

**A Multidisciplinary Approach on  
Swiss Organic Food and Agriculture**

**Jae In Kim  
Spring 2009**

**Switzerland: Public Health and Development Studies  
Academic Director: Earl Noelte**

**Washington University in St. Louis  
Environmental Studies / Economics**

**Copyright Permission**

The author hereby grants the School for International Training the permission to electronically reproduce and transmit this document to the students, alumni, staff, and faculty of the World Learning Community.

The author hereby grants the School for International Training the permission to electronically or in print format this document in whole or in part for library archival purposes only.

Jae In Kim

Signature: *Jae In Kim*

Date: April 22, 2009

**Abstract**

The organic food movement in Switzerland owes its success to the trust relationship among producers, retailers and consumers alike. The higher quality of organic food compared to those of neighboring countries, as well as the visible effort to maintain the quality with highly-recognized label certification scheme, allowed organic food to find a secure niche in supermarket shelves despite a higher price in an already expensive country. The market structure—Bio Suisse as an association of organic producers who set the criteria, and separate institutions for each research, inspection and distribution—maintains the careful balance in the market which explains the stability of this market even in the face of economic crisis.

The change to existing system is nonetheless inevitable, for Swiss organic movement to have continuous future development. The partnership Bio Suisse has with other institutions should be strengthened and it should further seek out other local institutional capacities, for instance, cantonal agricultural schools, to disseminate the organic farming techniques more effectively, while diversifying the retail system to increase accessibility to a larger population and facilitate direct contacts between producers and consumers.

**Preface**

My passion is food. I am a firm believer of “we are what we eat.” I have been therefore always curious of what role food plays within a society, especially with complex retail systems where consumers are too far detached from the food production to be conscious of where the food is coming from.

I first approached the topic of food and society from food security issue. As I was looking into the relationship between agriculture system and food security in Switzerland, I felt the need to focus my study on a specific subset of agriculture, to understand its structure in depth given the time period of the independent study project. It was then only natural for me as an environmental studies major student to lean towards the organic food and agriculture in Switzerland. I found it a fascinating subject. Swiss organic food market is so unique that I ended up devoting my entire project to analyzing how it functions, instead of exploring the topic I first had in mind. But the unexpected change, in retrospect, was a rather positive one since I was able to better utilize the rich environment in Switzerland and interview people with the same passion as mine.

**Acknowledgements**

This research could not have been written without Dr. Earl Noelte, my academic advisor.

I also thank Markus Arbenz, Christian Bovigny, Willy Cretegy, Christian Hockenjos, Andreas Thommen and Isabelle Vidon, who kindly agreed for the interview and provided me with invaluable information.

April 22, 2009

## Table of Contents

I.	Introduction.....	6
II.	Methodology.....	7
III.	Overview.....	10
	1. A Brief History.....	10
	2. Current situation.....	12
	3. Stakeholders.....	13
	- Bio Suisse and the Bud label.....	13
	- National: FiBL and Government.....	15
	- Regional: Canton of Vaud and Geneva.....	16
	- To Consumers: Migros and Farmer's market.....	17
IV.	Evaluation .....	18
	1. Environmental Impact.....	18
	2. Market Structure and Food Security.....	21
	3. Cultural Influence.....	24
	4. Food Quality and Food Safety: Building Trust.....	27
	5. Organic Food Trade and Social Justice.....	29
V.	Conclusion.....	32
VI.	Bibliography.....	34

## I. Introduction

Agriculture is one of the most basic ways in which humanity interacts with their immediate environment. On the individual level, we nourish ourselves daily as a result of agricultural activities. As a society, agriculture is a representation of our history, culture and philosophy about the world, and we change the landscape we live in through utilizing the soil, water, plants and animals. It is therefore essential that the practice of agriculture be sustainable for us to be able to leave the legacy of agriculture for the future generations as well.

But when it comes to food, the emphasis is not only on the necessity of agricultural activities. Food also involves pleasure, right and duty—eating healthily by choosing what is ideal for our body<sup>1</sup>; in the society, the way we define what and how to eat, where to distribute the food, and by how much are embedded in each culture which in turn influences the agriculture system.

