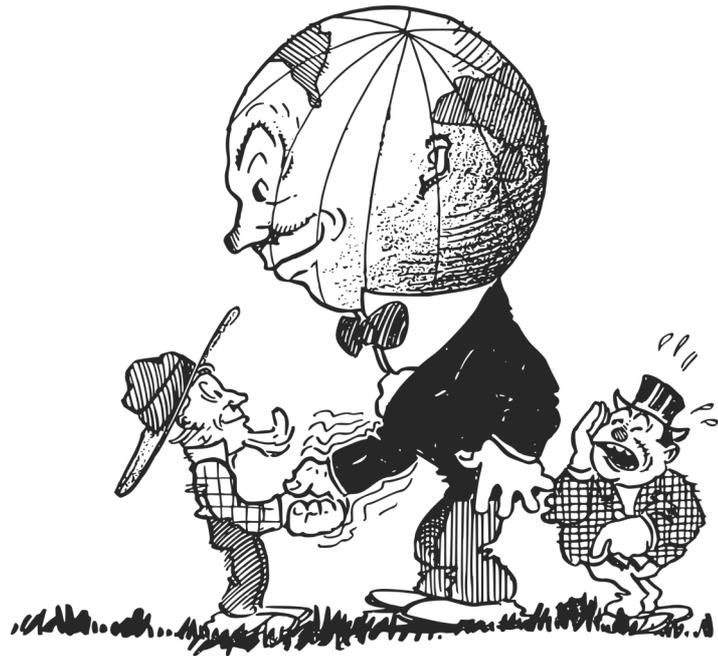


Regulations of organic agriculture lost in translation?

Exploring the implementation of the four principles of organic agriculture regarding the regulation and actual practice.



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August - 2016
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Glossary of Terms (as used in this thesis)

Paradigm

A set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline.

Worldview

It is believed that all actions and ideas originate from a worldview someone possesses, the binoculars one observes the world with (Vidal, 2008). Behind the 'what' that seems to establish the rightness of things, it is the 'why' behind the 'what'. A person's worldview, accompanied with ethical values, shape the way a person or company approaches the world and acts accordingly. From it a perceptual framework is derived that determines how ethical problems and perceived consequences are dealt with (Singhapakdi, et al. 1999; Hunt & Vitell, 1986).

Philosophy (in the sense of 'someone's view on a certain issue')

A well-considered view on an issue derived from a worldview situated in a certain paradigm that acts as a set of guiding principles for behaviour with respect to that issue.

Preface

This thesis came to be due to the question how organic products can be sold in a conventional store. The question came up because of the fact that the philosophy of organic is focused on a holistic approach on life. And so it seemed to be of no logic that the sales of organic products are not regulated, as this is one of the links in the value-chain. From this thought a search came about to find the right question to pose. Eventually this paper is the result. The process has not been without drawbacks, but that can only mean that I have learned a lot. With that said I would like to thank the two supervisors, Ynte van Dam and Henk Jochemsen, who had the patience to guide me through this process.

Summary

In recent years organic agriculture got a lot of attention. Both the production and consumption of organic products has grown exponentially, with all the consequences that entails. Many scientists, farmers and consumers have expressed critique about the justness of corporates being able to sell organic products and the effect it has on the core norms and values of organic agriculture. This paper explores what the differences and similarities between organic sales channels are regarding both philosophy and conduction of business. And how compatible the different sales channels and organic agriculture are regarding the philosophy behind it. The research is divided into two parts namely, a literature review which explores the current situation regarding the philosophy of organic agriculture, the organic regulations, the philosophy behind different sales channels and the differences of marketing organic products through the different sales channels. The second part entails an analysis exploring how the philosophy of organic agriculture is translated into regulations and how the regulations are implemented in practice by two different types of sales channels. The main finding of this paper is that the philosophy of the corporate organic value-chain and organic agriculture hardly correspond. It is argued that the reason why organic products can be sold through the corporate value-chain is that the philosophy of organic agriculture is not fully translated into the regulations. It is concluded that either the gap between the philosophy and regulation of organic agriculture needs to be filled, or a clear distinction needs to be made between the two to avoid pollution of terms and false expectations.

1 Introduction

Organic agriculture has experienced great growth during the past decade. With a current global market of 72 billion Us Dollars (Lernoud, et. al., 2016), it can be said that organic agriculture has become more than a niche market. By means of regulations a certain standard can be assured and organic products are now sourced and sold all over the world (Lockeretz, 2007). These regulations give great opportunities to convert conventional agricultural land into organic, which is one of the most important keys to make agriculture more sustainable. Organic agriculture accounted for 43,7 million hectares of farmed land worldwide in 2014 (11 million ha in 1999), with 2.3 million farmers working that land (Lernoud, et. al., 2016). This growth can be attributed to many different factors of which consumer demand can be seen as one of the main pillars. Whereas in the past organic consumers consisted of only a small group of very conscious people, now an ever-growing group of pragmatic users can be identified (Hjelmar, 2011). With this growth also the channels changed through which organic products are sold. While it started with local organic shops and cooperation's, now a great portion of organic products can be bought in any supermarket. Supermarkets made organic products widely available, due to their big scale operations and established supply chains.

If organic agriculture would just be a certain kind of practice, this growth would appear as a great success, but organic agriculture is a value-based practice. The values that shape this practice are defined by IFOAM (international foundation of Organic Agriculture Movements) as four principles namely: Health, Fairness, Ecology and Care¹. These principles in general entail a wholesome perspective on the entire production of organic agriculture. Meaning that all participants should treat each other, nature and future generations with respect. In a sense the idea is that one should act sustainably in social, economic and ecological terms, where sustainable can be defined as maintaining a balance which can be sustained in time. With this said, the question can be raised how it could happen that organic products are sold through the conventional value-chain if the philosophy of organic agriculture is so different from the philosophy of the conventional market.

The great interest in organic agriculture has many different reasons. Some people are attracted by it because of the alternative lifestyle that it accompanies, which contrasts the industrial power and materialistic view on the world. Others are more interested in the environmental benefits it provides. Also the wholesomeness of organic agriculture and the high quality food produced are well-established reasons (Lockeretz, 2007). Overall it seems that the growth of organic agriculture is accompanied with a realization that current agricultural practices are in need of some sort of change; a change towards more sustainable practices regarding agriculture.

¹ <http://www.ifoam.bio/en/organic-landmarks/principles-organic-agriculture>

Regardless of all the good intentions, it is of importance to mind the side effects of the exponential growth of organic agriculture regarding regulation and the underlying values. The globalization of organic agriculture opened a big market and a diversity of products from all over the world can be found in the supermarkets today.

But with the globalisation of organic agriculture there is a need of international standards regarding all steps of the organic value-chain. If not there is a danger of corrupting the system by finding mazes in the regulations, which lead to unequal opportunities. In general there is a concern that inadequate regulations lead to conventionalisation of organic agriculture. Conventionalisation of organic agriculture is associated with for example big-scale farming, specialisation, monoculture, and unequal power-distribution (Milestad et al., 2010). It is reported that farm size is increasing and the amount of mixed farms is decreasing (Best, 2008). Also an increase in cattle size on farms is observed (Verhoog, 2007). And even an increased use of permitted fertilizers of conventional origin in arable farming is found (Milestad et al., 2010).

These expressions are strongly related to the currently dominant worldview and the goals that are derived from that worldview (Gladwin, Kennelly & Krause, 1995). The main focus regarding the conventional value-chain is to expand the market share and make profit, which usually leads to lowering both production and life standards of animals but also the working conditions for the people working in that chain (Rushdy, 2013). Considering that how one views the world has such great impact on how business is conducted, is it of importance to identify which differences can be found between the conventional and organic value-chain. To obtain an insight, this paper will start with a literature review, identifying the occurrence of organic agriculture, the different paradigms vignette conventional and organic agriculture and the philosophy of both value-chains accompanied with derived assumptions. This information provides a general overview of the differences between the conventional and organic philosophy.

As regulations are established for certified organic products, which apply for both value-chains, no conclusions can be drawn solely on differences between the worldviews or philosophies. Therefore, an analysis will be made of the two different value-chains by comparing their production side and social structure. This will be done by analysing the expressions of both value-chains regarding conduction of business. By looking at the conduction of business it becomes clear how different the regulation of organic agriculture is interpreted and conducted. This analysis makes clear to what extent these value-chains really manifest the philosophy of organic agriculture.

As mentioned before, production and sales of organic products has widely increased due to the formulation of the regulations. So, another part of the analysis is to research how the principles of organic agriculture are translated in the regulations of organic agriculture regulations. This will be conducted by analysing to which extent the four principles of organic agriculture are implemented in the reformed Organic Regulations proposed by the European Commission. The aim of both analyses is to identify the bottlenecks and opportunities for future development of organic agriculture.

2 Review of Literature

This chapter will explore the rise of industrialized agriculture and the occurrence of the organic movement as a reaction. This exploration serves to indicate the relation between organic and conventional agricultural practices. To place organic and conventional agriculture in a broader perspective, different paradigms are explored. The paradigms can be seen as the most abstract level of analysis, constructed by a worldview that is predominant for a certain group. After this exploration, both the philosophy of organic agriculture and the current market are described. The organic philosophy is translated into four principles, which serve as guidelines for all participants of the value-chain. These principles are an elaboration of philosophical insights into more specific normative views or policies regarding certain practices. As for the philosophy of the market no such elaboration is available, so assumptions are derived from the market philosophy.

2.1 The rise of industrialized agriculture

After the Second World War agriculture experienced an accelerating period in which both new techniques and chemicals entered the market. The general reason given to explain the use of chemicals and heavy machinery was to upscale food production in order to meet food demand of hungry citizens in short term.

As time passed, agriculture became an industry of efficiency, which could provide even the poor with affordable food. Between 1930 and late 1960, the green revolution, initiated to accelerate development of agricultural technology, spread all over the world². In the years after agriculture was a topic of scientific interest, but it was not before *Silent Spring*, written by Rachel Carson (1962), that the effects of industrialised agriculture were taken seriously. Together with the stabilization of food provision and technological development other businesses arose. Transportation became more accessible, food processing became mechanized and the food supply increasingly centralized. These great improvements ensured available food and even made product development possible. Also the economic system evolved beyond simple transactions, it made possible that small companies could turn into profitable multinationals. Concerning the sales channels of food in general, the same trend of upscaling and technification can be found. The small grocery shops and markets slowly became marginalized and one-stop-shops arose.

These developments of global trade and the complex of the food industry demanded regulated security standards to ensure food quality and safety and fair practices concerning food trade. The governing bodies of the Food and Agriculture Organization of the United Nations (FAO) in 1961 and the World Health Organization (WHO) in 1963 founded The Codex Alimentarius Commission (Codex) international food standards. The Codex serves as guidelines and standards for the international food trade. The Codex assembles scientists, technical experts, government regulators and international consumer and industry

² <http://geography.about.com/od/globalproblemsandissues/a/greenrevolution.htm>

organizations to develop food standards together. Participation is voluntary, but currently the standards overall serve as the basis of national legislation (Morgera & Caro & Durán, 2012).

