricultural Policy (CAP)¹ mentioned in Article 39 (Williams, 1997). The dairy sector is one of the most profitable agri-food industries in Europe as it fulfils the 'multifunctional' criteria like rural development,

⁻

¹ CAP is a policy choice undertaken to enhance the profitability of agriculture, ensure food quality and safety and at the same time encourage international trade in Europe. Organic farming was introduced under the CAP to fulfil the rural development objectives. The EU has initiated policies to enhance organic development (discussed at length in the thesis report) taking into consideration farmer's profitability, consumer's preference and the one in interest of the environment and animal welfare.

maintaining landscape, providing ecosystem services and contributing to economic growth. The CAP supports the development of the dairy sector with economic policy instruments like milk quotas, tariffs, and export refunds that in turn support farmers and helps in creating a market for the dairy products (Häring, et al., 2004).

Agriculture in the European Union (EU), with support from the CAP, has undergone many structural changes like use of intensive pesticides and mechanized farming operations to boost the food production. However, the then unforeseen consequences of health, safety, environmental degradation, biodiversity loss and exploitation of natural resources have now brought concerns regarding the modern practices of agriculture. In Europe, food is no longer a basic commodity satisfying the needs of people but its quality assurance, nutrition value and safety has become the uppermost priority. Many consumers are aware of the environmental impacts of food production and opt for food that is produced with least environmental damage, safe to consume and has good quality standards (Stolze & Lampkin, 2009). The question then arises, how to have a sustainably produced food system with least environmental damage and yet meet consumers' needs.

Organic agriculture sometimes referred as a 'social movement' (Michelsen, 2001), that cultivates crops and livestock with minimal effects on the environment, emerged in opposition to the conventional form of agriculture. Although there are critiques concerning the sustainability of organic production (Tischner & Kjaernes, 2010) and the growth of production getting stabilized (Dabbert, Häring, & Zanoli, 2004), it is nonetheless an ideal way to practice farming operations with least environmental damage.

Organic agriculture began in early 1990s in Europe by small group of farmers who did not believe in the dependency of chemical fertilizers and had strong organic values. When this sector started building on a larger scale consumers were sceptic about this concept and its development. In order to have a common understanding of the organic farming practices in Europe, it was necessary to have a regulation that every Member State could comply with. The International Federation of Organic Agricultural Movements (IFOAM) initiated guidelines for practicing organic farming. However, the EU had its first regulation and standards developed under the Council Regulation EEC number 2092/91 (EC, 2007; Källander, 2009; Stolze & Lampkin, 2009) in 1991. According to this regulation, organic farms and its products are to be certified and inspected by an accredited third-party body. The regulation not only boosted the organic production rate in the EU Member States but also gained confidence among consumers about the safety and quality of organic food. Thereafter, there has been a constant revision of the organic policies and initiatives to enhance organic production. Direct area payment is one for the important policy instruments adopted under

CAP to support conversion of conventional farms into organic (Padel & Lampkin, 2007). Adopting organic agriculture under the CAP is one of the important strategies to meet the objectives of the 2003 CAP reform of promoting environmental friendly production methods (European Commission, 2004a; European Commission, 2004b).

In Sweden, the concept of organic farming began in mid 1980s, with small group of farmers and its supporting associations who believed in the organic philosophies (Källander, 2009). Since last two decades, the Swedish demand for organic food products is growing at a rapid rate. The Government aimed at having at least 20 percent of organic farms by 2010 (Jordbruksverket, 2007), however, they were successful in achieving only 14 percent through strategic steps (Foreign Affairs and Trade, 2012). The dairy industry is one of the established industries in Sweden and contributes a major share to the Swedish organic market. In 2009, about 8 percent of the milk delivered to the dairies was organically produced, and the proportion of organic cows maintained in Sweden is the fourth largest in Europe (Ahlman, 2010). Although the rate of consumption of raw milk is decreasing (Jordbruksverket, 2007), there is a rising demand for Swedish dairy products, both within the country and for exports. This is evident from the fact that in 2011, around 600 farms were KRAV certified and there has been a 3 percent rise in the total organic milk (KRAV, 2012).

1.2 PURPOSE OF THE STUDY

The rising demand of organic dairy products is no more pertained to rise in income, change in the household structure and population growth (Tischner & Kjaernes, 2010). The change in behaviour is attributed to a positive attitude in consumption of products that are naturally grown and can meet health and quality requirements. Organic policy has become a fundamental part of the CAP especially for rural development. The 2003 CAP reform includes **action plan** for organic farming that meets the dual role of- a) promotion and development of market to meet consumers' needs and b) to contribute to the rural development, which is driven and dominated by the society (European Commission, 2004a). Since then the European Member States have adopted many policy initiatives and market strategies for the progressive expansion of the environmentally benign approach, organic farming.

1.2.1. Aim of study

The main **aim** of the undertaken research is to study the implementation of the current policy and market initiatives under the 2003 CAP reform, with the Swedish organic dairy sector as a case-study. Conclusions drawn from the study will help to visualize the required changes in the institutional mechanism and market strategies, which will help to strengthen the future organic system. This study aims to improve the decision-making process for formulation of better policies in the Swedish

organic dairy sector. Good policy and a strong market system will improvise the relationship between producers and consumers and thus, contribute towards sustainable consumption and production practices.

1.2.2 Research Questions

In order to fulfil the aim, the Swedish organic dairy sector is studied at length. According to the KRAV (Association for Control of organic production) market report (2012), about one-third of the food market in Sweden consists of organic dairy products and there has been a 4.5 percent rise in 2010 from the previous year. This indicates the rising demand for organic dairy products among consumers. Also, the market premiums paid to the farmers for conversion to organic farming is considered to be the highest in Sweden (KRAV, 2012).

Many policy initiatives like area conversion payments, environment support, price premiums and milk quotas are present to increase the organic dairy production (Jordbruksverket, 2007). However, there is scepticism among the critiques as to what point can organic dairy products be increased in the market and what implications it will have on the production side? Following research questions were framed to analyze the organic development in the dairy sector and check its implications from an economic and social perspective.

a) What are the opportunities and barriers present for the dairy producers in Sweden, to enhance the organic dairy sector within the existing policies and market strategies?

b) How the existing organic dairy sector be improved to ensure a sustainable organic production and consumption?

The first research question is oriented towards the various stakeholders involved in the dairy production system. The question helps to analyze what difficulties these stakeholders encounter whilst practising organic dairy and what marketing strategies are required to increase the organic market share. Thus, appropriate guidelines can be devised to boost sustainable organic dairy production in Sweden. Also, Sweden being an EU member state, its market growth can be a good example for other Member States to follow.

The second question suggests the changes that need to be implemented in order to maintain the viability or stability of the organic dairy industry within Sweden. Organic production helps in maintaining good environmental conditions. However, it is important to include the economic and social perspectives of sustainability in addition to environmental perspective in order to maintain the total sustainability of the organic system.

1.3 RESEARCH DESIGN

To understand the policies developed under the EU, Sweden's organic dairy sector was developed as a case study. Sweden is a Member State of the EU and has a long history of practising organic farming. The undertaken research is *exploratory* that can be divided into two parts, the first dealing with the production side of organic dairy products and the second with its consumption. This was done to investigate the development of organic industry related to EU policies and market of organic dairy. Another perspective was to understand their implications on consumption and production. The initial plan was to use only a qualitative approach that includes various stakeholders associated with the organic dairy production. However, on collection of data and further analyzing the literature, it became necessary to use a mixed method approach, in which qualitative method is used in the first part of the study whereas quantitative method is used in the second part. Thus, the procedures for the following case study can be briefed as a *descriptive* and *deductive* where both qualitative and quantitative methods have been used to scrutinize the effect of organic policies and market strategies for its development in Sweden.

The first part of the study was completed by examination of extensive literature related to origins of the organic farming, development of related policies, their impact on the market growth and popularity of organic products amongst consumers. Polices and certification procedure developed by the EU and IFOAM were studied in order to have a better understanding of organic process and development. Data published on websites of Svensk Mjölk (Swedish Dairy Association), Lantbrukarnas Riksförbund (LRF) or Federation of Swedish Farmers, and annual reports of KRAV and Dairy co-operatives were used to particularly understand the progress of the Swedish organic dairy sector. Also, it is interesting to note the large involvement of the various stakeholders in organic dairy industry.

Along with the literature and reports published on organic dairy, interviews and observations form the basis of data collection, thus completing the triangulation in the undertaken methodology. Various methods of interviewing were used depending on the availability of the selected interviewees. Although the sample of interviewees was very small (in total four), they are key actors in their respective organizations. To start with, personal open-end interview was conducted with an expertise on sustainability and farming at LRF, thus representing the Swedish farmers. Farmers have a closer relationship with the association and it was feasible to interview their representative. Questions asked were related to the effect of polices on farmers and how they benefit from organic farming². Following this, semi-structured interviews were carried with the dairy co-operatives who

² See Appendix 1.

make use of organic milk to process various dairy products. The Swedish dairy co-operatives, Arla and Skånemejerier, were interviewed as they represent a national and regional perspective, respectively. A telephone interview took place with a senior manager at Arla Foods and the interview was transcribed immediately. In case of Skånemejerier questions were sent via electronic mail, as personal and telephone interview was not possible with the concerned person. The contact person is the business manager of Hjordnära, Skånemejerier's organic dairy. Both the dairy co-operatives were asked similar questions with little modifications depending on the individual scale of production. These interviews helped to address the first research question.

Svensk Mjölk (Swedish Dairy Association) is another organization that takes part in the policy-making and is in close association with the farmers and all the dairy co-operatives within Sweden. Hence to get a better picture of the market situation of the organic dairy sector, a telephone interview was conducted with the market specialist at Svensk Mjölk. The interview was recorded in writing and immediately transcribed. This interview helped to identify the current market growth and policy development, which otherwise was not easily found in the relevant documents.

From the data, collected through interviews and literature analysis, it was drawn that although there is a sufficient supply of organic dairy products, especially raw milk, there was of lack of demand from consumers. This was completely in contrast to the conclusions drawn from the literature review, which stated a high consumer demand and deficit supply of organic products. Hence, to further conclude the findings and counter check them, a cross-sectional survey method was used. During survey, the consumers were asked reasons for purchasing or not purchasing organic dairy products and if they were able to recognize the new Euro-leaf logo (organic label), which is mandatory on all packaged organic products from July 2012. In addition, observations were made regarding the price difference between conventional and organic products and the number of customers actually purchasing organic at the supermarkets. The survey had a sample size of 97 randomly selected respondents and the collected data was quantified using simple calculative method. It is to be noted here that although the survey did not form the major part of the thesis work, it was necessary to carry out a random sampling in order to countercheck the findings from interviews and literature.

1.4 SCOPE OF THE STUDY

The undertaken research is an attempt to understand the development of organic sector in Europe, with particular focus on the existing policies and market strategies. Sweden, as a nation is completely different in geographic and climatic conditions than its counterpart nations and hence, the development of organic sector varies. From the initial literature work, it was evident that every EU member state has its own principles and guidelines about organic farming, despite the presence of a

uniform set of guidelines. The Swedish organic sector was taken into account owing to a long history of organic development, presence of a single and widely recognized certification body and the vast number of organisations. However, the findings from the studies cannot be generalized for the policies being implemented elsewhere in the European Member States.

Although retailers play a major role in controlling prices and are in direct contact with the consumers, they do not form a major part of the study. The main focus is to understand the challenges in the policies and market strategies, encountered by the farmers and dairy-cooperatives in organic dairy production. This is owing to the fact that the EU policies do not have much impact on the retailers.

1.5 STRUCTURE OF THE THESIS

The **second** chapter gives a further and detailed insight into the development of organic farming, particularly in Europe, the existing policies and measures taken by the EU. Also, the market development for the organic products is further explained. The **literature review** thus helps to understand the various studies carried out in Europe related to the organic policies.

The *third* chapter deals exclusively with the development of organic farming in Sweden. Here the case of the Swedish organic dairy is explained. The *case study* is built on the existing literature, collected interviews and observations. Also, polices adopted by the Government and the role of the various stakeholders involved in the dairy production is taken into consideration. It also includes the market strategies adopted by the major dairy co-operatives to promote organic dairy products amongst consumers.

The major *findings* are explained in chapter *four*. Excerpts drawn from chapter two and case study developed in chapter three are used for *analysis and discussion*. The author has used the market orientation model for analysis. A market-focused sustainability framework has been proposed at the end of analysis.

Chapter *five* includes *concluding remarks* wherein the research questions are answered.

CHAPTER TWO

2. Literature review:

Organic farming is considered as an alternative practice to conventional farming. Post industrialized agriculture, very few farmers who believed in pesticide-free cultivation, practised organic farming. The sector was initially recognized only by a few organic supporters. Organic farming gained importance only in the 1990s owing to the growing concerns about damage done to the environment and human health by conventional agriculture and use of pesticides. The book *Silent Spring* written by Rachel Carson sheds light on the harmful effects of synthetic pesticides on environment and threatening the existence of other species. Thus, organic farming began as a form of an alternative practice that fulfils the objectives of environmental protection, efficient resource use, health safety and food quality against the detrimental way of growing food that depends on synthetic chemicals. Later the introduction of regulation and further development of market helped to achieve the above stated objectives of organic farming (Lampkin, 2003; Stolze & Lampkin, 2009).