Organic agriculture and organic food, in this sense, is a highly intriguing subject to explore. The organic movement is an urge to break away from the conventional system, a re-definition of how agriculture should be related to food, and food to the society as a whole. While aiming for the sustainable agriculture that protects or least harms the environment, the organic movement as a philosophy brings changes to how we see the whole system of food production and distribution. In the definition of International Federation of Organic Agriculture Movements (IFOAM),

Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on *ecological* processes, biodiversity and cycles

---

<sup>1</sup> Telfer, Elizabeth. (1996). *Food for Thought: Philosophy and Food*. London: Routledge. ; I do not include the full discussion about food duties. It involves more than simply eating healthily for oneself, such as vegetarianism. Within the focus of organic food, I decide that it is safe to mention only the first food duty.

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.<sup>2</sup> [emphasis added]

The word “organic” encompasses all ecological, cultural, technical, economic and social aspects. The purpose of my paper is then to learn positive and negatives impacts of the organic movement on all those aspects, within the context of Switzerland. I will first briefly outline rather successful Swiss organic movement history, identify the stakeholders in the organic food system within the domestic market and explain how they each have contributed to its development. I intend then to evaluate Swiss organic movement from environmental impacts, market and food security, cultural influence, food safety, trade and social justice perspectives. I will argue at the end that despite the current success of the organic movement there are still rooms for improvements, and I will come forth with some suggestions.

## **II. Methodology**

The focus of my study is Swiss organic food market. I principally use interactive research to understand my subject better since the relatively young and fast-changing nature of this particular market requires latest hands-on experience. Traditional library research was mostly done at the beginning of my research, in order to gain general knowledge about how food and society interact, and to answer questions why we eat what we eat. To understand the process of standard setting, production, monitoring and

---

<sup>2</sup> IFOAM. Growing Organic. Definition of Organic Agriculture. Retrieved April 18, 2009 from <[http://www.ifoam.org/growing\\_organic/definitions/doa/index.html](http://www.ifoam.org/growing_organic/definitions/doa/index.html)>.

distribution of the organic food, I identified individuals who work in the related institutions and did web-based research about each institution's role in developing and maintaining organic market, followed up by their yearly activity reports for the statistical data.

Diversification of my interview settings is extremely important, considering many stakeholders in this market. Furthermore, everything is decided in each canton in Switzerland. To explain that regional differences, I first looked into a bigger picture on the national level, and then focused on the canton of Vaud and Geneva—the two cantons, because of its geographical proximity, share one regional chapter for organic regulation and education, and there is no noticeable difference within those two as far as organic production is concerned. It was therefore unnecessary to conduct comparative studies, so for the purpose of my paper, I treated both cantons as an example of French-speaking Switzerland. For the reasons above I interviewed Markus Arbenz, the director of Bio Suisse, and Andreas Thommen, organic seed researcher from FiBL, for the national settings; at the regional level, Christian Hockenjos, the president of Bio Vaud, and Christian Bovigny, conseiller en agriculture biologique in l'Ecole cantonale d'agriculture de Grange-Verney à Moudon.

My interactive research settings for retail systems of organic food include two highly contrasting ones: one national supermarket chain Migros and a farmer's market in both Geneva and Nyon. Although Coop, another supermarket chain in Switzerland, distributes more organic products—almost half of all Bio Suisse products compared to a quarter distributed by Migros—I decided to interview Isabelle Vidon, a public relation representative in Coopérative-Migros-Genève. Migros follows the same standard set by

Bio Suisse, but Coop sells its own organic brand Naturaplan along with Bio Suisse products. Since my other interviewees were working with Bio Suisse, it was only logical to follow the same commodity chain to the retailers. Between the two farmer's markets I visited, Marché Bio de St-Jean was exclusively organic, and I had in-depth interview with Willy Creteigny, a wine maker and the president of Bio Genève.

To take the holistic approach to the subject I employ multidisciplinary and qualitative analysis. I will first introduce the stakeholders in Swiss organic food and agriculture system, and then within the same system identify and evaluate various dimensions from socio-economic, cultural and ecological perspectives.