2.2 The criticism and occurrence of organic agriculture

From the beginning of the industrialisation of food production criticism has been expressed. And as good as the green revolution sounded, many scientist and farmers questioned the new way of food production. Also from the side of the consumers a discontent was shown. And as a quest for alternatives to the mass production and use of pesticides movements started to arise both in the U.S. and Europe, which like the green revolution, spread all over the world. The most distinctive organic movements were the biological agriculture and biodynamic agriculture. Biodynamic, not elaborated in this thesis, is a way of agriculture oriented at anthroposophy with an esoteric-occult³ view on the world. The key concept presented by Rudolf Steiner, is the farm as a living organism where every farm has his own individual characteristics. This entails a combination of two main aspects, namely the biological character of (soil) fertility and the dynamic effects of the natural forces (Janick, et al., 1991).

Biological agriculture, now known as organic agriculture, worked more from a scientific point of view. The approach of organic agriculture movement was very much practice based, focussing on improvement of agricultural practices backed up by scientific knowledge. Soil fertility has been the main topic, focussing on soil organism dynamics, soil organic matter and the relations between the soil and plant roots. All the information combined provided a great basis for recommendations regarding the use of organic fertilizer (Janick, et al., 1991). Even though the scientific knowledge regarding soil life and the importance of a living soil, the organic movement didn't experience the same success as the industrialized methods. For a long time organic agriculture has been seen as an alternative agricultural practice, which was not really taken seriously.

Around 1970, organic agriculture expanded and with that a need for more co-operation arose. Five organic agricultural organizations founded the International Federation of Organic Agriculture Movements (IFOAM) around 1972, serving as a platform to share and exchange knowledge (Lockeretz, 2007), which today unites more than 750 organizations in 108 different countries (Morgera, Caro & Durán, 2012). Until recently, organic agriculture grew without any institutional or political support and strict regulations. Organic Agriculture did not only grew economically but also socio-culturally. Eventually this led to the formulation of the current four principles, which are the cornerstones of organic practices. The four principles Care, Health, Fairness and Ecology, discussed more elaborately further in this thesis, ideally serve as the basis for the whole value-chain. Meaning that participants entering this value-chain internalize the principles and conduct business with the general philosophy of organic agriculture (Lockeretz, 2007).

³ Esoteric-occult worldview can be interpreted, as knowledge beyond what directly can be observed, including astrology. An example regarding bio dynamics is the effect of the moon phase on growth of plants. (<http://ourultimatereality.com/occult-and-esoteric-knowledge-defined.html>)

One of the basic concepts behind organic agriculture is holism, which also includes the importance of local production and sales. So, with organic farming a diversity of 'alternative' sales channels were also established. Products were sold on farm, at farmers markets, through community supported agricultural systems and many more. Characteristics of the alternative sales channels are a direct contact with the producers, locality, more emphasis on the seasonal growth of plants and embedding food production into the community.

2.3 Organic agriculture and globalization

Currently, there is a claim that 'we' need to feed 9 billion people, a goal that we as humankind have to achieve. With this prospect, adjustments of current agricultural practices are needed. Not only the increase of population but also the increase of income per capita in developing countries plays a role in demand for an increase of food production. The biggest impact can be seen in the ever-growing consumption of animal products (Tilman, et al., 2011), especially in East Asia (Delgado, 2003).

There are many views on how this increase in food production should be realized. On the production side, measures proposed include increase of agricultural land, expanding aquaculture, closing the yield gap and sustainable intensification (Garnett, 2013; Godfray, et al., 2010). Another important solution presented is to increase production limits, such as the introduction of F1 hybrid breeds (Gregory & George, 2011; Godfray, et al., 2010). On the consumer and retail side solutions are found in reducing waste or changing diets (Godfray, et al., 2010).

The increase of agricultural land is limited due to urbanization or other uses for human consumption like the production of crops for biofuel. Also much land is degraded due to unsustainable land management leading to soil erosion, water pollution and desertification. On top of that the ever-changing climate is causing great challenges for agriculture today (Godfray, et al., 2010).

Improving breeding technologies to increase yield and close the yield gap is seen as the most promising solution short term (Gregory & George, 2011; Tester & Langridge, 2010). The breeders face the challenge to both increase the yield and decrease the need of input, one of the main aims for sustainable intensification (Garnett, 2013). Also the need of nitrogen fertilizer has to be reduced as excessive use is linked with degradation of soil, biodiversity and water pollution (Foley, 2005; Tilman, et al., 2011).

The irony is that all these expressions of the industrialization contributed to the increasing interest in organic agricultural practices. One example of the increasing support for organic practices is the price premium that is put in place by the government to enhance the growth of organic farming. Also the interest of consumers increased regarding organic food due to distrust created by scandals in the conventional foodscape and the interest for healthy food (Wier & Calverley, 2002). The inevitable followed, big retailers and supermarkets saw this great opportunity to both increase sales and 'green' their image (Goodman & Goodman, 2009).

To make trade through the conventional channel of organic products possible, regulations were formulated derived from the four principles of IFOAM. Because of regulations, price premiums and certification of organic agriculture grew exponentially and currently accounts for 43 million hectares of farmed land worldwide with 2 million farmers working on that land (Lernoud, et al., 2016). This growth of farmers starting or transitioning to organic practices can have many reasons. The two main reasons related to farming are considered husbandry and technical reasons and financial motives (Padel, 2001), which could imply that conversion is not so much about the philosophy but more a solution to experienced problems. Nevertheless, conventional distributors made the availability of organic commodities widely available and the organic market share sold through supermarkets is steadily growing, for example the US supermarkets hold one third of the organic market (Raynolds, 2004). It could be argued that this is a positive shift. Conventional production and sales are converted into organic practices, which leads to more agricultural land converted into organically certified land. But there are reasons to believe that the institutionalisation of the organic foodscape does more damage than good, also regarding the sustainability (Goldberger, 2011).

The sudden growth of interest in organic production and marketing is accompanied with concerns of dilution regarding the fundamental principles of organic farming. IFOAM expresses the recognition of the fear for organic to become conventionalized by new participants entering the organic market. The main concern expressed is that the created certification system makes it possible for new converts to weaken the organic standards, by only complying with the minimum requirements instead of starting from the underlying principles that fund organic agriculture. Another point of concern is the economic power concentration of the 'conventional' value-chain, which potentially could force down production prices, damaging the organic farmers. This accompanies the possibility for large supermarkets to prioritize big scale and specialized farms (often more distant) over small-scale farms. The reason for that is that large supermarket formulas work with standardized assortments, which require uniform product supply (Lockeretz, 2007; Raynolds, 2004).

Regarding regulatory changes, it seems that there is a difference between the USA and Europe. The European standards move more towards the principles formulated by IFOAM. An indication for this is the reformed Organic Regulations proposed by the European Commission. The commission expressed that the aim of the new regulations are to make sure that the representation of the four principles will be improved. In contrast, the regulations in the USA seem to become more conventionalized. In 2013, the United States Department of Agriculture (USDA) changed the rules regarding the voting system known as 'sunset'. This regulation was designed to allow the use of substances that, because of extenuating circumstances, were allowed in a five-year time frame to give organic farmers the time to find an organic replacement. The only way to permit the substance after that period was through a voting system, which entailed a two-thirds "decisive" majority vote of the National Organic Standards Board (NOSB), plus a public review. These additional rules disappeared, leaving the USDA to decide which substances are permitted under the organic label (Rangan et al., 2013). Although this concerns the U.S. regulations, this situation could twist the message

that organic agriculture sends out to all stakeholders in the value-chain. In addition to the idea that the changes in the U.S. might lead to loosening the regulations concerning agricultural practices in general (Allen & Kovach, 2000), it could also well be that these changes interfere with the core philosophy on which organic agriculture is based (Milestad et al., 2010).

2.4 Conflicting paradigms sustainable development

The interference of conventional practices with organic agriculture is related with the way one views the world, and the assumptions that are connected to that. A great part of this view is expressed in the paradigm most dominant at that moment in time. We define paradigm as *'A set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline'*⁴. It is of importance to emphasise a paradigm because it is the frame of reference from which our reality **is created?** and it shapes a great part of our worldview and day-to-day decision-making.

The worldview one holds usually does not consist of a complete developed philosophy, but rather of sets of assumptions of how the world works. These assumptions are often fragmented and only cover a part of the whole. This so-called worldview is not consciously held by its adherents, because it is an internal process. It is also believed that a worldview is maintained by the adherent, both consciously and unconsciously, through self-reinforcing by, for example, structuration, legitimation or filtering of the outside world. So for example, if a person believes that humans are selfish creatures, he or she would be more likely to explain a kind gesture of any kind, as something beneficial for the one who makes that gesture. Instead of adjusting the assumption by experience, the experience is seen from the perspective already present. This self-reinforcing seems to be one of the main reasons why it is difficult to change one's worldview. Let alone to arrive at a point of a shift from one paradigm into another (Kuhn, 1970; Gladwin, Kennelly & Krause, 1995).

In science paradigm shifts occur when a significant amount of anomalies is found regarding the present paradigm. According to the idea of Kuhn, if this happens the certain scientific discipline enters a state of crisis. This crisis makes place for many new ideas and after a period of chaos a new paradigm is formed. After this period a new set of assumptions is accepted as the new norm (Kuhn, 1970; Dahnke & Dreher, 2011).

In this paper, differences and shifts in paradigms are discussed in the light of sustainable development. Defining sustainable development as *'Sustainability is a relationship between dynamic human economic systems and larger dynamic, but normally slower-changing ecological systems, in which (a) human life can continue indefinitely, (b) human individuals can flourish, and (c) human cultures can develop; but in which effects of human activities remain within*

⁴ paradigm. (n.d.) *American Heritage® Dictionary of the English Language, Fifth Edition*. (2011). Retrieved May 19 2016 from <http://www.thefreedictionary.com/paradigm>

bounds, so as not to destroy the diversity, complexity, and function of the ecological life support system' (Gladwin, Kennelly & Krause, 1995, p. 877).