2.1 HISTORICAL DEVELOPMENT OF ORGANIC FARMING

The term organic was first coined by Walter Northbourne in 1940. In his book *Look to the Land*, he explains the natural process and functioning in the farming system (Kuepper, 2010). He elaborates the term 'organic' as a "complex but necessary interrelationship of all parts" (Heckman, 2007). However, the philosophy and principles of organic farming broadened much earlier. British botanist Sir Albert Howard is regarded as the father of organic farming. He introduced the concept of 'Law of Return' (Pollock, 2009) that later became the underlying principle for organic farming. Sir Howard severely criticized the use of chemical fertilizers in agriculture and suggested simple ways of natural composting, which he collected through observations when he was an agricultural specialist in India in 1920s. His book *An Agricultural Testament* describes the characteristics of 'Natures Farming' (Heckman, 2007; Pollock, 2009). Similar studies were carried out by many pioneers who were dedicated to the concept of natural farming and criticized the use of chemical pesticides. Lady Eve Balfour first carried out a comparative study of organic and conventional farming in England in 1939-1969, and her observations are published in the book, *The Living Soil and the Haughely Experiment* (Heckman, 2007).

³ Law of Return: Sir Albert Howard proposed this law. The law says that all organic waste is recycled in a natural way and returned to the soil, which is important and healthy for farming. Thus the law is a great way to understand that natural flora system is a better solution to adopt than the use of pesticides to get a better yield of crops. He also emphasizes that the "process of growth is equal to the process of decay" and that naturally the viability of system as a whole can be maintained.

Since then, there has been a rising interest to learn about the scope of organic farming. Although the movement of organic development was pertained only to Western Europe and North America, it slowly gained momentum even globally. This is apparent from the increase in the number of members joining the organisation IFOAM⁴, involvement of Food and Agricultural Organization (FAO) through activities like networking, market analysis, improving technical knowledge, providing assistance to farmers and the formulation of standards through the Codex Alimentarius Commission⁵ (Lockertz, 2007). Lockertz explains that all these developments were a result but not the cause of organic farming. He emphasizes that other than the political push and environmental concerns, people's choice to adopt a simpler lifestyle than the materialistic one also promotes the development of the organic (ibid).

In Europe, organic farming was an idea that existed among small number of farmers. It started even before any major technological changes took place in the farming practices (Dabbert, Häring, & Zanoli, 2004). However, upon realization of the organic importance, many small farmers interested in this concept got together and formed organizations to give a full-fledged meaning to organic farming and enhance its development. These non-profit organizations developed their own standards and marketing strategies to promote organic products through constant dialogue amongst farmers. As the market for organic products started growing, there was also confusion regarding its transparency in terms of production. Consumers were doubtful about the authenticity of organic products and there were issues regarding the source of production. This prompted action and thus, organic farming got political support by formulation of regulation and standards (ibid). Thus, organic farming became a major part of the agricultural policy that was once critically opposed. The next section describes in detail the development of policy and support by the EU.

2.2 WHAT IS ORGANIC FARMING?

By the end of the twentieth century organic farming started gaining acquaintance among the mainstream actors. However, there was still a definite perplexity about the exact definition of the

_

⁴ **IFOAM,** founded in 1972 is a unique International Organization that fosters organic growth with regional institutions. It provides guidelines, assistance and negotiates on agricultural and environmental issues for a better organic system worldwide. For the past 30 years it has constantly striving for achieving its goal on worldwide adoption of ecologically, economically and socially sound systems of organic agriculture. The standards formulated by IFOAM are usually adopted to develop national standards on organic farming. It also helps in promoting market and development with various innovative schemes offered to the farmers. http://www.ifoam.org/index.html

⁵ **Codex Alimentarius Commission** was formed by the bilateral organizations FAO and WHO that sets international standards, guidelines and codes of practice for safe and healthy food products. Codex Alimentarius is a reference point for the consumers, producers, processors and international traders for fair practices and quality of food. http://www.codexalimentarius.org/codex-home/en/

term 'organic'. Organic agriculture was started to increase crop yields and to improve the fertility of the soil (Ahlman, 2010). Thus, the next challenge was to define the term 'organic agriculture'. The definition formulated by the IFOAM is accepted and followed worldwide. According to IFOAM, organic farming is defined as,

"a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved" (IFOAM, n.d.).

According to this definition organic farming can be considered as an agricultural practice towards sustainable development that ensures safety of the natural environment and helps in maintaining a healthy lifestyle, along with economic growth. This definition of organic farming gives clear idea about its principles. It has also helped many institutions to develop standards and regulations that meet the organic principles. The EU has incorporated organic policy in its constitution and now serves as a guiding pathway to its Member States for practising organic farming. Although the present study focuses on the organic dairy in Sweden, it is necessary to mention the development of policies and regulations in the EU. The following section is an overview of the current strategies adopted by the EU.

2.3. POLICIES AND MARKET INITIATIVES ADOPTED UNDER EU

People having like-minded ideas on organic value initiated organic farming that subsequently led to the formation of private organizations. These private organizations spread across Europe not only provided aid to the interested farmers with organic guidance but also developed certification and standards on organic (Padel & Vine, 2010; Ch.3). Thus, a new era of organic production and consumption commenced in the 1990s with the backing of privately owned certifying bodies giving assurance about the quality and origins of organic products. National Governments of France (1980) and Denmark (1987) also started developing legislation to create credibility of the consumed products, covering the expenses for conversion of farms to organic (Michelsen, 2001).

2.3.1 Regulation

The first regulation for organic farming was developed by the EU, under the Council Regulation (EEC) No. 2092/91 (EC, 2007). The main aim to formulate such a regulation was to avoid misleading of certifications and maintaining the credibility of organic, thereby creating a transparent system (Padel & Vine, 2010). In 1999, the EU further introduced organic legislation under the CAP reform to realize the objectives of rural development and environmental concerns (European Commission, 2004a;

Sylvande & Floc'h-Wadel, 2000). The Commission subsequently developed several strategic action plans to realized the objectives, which was mainly focused on a two-fold agenda:

- a) Development of organic market driven by consumers. This included development of common policies, reinvestigation of rules for inspection that harmonizes internal trade and reinforcement of a common EU logo on organic products. Marketing of organic products is an important factor that needs to be enhanced by influencing consumer choice.
- **b)** Contributing to the rural development by supporting organic. This included national action plans developed by individual Member States, that covers investment in research, spread information to the farmers and the society, develop data bank and knowledge based network in order to strengthen organic development. Also, measures should be undertaken to constantly update regulations and standards (European Commission, 2004a).

The various regulations adopted by the EU in the past 20 years is summarized in **Table 1.** Standards and rules for labelling, certification and inspection for organics were developed under these regulations. The regulation and standards has raised the level of organic farming from a small group of collected ideas to a wide range of political and institutional involvement. This formed an important basis for development of market and policy initiatives. Indeed Stolze and Lampkin (2009) explain that the intervention of the EU to support organic farming was an important step to address issues prevailing the conventional form of agriculture that included imperfect competition, lack of information and transparency, market failure and correction of previous government's intervention (Stolze & Lampkin, 2009).

Table 1: Organic Regulations adopted under the EU

Organic Regulations adopted by EU	Description of the Regulations
Council Regulation (EEC) No. 2092/91	Organic production of agricultural crops and foodstuffs. All the organisations involved in the organic production must comply with the standards for regular inspection and certification
Council Regulation (EEC)No. 2078/92	To comply with the organic standards in order to receive financial support for organic farmers and for farmers under conversion. Also, organic farming part of the agri-environmental production programme
Council Regulation (EC) No. 1804/99	Guideliness for organic animal production and livestock management. Integrating it with production of agricultural crops
Council Regulation (EC) No. 834/2007	Revision of the European regulatory framework on organic production and labelling and repealing Regulation (EEC) No. 2092/91
Regulation (EC) No. 882/2004	Official controls (inspection)performed to ensure the verification and compliance in relation to feed and food law, animal health and animal welfare
Commisson Regulation 889/2008	Mandatory use of the EU organic logo on pre-packaged products and detailed rules required for labelling.

Source: Compiled from (EC, 2007; Padel, 2010; Sylvande & Floc'h-Wadel, 2000).

2.3.2 Policy Measures

Having regulation in place was not enough to boost the organic production. It was important to introduce relevant policy measures under these regulations in order to provide financial support to the farmers and at the same time contribute to rural development. EU is committed to achieve environmental sustainability in its agricultural policy and hence has adopted organic principles under its agri-environmental programme (European Commission, 2004a; Rosati & Aumaitre, 2004). Policy measures for farmers include area payments and support measures for maintenance and management of organic land (Stolze & Lampkin, 2009). Support measures are also provided during conversion of farms under the Council Regulation (EC) No. 2078/92 (Padel, 2010). Ofcourse the amount of incentives received for conversion vary in the Member States, depending on the type of organic land and crops grown. Sweden, Austria and Germany provide high area payments for permanent agricultural crops whereas lower area payments are provided in Denmark and UK; France pays incentives only during the conversion period of organic farms (Stolze & Lampkin, 2009). The

effect of such policy measures in EU(27) and in the above mentioned EU Member States is illustrated in **Table 2.** The table shows the percentage increase in the utilized agricultural area (UAA) managed as organic. Thus, irrespective of the presence of the European legal and financial support, the schemes vary across Member States and hence, the change in the production area also varies. In 2012, about 10 million hectares of UAA was managed organically in Europe, with sales of organic products about 19.6 billion Euros (Willer & Kilcher, 2012). This shows a massive increase in UAA under organic farming as compared to 6.2 million hectares in 2004 (Padel & Lampkin, 2007). Thus, policies have not only helped to increase awareness among farmers to adopt organic practices, but have given the opportunity to create organic market.

Table 2: Percent area under organic farming in the EU

Geographical Area	2006	2007	2008	2009	2010
EU (27)	3.7 ^s	4.0 ^s	4.4 ^s	4.7 ^s	5.1
Austria	16.7	17.1	17.5	18.5	17.2
Sweden	7.2	9.9	10.9	12.8	14.3
Germany	4.9	5.1	5.4	5.6	5.9
UK	3.4	3.7	4.1	4.2	4.1
Denmark	5.1	5.0 ^s	5.6	5.9	6.1

S is Eurostat estimates

Source: Modified from (Eurostat, 2012)

The percentage area under organic farming is defined as the total utilized agricultural area (UAA) occupied by organic farming. It includes both the organically farmed area and the area under conversion

2.3.3 Inspection, Certification and Labelling

The EU comprehended under the 2003 CAP reform that it was important not only to introduce policy measures and support system to the farmers but also to enhance the market for organic products (European Commission, 2004a). What can give the credibility of these organic products and how do consumers trust their authenticity? Along with development of organic market, providing the right information to consumers is equally important. Hence, it was necessary to incorporate a precise set of rules under the regulations that can directly influence the consumers' purchasing decisions. Certification of the farms and regular inspection forms the basis of the market development that provides credibility of the organic products (Lohr, 1998; Padel, 2010; Zorn, Lippert, & Dabbert, 2009). The EU has a list of rules and standards devised under the first council regulation (EEC) No. 2092/91. These standards for certification and inspection were subsequently amended and modified under the new regulation (EC) 834/2007 (Padel, 2010).

It is mandatory for all the actors involved in the organic production to undergo regular inspection and obtain the organic certification under the new regulation (EC) No 834/2007 (Zorn, Lippert, & Dabbert, 2009). These actors include farmers, organic food processors and distributors. The farmers who wish to convert from conventional to organic have to first register for an inspection. Only after approval by the inspection body, farmers can sell their products after at least 2 years of conversion period (European Commission, n.d.). The EU Member States are to abide by the rules for certification and can have additional rules, which are usually stricter, according to their national or regional requirements (Padel, 2010). Control authorities or control bodies⁶ (a third-party certification) carry out these regular inspections and provide certification upon conformity with the organic standards (Zorn, Lippert, & Dabbert, 2009). These may be privately owned, in case of Sweden, or managed by the Government, in case of Denmark, depending on the requirements of the individual Member States. Figure 1 illustrates a simple structure of the working of certification in the EU.

It is also important for the privately owned third party (control body), to demonstrate their eligibility to certify different organic operators and that their processes are in accordance with guidelines mentioned under the EU regulation. For this, the competent authorities of the Member States check if the control bodies meet the stated requirements and then receive accreditation under the European Standard EN 45011 or ISO Guide 65 (EC, 2007)⁷. It is important to note that only private control bodies undergo the process of accreditation and a regular inspection. Control authorities, as managed by the Government are not designated to undergo the accreditation process but have to update details of certification to competent authorities of the Member States (EC, 2007).

⁶ 'Control Authority' means a public administrative organization of the Member state who can carry out inspection and certification, whereas, 'Control Body' refers to an independent private third party who is competent to carry out certification and inspection of organic production (EC, 2007 as mentioned in Art. 2).

⁷ Article 27 of the Regulation (EC) 834/2007 mentions the specific requirements that the control system need

to comply (EC, 2007).