Having outlined my methodology, I must add several aspects of Swiss organic food system that I will exclude from my analysis. As I follow the commodity chain of organic food, I will analyze the system mainly from the perspective of producers and retailers. It is certainly true that behind the success of Swiss organic movement there are consumers who choose and pay for the products, but to explore the reason behind this phenomenon would be a completely different subject from an organic food development in Switzerland. This subject has to be evaluated along with other modes of eating, such as vegetarianism, since the change in mentality concerning food duties is not unique phenomenon to the organic movement; so I deliberately leave out this topic and rather evaluate Swiss-specific general cultural context in which the organic movement has succeeded. The concept of eating as duties to the society is only briefly explored above in the introduction.

Another factor excluded from discussion is the government. Swiss organic development has originated from private, domestic associations of interested producers.

For the same reason, I also limited my settings to Swiss domestic market without mentioning international context of the organic food market development in European Union and its policy towards organic agriculture.

Trade relation to other countries in the organic food market, therefore, is fairly limited as well. I must add the discussion at the end however, as the description of the domestic market would not be a complete picture without acknowledging the reality of trade liberalization and increasing organic imports trend. The prospect of organic market in Switzerland will be significantly different depending on its future policy towards imports, and as it is, I will tentatively make some recommendations at the end of this section.

### **III. Overview**

#### **1. A Brief History**

Before proceeding to the current situation of Swiss organic food, it would be helpful to situate ourselves from historical trend of the organic movement and its philosophy. Arguably one of the most influential books in organic agriculture “*An Agricultural Testament*” was published in 1940 by Sir Albert Howard.<sup>3</sup> In this book, he describes the practice of peasant farmers in India, and their management of soil fertility by using natural processes. Instead of following a conventional perspective of agriculture as a competition among human and pests and nature, he criticizes the rising agricultural science, and the trend of overspecialization in the field of agriculture. The N-P-K mentality, which reduces soil fertility to a simple ratio of three elements, is insufficient at

---

<sup>3</sup> The discussion in this section is originally inspired by the class I took in my home institution in Washington University in St. Louis, Culture and the Environment by Glenn D. Stone.

best, according to Sir Howard. He was convinced that the techniques without any usage of artificial fertilizer by Indian farmers were indeed superior to Western counterparts.

Although exhaustive in its technical explanation, this book goes further than mere technical explanation. Sir Howard, a holist himself, argues that the health of soil is also the health of people who live off from what it produces. The relationship he established between agricultural practice and human wellbeing has marked the beginning of the organic movement.

Separately from the organic movement of Sir Albert Howard, Switzerland had its own pioneers in this field as well. The term “organic-biological farming (organisch-biologischer Landbau)” was first used in 1949 by Hans Müller who initiated the organic farmers’ movement in 1940, together with his wife Maria Müller and his friend Hans Peter Rusch. The training center for organic farming was near Bern and people from Switzerland, Austria, and Germany all benefited from it. He also founded AVG Galmiz, the first cooperative for organic products commercialization.<sup>4</sup>

The organic movement spread to the German part of Switzerland first, and in 1960s and 1970s there were already 500 to 1,000 organic farms in Switzerland. Throughout 1970s to 1980s, several institutions emerged, all of which still remain to serve as internationally renowned organic agricultural centers: FiBL, the Research Institute of Organic Agriculture, in 1974, 1<sup>st</sup> IFOAM International Scientific Conference in 1976, and Swiss organic farmers’ associations Bio Suisse in 1980.<sup>5</sup>

---

<sup>4</sup> Niggli, Urs. (2000). Organic farming in Switzerland. Bad Dürkheim: Stiftung Ökologie & Landbau (SÖL).

<sup>5</sup> Organic-Europe. (2009, Jan. 27). Organic Farming in Switzerland in 2008. Retrieved April 14, 2009 from <[http://www.organic-europe.net/country\\_reports/switzerland/](http://www.organic-europe.net/country_reports/switzerland/)>.

It is worth mentioning the difference between the organic movement and the bio-dynamic movement in order to avoid confusion. Bio-dynamic farming was first proposed by Rudolf Steiner in 1924 and it takes a spiritual world view on agriculture and emphasizes the inter-relationship of soil, plant and animal, treating them as a holistic system. Though similar to organic movement in farming techniques, Bio-dynamic is unique in its use of astronomical calendars to assist the timing of sowing and planting.<sup>6</sup> Its movement was very active in 1930s and its official label “Demeter” was registered in 1954. In Switzerland, Demeter has currently 200 members in its association, selling their products through both large supermarket chains and their individual retailers.