Agriculture is situated in the middle of everything, as it is part of the human economic system and the ecological system, something that is not always recognized as such. In the realm of sustainable development a couple of paradigms can be identified. The main streams are: Technocentrism (closely related to anthropocentrism), biocentrism and ecocentrism (Gladwin, Kennelly & Krause, 1995; Callicott, 1995; Kleffel, 1996; Dahnke & Dreher, 2011). In the technocentric paradigm technology and humans are seen as the central focal points. The primary idea is that humans should dominate nature as the earth is inert and passive and therefore it is legitimate to exploit it. Nature is objectified and as humans are the only living beings with intrinsic value they have the right to use nature for their own benefit. (Gladwin, Kennelly & Krause, 1995; Callicott, 1995). Biocentrism places not only humans, but all living beings in the centre of attention. Not to say that all living beings are equally relevant or have the same rights. The biocentric paradigm includes for example the notion of animal rights, but it is limited in the sense that it is concerned with biological individuals more than the environment as a whole (Kleffel, 1996). Ecocentrism is considered to be a holistic approach, which means that humans are a part of a bigger system. In the ecocentric paradigm it is recognized that humans are subject to all natural systems, interconnected with all that is around us. The biggest difference between ecocentrism and biocentrism is that in the ecocentric paradigm processes and systems take primacy over separate parts (Gladwin, Kennelly & Krause, 1995).

The emphasis on future measures to obtain sustainable agricultural practices in large scale is foremost focused on bio-technological measures (Lyson, 2002). Some great improvements can be made with (bio) technological practices such as lowering fertilizer input, water use, electricity use and presumably many more. This approach seems to assume that the current value-chain is build up in a sustainable way and only improvements of practice are needed to sustainably obtain enough food to feed nine billion individuals. Many (agricultural) scientists, governmental agents and agribusiness companies such as Monsanto (USA), Syngenta (NL) and Novartis (Switzerland) support this direction of thought (Lyson, 2002). Agricultural Biotechnology is situated in the technocentric paradigm of neoclassical economics. Essentially, neoclassical economics is reductionist of nature, which is not changed by introducing biotechnology (Lyson, 2002; McAfee, 2003).

The current neoclassical economic market hypothesizes that in order to achieve optimal efficiency and greatest profitability in agricultural production the four factors of production should be balanced. The four factors entail: Land, labor, capital and entrepreneurship, which represent the functions of production⁵ (Lyson, 2002). The end products eventually then can be bought as commodities, meaning that the value of all four elements is translated into a price. Their products are meant for consumers to purchase in order to increase their well-being.

⁵ <http://www.economicdiscussion.net/production/factors-of-production-land-labour-capital-and-entrepreneur-national-income/541>

Alongside the conventional agricultural practices, other methods developed. Agroecology (Timmermann & Félix, 2015), organic agriculture (Luttikholt, 2007), biodynamic agriculture⁶, permaculture (Mollison, 1988) and more likeminded practices are all part of the socio-ecological paradigm. The practices are imbedded in a philosophy and/or worldview, with an overall non-reductionist view on reality. The above-mentioned methods approach agriculture from slightly different angles, but all share the concept of wholesomeness. They are founded on an environmental philosophy, which does not mean that science is excluded. On the contrary, ecological research takes the environment into account, in which the agricultural production process takes place. So, it is not that the socio-ecocentric paradigm excludes the main concepts of the technocentric paradigm. It is also based on scientific methods regarding agricultural practices. Including eco-systems, human interactions, and how the two can benefit most from each other in a balanced manner. Regarding the marketing of organic products, the aim is also to conduct profitable business. One could argue that the first aim is to conduct sound agriculture, so that no environmental damage is caused. And then the other aim is to have a profitable business, in order to conduct the agricultural practices accordingly the philosophy of wholesomeness and sustain in time.

The environmental philosophy includes many different sub-visions. One progressive movement within environmental philosophy is ecofeminism. It describes how the oppression of nature is the basis of many socially constructed obstacles, like inequality, corruption, etc. The core ideas are that the separation of mankind from nature and the exploitation of all that is not human, are associated with the domination of certain groups. Gender, race, wealth and sexual preference are all topics of inequality, which according to this philosophy are linked with where we stand in relation to nature (Sturgeon, 2009; Kheel, 1991). This view on the world might seem radical, but it should be kept in mind that the current food value-chain and practices are situated in the technocentric paradigm. Meaning that it might take time to become accustomed to such ideas. The Ecofeminist philosophy is expressed in minor ways in the sustainable agricultural practices previously mentioned. It recognizes the importance of harmonizing with nature rather than dominating nature for example (Lyson, 2002). Also the focus on social justice can be found in all the different practices.

2.5 The philosophy of Organic Agriculture

The Organic movement is, besides being a movement that promotes certain agricultural practices, both a philosophical and political movement. It arose at the end of the 19th century and throughout the 20th century it grew into a regulated agricultural practise built on a value-based approach. Important to mention is that from the early beginning Organic Agriculture (OA) was plant-nutrition based, backed up with scientific research (Lockeretz, 2007). Organic agriculture is mostly a way of practicing agriculture, but is inclusive regarding the social environment it is imbedded in.

⁶ <http://www.demeter-usa.org/learn-more/biodynamic-principles-practices.asp>

Many definitions of Organic Agriculture can be mentioned, for example The United States Department of Agriculture (USDA) answers the question of how the USDA defines organic as follows:

“Organic food is produced using sustainable agricultural production practices. Not permitted are most conventional pesticides; fertilizers made with synthetic ingredients, or sewage sludge; bioengineering; or ionizing radiation. Organic meat, poultry eggs, and dairy products come from animals that are given no antibiotics or growth hormones. The USDA National Organic Program website has more information including inspection and certification information.” – (USDA, 2004)⁷

This definition explains moreover what organic is not with the emphasis on inputs that cannot be used. Even if organic agriculture would only be considered an agricultural practice, this definition does not explain what organic agriculture is. The IFOAM articulated a definition of what organic agriculture does entail, recognizing the connection of human and agricultural practices placing them together in ecosystems:

“Organic Agriculture is 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, 2005)⁸

2.5.1 IFOAM

Before the 80's, the movement of organic agriculture was driven by an assembly of grassroots organizations, farmers and traders who formed national associations to push their thoughts. Examples are Demeter International in Germany, the Soil Association in the United Kingdom and Rodale Press in the United States. In 1972, many of these associations conjoined to form the International Federation of Organic Agriculture Movements (Morgera, Caro & Durán, 2012).

IFOAM is an international federation, which besides serving many other purposes concerning OA, tries to bridge the original values of the organic movement with the globalization of regulations. IFOAM is working together with Food and Agriculture Organization of the United Nations (FAO) and the United Nations Conference on Trade and Development (UNCTAD) to bridge differences in regulations and standards to make global trade feasible (Luttikholt, 2007).

⁷http://www.usda.gov/wps/portal/usda/usdahome?parentnav=FAQS_BYTOPIC&FAQ_NAVIGATION_ID=ORGANIC_FQ&FAQ_NAVIGATION_TYPE=FAQS_BYTOPIC&contentid=faqdetail-3.xml&deployment_action=retrievecontent

⁸ <http://www.ifoam.bio/en/organic-landmarks/definition-organic-agriculture>

2.6 The four principles

To create a cohesive founding on which regulations can be built for different countries or private labels, IFOAM formulated four principles. These principles were established in a democratic way where, through questionnaires and consultations, the final draft was revised by both internal and external feedback. Eventually in September 2005 the four principles of OA were presented accordingly; the principles of Health, Ecology, Fairness and Care (see appendix A) (Luttikholt, 2007). Below a short description is given of the four principles.

Health

The principle of health refers to the interconnection between the health of humans and ecosystems. It emphasises the preservation and maintenance of nature to be able to obtain health. 'The role of organic agriculture, whether in farming, processing, distribution or consumption, is to sustain and enhance the health of ecosystems and organisms from the smallest in the soil to human beings' (Appendix A).

Ecology

The principle of ecology points out that organic agriculture is imbedded in the living ecological systems, therefore it has to be based on ecological processes and (re) cycling. It stresses the idea that the management of organic agriculture has to be adapted to the conditions of the local ecology, culture and scale. 'Those who produce, process, trade, or consume organic products should protect and benefit the common environment including landscapes, climate, habitats, biodiversity, air and water' (Appendix A).

Fairness

'Fairness is characterized by equity, respect, justice and stewardship of the shared world, both among people and in their relations to other living beings' (Appendix A). The principle of fairness puts forward that interactions between all parties participating in the organic value-chain should ensure fairness. The principle also stands for the balance of taking and giving concerning our environment, as well as to keep future generations in mind. This includes integrating the environmental costs of production into the cost of the process and not externalize them to society.

Care

The principle of care emphasises the importance of the balance between increasing production and care of the environment. It is stated that due to our lack of understanding concerning the ecosystems we have to be precautionous. Also the importance of scientific research is stressed with the footnote that science alone is not sufficient to conduct sound agriculture. 'Practical experience, accumulated wisdom and traditional and indigenous knowledge offer valid solutions, tested by time' (Appendix A). The main message is that a holistic method should be put in place to assure a solid agricultural practice.

2.6.1 Recognition of the four principles

IFOAM stresses the importance of the principles as the foundation of the organic food chain where all participants need to take their responsibility seriously. That is why new converts to organic agriculture need to become acquainted with these principles (Luttikholt, 2007).

To emphasize the recognition of these principles it is of importance to mention that they served as a baseline for the revision process of the European regulatory system for organic agriculture. A comparison was made between the IFOAM principles and publications regarding organic values and regulations, including the pre-revised regulations of Europe and according to this analysis the four principles are covered by literature. The authors of the paper notice that the principles formulated by IFOAM are comparable to deontological ethics, where a certain philosophy is translated into guiding principles. In the case of organic agriculture the principles are formulated to give participants of the organic movement freedom to be inspired. But, as we are just humans, the principles serve as a framework and the regulation as boundaries (Padel, Röcklinsberg, & Schmid, 2009).

2.6.2 Certification

Organic agriculture used to be unregulated but driven by a shared philosophy on what organic entailed. So, the formulated principles serve as guidelines and not as rules (Luttikholt, 2007). Organic agriculture was steadily growing before the regulations were put in place. And conduction of business was done on the basis of direct contact and trust. The certification of organic products and the accompanied regulation are therefore not necessary for organic agriculture to exist. The conventional market is moreover anonymous, big scale and often long distance. For such a market regulations and certification are needed because the contact between participants is less direct which makes it harder to track where the product comes from. So, the certification of organic products is not per se a prerequisite for organic agriculture to exist but more to be able to participate in a more individualistic market.

2.7 The philosophy of the market

To be able to analyse the current conventional value-chain, it is important to know the underlying assumptions. To get an image on how the current market came about, a short review will introduce the main philosophies, starting in the 18th century. There are many different contrasts that can be found looking at the philosophies of the market, but for this paper the main current philosophy as well as the critique on it, will be discussed.