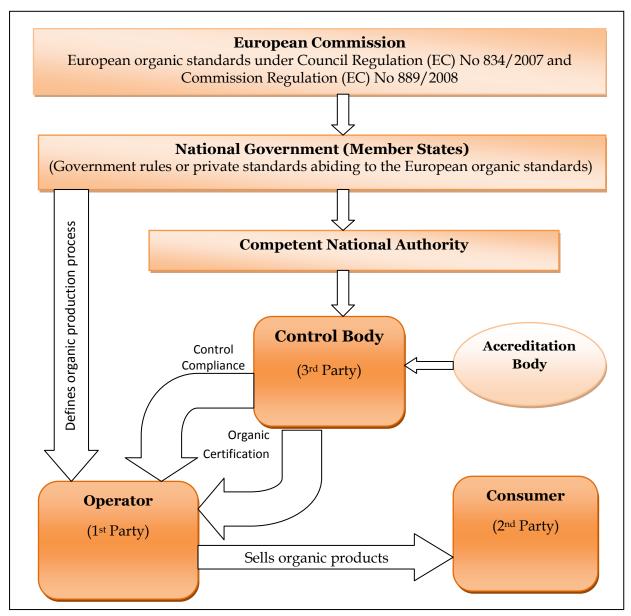


Figure 1: Structure of the working of certification in the EU, adapted from (Zorn, Lippert, & Dabbert, 2009)

Why certification has become so imperative? Other than providing credibility to consumers about organic products, certification proves beneficial to organic operators in many terms. For farmers, certification is a way of acquiring the desirable financial support from the EU in order to meet the organic requirements and continue with organic farming. This also helps them in channelling their organic produce into the organic markets. During the processing of organic food, it is mandatory not to mix conventional and organic materials (EC, 2007). Hence, the organic food processing companies often need to make an additional investment in their processing unit for the same. Certification and labelling helps to endorse their respective brands in the market and gain consumers' confidence as

they are willing to pay extra for the organic products (Zorn, Lippert, & Dabbert, 2009). This ultimately leads to increase in profits, thus helping to recover the cost of capital investment.

Along with certification, the use of organic logo makes it easy for consumers to differentiate the organic products from the conventional ones. It assures consumers that the product is duly certified and inspected (Janssen & Hamm, 2012). Certified organic logos are thus, a way for informing the customers about the originality and credence of organic products. There are many organically certified logos available in the market, like community logos (former EU logo), private labels, and governmental labels. The plurality of organic labels, although a sign of development of differentiated market (Koos, 2011), often leads to confusion amongst its buyers (Janssen & Hamm, 2012; Sønderskov & Daugbjerg, 2011; Thøgersen, 2010). The EU has introduced a new organic logo, which is mandatory on all pre-packaged organic products from July 1, 20108; the implementation rules mentioned under the Commission Regulation (EC) No 889/2008 (European Commission, 2010; EC, 2007; Janssen & Hamm, 2012; Padel, 2010). The previous voluntary Community logos were found to be substandard in terms of market development and protection of consumers' interest (European Commission, 2010), hence, the need to implement a new organic logo. The previous community logo and the new EU logo are shown in Figure 2. Private labels and Government labels can be used along with the new EU-organic logo. The indication of the EU logo illustrates that the certified product had at least more than 95 percent of organic materials and complies with the rules of the inspection scheme (European Commission, n.d.).

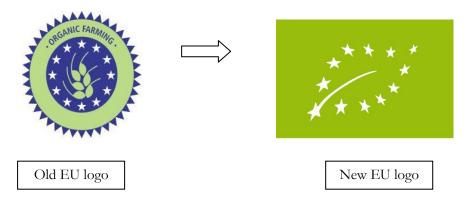


Figure 2: The European Organic logos

The New Euro-leaf logo is registered as an Organic Farming Collective logo. All packaged organic food will have this logo accompanied by a code having the format as AB-CDE-999; thus explaining the country of origin and referring the control body of inspection (European Commission, 2010).

_

⁸ Under the Regulation (EC) No 834/2007, a two-year transition period is allotted for implementing the new logo on all packaged organic products. Thus, it is mandatory for all the stocks produced after July 2010 to have the new EU logo.

2.4 ORGANIC MARKET AND CONSUMERS

The organic market is on the rise, especially with the growing concerns about health and environmental safety. The 2003 EU CAP reform insists on creating a market for organic products and improve its share in the Member States through strategic planning (European Commission, 2004a). This is to reach maximum number of consumers, and to share and spread the value of organic to them. Formulation of a legal framework of logos and certification schemes are responsible for inducing rapid growth of the organic international market (Aschemann, Hamm, Naspetti, & Zanoli, 2007). In 2010, the organic market had a turnover of about 19.6 billion euros, with Germany, France and UK leading the organic market; however, the highest consumption rate of organic food was observed in Swizerland, Germany and Luxemberg (Willer & Kilcher, 2012). What leads to this diversification for consumption of organic food?

Consumption is an important aspect that guides the production side, aids political parties to formulate effective policies and at the same time spur innovative ideas (Broberg, 2010). Often organic market works due to a group of ethical consumers who seek information about the quality of products and show concern for the environment. These so-called 'green consumers' that 'attempt to integrate a variety of societal and environmental influences with their purchasing behaviour' (McEachern & McClean, 2002) are motivated to invest in organic products owing to self-interest and constitute only around 15 percent of the world population (ibid). Thus, only a handful of dedicated green consumers drive the organic market, which are motivated to buy organic food due to 'product-specific characteristics' (Wier & Calverley, 2002).

For the assurance of the organic market to grow, building consumer confidence is very crucial. Although, provision of a common organic label is believed to change the attitude of the consumers; there are many studies relating that the presence of common organic logo do not motivate consumers to purchase organic products (Janssen & Hamm, 2012; Thøgersen, 2010). Thøgersen (2010) explains that despite the presence of a uniform regulation, the consumption pattern varies in the EU member countries owing to the structural market variation and the way individual governments deal with the promotion of organic consumption (Thøgersen, 2010). Similarly, Janssen & Hamm (2012) recount that provision of only organic logos is not enough, as many consumers are unaware of the actual certification and inspection process. Their studies show that labelling by third-party certification does not necessarily contribute the right information to the consumers as they are able to recognize only a few familiar (mostly local ones) organic logos. The old EU organic logo is hardly recognized by the consumers and most of them are unaware of the regulations involved under the EU (Janssen & Hamm, 2012).

High organic prices are often condsidered as an excuse for not purchasing organic products. The additional price used on the organic products are the price premiums, an extra cost to be paid by the consumers (European Commission, 2004a). Several studies show that consumers are willing to pay the extra for organic produce (Aschemann, Hamm, Naspetti, & Zanoli, 2007; Wier & Calverley, 2002), but at the same time these consumers belong to the green or idealistic category who believe in the organic value (McEachern & McClean, 2002; Harris, Burress, & Eicher, 2000). However, this limited group of consumers are increasing in number crossing the traditional barriers of income, education and standard of living for purchasing organic products (Aschemann, Hamm, Naspetti, & Zanoli, 2007).

Another important market barrier is perceived to be the distribution and sales channel for organic products. With the the conventional supermarkets entering the organic market, these act as main source for the consumers to buy the organic produce. However, availability and the difficulty in identifying the location of these products in the supermarkets acts as a major barrier in satisfying the consumer demand (Aschemann, Hamm, Naspetti, & Zanoli, 2007; Wier & Calverley, 2002).

Thus, to ensure a sustainable consumption of organic food in the countries, it becomes essential to strengthen the supply-side measures, considering the needs and attitudes of the consumers.

CHAPTER THREE

3. Case Study of the Swedish Organic Dairy Sector:

Sweden belongs to the category of modern nations where large structural changes took place leading to an agri-business environment. Organic movement began in Sweden from a marginal group of farmers that later turned into a functional organic business and management. However, Broberg explains that unlike other nations, the Swedish organic sector includes a myriad of actors and organizations (Broberg, 2010), thus, shaping the organic sector from an inter-organizational perspective. Moreover, Sweden being a Member State of the EU, the changes in the policies and regulations formulated by the EU has a direct influence on Sweden's national policies too. All these factors make it suitable to study and analyse the current situation of the organic status in Sweden. Also, the presence of a commonly recognised organic logo, KRAV, helps to assess its effectiveness in influencing purchasing decisions amongst its consumers.

The following case study explores the different actors involved in the organic sector with a particular focus on the Swedish organic milk sector. The case study is built up using personal interviews, documentation including articles, news and scientific papers related to development of organic sector in Sweden along with the use of observations made in relation to purchasing behaviour and consumption of dairy products in the supermarkets.

3.1 DEVELOPMENT OF THE SWEDISH ORGANIC SECTOR

Like many European nations, agriculture was initiated in Sweden more than six thousand years ago (Åberg, 1943). Sweden's farming was dominated by a mixed method, consisting combination of cropping and animal husbandry. Thus, Sweden's landscape represents small agricultural settlements and arable lands surrounded by pastures, meadows and forests (Stalzman, Head, & Steneske, 2011). In fact Åberg explains that the Swedish farming was successful due to strong collaborations between farmers' associations and Swedish Government. These relations played a key role in bridging the gap while negotiating agreements between the peasants and Government (Åberg, 1943). The Swedish farming changed dramatically in the twentieth century with use of modern technology and specialisation techniques. The use of fertilizers and pesticides boosted the productivity; however, the growth is coupled with detrimental effect on the surrounding environment. Upon realization of the effects of the conventional modernized farming practices on the natural environment, the Swedish Nature Conservation emerged in the 1960s (Stalzman, Head, & Steneske, 2011). This organisation till date is responsible for management of landscapes and strives to preserve the semi-grassland landscape, which is crucial in maintaining the biotopes and values associated with them (ibid). Retaining a varied agricultural landscape is one of the national objectives to achieve the goal of a

sustainable society and Jordbrukskervet (the Swedish Board of Agriculture) is responsible for attaining this objective (Ministry of the Environment, 2004; Naturvardsverket, 2008).

Organic production is one such method that contributes in achieving the environmental goal of a 'varied agricultural landscape' (Jordbruksverket, 2007). There are many studies showing how organic farming proves beneficial in maintaining biodiversity and species richness (Kuepper, 2010; Lotter, 2003; Stinner, 2007). The main aim of organic production in Sweden is to have a food production system that protects both, animals and environment, and at the same time create a system that can be sustained for longer period of time (Ministry of Rural Affairs, 2006). The first Association of organic farmers called *Alternativodlarnas Riksförbund* (National Association of Alternative farmers-ARF) was formed in 1985 (Källander, 2009). This association was formed with a mandate to establish a formal institution for organic farming and to devise specific guidelines for enhancement of the same. Later, a need to create a market for organic products emerged. Thus, in 1985 ARF was formed with simultaneous development of the organic marketing co-operative called "Samodlarna Värmland" that initiated the first certifying body, KRAV. The main task of ARF was to work with development of agricultural policies, standards and certification, increase awareness among consumers, market development and networking (Källander, 2009).

KRAV

KRAV- Control Association for Alternative Culture- is a non-profit organization that is responsible for developing standards, certification and inspection and spreading information about organic development to consumers (Källander, 2009). The KRAV label is recognized by 97 percent of the Swedish consumers (KRAV, 2012). Biodynamic Association, the Swedish Association for Nature Conservation (Naturskyddsföreningen), Association of Organic Biological Cultivation and Alternative Growers Association were its first members (Friberg, 2011). The current KRAV organisation comprises of diverse members representing both conventional and organic organisations. These include farmers associations (organic and conventional), conventional processors, food retailers, conservation organisations and representatives of consumers (Milestad, Wivstad, Lund, & Geber, 2008; Sundberg, 2012). These members get a chance to express their opinions and thus influence changes whilst setting guidelines for organic production. Thus, KRAV represents a federal business organisation consisting myriad of actors working in collaboration to achieve sustainable organic production. Moreover, KRAV is accredited to IFOAM giving an additional credibility to its performance and recognition.

Other than KRAV, Demertförbundent is another organisation, responsible for organic certification (Ahlman, 2010; Lund, Hemlin, & Lockeretz, 2002). Three independents organisations, SMAK, Aranea Certifiering and HS Certifiering are responsible to carry out inspection of organic farms and companies (Ahlman, 2010). Further the certification and inspection bodies have to be accredited. In Sweden, the organisation SWEDAC (Swedish Board for Accreditation and Conformity Assessment) gives accreditation to the third-party bodies to carry out inspection and certification.

A number of factors can be attributed for the success of organic sector in Sweden. The Government provides financial support to the farmers during the conversion period. The Government launched a '10% target campaign' in 1993, which stated that by the year 2000 at least 10 percent of the agricultural land will be organically managed (Rundgren, 2002). The campaign was very successful in achieving this target and hence further extended the target to 20 percent by 2010. Also, personal motivations, food quality, health reasons and resource management additionally boosted the organic conversion (Lund, Hemlin, & Lockeretz, 2002). Particularly, concern for animal welfare is seen as a higher notion amongst the Swedish consumers (ibid.). Collaboration between the various organic stakeholders is another reason for the success of organic development. These stakeholders participate in negotiations for a better policy dialogue and there is clear cut demarcation of the roles assigned to the participating organisations (Källander, 2009; Rundgren, 2002). Thus, despite the complex set of actors involved, this sector is well organized when it comes to the functionality and execution of tasks. Other than KRAV label, retail chains play an important role in communicating the organic products to the consumers and making it available to them. Kooperative Förbundet (KF), the Consumer's Co-operative and also a retail chain, is a pioneer in introducing organic products to consumers (Källander, 2009).