## **2. Current Situation**

The statistics on this section is from the press conference report of Bio Suisse on the trend of 2008/2009. There are other statistics available but this one was the most recent one. The surface area of organic farms has been continuously increasing ever since 1999, reaching 11.4%.<sup>7</sup> In the Alpine regions, where existing environmental regulations prescribe the use of pesticides or synthetic fertilizers, the percentage of organic agricultural land is even higher, 20.8% in 2008; in another word, 84% of organic farmland in Switzerland is permanent grassland. This is why the distribution of organic farms is highly uneven, with the canton Graubünden for instance reaching as high as 51% surface area (2005), while organic farming needs more development in the Western part

---

<sup>6</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>7</sup> Bio Suisse. (2009). Nombre des entreprises agricoles selon le nombre et la surface en 2008.

of Switzerland, where mostly horticultural crops are cultivated on stockless arable farms.<sup>8</sup>

French-speaking cantons of Switzerland, realizing the low level of organic farms in their regions, implemented a project called “Bio Romandie Plus” from 2003 to 2004. Now the adoption of organic farming in this region is increasing rapidly, and although smaller in absolute number, the growth rate of organic farms is higher than that of German region.

### **3. Stakeholders**

The stakeholders that I was able to identify through my interactive research have contributed to the development of the organic food and agriculture. The result is the unique organic market system in Switzerland, which maintains a steady niche in the market despite its high price.

#### ***Bio Suisse and the Bud label***

It is impossible to describe the organic market in Switzerland without mentioning Bio Suisse first. Founded in 1981, this association of Swiss organic farmers consists of 32 member organizations and 6300 farms. Organic food market accounts for 3% of Swiss food market, while in terms of surface area of farms organic production reaches 11%.<sup>9</sup> Unlike its neighboring countries such as France or Germany where governmental certification coexists with private labeling schemes, Bio Suisse enjoys a pivotal, almost

---

<sup>8</sup> Organic-Europe. (2009, Jan. 27). Organic Farming in Switzerland in 2008. Retrieved April 14, 2009 from <[http://www.organic-europe.net/country\\_reports/switzerland/](http://www.organic-europe.net/country_reports/switzerland/)>.

<sup>9</sup> Bio Suisse. 6,300 Bud Farms. Retrieved April 2, 2009 from <<http://www.bio-suisse.ch/en/association/informationassociation.php>>.

monopolistic status in Switzerland, all the while remaining as a private organization.<sup>10</sup>

This is a very unique situation, as all organic producers in Switzerland voluntarily adopt a common standard ordinance formulated by Bio Suisse.

Although Bio Suisse dominates most of the organic products in Switzerland at every level from producers, food processors, retailers, finally to consumers, it nevertheless does not represent a certain interest group. In this sense, Bio Suisse is a neutral umbrella group that coordinates and intermediates the organic food and Swiss societal interaction.

This high proportion of market share of Bio Suisse—more than 90%— creates distinct characteristics in the Swiss organic food market. Much like Swiss culture, Bio Suisse too was founded by the mutual agreements of organic producers. The consensual process made it possible for them to unify their effort and to create a uniform regulation for the production. Since then it took Bio Suisse more than 20 years to gather the expertise and develop detailed certification processes, at the same time gaining recognition from the public. It is not one of the fastest developments of private enterprise, but the positive image it has built throughout the years earned the stable position Bio Suisse has on the market at the moment.

All this would have been impossible were it not for the well-recognized Bud label, a certification seal for Bio Suisse. The Bud label stands for:<sup>11</sup>

- Natural diversity on the organic farm

---

<sup>10</sup> This statement has to be qualified, as there is one more producer organization in Switzerland “Demeter Suisse”. However, this is an association for bio-dynamic agriculture, and the farmers of Demeter automatically receive the Bud label by Bio Suisse as well, since Demeter also adopts Bio Suisse standards. Bio-dynamic agriculture is a slightly different movement and for the purpose of my paper I did not include this organization to stay with my current subject.