2.7.1 Classical economy

Capitalism

Adam Smith (1723-1790), seen as one of the pioneer thinkers of modern political economy, wrote *The Wealth of Nations* around the same time the Industrial revolution took off. During this time the concept of wealth elevated, due to the ability of upscaling and

mechanisation. Smith wrote about the open market economy, the exchange of commodities, the market value and regulation of this market. He argues that in a 'system of natural liberty' every man can obtain a certain degree of wealth according to his effort labour wise. This comes down to the idea of demand and supply, also referred to as 'the invisible hand', where if every man would only follow his own interest a balance would be established. In this way even the greedy and selfish would be kept in place (Henry, 2000). Important to notice is that Smith pointed out that the bargaining power of the employee could endanger sufficient payment to maintain the life of the worker if the supply of workers was higher than the demand. He pressured the point of a constant balance between supply and demand of elements in the market. Rapid economic growth would disturb the balance causing inequality, which would not lead to the optimal interplay (Taylor, 2001).

Around the time of the British Enlightenment, John Locke (1632–1704) also formulated a comparable idea of market demand and supply (Locke, 1689/2014). Both Smith and Locke recognized the importance of governmental monitoring, especially against any form of monopoly. Accordingly this would distort the beneficial properties of the free market, as the businesses could profit from it, to the detriment of consumer sovereignty. Locke even argued that humans are contracted into society, which also makes the government responsible for protecting citizens' property rights, referred to as the social contract theory (Locke, 2014).

Marx' economic theory

As a fundamental critique on classical economics, Karl Marx (1818–1883) developed a new theory as a counterpoise on capitalism. Marx developed an idea, based on the labour theory of value also associated with Marxian economics, called Law of value. Marx' thoughts on value and price start with his idea of commodity, a quote from the first page of *Das Kapital*:

"The wealth of those societies in which the capitalist mode of production prevails, presents itself as an immense accumulation of commodities, its unit being a single commodity. Our investigation must therefore begin with the analysis of a commodity." (Marx, 1983, p. 1)

Marx's idea on the theory of value entails that the economic value of a good or service is determined by the total amount of socially necessary labour required, rather than by the use or pleasure of its owner (Marx, 1935). So the value of the commodity is reflected in the labour needed.

Ironically, this idea can also be found in the theory of Adam Smith. Smith makes a distinction between a labour-embodied and labour-commanded theory. He argues that the real value is determined by the labour needed to obtain a certain commodity, but that the estimated value rests on the market, which often doesn't represent the same (Henry, 2000). Marx argued that the way the market was regulated in his time, made accumulation of economic growth possible, but at the expense of the full potential of workers. He observed how wealth was distributed in an unequal manner due to capitalism (Marx, 1983).

2.7.2 Neoclassical economy

Until the end of the 19th century the theory of how the exchange of commodities should be valued, was very much theoretical, social and ethical. The neoclassical period is moreover characterized by mathematics and logic, but there is no consent concerning the main idea, so many differences can be found. Stanley Jevons, Leon Walras, Francis Ysidro Edgeworth, and Vilfredo Pareto are seen as the creators of the neoclassical approach of economy. The theories they developed were based on the idea that economic constructs could be formulated in analogy to theories derived from physics (Nadeau, 2008).

The theory of value in the neoclassical economic theory rested on the assumption that utility, the measure-unit used, could substitute energy in the mid-nineteenth century physics theory of the conservation principle. The idea was that the economic actors operate within a field of force, substituted by utility, in which the natural laws of economics are supposed to predict the choices made by these actors. This idea departs from the presumption that human actions take place in closed circles of cause and effect (Nadeau, 2008).

The concept of utility was derived from the philosophy of Jeremy Bentham (1748 – 1832) in his masterpiece *An Introduction to the Principles of Morals and Legislation* (1789). The core of utilitarianism is the notice that humankind lives under the sovereign masters of pleasure and pain. Bentham argued that all that we do, is measured by the utility of diminishing pain or increasing pleasure. He constructed a system with which one could measure pleasure in a quantitative manner.

During the years after much criticism was put forward to this theory. Alfred Marshall, who was a great character in the world economy, acknowledged the fact that economy is not situated in a fixed surrounding where outcomes can be predicted. But, he still used the tools of classical mechanics to explain the market and economy (The Concise Encyclopedia of Economics, 2008).

After Marshall, John Maynard Keynes (1883 – 1946) came with the critique that solely the free-market could not solve prolonged periods of unemployment if workers would be flexible in their wage demand. He suggested that governments should invest money, which they would lend, to boost the market via provision of employment⁹. During the 50's and 60's many capitalist governments adopted this idea, especially when economic depressions hit. At the same time part of the governmental power shifted towards private power, which neither Keynes, nor the majority of the public opinion approved (Keynes, 1973).

Also Keynes' work and theories derived from it were highly criticized. Mainly due to the assumption that predictions could be made through a relationship between unemployment and inflation, also known as the Phillips curve. It implied that governmental stimulus could reduce unemployment, derived from calculations¹⁰.

2.7.3 Neo-liberal economy

Monetarism

⁹ <https://www.marxists.org/archive/mattick-paul/1955/keynes.htm>

¹⁰ <http://cruel.org/econthought/essays/keynes/inflation.html>

Around the 80's of the 20th century, Monetarism came about with as leading figure Milton Friedman (1912 – 2006). The difference between Keynes and Friedman was the focus; whereas Keynes focused on the value stability of currency, Friedman's focus was more on the price stability. The price stability emphasized the equilibrium between supply and demand, which would be achieved by regulation of money supply. The theory was that due to great money supply, inflation would occur, which would then lead to unemployment. So, according to this theory, governmental support would not lead to lower unemployment in longer terms.

The idea of price stability relies on the optimization principles, a mathematical strategy to find the local maxima and minima of a function subject to equality constraints, also known as Lagrange multipliers (Milton Friedman." *The Concise Encyclopedia of Economics*". 2008). This idea seems to be derived from Bentham's utilitarian idea of the equilibrium between pleasure and pain.

Post capitalism

Currently it seems like a new period is about to break through, seen as the end of capitalism¹¹. It can be observed that not only agricultural practices suffer from the so-called free-market embedded in the neoclassical economy, but that many parts of society are out of balance; examples are high rates of poverty and unemployment. It is argued that the new classical period brought many technical innovations, which now can be used to restructure our economy. Keeping in mind that economy has to be interpreted in the broadest sense of the word. So it also entails reshaping social structures, interaction between human nature and the basic of human existence namely, agriculture. In his book *PostCapitalism: A Guide to our future*, Paul Mason (2016) explains that we could remodel how the states are formed, put an end to monopolies and expand collaboration in different fields. Regarding the two paradigms discussed, this concept of reforming capitalistic structures fits well with the ecological paradigm in terms of prioritizing people over money.

2.8 Assumptions in philosophy of the market

Even though new philosophies are being constructed, the 'conventional' value-chain is currently situated in the neo-classical (micro) economic sphere. To have an idea where companies depart from, a couple of general assumptions are summed-up below.

Human nature

The worldview behind the current free-market capitalism is based on prepossessed concepts regarding inherent characteristics of human beings. The idea, described by Smith, is that everybody somehow moves from a selfish point of view (Henry, 2000, ¹²), and it seems that throughout the years this assumption remained the basis for further assumptions. The idea is

¹¹ <http://www.theguardian.com/books/2015/jul/17/postcapitalism-end-of-capitalism-begun>

¹² <https://www.aei.org/publication/human-nature-and-capitalism/>

that if everybody can move freely this selfish way of being would lead to optimal use of potential.

Growth and Profit

One of the main objectives of capitalistic oriented companies is to obtain growth and profit. According to Weber the spirit of capitalism is accumulation of wealth, for the sake of the money without a further purpose than enjoyment that is often operationalized into utility. Profit is mainly translated as growth of the incoming money flow. Seemingly also Smith and Marx agreed that this is one of the main objectives of capitalism. An important aspect is that the obtained wealth is usually maintained, and not further distributed. Keynes writes that nine tenth is being saved and the rest invested in further growth (Zou, 1994).

Utility

The concept utility was formulated by Jeremy Bentham. As described before, his idea was that we live under the two sovereign masters of pleasure and pain (Bentham, 1789). The goal in life would be to optimize pleasure for the majority. In the capitalistic concept this pleasure or enjoyment can be obtained by wealth. Bentham constructed a system with which one could measure pleasure in a quantitative manner, a concept that can be found in how economics is conducted. An important side note is that in the neo-classical (micro) economic theory solely this concept is derived from the philosophy of Bentham, not the other aspects of his philosophy.

Free-market

The concept of the free-market is not solely a capitalistic feature, but can be found also in the theory of for example free-market anarchists¹³, which is a philosophy against the capitalist idea, but does agree with the core concept of the free-market. The core idea of the free-market is that there are no regulations put in place to govern the market. As governmental involvement or interference will only lead to disturbing the market and create ineffectiveness. The idea is connected with the idea that if everybody would fulfil his full 'selfish' potential then plenty of innovations would come about (Gani, 2009).

Supply and demand

The idea of an ideal free market is that the only force of interference is supply and demand. In a free market prices are set by the supply and demand, meaning that the price is determined by what can be asked at that moment; high demand and low supply would mean you can set the price high (consumer surplus), and low demand high supply usually leads to lower prices (producer surplus), depending on the merchandise. The equilibrium theory poses that the

¹³Free-market Anarchists: Free market anarchism is an umbrella term for a number of ideologies which believe that there should be no government, and a free market economic system, as opposed to anarcho socialism, anarcho communism, and anarcho syndicalism which focus on shifting ownership of property, companies etc. to the masses.

<http://www.urbandictionary.com/define.php?term=Anarcho+Capitalism/Free+Market+Anarchism>

optimal point can be reached if supply and demand is balanced (Scitovsky, 1954). This approach also presumes that the price embodies all of the value of the product that matters on the market.

Reductionism

Reductionism is used in many fields of science to be able to explain certain interactions and causalities. It is a way to reduce reality to a set of variables of which some are fixed and some mutable, to detect which certain variables are involved in a certain process. In economy reductionism is used to explain economic phenomena by mathematical formulas to be able to make predictions (Hoover, 2014). It also seems that economy as a science does not take into account the social and ecological sphere, unless effects in these spheres are expressed in economic terms of, e.g. costs of production. This approach leads to a tendency of externalizing costs.

3 Methodology and approach

As for now the Literature review revealed that organic agriculture initially occurred as a reaction against conventional agricultural practices. This can also be observed in the philosophies derived from the different worldviews. Another point that is addressed is the regulation of organic agriculture, which connects the conventional and organic value-chains. The regulations not only connect, but also serve as a common ground for both value-chains. Assuming that the regulations are based on the four principles, as this is put forward as such by IFOAM. One would assume that no matter the philosophy behind the practice, the conduction of practice would in the end represent the four principles of organic agriculture. Meaning that even though the conventional value-chain originates from a different paradigm with the accompanied way of looking at the world, the practice regarding organic production should correspond with the four principles.

To be able to indicate if the above-mentioned reasoning corresponds with the actual practice an analysis will be made consisting of two parts. First, the corporate organic and alternative value-chains are compared regarding the four principles by analysing the production structure and the underlying social structures. Second, an exploration of the current en proposed regulation is made to reveal to which extend the four principles are represented.