3.2 ORGANIC MILK PRODUCTION IN SWEDEN

Milk forms an important constituent of the daily food intake as it contains all the important nutrients required to maintain a healthy life-style. Today processed milk products like yoghurt and cheese form an integral part of the daily diet along with drinking milk. The Swedish dairy sector contributes the largest income to the Sweden agricultural sector with about two-third full farmers engaged in milk production (Fahlbeck & Nilsson, 2002). Among all the consumable organic food, milk is the most popular and mostly consumed (Organicmonitor, 2012). Although some organic farmers have their own local brand for selling milk, most of the milk (both conventional and organic) is processed by the dairy co-operatives. There are six major dairy co-operatives in Sweden with Arla Foods being the largest co-operative and having a strong international market. **Table 3** gives a glimpse of the Swedish dairy sector, whereas **Table 4** represents the most popular dairy products sold in the Swedish

market. In Sweden, the dairy sector has undergone many structural and technological changes. The dairy farms have reduced in number, but they are larger in size and also the herd size has increased (Ahlman, 2010; Cardell, 2007). Between 2001 and 2007, the number of dairy farms decreased by 40 percent whereas the average herd size increased by 42-57 cows per farm (Hansson & Ferguson, 2011). Changes in the CAP policies seem to be one of the influential factors for the reduction of farmers. Also, the production of milk has changed from a self-sufficient to a market driven perspective.

Table 3: Structure of the Swedish Dairy sector

January 2012	Country Total
Number of dairy companies	20
processing plants	35
Number of livestock cooperatives	3
Number of breed societies	9
Number of dairy farmers	5193
(of which organic)	632
Number of dairy cows (June 2011)	346*
Average of cows per herd	66*
Total milk delivered Million kg (2011)	2850

^{*} Swedish board of Agriculture

Table 4: Production of conventional and organic dairy products in Sweden

Production of dairy products 2010	Tonnes	Percentage of organic (%)
Drinking milk	914 480	
of which organic	109 808	12
Fermented milk (yoghurt etc.)	263 241	
of which organic	27 844	10.5
Cream	109 693	
of which organic	4 831	4.4
Cheese (incl. fresh cheese)	103 144	
of which organic	629	0.6

Source: Modified and adapted from Report on Milk in Sweden, 2011 (Swedish Dairy Association, 2011) http://www.svenskmjolk.se/Global/Dokument/Dokumentarkiv/Statistik/Milk%20key%20figures%20Sweden.pd f

The first organic milk was delivered to the dairy association, Milko (now merged with Arla Foods) in 1989 by 9 organic dairy farmers (Ahlman, 2010; Fahlbeck & Nilsson, 2002). Since then voluntarily, many farmers started organic practices. However, this rapid progress slowed down in the mid 2000s as the market share of organic milk was only 5 percent (ibid.) and there was an increasing demand for organic milk. Hence, to boost the organic production Government introduced subsidies (area

payments) and also the dairy companies started to pay extra to help conventional famers convert to organic farming. At the same time there have been many initiatives undertaken by the local bodies and non-profit organizations to raise awareness about organic products among consumers. Moreover, strategic marketing steps adopted by big retail co-operatives like COOP (KF retail), lead to further consumption of organic milk and by-products (Ahlman, 2010). Today the Swedish consumers are more concerned about their health and their surrounding environment. In 2012, about 12 percent of the total milk was organically produced (KRAV, 2012; Swedish Dairy Association, 2012) and the proportion of organic cows maintained in Sweden is the fourth largest in Europe (Ahlman, 2010). In fact, Sweden is regarded in having the best management practices concerning animal welfare and their health.

3.3 SWEDISH DAIRY SECTOR FROM AN ORGANISATIONAL PERSPECTIVE

As said earlier, the Swedish dairy sector comprises of various organisations working in immense collaboration with each other for the betterment of the same. This is true for both conventional and organic sector. Only and the most important difference is the way organic milk produced in strict accordance with the standards and certification rules by KRAV. Other than that, the organic milk is processed by dairy co-operatives mostly involved in conventional dairy processing, and later sold in the retail market with other dairy products. Following is the description of some of the important key organisations influencing the growth of the Swedish dairy sector. The study is motivated by 'interorganisational dynamics' suggested by Broberg (2010) as the Swedish agricultural business is greatly influenced by the co-operation between the various organisations. For feasibility purpose of the study, only one organisation representing the farmers and the two major dairy-cooperatives in Sweden, Arla and Skånemejerier, are studied and analysed. It is important to keep in mind that there are other small local organisations and consumer forum group who are working for development of the organic sector. However, only few organisations have been selected to study the development of the Swedish organic dairy sector.

3.3.1. Lantbrukarnas Riksförbund (LRF) - Federation of the Swedish Farmers

LRF is a non-political organisation, representing group of farmers or individual members interested in agriculture and forestry business. The aim of the organisation is to promote green development that ensures a sustainable growth and profitability to its members (LRF, 2012). The individual members are represented through regional and local associations in order to facilitate communication. LRF also carries out many activities on an international level, especially negotiating policies and representing farmer's views for enhancement and implementation of policies. Also, it has been a consumers'

representative for communicating the Swedish views on consumption of food and need for labelling to the EU for lobbying a better regulation (LRF, 2006).

LRF has always promoted practices, which are beneficial to the environment, helpful to maintain the landscapes and proved profitable to the farmers. Thus, the organisation wholeheartedly supports organic farming. About 30 percent of LRF farmers are growing organic food. An interview with climate and sustainable expert at LRF, Jan Eksvärd, highlighted the fact that most of the organic farmers are keen on growing organic grains. Also, the demand of organic products outside Sweden is rising that gives Swedish farmers an opportunity to adopt organic farming and to meet the export demand (LRF, n.d.). However, the organic dairy sector looks quite bleak, especially when the consumption of milk is decreasing (Jordbruksverket, 2007; Swedish Dairy Association, 2012). More farmers may stop adopting and practising organic dairy farming, if they fail to receive the extra payments from the dairy producers and instead continue with conventional method that can be efficiently and sustainably managed (Eksvärd, 2012). There is a 2 percent annual decrease in the number of farmers and a major focus of the LRF is to convince the youth to adopt farming as a profession. Farmers often complain of not being paid the right amount for organic produce, as the production cost is quite high and consumers prefer buying inexpensive food (ibid.).

3.3.2 Swedish Dairy Association (Svensk Mjölk)

The Swedish Dairy Association (Svensk Mjölk) is a knowledge institute that is tied with almost all the dairy farmers and dairy co-operatives in Sweden. It provides information on various issues ranging from cattle breeding, nutritional aspect, milk policies and quality, and efficient management of resources. Nowadays, the organisation is focussing on promoting the importance of milk in schools and houses in response to the reduction of milk consumption in Sweden. It is also involved in communicating the importance of organic labelling to consumers (Edman, 2012). During interview with a climate and environment expert at Svensk Mjölk, Anna-Karin Edman, it was observed that there is no direct involvement or focus of the organisation in promoting the organic products. In fact, the organic growth is driven by the market, which in turn depends on the consumers who purchase the products. The organisation rather focuses on making the dairy industry more efficient and assisting farmers in the effective management of resources. In the interview, Edman stated that in the future the main obstacle for carrying out various agricultural businesses and for growing local organic feed would be the increase in competition of land acquisition, especially in the Skåne region (as most of the milk production is concentrated in the Southern part of Sweden).

3.3.3 Dairy Co-operatives:

The dairy co-operatives have always played an important role in developing the initial market for organic foods in Sweden and have continuously maintained an effective dialogue with the policy makers, distributors and consumers (Källander, 2009). All the milk produced in the farms is processed by the dairy co-operatives. These dairy co-operatives are responsible of providing payments to organic farmers, depending on the sales of organic milk. Fahlbeck and Nilsson explain that the Swedish dairy co-operatives, for a very long time, were away from promoting organic dairy products in the market. This can also be supported by the small number of distributing and retailing channels in the initial phases. A lot of extra costs are involved to promote marketing, for instance investing in new packages and certification process. Rather the initiative of organic marketing depends on the success of the co-operative in establishing a foothold in the region, for example, Arla Foods. Being a successful co-operative it can easily invest in organic by marketing strategies, management of demand and supply volume without hampering the profits (Fahlbeck & Nilsson, 2002). Thus, different dairy co-operatives have different marketing strategies for promoting organic growth, depending on their financial and management capabilities.

a) Arla Foods:

Arla Foods, a global dairy co-operative, was first established in 1881 in Sweden. Since then Arla has expanded worldwide and is one of the leading dairy co-operatives in Europe, with core business in Sweden, Denmark and Germany. It is also a major dairy-cooperative to include maximum amount of organic milk in its processing. In 2011, organic farmers supplying milk to Arla were paid approximately 3.74 SEK per kg of milk as a performance price (Arla, 2011). Arla Foods has been a pioneer in expanding the organic milk in its processing unit. They have several ties with the regional farmers in order to supply fresh milk and products in the local region, thus trying to minimise the carbon emission and contributing to overall sustainability. Arla believes in the standards set by KRAV and trusts the certification procedure. They are of the opinion that following strict guidelines results in additional investments in the processing unit for separating conventional and organic lines, but this extra cost is eventually paid by the consumers (Pettersson, 2012).

The organic market in Sweden is growing at a rapid rate of 20-30 percent per year (Källander, 2009), mainly due to increasing demand for organic products. However, the recent quarterly report published on market progress in Sweden shows that specifically the consumption of raw milk is decreasing among the Swedes (Foreign Affairs and Trade, 2012; Jordbruksverket, 2007). The current status is that, most of the surplus organic milk is being sold as conventional milk (Pettersson, 2012). Pettersson, a senior manager at Arla Foods, revealed that in the future if the trend of decreased

organic milk consumption continues (only 5 percent growth in the next 5 years), there is a possibility of closing down the organic milk production, as it will become an expensive affair to pay extra to the organic farmers. However, Arla is planning to incorporate new marketing campaigns to boost the organic production among consumers and double the usage of organic milk in its processing by 2020 (Foreign Affairs and Trade, 2012).

b) Skånemejerier:

Skånemejerier, comparatively a smaller dairy co-operative than Arla, is the second largest dairy co-operative, dominating the market in Southern part of Sweden, Skåne. The company's brand is very popular for supplying local fresh dairy products. Skånemejerier as an organisation is very keen on expanding its organic share. It provides expertise to farmers in terms of economic support and information (Skånemejerier, n.d.). The organisation also aims to pay the highest payment to farmers for the organic milk in terms of weight of milk. Most of the processing of organic milk takes place in the Malmö dairy, although care is taken to separate it from the conventional line. In addition, Skånemejerier has adopted a dairy near Hjo, called Hjordnära to supply organic milk outside Skåne region. Around 6 percent of the total milk in weight is organic and 50 percent of the farmers who supply milk daily to Skånemejerier are organic (Skånemejerier, n.d.).

Hjordnära is a small-scale dairy located in the Västergötland province. The dairy is owned by seven organic dairy farmers, located within 30 kilometre radius around the dairy, and Skånemejerier having the maximum percentage share (about 91 percent) in the partnership. The farms strictly follow the guidelines and standards set under KRAV and at the same time are trying to initiate the best sustainable practices, by handling the wastes, reusing energy and minimizing emissions (Hjordnära, n.d.). The farms at Hjordnära and the production system are regularly inspected by a third-party, Kiwa Aranea (Dahlqvist, 2012).

Skånemejerier as a co-operative has established strong ties with Hjordnära in order to provide support to the small scale farmers and plays an important role in managing the products. They also help in branding the products and making it available to the consumers. Dahlqvist mentions that the current problem with organic products is that consumers find it difficult to purchase them owing to high costs. However, the high cost is due to the added value and investments made in organic production (Dahlqvist, 2012). However, it was observed that the products under Hjordnära brand are very much appreciated by the customers.

Other than Hjordnära, Skånemejerier is striving to minimize the carbon emissions by 50 percent by 2020 as of 2010 target. The co-operative aims at being the best environmental-friendly dairy that

follows sustainable management practices. Table 3.3 gives a glance of the market share of milk being produced by the dairy co-operatives in the past three years, which is measured in DHV in Sweden or sales value/1000 SEK. On the market front, Skånemejerier faces competition from Arla Foods, and hence to maintain the profits and to ensure good payment to the farmers, marketing of conventional products is also very important along with organic (Dahlqvist, 2012). Recently, the co-operative is taken over by a French dairy firm, Groupe Lactalis. This change may not affect the Swedish farmers associated to Skånemejerier, but can possibly aid them to participate in international competition with a strong financial back-up (Bouckley, 2012; Kjellberg, 2011).

3.3.4 Retailers and Consumers:

Retailers play an important role in influencing the consumers' purchasing decisions (Beckeman & Olsson, 2011) as they are believed to be in close communication with them. They are considered as an important link between consumers and producers. Especially, food retailers can affect the consumption ability through controlling the display and prices of commodities. Thus, retailers act as important key players when it comes to marketing of organic products to the consumers. The retail sector in Sweden is one of the most established sectors in Europe (Gullstrand & Jörgensen, 2012). The Swedish food retail system has grown immensely from a non-centralised market (many small retail shops) to a centralised one (supermarkets) that is open to international players and products (Bonnedahl & Jensen, 2007), thus creating competition for Swedish commodities in the domestic and international market.