Against this background, this study concentrates on a conceptual and normative analysis of views and value-orientations that can be identified behind certain ways of producing and marketing food. Such kind of analysis belongs to the field of philosophy. Since the analysis directly concerns social practices in the field of production and marketing, the study cannot be primarily situated in the field of philosophy but at the 'interface' between philosophy, organic agriculture and market studies.

3.1 Aim

The aim of this study is to examine whether the values and views embodied in the different ways organic products are marketed, is consistent with the values and views underlying organic agriculture. And by doing so, discover where the bottlenecks can be identified.

3.2 Approach

This paper consists of two main parts namely, the literature review given above and an analysis of the results on the basis of certain questions. The literature review serves as the context from which criteria and indications are derived for the analysis. To obtain a clear view on the situation, the conceptual framework will be exemplified and the levels of analysis further explained. Furthermore, criteria are formulated to be able to compare the corporate organic and alternative value-chain.

3.3 Conceptual framework for the analysis

In the literature review, the different paradigms are discussed. The specific paradigms predominant in the corporate organic and alternative value-chains, serve as a conceptual framework for this paper. To clarify both the different paradigms and worldviews a summary is given.

3.3.1 *Technocentric paradigm*

The technocentric paradigm is characterized by the assumption that humankind is separate from nature. And as humans are the only ones with intrinsic value, they have the right to use nature to their benefit. The ethics are homocentric and utilitarian, meaning that the felicity of the greatest group of humans comes first. Other aspects are continuous economic growth and technological innovation. The accompanied reasoning is egoistic, linear, rational, dualistic and reductionist of character. The economy is viewed as a closed linear system, where nature and economy are two separate spheres. The corporate organic value-chain, a 'sub' chain of the conventional value-chain, is situated in this presently predominant paradigm.

3.3.2 *Socio-ecocentric paradigm*

The socio-ecocentric paradigm is based on the concept of wholeness. Humankind is a part of nature and interdependent as everything is connected. With that it is believed that humans should care for nature, as it is a part of us. Technology is viewed as a promise for fast growth now, with unforeseen effects in the future. The well-being of humans is subservient to the well-being of the earth. The economy is interconnected with the social and ecological spheres. Therefore, economic growth is not a main goal but a result from sound practice taking the other two aspects into account. The alternative value-chain is situated in the socio-ecocentric paradigm.

The predominant paradigm of today's economy is referred to, in this paper, as the technocentric paradigm. The technocentric paradigm starts from the same set of assumptions as the neo-classical market philosophy, where the key concepts regard optimization, intensification, reductionism and utility (Gladwin, Kennelly & Krause, 1995; Kleffel, 1996).

3.4 Identified levels of analysis

In this paper different theoretical levels are discussed. The identified levels of analysis are: paradigm, worldview, philosophy, the elaboration of the philosophical insights and the actual practices derived from the philosophy. The overview (Table 1) shows the theoretical levels identified and the application for this paper. A distinction is made between the levels already discussed in the literature (grey) and the level of analysis namely, the actual practices of production and sales.

Table 1. Levels of analysis

Theoretical level	Application in paper
Paradigm	Used as a framework to contextualize the different philosophies.
Worldview	Not elaborated but used to indicate certain assumptions behind the philosophy.
Philosophy	Philosophical analysis of certain phenomena in reality. Identifying the different 'philosophies' of sales channels.
Elaboration of philosophical insights into more specific normative views or policies regarding certain practices.	The philosophies translated into guidelines or focal points; regulations and certifications.
Actual practices of production and sales	Serving as common ground to expose practical differences regarding the different philosophies.

It is of importance to emphasize that the above-mentioned (theoretical) levels influence one another top-down and bottom-up. Meaning that changes regarding the conduction of business could also influence the philosophy it is based on. This is of importance to mention, because it implies that none of the levels are static. Both the conventional and organic philosophy is constantly changing and so this paper can only give a general idea of the differences and similarities between them.

3.4.1 Regulations and certification

The corporate organic value-chain operates within the framework of the technocentric paradigm with all levels of analysis included. But, as mentioned before, the regulation of organic production serves as a common ground for both value-chains, illustrated in figure 1. It is important to both look into the regulations and the conduction of practice. This is to understand both sides of the story; how are the regulations interpreted and implemented

through two value-chains with complete different philosophies on the world. But, also how are the four principles actually represented in the regulations that serve as the minimum rules to comply to.

The literature review revealed another bottleneck with which the organic organisation is struggling. The regulations formulated to enable certification of organic products bring dissonance between the philosophy of organic agriculture and the application of organic agriculture in practice. For this paper it would be possible to leave this topic aside, as it does not follow the same kind of analysis. But, as the regulation of organic agriculture is one of the most important bridges between the organic and conventional chain it is included in the analysis.

An exploration will be conducted to indicate how the current regulations embody the four principles of organic agriculture. The before mentioned new proposition of the European Commission to adjust the regulations will be analysed to indicate if these changes improve the representation of the four principles of organic agriculture.

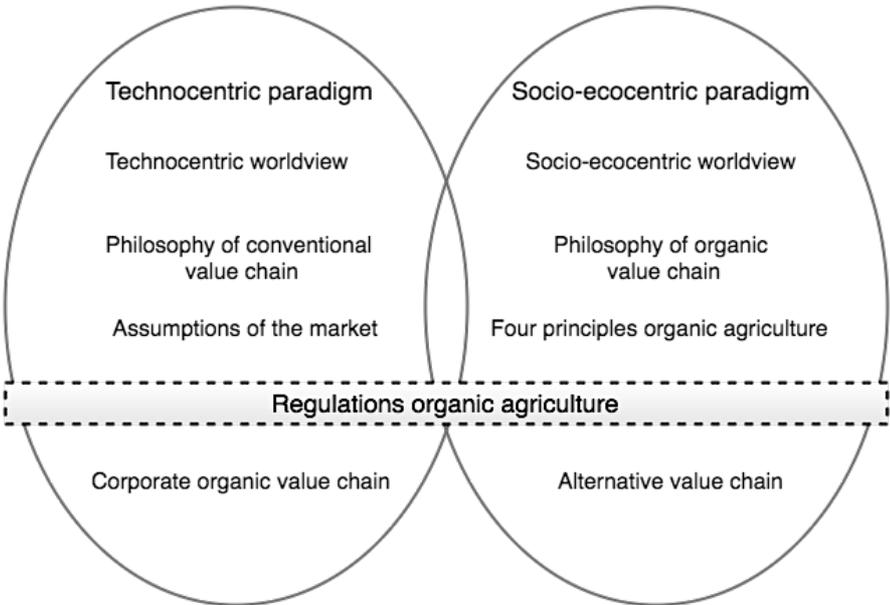


Figure 1. Clarification of the levels of analysis regarding the corresponding paradigms.

3.5 The analysis of the level: actual practices of production and sales

For the level of actual practices of production and sales, two general value-chains are compared namely, the corporate organic value-chain and the alternative value-chain. Because this study focuses on the philosophy of the sales channels it is decided to make a rough distinction between the sales channels of organic products. This means that not all (sub) channels are analysed separately but the two main distinguishable channels are described. A distinction is made between the *corporate organic value-chain*, which mainly entails the supermarket, and *alternative value-chain*, which entails many different sales channels with an overall shared philosophy.

This generalisation is made to keep the analysis clear and because the overall philosophy behind the chosen value-chains are compatible with the discussed philosophies. It is of importance to emphasize that this distinction does not represent the actual practices conducted in the 'real world'. Both corporate organic and alternative value-chains are entangled in many ways and the two are less and less distinguishable (Maye, D. A. M. I. A. N., & Kirwan, 2010).

The analysis consists of a couple of steps. Firstly, information of the two value-chains regarding the production and underlying social structures will be obtained through literature. Secondly, with the information collected the two value-chains will be compared regarding the pre-determined criteria. Thirdly, the outcome of the comparison between the two value-chains will be analysed with respect to the extent that they adhere to the four principles.

3.6 Evaluation criteria

Literature review reveals that there is a fear of conventionalisation regarding organic agricultural practices. The two main points discussed are the fear of minimum compliance to the regulations by new converters and that the power concentration of the conventional value-chain will also occur in the organic production chain. The first fear concerns the actual practice, the production structure of the value-chain. The second fear has more to do with the social dynamics in the value-chain, the underlying social structures.

So to compare the two value-chains regarding conduction of business, these two main structures will be analysed. The production structure entails in practical terms how the value-chain is build-up. The underlying social structure addresses the dynamics of the value-chain regarding distribution of power and the approach to the market.

Production structure

For the structure of production five main criteria are chosen namely; **market system, market scale, production, chain length, certification and production cost**. These five points will guide the first part of the analysis and serve as the criteria for the second two parts of the analysis (Table 2).

Social Structure

For the underlying social structure four main criteria are formulated which serve as the guideline to analyse the differences between the two value-chains namely; **driving principle, organisational structure, power distribution and social focus**. (Table 2)

Table 2. Evaluation criteria

Criteria	
Production structure	
	Market system
	Market scale
	Production
	Chain length
	Certification
	Production cost
Social structure	
	Driving principle
	Organisational structure
	Power distribution
	Social focus

The four principles of organic agriculture

As mentioned before, after the comparison of the two value-chains the outcome will be analysed regarding the representation of the four principles. For this analysis the four principles and the main aspects for every separate principle will be used (Table 3).

These principles also serve as the guideline to analyse up to which extent the four principles are represented in the newly proposed regulations of organic agriculture (cf. section 4.4).

Table 3. The four principles of organic agriculture and main aspects.

Principle	Main aspects
Health	
	Interconnection human and ecosystem
	Maintenance of physical, mental, social and ecological well-being.
Ecology	
	Location specific
	Holism
	Biodiversity
	Balance of input and output (recycle)
Fairness	
	Cooperation
	Equity
	Internalisation of environmental costs
	Animal welfare
Care	
	Balance between production and environment
	Precaution and responsibility
	Balance between science and practice

4 Analysis

In this chapter two points will be discussed. First, the comparison of actual practices of production and sales will be conducted. This will be conducted, by comparing the corporate organic value-chain with the alternative value-chain according the criteria drafted. Second, an analysis of the proposed regulation changes and the representation of the four principles will be made.

4.1 Literature analysis actual practices of production and sales

4.1.1 Corporate organic value-chain

The corporate organic foodscape can be defined as institutionalized food systems through which organic products are sold. This sales channel did not grow with the occurrence of organic production (bottom up), but is integrated or adopted by an existing value-chain (Johnston, Biro & MacKendrick, 2009). The corporate organic foodscape is imbedded in the neo-classical market philosophy defined in the literature review. So, the conduction of practice moves from a concept of human nature as intrinsically selfish. Due to this perception of man, it is important that certification and regulation are present as a 'trust' guaranty.