In Sweden, most of the food commodities are purchased in supermarkets. Over the time, the number of stores has reduced and at the same time they are becoming bigger area wise. This resulted in a rise of supermarkets from 2.2 percent to 3.1 percent between the years 2005 to 2008 (Gullstrand & Jörgensen, 2012; Maican & Orth, 2008). The Swedish retail market has a share of 86 percent in the market, dominated by ICA (50 percent share of market), followed by COOP and Axfood (Beckeman & Olsson, 2011; Gullstrand & Jörgensen, 2012). ICA Group has the maximum amount of organic share too and has expanded geographically over Sweden with different stores belonging to ICA group. Gullstrand and Jörgensen (2012) explain that the pricing of food commodities for individual ICA store is different as they are prohibited from discussing the prices. This price difference has a strategic role to play in consumers' decisions to purchase products.

Studies show that price plays an influential factor in purchasing of organic products (McEachern & McClean, 2002; Magnusson, *et al.*, 2001). High premium prices often prove disadvantageous to consumers that prompt them to choose conventional over organic, even if they have a positive attitude and concern towards environmental protection, animal welfare and good food quality

(Magnusson et.al., 2001). In addition, private branding and variety of labels often confuse consumers about the quality of the organic products (Anselmsson & Johansson, 2009; Beckeman & Olsson, 2011; Gullstrand & Jörgensen, 2012). For example, ICA has its own ecological brand, called 'I Love Eco' (Beckeman & Olsson, 2011) that retailers claim to have the same quality as other organic brands supplied by the organic producers, further leading to competition. However, the author has not considered the private branding in this research, but points out that is an important factor that can affect consumer's choice while purchasing organic products. To investigate how expensive the organic products are as compared to the conventional ones, the author has made observations of price difference of some of the dairy products in the ICA Malmborg and COOP Konsum stores in Lund. The observations are illustrated in Table 5. The author observed that although the price difference for organic and conventional milk is not very high, the perception of buying organic milk completely depends upon individual choice and trust in organic products. Also, as mentioned earlier, these prices for organic products are decided by the individual retail stores and hence, cannot be generalised for the entire Sweden.

Table 5: Prices of conventional and organic dairy products in the retail stores

Product	Store	Conventional price in SEK)	Organic (price in SEK)	Difference
Mellanmjölk (1.5%	ICA Malmborg	8.90	10.90	2
fat, 1L)	COOP Konsum	8.70	10.55	1.85
Lättmjölk (0.5%	ICA Malmborg	7.90	9.90	2
fat, 1L)	COOP Konsum	8.70	9.60	0.9
Vispgräde (3dL)	ICA Malmborg	11.90	12.90	1
Vispgrade (3dL)	COOP Konsum	10.95	13.20	2.25
Yoghurt Naturell	COOP Konsum	13.70	16.40	2.7
Hjordnära mjölk	ICA Malmborg		11.90	
(1L)	Coop Konsum		15.90	

Source: Compiled by the author through collected observations in ICA Malmborg and COOP Konsum stores in Lund. The prices remained constant for a substantial period of time during the time period of undertaken research. All the prices have been noted for the brand, Skånemejerier.

3.4 THE SWEDISH ORGANIC MARKET

The organic market in Sweden is growing at a rapid rate with sales of organic products crossing over 9.2 billion SEK in 2011 (GAIN, 2012). As compared to 2010, there was one billion SEK rise in the organic sales (Foreign Affairs and Trade, 2012), of which one-third of the market is occupied by the dairy products. However, Arla dairy co-operative is of the opinion that the consumption of organic milk is decreasing and this may pose a threat to further development of organic dairy sector. So, in

order to check the demand of consumption of organic dairy products a survey⁹ was conducted to comprehend consumers' organic purchasing decisions. The survey was carried out using a random sampling method in the supermarkets in Lund and Malmö, with a sample size of 97 consumers. Questions were asked as to why or why not consumers purchase organic dairy products and the possible options were given, whenever necessary. The survey was limited to organic dairy products comprising of milk, cream, yoghurt and cheese. In addition, images of KRAV logo and the new EU organic logo were shown to check how many consumers recognize the labelling system. The collected results were evaluated using simple mathematical calculations and converted to percentage form. Out of 97 consumers, 39 consumers buy organic dairy products on a regular basis, 33 people sometimes prefer to buy organic products whereas, 26 people do not purchase. Figure 3 & Figure 4 represents the various factors influencing the decision for buying and for not buying organic dairy products, respectively.

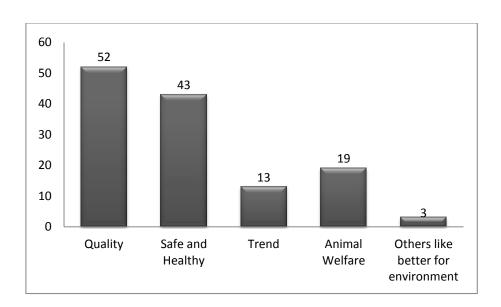


Figure 3: Consumer responses for buying organic dairy products

-

⁹ Survey questions included in the Appendix 2

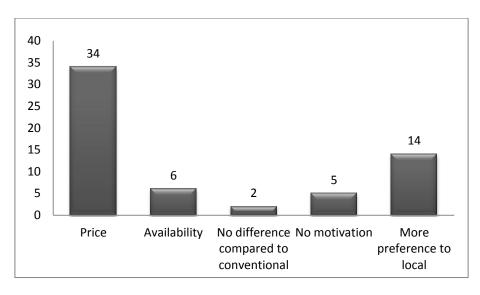


Figure 4: Consumer responses for not buying organic dairy products

From the above stated graphs, it is clear that the number of dedicated green consumers is less than 50 percent of the total sample group. There were also a number of people who purchased organic dairy products, mostly when the prices were low and when they wish to have a different taste and support local food. Above all, quality and health reasons were the main factors that influenced the decisions of the green consumers to purchase the organic products. Price of organic dairy products played an important role for not purchasing organic products. It was also interesting to note that consumers were keen on purchasing more of local products and hence supported the brands accordingly. When it came to labelling, more than 90 percent of the people recognized the Swedish logo KRAV. The new EU logo, which has been implemented from July, 2012, was hardly recognized by 20 percent of the sample population. Also, the ones who recognized the logo were not sure of its significance. The above results reflect the gap between the production and consumption side. In spite of regulations and standards in place to boost the organic production, the consumption side is too bleak and confusing due to different market strategies by the retailers and dairy companies.

The following section illustrates as how to bridge this communication gap and what steps can be taken to enhance the organic dairy production in the future.

CHAPTER FOUR

4. Analysis and Discussion

The following section analyses some of the key findings that was drawn from the above mentioned case study. During analysis, the existing policies and strategies adopted under the EU is taken into consideration. From the study, it is evident that a number of policies framed by the EU and the Swedish National Government are aimed at increasing the share of organic products in the market. As mentioned earlier in Chapter 2, one of the key objectives under the 2003 CAP reform is to increase the share of the organic market that is consumer driven. This section highlights the importance of marketing strategies in the value chain and the role of organisations that focuses on market-based sustainability. However, it is first important to mention the key findings from the case study, which is as follows.

4.1 KEY FINDINGS:

1. Standards and regulations

KRAV is the main certifying body, which is trusted by all the organisations of the Swedish organic dairy sector. The standards set by the KRAV organisation are considered to be stricter than that framed under the EU; however, these standards have been set by taking into consideration the Swedish agricultural conditions. The farmers receive extra payments for adopting organic farming by the Swedish Government (Eksvärd, 2012). It also provides support in monetary terms during the period of conversion and later for maintaining organic conditions, thus fulfilling the national objective of enhancing the rural development (United Nations, 2008). Also, it is evident that the Swedish policies are in compliance with the policies framed by the EU.

The organic dairy companies undergo inspection on a regular basis. From the case study, it is apparent that except Hjordnära there is no other dairy company that has a separate dairy for organic production. Often dairy companies integrate separate organic lines within the conventional dairy processing. This additional investment means that the price of recovery solely depends on the market. Thus, it provides very little opportunity for the new conventional dairy players to enter into organic market.

2. Labelling:

Labelling is an important market strategy for organic players into the market. In Sweden, more than 97 percent of the Swedish consumers are familiar with the organic label KRAV (KRAV, 2012). From the consumer survey carried by the author, it was evident that almost all the respondents in the

survey trusted KRAV as an organic label. However, only 20 percent of the respondents were familiar with the new EU organic label, Euroleaf (see figure2). However, as KRAV can accompany the new organic logo, it may take some time for the consumers to familiarise with it. Other than KRAV label, there is no other prominent label to confuse consumers about the quality of organic products. The private branding and labelling by the individual retailers is gaining importance, but its demand is very limited and again depends on how the retailers display them along with other organic products. In addition, only few consumers, termed as green consumers, purchase organic products on a regular basis. Other consumers have different perceptions for buying them; like price factor, locally produced and taste and quality. Thus, ultimately the retailers have an upper-hand in the management of organic products and to sell it to the consumers.

3. Marketing:

The dairy industry in Sweden is one of the most prosperous industries and contributes to Sweden's national economy. The dairy production is a complex system that comprises of myriad of actors and organisations. The market of organic products in Sweden is concentrated largely in the supermarkets. The retailers are responsible for controlling the prices of organic commodities (as shown in table 5) and also for displaying and advertising products' features. However, the dairy companies have adopted various marketing strategies with the retailers. These involve carrying out consumer surveys to check the satisfaction about organic products or running campaigns to boost the organic consumption. Such strategies are adopted by both, Arla Foods and Skånemejerier. However, from the survey and the interviews conducted, a big communication gap was perceived between the organic dairy producers and the consumers. Literature review shows that there is a high organic consumer demand whereas, co-operatives claim that there is not much organic consumption of milk, and sometimes they have organic milk has to be sold under conventional category (Pettersson, 2012). This implies that the policies adopted under the EU and that under the Swedish Government are not enough. It is true that the market for organic commodities is on a rise, but the marketing strategies are to be improved and there is a necessity to establish a strong connection and network with other stakeholders that takes into consideration societal and ecological needs. Marketing strategy needs to be focused from a sustainability perspective that integrates the social, economic and environmental values. It has to be improved in such a way that organic products are not purchased only by a handful of dedicated green consumers, but becomes popular over a larger section of the society.

The various organisations of the Swedish dairy sector are well established. However, other than labelling schemes, there is no clear representation of any other market strategy to promote organic

products on a larger scale. Hence, the following section briefs on the organisational perspective that needs to be adopted for a better future of the organic market.

4.2 ANALYSIS AND DISCUSSION

Often organic farming is just considered as an alternative solution. It is only incorporated within the conventional set-up and the high prices only reflect the additional cost. In order to enhance the market value of organic products, the involved organisations need to change their market strategies that can make organic market sustainable in the long run. Market orientation is a very old concept focussing on customers' needs to devise appropriate plan for branding the products. The dairy cooperatives in Sweden believe in environmental values and ensure that the dairy farms are maintained in a sustainable manner. However, to it is also important to continuously evaluate the performance of organic production too, that can benefit the farmers, the co-operatives and yet satisfy the consumer's growing demand.

A market-focused sustainability needs to be developed that takes into consideration consumer's opinion in such a way that the market strategy remains inevitable for a long time, even if distortions occur in the market. Research proves that to continue with a sustainable business, organisations need to expand their knowledge and through organisational learning create innovative solutions to lure the consumers (Slater & Narver, 1995). The author in the following research is inspired by studies based on sustainable marketing and organisational learning that is important for future development of the organic sector.

4.2.1 Market Orientation (MO)

Marketing is a business strategy wherein the core interest is to sell the products to the consumers. Various marketing strategies like advertisements, labelling, and campaigns are used by the dairy companies and retailers in Sweden to influence consumers for purchasing goods. **Market orientation** (MO) is a corporate management strategy that reflects the role of the organisations (Mitchell, Wooliscroft, & Higham, 2010). Taking into consideration the organisations involved in the organic dairy sector, the author uses the definition proposed by Slater and Narver (1995) for defining MO that emphasizes on organisational learning to promote market orientation to induce behavioural change. MO is defined as a learning orientation that,

"places priority on profitable creation and maintenance of superior customer value while considering interests of other key stakeholders; and provides norms for behaviour regarding organisation development and responsiveness to market information" (Slater & Narver, 1995).

The Swedish dairy sector especially the dairy co-operatives, fit into the components the MO model, illustrated in **Figure 5**. From the literature and interviews it was drawn that the dairy companies are striving to gather information and increase their knowledge capacity on the organic market and needs of consumers, for maximising the co-operatives profits and in turn improve its performance. They are further co-ordinated by organisations like Svensk Mjölk, LRF, and KRAV who assist them by exchanging information about the market, policies and standards for meeting organic requirements. However, this kind of market orientation is limited only till the production end and the actual meaning of organic is not delivered to the consumers. Although, the organisations are striving to improve their environmental performance through efficient use of resources and reducing carbon emissions, the marketing strategies need to be changed to ensure sustainability in the long run. Hence, the author proposes a sustainability market focused approach that takes into consideration the ecological and societal aspects to ensure the enhancement of the organic sector in Sweden.

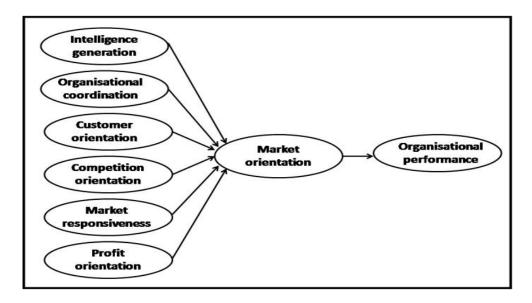


Figure 5: Components of Market Orientation Model (Mitchell, Wooliscroft, & Higham, 2010)

4.2.2 Market-focused sustainability

Environmental concerns and future notions about the availability of resource management have driven many organisations to improve their performance with efficient use of resource and adopting innovative technologies. The organisations are striving to improve their performance that can in turn contribute to sustainable development. Sustainable marketing is an approach that works towards a long-term strategy in the corporate management, taking into consideration the environmental tradeoffs for the betterment of the society with profitable business for the firm (Mitchell, Wooliscroft, & Higham, 2010). Hult (2011) explains that a market focused sustainability approach adopted by an organisation concentrates on adopting marketing strategies that can remain viable for a longer period of time and is difficult to substitute. The framework is suitable for the organic dairy

organisations, as it considers different stakeholders' views on devising the strategy. Such an approach helps the organisation to achieve position in the market, deliver organic value to the customers and stakeholders, and at the same time contribute to the market growth (Hult, 2011). The author has used the analytical framework on market-focused sustainability, proposed by Hult (2011), to explain how the marketing of the Swedish dairy sector can be improved from a sustainability perspective and the organic values is shared amongst number of consumers. The framework is illustrated in **Figure 6**.

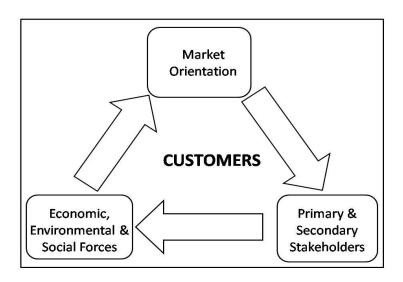


Figure 6: Market-focused sustainability Framework (Hult, 2011)

According to Hult (2011), to achieve a market-focused sustainability one has to go beyond the market orientation model and reconceptualise it in such a way that along with the consumers, it includes multitude of stakeholders and corporate social responsibility/triple bottom line (Hult, 2011). The framework is based on two theories, institutional theory and system theory. The institutional theory refers to behavioural aspect, as how organisation develops its own norms (social, economic, political) through continuous organisational learning that helps to influence consumers' behaviour; whereas systems theory refers to the inter-organisational dialogue and information exchange within its social and ecological setting (Hult, 2011). Sustainable marketing is further supported by Mitchell et.al who explains that the market needs a shift from a 'free' market to a 'guided' market where socio-ecological conditions are taken into consideration whilst deciding the norms of the organization. Here, the corporations and the society, together decide the social, economic, political and ecological norms that will help to govern the market-based economy (Mitchell, Wooliscroft, & Higham, 2010). Adopting sustainability market approach with social and economic stakeholders,

make corporations perform better and yield the desired outcomes, with up-to-date information on consumer's demand for products (ibid.).

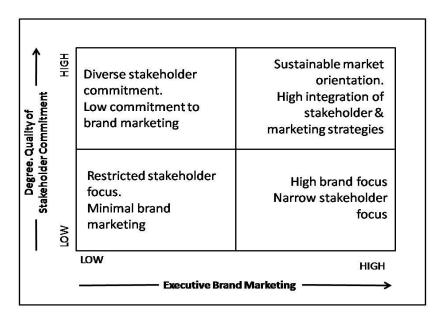


Figure 7: Matrix for the corporations to assess their performance for adopting sustainable marketing or a market focused sustainability framework (Mitchell, Wooliscroft, & Higham, 2010)

There is a potential for the organic dairy sector, especially the dairy co-operatives and retailers, in Sweden to enhance the market share of organic products, by adopting a sustainable market approach. The co-operatives are already active in corporate social responsibility, yet they need to build a strong relationship with other stakeholders to enable a 'guided' market. This shall ensure that the demand is also met and the problem of consumption of organic milk is in accordance with the supply. Arla Foods can resolve the problem of not selling organic milk as conventional, by building effective strategies with their distributors and knowing the consumers' information. They can in turn also collaborate for an effective implementation of the KRAV standards. The matrix shown in **Figure 7** illustrates that a diverse but integrated involvement of social, ecological and economic stakeholders, with effective marker orientation, helps to devise appropriate strategies that in turn assist to increase the branding of products, even in a competitive market (Mitchell, Wooliscroft, & Higham, 2010). Using a sustainable marketing based approach shall also reduce the communication gap between the production and consumption side, which was earlier identified in the findings.

However, one also needs to keep in mind that backing of strong policies are required in order to implement and execute sustainable marketing. The policies framed by the EU acts as an external guide that fulfils the economic and environmental forces mentioned in **Figure 6**. These policies act as guidelines for the industries to stay in accordance with the regulations that ultimately ensure the

consumers about the authenticity of the organic products. For example, labelling is a good marketing strategy adopted under the EU that provides credibility to the organic products, and regulations framed under the EU act as guiding force for the dairy companied to comply with. Thus, along with the new marketing initiatives that need to be espoused by the dairy companies, it is important to scrutinize the existing policies for enhancement in the organic growth sector.

The author recommends that dairy companies can invest in constructing separate organic lines (and not integrate them with the conventional ones), like that done by Hjordnära. This additional investment can be backed up through additional subsidies by the Government or through loan schemes. Such kind of schemes can be negotiated with the stakeholders and then can be introduced by the Government. Creating separate organic lines, can further boost the conversion of conventional agricultural land into organic and at the same time create trust among the consumers.

CHAPTER FIVE

5. Conclusion

The organic farming started as an alternative farming to the conventional form of agriculture on account of growing detrimental health effects of synthetic chemical fertilizers, loss of biodiversity and decreasing soil fertility. The initial organic movement was dispersed worldwide and practised by small number of dedicated farmers who believed in the philosophy of organic. Particularly in Europe, where the conventional form of agriculture was promoted on a large scale due to higher yields and large production of food, the organic farming was a miniature discussed and practised by few organisations. The IFOAM was the first International organisation that formulated specific guidelines for practising organic farming and aid interested farmers in terms of information, advise and even financially. Slowly, the organic movement gained momentum and in the early 1990s was incorporated by the EU under the CAP as a solution to encourage environmental friendly objectives. In, 1991, the first regulation was enacted for practising organic farming and subsequent policies were devised to enhance this production. Since then, the regulation has been revised and many policy instruments, including labelling and certification has been amended and introduced to promote organic agriculture on a larger scale.

In Sweden the organic farming started in 1985. The undertaken research explores the development of the organic sector in Sweden, particularly focusing on the organic dairy sector. A triangulation of literature, observations and personal interviews were conducted to build the case study. Firstly the role of EU, regulations framed by the EU and the process of certification and labelling were scrutinized in detail to understand the complete picture and the dynamic of organic development. Polices were then analysed from the Swedish context. KRAV is the main private organisation that certifies the farms under the regulations stated under the EU. KRAV logo is recognized by more than 97 percent of the Swedish consumers. The organic demand for organic products is rising and the organic market is also growing rapidly. The dairy sector in very well developed in Sweden and contributes to one-third of the nations' economy.

The Swedish dairy sector comprises of many actors and organisations. The important actors are the farmers and the dairy companies, who process raw organic milk into various dairy products. Other than these, many non-profit associations are involved who lobby on behalf of the farmers and companies for formulation and implementation of better policies. The aim of the study was to foresee the consequences of the organic dairy sector, in light of the current regulations and marketing strategies adopted along the value chain.

From the collected data, one of the objectives under the 2003 CAP reform is to support environmental practices, like organic and develop a market for the same (European Commission, 2004a). The Swedish Government supports the organic agriculture as it helps to improve the landscape. The Government supports organic farmers through area payments and also provide support during the conversion period. The organic farms undergo regular inspection and most of the farms are KRAV certified. The dairy companies also have to follow the standards developed, if they support organic processing. So, the only actors who follow these regulations are organic farmers and the dairy companies. These policies are indeed beneficial for actors who wish to support organic farming.

The main barrier accounted by them is that if the sales of organic products are not too much, the farmers receive less premium prices from the dairy companies. This may lead to a stagnant production and many new farmers are hesitant to undergo conversion. Also, the number of farmers are decreasing at 2 percent rate annually (Eksvärd, 2012), further leading to problems of a uniform rate of production. Also, farmers and dairy companies at times, find KRAV standards far too strict to abide by them.

The retailers play an upper-hand, when it comes to marketing of products. Moreover, the shops for organic products is quite limited, most of the selling takes place in the hypermarkets, further limiting the easy availability of organic products. Another issue with the organic dairy sector is that the consumption of raw milk is decreasing every year in Sweden (Jordbruksverket, 2007). Other dairy products like yoghurt and cream are consumed at a substantial rate. The retailers influence consumer's purchasing decisions. However, they are the least affected by the standards and regulations framed under the EU. Hence, retailers need to be included in the decision making process whilst formulating organic policies, as they are more familiar about the market growth, especially with the consumption of organic products.

Thus, the first research question is answered here,

What are the opportunities and barriers present for the dairy producers in Sweden, to enhance the organic dairy sector within the existing policies and market strategies?

Labelling is considered as an important marketing tool to influence market growth. A number of organic labels are present in the market, justifying that the products are produced in accordance with the prescribed standards for organic (Janssen & Hamm, 2012). In Sweden, the organic logo KRAV is easily recognizable and trusted by the consumers. The EU has introduced a new organic logo, under the Commission regulation EEC 889/2008, which is to be implemented from July, 2012 on all

pre-packaged organic food (European Commission, 2010). However, the undertaken marketing steps to spread information about the logo have not been significant enough. This can be supported by the fact only 20 percent of the respondents in the consumer survey carried out by the author recognized the new EU logo.

In Sweden the state has taken efforts to promote organic products, with labelling and certification schemes. However, the supply and demand side market interactions drive the consumption of organic products (Koos, 2011). So, along with the development of policy, it becomes essential to adopt marketing methods that go beyond making profits and can withstand for a longer time. The author believes that the components of the Swedish organic sector fit in the market orientation model (see Figure 5). The dairy co-operatives and other organisations have good co-ordination; respond to the market demand and good orientation with the farmers for producing organic milk. All these criteria lead to the better performance of the organisation and help them compete in the market. However, there are only 6 major dairy companies in Sweden due to constant merging between companies for better profits, for example, recently the French dairy company Groupe Lactalis owns Skånemejerier and last year Arla Foods merged with Milko. Thus, the market is occupied by few large dairy companies, leaving no scope for new milk companies to establish themselves in the market. Thus, the production of organic dairy products is concentrated and handled only by a few.

The author proposes for the companies to adopt marketing sustainability practices, that takes into consideration all the important stakeholders and understanding of the societal and ecological systems, whilst devising marketing strategies. When adopted from a market focused sustainability approach, these strategies help the companies to outstand in the competitive market and ensure that the organic production shall continue for a longer time (Hult, 2011). The author is of the opinion that this is just one way to bridge the gap between the producers and consumers, leading to a sustainable consumption and production. Swedes are highly motivated and have concern for environmental issues and animal welfare, hence, large amount of organic consumption is observed here (Koos, 2011). However, the market can be enhanced sustainably and at the same time improve the corporate performance, when organisational learning and improvement in polices takes place through sustainable marketing orientation.

The above discussion helps to address the second research question,

How the existing organic dairy sector be improved to ensure a sustainable organic production and consumption?

The undertaken research is an attempt to explore one of the sustainable practices, organic farming. The research shows that the organic system is complex, where political, societal and market organisations are involved, each trying to get benefits with maximum profit margins. However, to ensure its sustainability in the long run, consensus amongst its actors is required. Sweden as a country has strong environmental beliefs. The organisations are in great association with each other and constantly trying to create a sustainable system with innovative ideas, even for conventional products. The consumption of the current organic products is rising steadily and sustainable marketing can help to include larger sections of the society. This may slowly also reduce the high premium prices paid by the consumers now. However, at the end it is important to note that unless ethical motivation and pro-environmental behaviour are strong, a sustainable consumption cannot be achieved.