Production structure

Clarifying the meaning of the term corporate organic value-chain is important to understand the relation with both the conventional and organic value-chains. The corporate organic value-chain is not a complete different value-chain from the conventional value-chain as it is owned and regulated by the same companies. Meaning that organic production is somewhat a side-branch of the conventional value-chain. The companies that own the supermarket formulas also own or rule a big part of the entire value-chain (International Trade Union Confederation, 2016).

Main characteristics of the supermarket formulas are growth of market share and profit, standardization of the assortment and production processes and upscaling in order to provide people with affordable food. These characteristics led to big scale one-stop-shops where almost all types of products can be found, meaning that one can find locally produced biodynamic products next to conventionally produced products imported from the other side of the world. In other words, it is a store where all philosophies are sold abreast as commodities to serve the comfort of the consumer.

The corporate organic value-chain is characterized by specialization and big scale, with that accompanied with externalisation (Ilbery & Maye, 2005). In practical terms it means that for example, organic farms providing the big market produce monoculture crops in rotation, which fits with the idea of uniform products sold in the supermarket. The concept of big scale can be extended throughout the whole value-chain; processing and production processes are scaled up to be able to have a largely uniform assortment in all the shops. The upscaling of processes in general, made possible by technological inventions, gives the ability to lower the

cost of production and transport externalisation is most observed in animal production, where the cattle size is increasing and feed is often imported (De Wit & Verhoog, 2007).

As mentioned before, one of the characteristics of the corporate organic value-chain is the strong connection with the regular global food market (Allen & Kovach, 2000). As a result of the introduction of certification and labelling of organic products a guaranty is provided. This means that it is possible to source certified products from all over the world, with the certainty of compliance to specific rules. This enables corporates to obtain the most favourable products concerning price, quality and uniformity. The global sales and purchasing done by the corporates makes it possible to provide the consumers with an steady assortment, not taking seasons or other factors into account. So, specialisation and standardization can be found through the whole chain (Allen & Kovach, 2000), from farm to production where the supermarket eventually is a collection point where diversification of products can be found again.

Underlying social structure

The corporate organic value-chain is characterized by growth of market share and profit. These are the main focal points from which the whole chain is driven. To obtain these focal points, the consumer is the most important focus. It could be argued that the demand and interest of consumers for organic products started the accelerating growth of these products in the store. The corporates that own the supermarkets are well aware of the importance of serving their customers and so they have a well-developed overview of the market. Most supermarkets have several methods to obtain information about their consumers. They keep track of demand and supply, can observe current trends both national and international and keep track of customers' behaviour. A lot of research has been conducted, looking into consumer behaviour (Sirohi, McLaughlin, & Wittink, 1998; Montgomery, 1975). For example by introducing a member card with which the customer can profit from special offers or discount (Montgomery, 1997). Also the arrangement of the stores plays a role in directing the consumers (Larson, Bradlow, & Fader, 2005), also referred to as nudging. This centralization of knowledge gives the corporates great power. On the contrary, both farmers and consumers are involved in large numbers, but they are often poorly organized.

The fact that farmers are poorly organized constitutes an advantage for the corporates, because corporates can set the price and quality standards. This buyer power facilitates a position for the corporates to control their suppliers to an extent that leads to a serious imbalance in bargaining power between the suppliers and the supermarkets (Nicholson & Young, 2012; Grimes, 2004). This imbalance is also connected with the concept of hierarchy that can be found in the corporate organic value-chain. This type of organisational structure entails a vertical power distribution where the top layers decide what lower layers execute. You could see the corporates as the bosses who decide what the farmers and producers have to execute, but to a certain extent also what the consumer consumes. So in essence the supermarket formulas have the highest bargaining power and eventually decide what needs to be produced and what the consumer consumes (Johnston, Biro & MacKendrick, 2009).

Obviously, on a smaller scale both farmers and consumers also have a saying; if consumers don't buy a certain product it doesn't make sense to sell it at a certain point and if no farmer produces a certain crop, there is no supply. But on a big scale both parties have little to say.

4.1.2 Alternative value-chain

Some would say that the alternative value-chain created a new way of merchandising food, but it actually comes closer to how food was sold before the industrial revolution and how sales is conducted in many less 'developed' countries. Numerous different forms can be found, from farmer markets and organic shops to box schemes and farm to consumer initiatives. All the different forms emphasize the redistribution of value in the chain. The alternative value-chain serves to address the current market governance and to recover consumer trust (Carlisle, 2015; Goodman & Goodman, 2009), led by food democrats (Johnston, Biro & MacKendrick, 2009).

Production structure

The alternative value-chain is often characterized as small-scale farming, organic and/or holistic production systems, a (more) direct distribution, collaboration and moral economy (Carlisle, 2015). The alternative value-chain is seen as both an alternative to the currently predominant supply channel and an exclusionary form of selling products (Donald & Blay-Palmer, 2006; Carlisle, 2015). The idea of the alternative value-chain is to enhance local distribution and with that the local economy. Hence, nowadays most organic (super) markets do import many products globally to be able to offer a complete assortment. Farmers who sell their products through alternative routes often have small-scale farmers who produce a diverse range of products. One of the reasons for them can be to spread the risk harvest wise, but also to obtain niche products, which gives them a strong position in the market.

As said before, the alternative value-chain originates from the quest to offer a different way to distribute sustainable products. So, the organizational structure counters somewhat the 'conventional' value-chain. The main characteristics of the alternative value-chain's organizational structure, are a more direct contact with the producer, local sourcing, less intermediaries in the chain leading to a shorter supply chain. It is important to notice that this not always implies that the sourcing is nearer. Focussing on the distance solely a distinction is made between three different forms defined as short supply chains (SFSCs) namely, face-to-face, proximate and extended (see Figure 2), which accordingly is characterized by very local like farmers shops etc. to certified products globally sources. (Renting, et al., 2003).

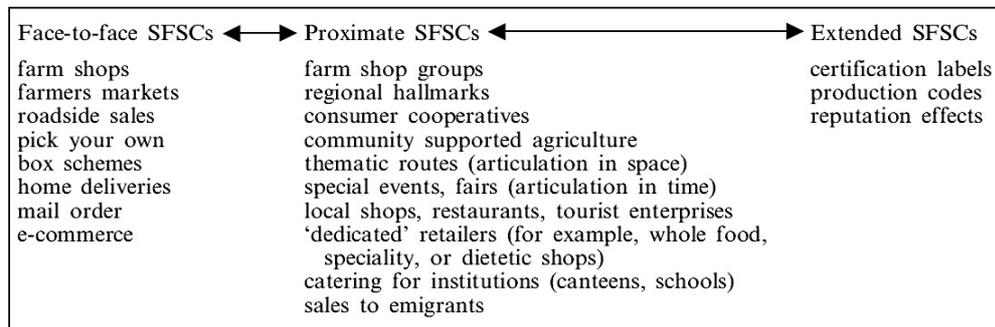


Figure 2. Different mechanisms for extending short food supply chains (SFSCs) in time and space. Reprinted From “Understanding alternative food networks: exploring the role of short food supply chains in rural development” by Renting, H., Marsden, T. K., & Banks, J. (2003). *Environment and planning A*, 35(3), 393-411.

Underlying social structure

The alternative value-chain has a strong emphasis on social structures, as the philosophy behind it recognizes the importance of equal treatment of humans and collaboration between the participants of the value-chain. The effects of the more equal distribution of the value-chain are more direct contact between producers and consumers, fairer prices for the producers, direct feedback from consumer to producer, increase of trust from the consumer towards the food system. In short an increase of social profit concerning the value-chain (Maye, D. A. M. I. A. N., & Kirwan, 2010; Giaré & Guica, 2013). One of the most important characteristics of the alternative value-chain is that due to the direct contact with producers there is not always a need for certification, as the consumers can ‘certify’ the products themselves. Collaboration between farmers, processors, distributors and merchants creates a less anonymous value-chain. Of course, there is a danger of miscommunication or corruption. But, understanding that all participants of a certain value-chain are depending on each other creates a system build on relations.

4.1.2.1 Occurring changes

As for today, the Alternative food networks are becoming more and more commercialized and concerns are expressed (Goodman & Goodman, 2009, Reynolds, 2004). This regards the consequences of social, political and economic differences between organic and conventional value-chains. Nowadays, most of the organic companies are owned by transnational corporations (Howard, 2009,¹⁴). This matter doesn’t only corrupt the idealistic image that is presented to costumers, but it also compromises certain principles it is based upon, something that will be looked into later in the paper.

The fact that companies that are part of the alternative value-chain, one of the sales channels of organic products, are purchased by transnational corporations makes it difficult to observe them as self-contained entities. To be able to make a comparison between the

¹⁴ <https://www.msu.edu/~howardp/organicindustry.html>

alternative value-chain and the corporate organic value-chain the initial norms and values of the alternative value-chain are taken as focal points.

4.2 Comparison of actual practices of production and sales

Comparing the two value-chains it can be observed that there are many differences, even though the regulations to which both value-chains have to comply to are the same. Apparently, the interpretation of the regulations differ so much that the outcome of both the production and underlying social structures are almost opposite.

Production structure

The main differences observed are the aim for uniformity and big scale in the corporate organic value-chain and the aim for diversity and small scale in the alternative value-chain. The criterion 'production' is characterized by uniformity, monoculture and intensification in the case of the corporate organic value-chain, which fits very well with the underlying philosophy of the conventional value-chain. It is not surprising that the alternative value-chain is characterized by diversity and extensive agriculture. As it is expected that participants of this value-chain conduct business on the basis of their intrinsic believe and not just following rules put in place.

Also similarities can be observed to some extent. Both value-chains conduct business on global level and sell certified products. Still, the underlying motivation to conduct business in global level is not identical. For example, if a merchant conducts direct business with a small farmer in Costa Rica because the product produced is not found somewhere else, it can still be considered global. But the context is completely different from a corporation that sources a certain product from a big scale farm in Costa Rica because the product is cheaper than bought from nearby.

Underlying social structures

As regulations do not impose certain underlying social structures directly, it makes sense that these still originate from the core philosophy, on which the value-chain is based. The core difference between the two value-chains is the driving principle, as many practical outcomes can be derived from that aspect. The fact that the corporate organic value-chain is driven by profit, can explain aspects of the production structure like a global market, big scale, uniformity and intensification. Because all these aspects in the end can lead to a lower production cost per product, which can lead to a higher profit. For example, sourcing products on the global market can provide products of lower cost, as labour cost is not equal in all countries. And for uniform and big scale farming it is possible to mechanize the production, which leads to less labour hours needed. On the other hand the alternative value-chain is value driven and also there the aspects of the production structure can be derived from that driving principle. Small scale, diversity and locality are aspects that add value to a

product. Not only environmentally and socially, but also economically as consumers who buy organic products are likely to fall for the contextual story behind the product.