References:

- Åberg, E. (1943). Sweden looks to its agriculture. *The Scientific Monthly, 57*(3), 230-239. Retrieved from http://www.jstor.org/stable/17979
- Ahlman, T. (2010). Organic Dairy Production- Herd characteristics and genotype by environmental interactions. Swedish University of Agricultural Sciences. Uppsala: SLU Service/Repro,.
- Anselmsson, J., & Johansson, U. (2009). Third generation of retailer brands-retailer expectation and consumer response. *British Food Journal*, *111*(7), 717-734. Retrieved from http://dx.doi.org/10.1108/00070700910972396
- Arla. (2011). Consolidated Annual Report. Arla Foods.
- Aschemann, J., Hamm, U., Naspetti, S., & Zanoli, R. (2007). The Organic Market. In W. Lockeretz, *Organic Farming, An International History* (pp. 135-163). CAB International Ltd.
- Beckeman, M., & Olsson, A. (2011, February). The role of Swedish retailers in food innovations. *The International Review of Retail, Distribution and Consumer Research*, *21*(1), 51–70.
- Bonnedahl, K. J., & Jensen, T. (2007, July). Internationalization of the organizational field: Swedish grocery retailers in the European integration process. *The International Review of Retail, Distribution and Consumer Research*, *17*(3), 283-302. Retrieved from http://dx.doi.org/10.1080/09593960701368846
- Bouckley, B. (2012, January). *Groupe Lactalis lift-off looms for Swedish dairy co-op Skånemejerier*. Retrieved from DAIRY Reporter.com: http://www.dairyreporter.com/Financial/Groupe-Lactalis-lift-off-looms-for-Swedish-dairy-co-op-Skanemejerier
- Broberg, O. (2010). Labeling the good: alternative visions and organic branding in Sweden in the late twentieth century. *Enterprise and Society*, 11(4), 811-838.
- Cardell, A. (2007). Milk in Sweden. Svenskmjolk, The Swedish Dairy Association.
- Dabbert, S., Häring, A., & Zanoli, R. (2004). *Organic Farming- Policies and prospects*. London and New York: Zed Books Ltd.
- Dahlqvist, S. (2012, August). Organic production at Hjördnära, Skanemejerier. (S. Bhagat, Interviewer)
- Durand, G., & Huylenbroeck, G. (2003). Mulitfunctionality and rural development: a general framework. In G. Huylenbroeck, & D. G, *Multifunctional Agriculture: a new paradigm for European agriculture and rural development*. Ashgate Publishing Ltd. .
- EC. (2007). Council Regulation (EC) No 834/2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. *Official Journal of the European Union*, 1-23
- Edman, A.-K. M. (2012, April). Role of Swedish Dairy Association in Organic Farming. (S. Bhagat, Interviewer)

- Eksvärd, J. (2012, February). LRF's role in organic production. (S. Bhagat, Interviewer)
- European Commission. (2004a). European Action Plan for Organic Food and Farming, Communication from the Commission to the Counci and the European Parliamentl. Brussels: European Union.
- European Commission. (2004b). *The Common Agricultural Policy Explained*. Brussels: European Commission, Dirctorate-General of Agriculture and Rural Development.
- European Commission. (2010, March 31). Commission Regulation (EU) No 271/2010 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards the organic production logo of the European Union. Official Journal of the European Union, L 84/19- L 84/22.
- European Commission. (n.d.). Agriculture and Rural Development- Logo and labelling. Retrieved from European Union: http://ec.europa.eu/agriculture/organic/consumer-confidence/logo-labelling_en
- Eurostat. (2012). *Area under organic farming.* Retrieved from European Commission: Eurostat: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=0&language=en&pcode=t sdpc440
- Fahlbeck, E., & Nilsson, J. (2002). The Marketing of Organic Food Products: the case of Swedish dairy co-operatives. *Environmental Co-operation and Institutional Change*, 345-362.
- Foreign Affairs and Trade, N. Z. (2012). *Sustainability Market Intelligence, February 2012 Quarterly Report.* New Zealand: Trade and Enterprise.
- Friberg, K. (2011). KRAVs historia. Retrieved July 28, 2012, from KRAV: http://www.krav.se/Om-KRAV/Organisationen/Historik/KRAVs-historia/
- GAIN, G. A. (2012). Swedish Organic Market. USDA Foreign Agricultural Services.
- Gullstrand, J., & Jörgensen, C. (2012, March 16). Local Price Competition: The Case of Swedish Food Retailers. *Journal of Agricultural & Food Industrial Organization*, 10(1). doi: 10.1515/1542-0485.1365
- Hansson, H., & Ferguson, R. (2011). Factors influencing the strategic decision to further develop dairy production- A study of farmers from the Central Sweden. *Livestock Sciences*, *135*, 110-123.
- Häring, A., Dabbert, S., Aurbacher, J., Bichler, B., Eichert, C., Gambelli, D., . . . Zanoli, R. (2004).

 Organic farming and measures of European agricultural policy (Vol. 11). (S. Dabbert, Ed.)

 Stuttgart: University of Hohenheim, Germany.
- Harris, B., Burress, B., & Eicher, S. (2000). *Demand for local and organic produce: a brief overview of the literature*. University of Kansas: Institute for Public Policy and Public Research.
- Heckman, J. (2007, July 21). A History of Organic Farming: Transitions from Sir Albert Howard's War in the Soil to the USDA National Organic Program. Retrieved 03 04, 2012, from westonprice.org: http://www.westonaprice.org/farm-a-ranch/history-of-organic-farming

- Hjordnära. (n.d.). *Om Hjordnära*. Retrieved August 12, 2012, from Hjordnära- ekologiska gardar: http://www.hjordnara.se/hjordnara.aspx
- Hult, G. T. (2011). Market-focused sustainability: market orientation plus! *Journal of the Academy of Marketing Science*, 1-6.
- IFOAM. (n.d.). *Definition of Organic Agriculture*. Retrieved April 05, 2012, from IFOAM, International Federation of Organic Agriculture Movements:

 http://www.ifoam.org/growing_organic/definitions/doa/index.html
- Janssen, M., & Hamm, U. (2012). Product labelling in the market for organic food: Consumer preferences and willingness-to-pay for different organic certification logos. *Food Quality and Preference*, 25, 9-22.
- Jordbruksverket. (2007). Facts about Swedish Agriculture. Swedish Board of Agriculture.
- Källander, I. (2009). Sweden early organic agricultural development. Retrieved from International Federation of Organic Agriculture Movements (IFOAM):

 http://www.ifoam.org/growing_organic/2_policy/case_studies/sweden_case_study.php
- Kjellberg, N. (2011, December). Skånemejerier säger ja till affär med Lactalis. Retrieved September 02, 2012, from Svensk Mjolk, Swedish Dairy Association: http://svenskmjolk.se/Mjolkgarden/Tidningen-Husdjur/Nyheter/2011/Ovrigt/Skanemejerier-sager-ja-till-affar-med-Lactalis/
- Koos, S. (2011). Varieties of environmental Labelling, market structures, and sustainable consumption across Europe: A comparative analysis of organizational and market supply determinants of environmental-labelled goods. *Journal of Consum Policy, 34*, 127–151. doi:10.1007/s10603-010-9153-2
- KRAV. (2012). KRAV Market Report. Retrieved from http://www.krav.se/Documents/Marknadsrapporter/marknadsrapport2012/KRAV_PPT_marknadsrapport2012_slutversionEnglish.pdf
- Kuepper, G. (2010). A brief overview of the history and philosophy of organic agriculture. Poteau: Kerr Centre for Sustainable Agriculture.
- Lampkin, N. (2003). From conversion payments to integrated action plans in the European Union. In OECD, *Organic Agriculture: Sustainability, Markets and Policies* (pp. 313-328). Wallingford: CABI Publishing.
- Lockertz, W. (2007). What explains the rise of organic farming? In W. Lockertz, *Organic Farming: An International History* (pp. 13-20). CABI Publishers.
- Lohr, L. (1998). Implications of Organic Certification for Market Structure and Trade. *American Jounal of Agriculturlal Economics*, 80(5), 1125-1129.
- Lotter, D. W. (2003, October). Organic Agriculture. *Journal of Sustainble Agriculture, 21*(4), 59-128. doi:http://dx.doi.org/10.1300/J064v21n04 06

- LRF Federation of Swedish Farmers. (2006). Labelling: competitiveness, consumer information and better regulation for the EU. *Response letter to European Commission on Labelling*. Retrieved from http://ec.europa.eu/food/food/labellingnutrition/betterregulation/docs/45.pdf
- LRF Federation of Swedish Farmers. (2012). *About LRF*. Retrieved September 06, 2012, from Lantbrukarnas Riksförbund: http://www.lrf.se/In-English/
- LRF Federation of Swedish Farmers. (n.d.). Ökat intresse för ekologiska livsmedel. Retrieved September 06, 2012, from Lantbrukarnas Riksförbund: http://www.lrf.se/Mat/Ekologiskt/Ekologiska-livsmedel/
- Lund, V., Hemlin, S., & Lockeretz, W. (2002). Organic livestock production as viewed by Swedish farmers and organic initiators. *Agriculture and Human Values*, *19*, 255-268.
- Magnusson, M. K., Arvola, A., Hursti, U.-K. K., Åberg, L., & Sjödén, P.-O. (2001). Attitudes towards organic foods among Swedish consumers. *British Food Journal*, *103*(3), 209 227. Retrieved from http://dx.doi.org/10.1108/00070700110386755
- Maican, F., & Orth, M. (2008). *Productivity Dynamics and the Role of "Big-Box" Entrants in Retailing*. Working Paper in Economics. Retrieved from https://gupea.ub.gu.se/bitstream/2077/18683/4/gupea_2077_18683_4.pdf
- McEachern, M., & McClean, P. (2002). Organic purchasing motivations and attitudes: are they ethical? *International Journal of Consumer Studies*, *26*(2), 85-92.
- Michelsen, J. (2001). Recent Development and Political Acceptance of Organic Famring in Europe. *Sociologia Ruralis*, 41(1), 1-18.
- Milestad, R., Wivstad, M., Lund, V., & Geber, U. (2008). Goals and standards in Swedish organic farming: trading off between desirables. *International Journal of Agricultural Resources, Governance and Ecology, 7*, 23-39.
- Ministry of Rural Affairs. (2006). *Organic production and consumption*. Retrieved from Regeringskansliet, Government Offices of Sweden: http://www.sweden.gov.se/sb/d/2160/a/66256
- Ministry of the Environment. (2004). Sweden's Environmental Quality Objectives. Retrieved from Regeringskansliet, Government offices of Sweden: http://www.sweden.gov.se/sb/d/5775
- Mitchell, R. W., Wooliscroft, B., & Higham, J. (2010, March). Sustainable Market Orientation: A new approach to managing marketing strategy. *Journal of Macromarketing*, *30*(2), 160-170. Retrieved from http://jmk.sagepub.com/content/30/2/160
- Naturvardsverket. (2008). Sweden's environmental objectives in brief. Swedish Environmental Protection Agency. Retrieved from http://www.naturvardsverket.se/Documents/publikationer/978-91-620-8324-3.pdf
- Offerman, F., Nieberg, H., & Zander, K. (2009). Dependency of organic farms on direct payments in selected EU member states: Today and tomorrow. *Food Policy*, *34*, 273-279.

- Organicmonitor. (2012, April 10). *Sweden: organics still on the rise*. Retrieved from Organic-Market info. Online magazine for Organic Trade: http://www.organic-market.info/web/News_in_brief/Regional_Marketing/Sweden/176/194/0/12154.html
- Padel, S. (2010). The European Regulatory Framework and its implications in influencing organic inspection and certification systems in the EU. CERTCOST Economic analysis of certification systems for organic food and farming. Retrieved from www.certcost.org
- Padel, S., & Lampkin, N. (2007). the Development of Governmental Support for Organic Farming in Europe. In W. Lockeretz, *Organic Farming: An International History* (pp. 105-134). CABI Publishing.
- Padel, S., & Vine, J. (2010). *The European regulatory framework and its implementation in influencing organic inspection and certification systems in the EU.* CERTCOST-Economic Analysis of Certification Systems in Organic Food and Farming.
- Pettersson, K. (2012). Organic milk production by Arla Foods. (S. Bhagat, Interviewer)
- Pollock, J. (2009, August 08). *History of Organic Farming: the Age-Old Methods of Agriculture Are Rediscovered and Revitalized.* Retrieved 2012, from TheHistoryOf.net: http://thehistoryof.net/history-of-organic-farming.html
- Rosati, A., & Aumaitre, A. (2004). Organic dairy farming in Europe. *Livestock Production Science, 90,* 41-51.
- Rundgren, G. (2002). Organic agriculture in Sweden, 14% organic. GrolinkAB.
- Skånemejerier. (n.d.). What is ecology? Retrieved September 28, 2012, from Skånemejerier: http://www.skanemejerier.se/en/Environment/What-is-ecology/
- Slater, S. F., & Narver, J. C. (1995, July). Market Oreintation and the learning organization. *Journal of Marketing*, *59*(3), 63-74. Retrieved from http://www.jstor.org/stable/1252120.
- Sønderskov, K., & Daugbjerg, C. (2011). The state and consumer confidence in eco-labeling:organic labeling in Denmark, Sweden, The United Kingdom and The United States. *Agriculture and Human Values*, *28*, 507–517. doi:10.1007/s10460-010-9295-5
- Stalzman, K., Head, L., & Steneske, M. (2011). Do cows belong in nature? The cultural basis of agriculture in Sweden and Australia. *Journal of Rural Studies*, *27*, 54-62.
- Stinner, D. H. (2007). The Science of Organic Farming. In W. Lockeretz, *Organic Farming. An International history*. CAB International.
- Stolze, M., & Lampkin, N. (2009). Policy for organic farming: Rationale and concepts. *Food Policy, 34,* 237-244.
- Stolze, M., Piorr, A., Häring, A., & Dabbert, S. (2000). *The Environmental impacts of organic farming in Europe* (Vol. 6). Germany: University of Hohenheim.