Table 4. Comparison of the corporate organic and alternative value-chain.

Criteria	Corporate organic	Alternative
Production structure		
Market system	<i>Global market</i>	<i>Local & Global market</i>
Market scale	<i>Big scale</i>	<i>Small scale</i>
Production	<i>Uniformity</i> <i>Intensive</i>	<i>Diversity</i> <i>Extensive</i>
Chain length	<i>Long food supply chain</i>	<i>Short food supply chain</i>
Certification	<i>Certified products</i>	<i>Uncertified & certified products</i>
Production cost	<i>Externalisation of cost</i> <i>Cost reduction</i>	<i>Internalisation of cost</i> <i>Profitability</i>
Underlying social structure		
Driving principle	<i>Profit driven</i>	<i>Value driven</i>
Organisational structure	<i>Hierarchy</i>	<i>Network</i>
Power distribution	<i>Unequal power distribution</i>	<i>Equal power distribution</i>
Social focus	<i>Individualistic</i>	<i>Relational</i>

Another striking difference is the distribution of power and social focus. The corporate organic value-chain is characterized by unequal power distribution and individualism, two aspects that can be found in the current conventional market as well. By contrast, the alternative value-chain identifies with an equal power distribution and a relational focus. The organisational structure accompanied with those aspects is network, which makes perfect sense if the social focus is relational, vice versa with the hierarchal organisation in connection with unequal power distribution.

4.3 Implementation of four principles

The analysis of the differences and similarities of the two value-chains shows that there are many factors that oppose each other. But, to be able to conclude how these value chains confirm or contradict the four principles of organic agriculture, another analysis is presented below.

Health

Observing the two main aspects that are derived from the principle of health it can be concluded that the corporate organic value-chain does not meet up to it (Table 5). There is no sign of interconnection of human and ecosystems, but neither of the maintenance of physical,

mental, social and ecological well-being. The alternative value-chain does seem to meet the criteria, because there is a strong emphasis on maintaining a balance between human and ecosystems through biodiversity and extensive farming. Also the emphasis on equal power distribution, internalisation of production cost and network structures is present. But, it has to be recognized that the main aspects of the principle of health are very broad which makes it hard to validate.

Ecology

The main aspects of the principle of ecology are location-specific, holism, biodiversity and the balance between input and output (table 5). These aspects can be found back in the alternative value-chain, with an exception of local-specific, as there are products sourced from far and products produced in greenhouses, which otherwise would not grow in that country. As for the corporate organic value-chain, almost no aspect can be found to be of real importance. It does not mean that for example no biodiversity is found, but there is no great emphasis on the aspect. As for the location specificity, there are products sourced from abroad that are sold with attention to the place it comes from. But, it does not seem to be a priority.

Fairness

The four main aspects of the principle of fairness are cooperation, equity, internalisation of costs and animal welfare. The first three aspects can be directly derived from the analysis conducted above (Table 4) and it is clear that the corporate organic value-chain does not comply with any of them. On the contrary, the alternative value-chain does as these aspects are a representation of the underlying social structure. The aspect animal welfare is not discussed in the above-mentioned analysis, so no conclusions can be drawn at this point.

Care

The main aspects of the principle of care are balance between production and environment, precaution and responsibility and balance between science and practice. A balance between production and environment can be contributed to the criteria production and partially to the production costs (table 4). Where it can be observed that the corporate organic value-chain does not comply, as it focuses on intensification of production together with monoculture and externalisation of costs. The alternative value-chain focuses on the opposite of the spectrum, which makes it compatible with the principle.

Table 5. Representation of four principles regarding actual practices of production and sales.

Principle	Main aspects	Corporate organic	Alternative
Health			
	Interconnection human and ecosystem	–	+
	Maintenance of physical, mental, social and ecological well-being.	–	+
Ecology			
	Location specific	+/-	+/-
	Holism	–	+
	Biodiversity	–	+
	Balance of input and output (recycle)	–	+
Fairness			
	Cooperation	–	+
	Equity	–	+
	Internalisation of environmental costs	–	+
	Animal welfare	×	×
Care			
	Balance between production and environment	–	+
	Precaution and responsibility	–	+
	Balance between science and practice	+	+

4.4 The four principles translated into regulations

Current regulations and representation of the four principles

Currently many researchers put question marks at the implementation of the four principles in the organic regulations (Padel, Röcklinsberg, & Schmid, 2009, Raynolds, 2004; De Wit & Verhoog, 2007). It is recognized that the translation of values into regulations is difficult, and it can be observed that the production rules mostly focus on easily translatable topics like inputs. Input limits for example can be indicated by research and generalized for all farms. But values are harder to translate as they can be interpreted in many ways. An example of such a value is the principle of Ecology (Appendix A) regarding agro-ecological system values like bio-diversity and nutrient recycling. These aspects are not translated into regulations, as they are hard to generalize. Another point is the lack of social representation in the principles, for which again it is difficult to construct mechanisms. An example is the security of farmers. The idea is that the regulations serve also to ensure farmers of rightful pricing and recognition for their efforts. The regulations came along with certification and price premium serving to ensure the farmers income and consumer trust. But there is no clear regulation ensuring a fair

competition for farmers, a point represented in the principle of Fairness (Appendix A)(Padel, Röcklinsberg, & Schmid, 2009).

Looking at regulations put into practice a contradiction can be observed. The main discussion points are the occurrence of specialization, which is an indication of intensification of the farming system, and the increase of input. The increase of input use, both organic and conventional, can lead to environmental problems and increase of dependency (Raynolds, 2004). This dependency on inputs is in conflict with two important values included in the principle of ecology, namely the value of closing the production cycle and of reducing reliance on external inputs (De Wit & Verhoog, 2007).

It can be concluded, there are several core values that are not always found in practice such as recycling of nutrients, the agro-ecological systems approach and environmental protection (Padel, Röcklinsberg, & Schmid, 2009; De Wit & Verhoog, 2007).

Proposed regulations

The European Commission presented a legislative proposal for a reformed Organic Regulation, accompanied with a European Organic Action plan, on March 24th 2014. The European Council and European Parliament are now discussing the proposal, with the prospect of finalizing and coming into effect in 2017¹⁵.

The three main objectives of this proposal are removing obstacles to improve sustainable development of organic production, guaranteeing fair competition for farmers and operators and maintaining consumer confidence in organic products (Sanders, 2013). The main point of discussion is the many different standards regarding organic agriculture (Padel, Röcklinsberg, & Schmid, 2009). Something IFOAM itself also recognizes as a bottleneck. The proposal emphasizes several points; simplify processes of import, clarify the provisions on the field of application, production rules, labelling and controls, remove ineffective provisions and limit the scope of Member States for granting exceptions to the rules. It seems that the focus lays very much on simplification and unification of regulations, with the prospect of improvement in all fields. For example, the aim is to remove 37 of the 135 existing obligations in the organic farming legislation to simplify processes for farmers and make this sector more attractive to convert to for newcomers, and enhance consumer trust.

It is proposed to focus on the principle-driven policy scenario (the other scenario's being the market-driven option and the improved status quo option) aiming at re-focusing organic production on its principles. The idea is that the principles will be better reflected in the production rules. It is written that one of the reasons is to meet the expectations of the consumers. By doing so specific production rules are brought together to address the issue of readability. Which entails that the production rules are reinforced and harmonised by removing exceptions. Exceptions are only put in place where necessary to avoid stagnation in organic production¹⁶. One of the main aims is to decrease the bureaucracy for farmers.

¹⁵ <http://www.ifoam-eu.org/en/news/2014/03/25/eu-commissions-proposals-new-eu-organic-regulation-and-organic-action-plan-are-now>

¹⁶ http://ec.europa.eu/agriculture/organic/documents/eu-policy/policy-development/report-and-annexes/proposal_en.pdf

Proposed is to put group certification into place to give small hold farmers more competitive strength.

Another proposed change of interest is to remove the ability for certain retailers to exempt from the control system. The retailer exemption was put in place for operators who only sell products directly to the final consumer. It is feared that removing this exemption will lead to extra costs and administrative burden for small retailers. This change could lead to a decline of small retailers¹⁷.

As mentioned before, in the new legislative proposal for a reformed Organic Regulation the emphasis is put on a principle-driven policy scenario, which gives the impression that recommendations somewhat include the formulated principles. Here I do not have the intention to thoroughly analyse every change proposed, but to raise some items of discussion.

Looking at the proposed changes of the regulations a couple of things seem contradictory. On the one hand the emphasis is on the principles-driven scenario. But on the other hand it is written in the proposal that the three main objectives of the proposal are removing obstacles to improve sustainable development of organic production, guaranteeing fair competition for farmers and operators and maintaining consumer confidence in organic products. These main objectives are well represented in the proposed changes. The main proposed improvement is to remove as many exemptions as possible, to unify standards. The expected results will be that animal welfare will increase, that the market will become more attractive, the competition between farmers will become fairer and that it will have a positive influence on the environmental impact. It is also believed that consumer confidence will increase due to better regulations concerning safety and production. These improved regulations will lead to a greater emphasis on social problems. Consumer confidence also contributes to a prospect of the growing market concerning organic products.

In the description of the proposed regulations no explanation is given which principles are elaborated or how the changes would improve integration of the principles into the regulations or practices conducted. Moreover, the principle-driven policy scenario seems rather consumer- and market-driven then focusing on the four principles. So, the point of departure seems to be to obtain the three main objectives, rather than observe the principles. Taking a closer look at these objectives it can be seen that they emphasize the growth of organic production. This is not to say that this objective is misplaced, but rather to emphasize the fact that what is written does not seem consistent. To make my point more vivid I give an example.

It is written that the choice of emphasising uniformity of the regulations is driven by public consultation. However, the respondents expressed their concern mainly for the environment and the quality of the product. It can be questioned if the environmental factor can be improved, when for example no emphasis is put on the resilience of farming, especially on farm level, in the regulations. Resilience is very important when talking about sustainability and the environment (Milestad & Darnhofer, 2003). One of the main drivers of

¹⁷ http://www.soilassociation.org/LinkClick.aspx?fileticket=uBYc-Rd1J_Y%3D&tabid=313

resilience is diversity, something that can be observed in ecosystems, but also on farm level (Lin, 2011). The importance of taking diversity into account is stressed in the principle of Ecology, but in the proposal it is described that it is expected that by removing exceptions the regulations will have a positive effect on the environment.

Another, more relevant point of discussion is that in general no emphasis is put on the way products are marketed. Looking at all information given in the literature study it becomes clear that a lot of the problems regarding food production are caused by social inequalities and disrupted power distribution. In the principles of Fairness it is stated that *'This principle emphasizes that those involved in organic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties - farmers, workers, processors, distributors, traders and consumers'* (Appendix 1). In a world where everybody would act from intrinsic motivations derived from these principles, regulations would not be needed in the first place. Because we are situated in the reality where virtues are not the basis for action, regulations are put in place. Regulations serve both as an insurance for consumers in order to obtain products that are produced by certain standards and to ensure certain 'privileges' for producers and processors. Observed is that power accumulation in the conventional chain is situated at the retailer, where currently no regulations are formulated. I would like to argue that in order to obtain fairness at all levels, and taking for granted that the current measure of obtaining certain securities is implementing regulations, the sales of organically produced products should be included in these regulations.

It is of importance to stress this point because these regulations serve as boundaries for all stakeholders involved in the organic value-chain. But if only part of the chain is regulated the principle of fairness cannot flourish. It seems logical that if the regulations are not implemented throughout the value-chain, inequality will remain. Here inequality shouldn't be merely interpreted in the sense of power or money distribution. Due to the great importance of money in this world it also stagnates the possibility of diversification. Diversification of ideas, agricultural practices and solutions to problems that do not concern the parties with the greatest power.

5 Discussion

The answer to the question posed which sales channel matches the philosophy of organic agriculture best, is evident. The alternative value-chain is most equipped to deliver the products produced according to the core values of organic agriculture. The more interesting question to answer is how the corporate organic foodscape can exist at all, even if it does not carry the values of organic agriculture. It seems that due to certification of organic agriculture the possibility is created. Regulating organic products created a possibility to obtain certified organic products as commodities. Meaning that who produced the product, where it is produced and all other social or ecological factors apparently are either included in the price of the product or considered irrelevant. It is not guaranteed that the social and ecological factors

are always respected, but the illusion is created that certification of organic products in the store safeguards the principles from which organic agriculture departs.

From both the literature review and the analysis a couple of bottlenecks can be identified. In the first place, the incomplete regulations of the value-chain due to a poor reflection of the core values of organic agriculture appear to be one of the 'problems'. It seems that the regulations do not completely cover the four principles they supposedly are based upon. It can be observed that the emphasis is put on growth of the organic market and satisfying consumer demand more than to establish rules to make participants of the organic value-chain comply with the core principles.

Another point regarding regulations is that it does not cover the entire value-chain, as the sale of organic products is not regulated. These two aspects of regulation enable corporations to enter the sphere of organic agriculture without complying with the core principles of organic agriculture. As became clear the corporate organic value-chain is situated in the neo-classical market, which is not based upon social and ecological principles. So, it can be said that there is a naïve expectation of IFOAM that all participants of the organic value-chain become acquainted with the principles themselves. It seems that by regulating organic agriculture a compromise is made between fast growth and the integrity of the core principles (Kröger & Schäfer, 2014). A new question arises namely, where lays the balance between preserving the core philosophy of organic agriculture and obtaining growth in the short term. It can be observed that by emphasizing on short-term growth, the values of organic agriculture are compromised.

The current situation could be perceived as an opportunity for organic agriculture. If certain gaps in the regulations will be filled, meaning that the principles of organic agriculture are reflected in the regulation, the sales of organic products also becomes regulated. Because the demand for organic products is already created, it might force the corporate organic foodscape to comply with the 'improved' regulations. Of course this is an optimistic view regarding the current situation. But, it is to indicate that there is an opportunity for organic agriculture to shift the organic market towards the ecological paradigm on which it is originally based.

It could be said of organic agriculture that its definition is subject to continuous change and with that also the philosophy can change. But this is as much the case for the 'conventional' sector. And so it might be a chance to direct the corporate organic value-chain towards the values of organic agriculture. And even though the ideal situation according to IFOAM would be that participants of the organic value-chain intrinsically conduct business inspired by the four principles, forced change could also be an option. So to say that if the four principles of organic agriculture would be well reflected in the regulations for all participants to comply with, newcomers are forced to implement them into their conduction of business.

Zooming out to the paradigms mentioned as a contextual framework, I believe that to bring the corporate organic value-chain closer to the philosophy of organic agriculture, a shift towards the ecological paradigm has to be made. Even apart from the question whether this shift is desirable. Currently the corporate organic foodscape is situated in the technocentric

paradigm in which the emphasis is more and more on the environment as it is recognized that food production is depending on it. But there is little emphasis on improving social structures, which is believed to be an essential part of the problem. I view time as an underestimated property of this issue, as a shift from one paradigm to another can't happen overnight. The idea of IFOAM is that participants of the organic value-chain integrate the four principles (Lockeretz, 2007). Not only in their practice but also as to view the world as a whole (Ikerd, 1993). So, the idea is that eventually the regulations are more formalities that make it possible to unify organic practices. Thus, time is needed to make people intrinsically believe in the philosophy of organic agriculture, as part of their worldview. Instead of only complying to the regulations but without considering the four principles if not forced to. In a sense organic agriculture could be more than an agricultural practice and business. It could be used to increase the power of local organisations, social movements (Allen & Kovach, 2000) and increase awareness of environmental issues also concerning our food production.

Also taking into consideration that even a large part of the alternative value-chain is owned by corporates, it seems that the exponential growth of organic agriculture polluted the core concept of organic agriculture. The underestimation of time, social equality and ecological soundness brought us to this point. Whereas the technocentric paradigm views nature as something we are able to control, the environmental paradigm emphasizes the importance of harmonizing with it to sustain a balance. So, I would argue that the way to make this cultural shift is to slowly integrate the ideas into social structures instead of imposing them. But as time is not on our side, regulative measures could force the process of change towards a value-chain where people, planet and profit are balanced.

6 In conclusion

This thesis contains an exploration on a broad topic, which means that the topics discussed are not researched in depth. Also many generalisations are made regarding the two different sales channels at the expense of validity of the assumptions. The aim was not to generate conclusive facts, but more to be able to grasp a bigger part of the scope. Regarding the regulations it would be worthy to conduct a systematic research. This to obtain a good overview of the bottlenecks in the regulations with respect to the extent they reflect the four principles. Also a proposal with respect to the rules that should be put in place to close the gap between the regulations and the philosophy of organic agriculture would be recommendable.

With respect to methodology it can be concluded that it is hard to compare philosophies and practices as many differences in conduction of business or interpretation of ideas can be found. The philosophy of organic agriculture has been translated into the four principles, but even then it cannot be generalized without losing a part of reality. Nevertheless, it is evident that the conduction of business regarding the corporate organic value-chain does not comply with the philosophy of organic agriculture. And it can be concluded that the current philosophy behind the conduction of business regarding the corporate organic foodscape

cannot be united with the philosophy of organic agriculture, unless some drastic changes are made in the way one observes the world. I want to argue that due to the incompleteness of the regulation regarding organic production there is a loss of credibility. In practice, the philosophy of organic agriculture and 'certified organic' are two different concepts. The main reason is because the regulations behind the certification are foremost focussed on the practice, which is measurable. For example, how much bio-pesticides can or cannot be used. With that some ecological aspects are addressed, like lowering pesticide use and implement crop rotation. But for example, biodiversity is not directly implemented into the regulation, which is a factor of importance in many ways. Also the social factors that come forward in the four principles are not implemented into the regulations as such.

The difference between the image of organic agriculture and the actual practice can cause confusion among all participants of the organic value-chain and eventually leads to scepticism. So, in order to avoid confusion between the core principles and regulation of organic agriculture I propose two options. Either the gap between the philosophy of organic agriculture and the regulation of organic agriculture needs to be filled by integrating more of the four principles into the regulations. Or an explicit distinction between the two needs to be made so that it is clear that certified organic is not per definition the same as the principles formulated by IFOAM. In this way participants of the organic value-chain know where they stand.

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8 Appendix

8.1 Appendix 1

The four principles formulated by IFOAM

Principle of Health

Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.

This principle points out that the health of individuals and communities cannot be separated from the health of ecosystems - healthy soils produce healthy crops that foster the health of animals and people. Health is the wholeness and integrity of living systems. It is not simply the absence of illness, but the maintenance of physical, mental, social and ecological well-being. Immunity, resilience and regeneration are key characteristics of health. The role of organic agriculture, whether in farming, processing, distribution, or consumption, is to sustain and enhance the health of ecosystems and organisms from the smallest in the soil to human beings. In particular, organic agriculture is intended to produce high quality, nutritious food that contributes to preventive health care and well-being. In view of this it should avoid the use of fertilizers, pesticides, animal drugs and food additives that may have adverse health effects.

Principle of Ecology

Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

This principle roots organic agriculture within living ecological systems. It states that production is to be based on ecological processes, and recycling. Nourishment and well-being are achieved through the ecology of the specific production environment. For example, in the case of crops this is the living soil; for animals it is the farm ecosystem; for fish and marine organisms, the aquatic environment. Organic farming, pastoral and wild harvest systems should fit the cycles and ecological balances in nature. These cycles are universal but their operation is site-specific. Organic management must be adapted to local conditions, ecology, culture and scale. Inputs should be reduced by reuse, recycling and efficient management of materials and energy in order to maintain and improve environmental quality and conserve resources. Organic agriculture should attain ecological balance through the design of farming systems, establishment of habitats and maintenance of genetic and agricultural diversity. Those who produce, process, trade, or consume organic products should protect and benefit the common environment including landscapes, climate, habitats, biodiversity, air and water.

Principle of Fairness

Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.

Fairness is characterized by equity, respect, justice and stewardship of the shared world, both among people and in their relations to other living beings. This principle emphasizes that those involved in organic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties - farmers, workers, processors, distributors, traders and consumers. Organic agriculture should provide everyone involved with a good quality of life, and contribute to food sovereignty and reduction of poverty. It aims to produce a sufficient supply of good quality food and other products. This principle insists that animals should be provided with the conditions and opportunities of life that accord with their physiology, natural behaviour and well-being. Natural and environmental resources that are used for production and consumption should be managed in a way that is socially and ecologically just and should be held in trust for future generations. Fairness requires systems of production, distribution and trade that are open and equitable and account for real environmental and social costs.

Principle of Care

Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

Organic agriculture is a living and dynamic system that responds to internal and external demands and conditions. Practitioners of organic agriculture can enhance efficiency and increase productivity, but this should not be at the risk of jeopardizing health and well-being. Consequently, new technologies need to be assessed and existing methods reviewed. Given the incomplete understanding of ecosystems and agriculture, care must be taken. This principle states that precaution and responsibility are the key concerns in management, development and technology choices in organic agriculture. Science is necessary to ensure that organic agriculture is healthy, safe and ecologically sound. However, scientific knowledge alone is not sufficient. Practical experience, accumulated wisdom and traditional and indigenous knowledge offer valid solutions, tested by time. Organic agriculture should prevent significant risks by adopting appropriate technologies and rejecting unpredictable ones, such as genetic engineering. Decisions should reflect the values and needs of all who might be affected, through transparent and participatory processes.