- Sundberg, S. (2012). *KRAV Medlemmar*. Retrieved July 15, 2012, from KRAV: http://www.krav.se/Om-KRAV/Organisationen/Organisationsschema/Medlemmar/
- Swedish Dairy Association, S. (2012). Milk- Key figures, Sweden. Skövde: Rolf Tryckeri ab.
- Sylvande, B., & Floc'h-Wadel, A. (2000). Consumer demand and production of organics in the EU. *AgBioForum*, 3(2&3), 97-106.
- Thøgersen, J. (2010). Country Differences in Sustainable Consumption: The Case of organic food. *Journal of macromarketing*, 30(2), 171-185. doi:10.1177/0276146710361926
- Tischner, U., & Kjaernes, U. (2010). Sustainable consumption and production in the agricultural food domain. In U. Tischner, E. Sto, U. Kjaernes, & A. Tukkker, *System Innovation for Sustainability* 3. UK: Greenleaf Publishing Ltd.
- United Nations. (2008). Best Practices for Organic Policy. What developing country Governments can do to promote organic agricultural sector. Geneva and New York: United Nations.
- Wier, M., & Calverley, C. (2002). Market potential for organic foods in Europe. *British Food Journal,* 104(1), 45 62. Retrieved from http://dx.doi.org/10.1108/00070700210418749
- Willer, H., & Kilcher, L. (2012). World of Organic Agriculture-Statistics and Emerging Trends 2012.

 Bonn: Research Institute of Organic Agriculture (FiBL), Frick and International Federation of Agricultural Movements (IFOAM).
- Zorn, A., Lippert, C., & Dabbert, S. (2009). *Economic concepts of Organic Certification*. CERTCOST. Retrieved from www.certcost.org

Appendix

Appendix1: Transcribed interviews of personnel at LRF, Arla Foods and Skånemejerier

Interview 1: Sustainable expert at LRF

Interviewer: Sarita Bhagat

Interviewee: Jan Eksvard

Duration of the interview: 1 hour at Expresso House, Lund

Interviewer:

What benefits to organic farmers get from the Government?

Interviewee:

For converting to organic farming farmers receive an area payment depending upon the volume of milk produced. This is supported by the CAP. Further payment is also given for doing good for the environment (organic).

The payment area for milk is higher. The cultivation of organic vegetables is not supported by CAP. Although the value of the organic vegetable production is high, the area payment received by farmers is less. Hence, the amount of payment received by the farmers is very much dependant on the market.

Interviewer:

Do dairy co-operatives control the price?

Interviewee:

Mainly prices of the organic products are controlled by the retailers. They play an important role in influencing the consumers to purchase the organic products.

Big dairy co-operatives like Arla also control the price depending on the volume of production. For example, to increase sales of organic strawberry yoghurt, they purposely increased the prices of other conventionally produced yoghurt. Hence, consumers could purchase the organic produced yoghurt. Thus, when the percentage target of market share is reached, one can have consumers to pay more for it.

Expanding the market is good to help Sweden have its products displayed in the market.

Interviewer:

How the value of organic shared by the various stakeholders involved in the process?

Interviewee:

Organic production will stop if the payment received by the farmers is too low. So maybe removal of area payments or milk quotas might affect the organic production. Dialogue among the stakeholders is important for a win-win situation. Today it is expensive to invest in knowledge and behaviour savings at farm/retailer level. Therefore, much awareness needs to be created from the consumer side as how these increased values is to be shared. If one link is broken, then the chain is disrupted and hence, the sharing of values.

Interviewer:

How important is certification?

Interviewee:

Retailers prefer if the products are certified, especially KRAV certified, as many consumers recognize it. Although KRAV certification process is strict, a better dialogue among all the stakeholders is necessary to make the process easier.

Interviewer:

Often organic dairy farms require large amount of land. How will this have an effect on the organic production? What is the potential for increasing the organic farms?

Interviewee:

Large amount of land is not a problem. Statistically here is a decrease of about 2 percent of farmers every year. This is the main problem. Landscape can be managed. Now the current focus is to save maximum energy on the farm and many steps are being taken in that direction.

In North Sweden, expanding the land is a limit. North Sweden has large forests and the landscape is not plain. So, here just giving extra payments won't work at all. The conditions for practising organic farming is better in the South, hence one finds more number of organic farms in the South. In Sweden, now one-third of the Swedish farms have organic production.

The current problem is the less yield obtained from organic produce. Lot of research is taking place currently in this regard. For example, use of urine to increase the yield is taking place. Also, residues are being used on the farm for biogas production. This also ensures the use of energy on the farms.

Interviewer:

What is the role of the LRF?

Interviewee:

To support farmers to develop their farming, coach them on the best practices, create structure and services, and provide consultancy. They also act as lobbyist on behalf of the farmers when negotiating policies.

Interviewer:

How LRF looks into conventional and organic agriculture in general?

Interviewee:

Provide legitimacy to organic producers, federation supports expansion of organic production

Broadening space for being creative like having an open dialogue

There is also a willingness among the consumers to pay for organic products.

Interview 2: Dairy co-operative, Arla Foods

Interviewer: Sarita Bhagat

Interviewee: Kjell Lunden Pettersson, Sr. Manager, Arla Foods.

Duration of the interview: 35 mins.

Interview was conducted through telephone. As call was made with the help of computer, my hands were free to take down notes. The interview was semi-structured.

Interviewer:

As a dairy co-operative, what opportunities are present for the organization to comply with the EU policies for organic dairy and standards set by Sweden?

Interviewee:

All organic production is certified and labelled by organic organisation, KRAV. Milk is selected from farms that are KRAV certified. KRAV organisation itself fulfils all the regulations and demands framed by the EU..... or rather the rules are even stricter than the EU. The regulations are far better than recognized by the EU. Arla is also checked by the organisation (KRAV) every here. So, there is no such problem with the certification and labelling.

Interviewer:

What kind of barriers does Arla encounter while maintaining constantly the standards for labelling and certification during the processing of organic milk?

Interviewee:

Separate milk line for processing puts an extra demand on the dairy industry..... from Arla's perspective, it is the added value that has to be paid by the consumers... like even packaging of organic milk..... Changes need to be constantly made in the planning procedure, putting extra demand on the logistics and management.

Organic milk is an added value programme... this added value needs to be accounted. An independent third party has to be there to verify that we are doing everything that is needed to be self-organic. So KRAV helps in meeting the 3rd party requirement.

Interviewer:

What are the disadvantages of the policies, like paying price premiums to farmers?

Interviewee:

It is expensive for farmers to pay for organic...more hectares are needed for organic feed.... concentrates of large field is required. Arla has to pay the farmers extra for organic milk. This extra cost comes from consumers. During the last 20years farmers were always paid extra..... Difference between conventional and organic decreased last year. There is surplus of organic milk now..... Price premiums have hence decreased...... this difference occurred for the first time in 19 years.... there was balance between the organic produced and organic sold. But maybe last year merger with Milko resulted in the surplus production. Therefore, the price was lowered and hence less profitable for farmers.

Interviewer:

What is the current market share of organic dairy products in Sweden? As a dairy so-operative what market strategies are adopted to enhance this share in the market?

Interviewee:

Last year due to economic stagnation consumers have bought less organic milk. Organic prices are higher for the added value they have. To push organic milk a bit higher the goal is to continuously increase the production, but first the high demand for consumption is required. All Swedish organic milk is to be sold within Sweden, except they are sold to the Nordic countries. Major organic reduction in demand occurred in Denmark, but there is still higher demand in Finland. So for better market strategies, balance is required between demand and production.

The current market strategy thus is to increase that demand amongst the consumers. Promoting organic milk amongst consumers is important to have a balance between the demand and the production. We are in constant touch with the Consumer Forum in Sweden and according to them about one-third of the consumers are ready to pay extra for organic products. They are not very much interested in the rising organic prices but the organic itself.

So what market looks like.....?The current strategy is to play with different groups. Work step by step to interest people in organic production

Interviewer:

What changes are expected in the organic market for dairy and its products in the near future?

Interviewee:

The personal reflection is that the organic real production will slow down; we will have a slow increase in the organic consumption.....but high consumption in other organic products like fruits and vegetables....one-tenth of the percentage increase in share. Within 5 years, maybe there will be only 5 percent increase in organic milk, not much.

Interviewer:

Then what about the farmers?

<u>Interviewee:</u>

Small farmers may stop doing organic. Modern organic farms will change. At the moment when surplus is being done, consumption fact has to be taken into consideration before taking into new companies.

Conventional dairy has also improved in many ways. The difference is very meagre when maintaining the conventional, it is very efficient. Therefore, it is just a win-win situation.....farmers just want the best practice. The trademark is just organic. The question is then how to increase the share of organic.... the current share in Sweden is 11 percent and double in Denmark. Consumers want to support organic milk and the higher price is just the added value. There is not much difference if you analyse the fat or protein content between the two. If looking at the climate change there is only difference between the time for grazing, but in Sweden, even conventional cows are supposed to stay outside for grazing. So you support the system that is better than the other and it is rather difficult to choose which practice is the best.

Interviewer:

Thank you for the valuable contribution and time. Could you please leave me your email address so that I could get back to you for any further queries?

Interviewee:

It was my pleasure. My email address is $\underline{\text{kjell.lunden-pettersson@arlafoods.com}}$. All the best for your research work.

Interview 3: Dairy co-operative Skånemejerier

Interviewer: Sarita Bhagat

Interviewee: Sabina Dahlqvist, Sr. Manager at Hjordnära.

Type of interview: Questions and answers were exchanged through electronic mail

1) How are the organic policies framed by the EU and Sweden beneficial (what opportunities) to Skånemejerier? (Policies can range from certifications schemes, area payments to farmers, price premiums, etc.)

I will try to answer the best that I can but unfortunately, this is not my area of expertise. There are no special beneficial to Sweden from EU regarding organic production. We are certified once a year and then pay a fee to our certification company, in our case, kiwa aranea. Regarding to the payments to the farmers, I do not have information about that.

2) Are there any disadvantages for the dairy co-operative while complying with these policies and standards for the organic dairy? If yes, what are they?

I cannot see any disadvantages except that it is very expensive to produce organic dairy products and there for very high retail price that consumers see as a reason not to buy organic. And it is hard for the companies having organic products to get paid for what the products are worth since in general it is giving back so much for the environment not mentioning that it is better quality in the food for the end consumer. If any, I would wish a more generous government policy for organic production.

3) What difficulties do the dairy cooperatives encounter during the processing of organic milk and at the same time constantly maintaining the organic standards? What strategies does the company adopt to overcome them?

I would not call it difficulties regarding the processing except that everything needs to be handled so carefully. Although, that is general for all food production.

4) What is the current market share of organic dairy products?

Not sure if you mean our markets shares or overall but please see the matrix below. This is for the total market what we are calling DVH in Sweden. In sales value in 1000kr

Område	2009	2010	2011
Dairy totalt	18 917 843	19 310 165	20 051 766
Organic dairy	1 291 555	1 289 131	1 296 120
Skånemejerier	66 720	95 207	119 185
Organic share total	6,8	6,7	6,5
Skånemejerier organic share of totalt	5,2	7,4	9,2

5) What are the market strategies adopted by the co-operative to enhance and maintain the organic dairy share in the market?

To continually have market activities and build for e.g Hjordnära Brand. Keep on working with the knowledge of the brand and to get a higher distribution.

6) What are the barriers encountered by co-operative while implementing them?

We have a too much low distribution. If we are not in the shelf the consumer, have a hard time buying the products.

7) As retailers control the major prices of organic dairy products, how does this affect the company's economy (could be beneficial and advantageous for the company) and the production rate of organic dairy?

It is hard to give the farmers the price the "deserve" since we need to have a cost margin at the end to survive. Otherwise, we can stick to high margins products and that is not organic products at the end of the day that gives us those kroner.

8) As an organization, how do you view the future of organic dairy production and market? Is it likely to grow at a faster pace, remain stagnant or going to decrease or any other.

I believe that is possible to grow faster but since as mentioned above it is not strong margins product it is hard to get focus within the organization and hard to get marketing budget for it. There are strategies that focus more on the conventional products that gives us more money at the end row for the calculation.

9) In Sweden, will organic share increase over the conventional dairy production?

It will increase but unfortunately in EMV products for e.g ICA, COOP etc.

10) What role does the co-operative play in promoting the organic dairy share to its consumers?

A huge role since it is all about knowledge about what organic both production and products can do for the environment and for the people.

Appendix 2: Questions of the consumer survey:

Method of Sampling: Random selection

Total number of respondents: 97

Place of sampling: Supermarkets in Lund and Malmö

Questions:

1) Do you purchase organic dairy products? (Yes/No/Sometimes)

During the survey, it was observed that consumers purchased organic dairy products such as milk, yoghurt and cream.

Out of 97 respondents, 39 consumers buy organic dairy products on a regular basis, 33 people sometimes prefer to buy organic products whereas, 26 people do not purchase

- 2) What motivates you to purchase organic products?
 - a) Quality
 - b) Safety and health reasons
 - c) Organic as a trend
 - d) Animal welfare
 - e) Others
- 3) Why you do not purchase organic products?
 - a) High prices
 - b) Availability
 - c) No real difference in taste between conventional and organic
 - d) No motivation to purchase
 - e) Preference to local purchasing
- 4) Do you recognize the following labels and do you know its significance?