<sup>11</sup> Ibid.

- Ethologically sound livestock management and feeding
- No use of chemically synthesized pesticides or fertilizers
- No use of genetic engineering
- No use of unnecessary additives such as flavourings and colourings
- Non-aggressive processing of foodstuffs
- inspection of organic production and processing

The Bud label signifies to the consumers a higher quality of products, and they generally trust the Bud label to be strictly following the criteria set by Bio Suisse, which in turn reinforces the trust relationship between Bio Suisse and Swiss customers. The Bio label has a practical function too, as the Bud label enables Bio Suisse to receive royalty from various organic products: revenue for Bio Suisse to make collective efforts to represent the interest of all organic-related parties at the governmental level as well as marketing. Of approximately 9 millions CHF budget, Director of Bio Suisse Arbenz estimated about 1 million for standard development, 2 millions in quality assurance, 3 millions spent in marketing and campaigning, and another 3 millions for miscellaneous in which lobbying takes a significant part.<sup>12</sup>

### ***National: FiBL and Government***

Behind the success of Bio Suisse, there is a solid infrastructure provided by both FiBL, Research Institute of Organic Agriculture and the government. Founded in 1973, FiBL Switzerland is located in Frick close to head office of Bio Suisse and serves as a hub for organic farming knowledge center along with other sister research centers around

---

<sup>12</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

the Europe. It has over 120 staff members who specialize mostly in agricultural science, but they also work actively in policy development and evaluation of organic agricultural policy.<sup>13</sup>

As a scientific research center, FiBL needs to maintain the autonomy of its system, and for this it is essential to diversify its source of funding. One-third comes from direct research project money, another from private donation and the other third from Swiss federal government who recognizes the public value of FiBL.

Swiss Federal government, as in the case of FiBL or Bio Suisse, indirectly supports the organic agricultural development by funding these institutions. The peculiarity of Swiss organic movement lies in its non-governmental, yet nationally uniform system. The government in this context mainly follows what is already outlined by the private organizations, and such was the case for several legislations and ordinances on organic farming.<sup>14</sup> It seems that the pace of political process is not as fast as the innovative steps Bio Suisse take. I have to qualify this statement; this is not to say that what Swiss government does has little effect on the status of organic movement. On the contrary, a recent change in government's attitude, leaning towards more sustainable rural development, led to a new direct payment system that favored the organic farming methods, and as a result of this change a number of conventional farmers converted to organic practices.

### ***Regional: Canton of Vaud and Geneva***

#### ***Bio Vaud Producer***

---

<sup>13</sup> Thommen, Andreas. (2009 April 3). Researcher, FiBL. Interview.

<sup>14</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

Although the uniform organic production criteria are decided on the national level, the implementation happens on a regional, or more precisely, cantonal level as it is the case in Switzerland. Organic agriculture, compared to conventional one, has to be adapted to the local climate and soil condition, not to mention the seed varieties necessary for successful organic farming. It is therefore essential for organic farmers in the same region to gather and exchange information, and actively cooperate in order to stay competitive on the market. For instance Bio Vaud, a chapter of Bio Suisse in the canton of Vaud, organizes meetings, visits to other farms, or discussion sessions 3~4 times a season. The social interaction among organic producers in this canton is especially vital for the further development, as the organic movement is still at the beginning stage compared to other cantons in German-speaking Switzerland.

*Ecole cantonale d'agriculture de Grange-Verney à Moudon*

The public agricultural school in Moudon works with the organic farmers in the region, providing technical helps when needed or simply providing a meeting place.<sup>15</sup> The presence of existing infrastructure holds promise for future development, but at present there is not much demand for organic farming, and there are only a few classes offered on the subject but no major exclusively for organic agriculture in the agricultural school in the canton of Vaud.

***To Consumers: Migros and Farmer's market***

*Migros*

---

<sup>15</sup> Bovigny, Christian. (2009 April 9). Consultant, Ecole cantonale d'agriculture de Grange-Verney. Interview.

Two large supermarket chains Coop and Migros participate in the organic food market by driving demands, distributing across the nation and paying for the publicity of the products. They are for-profit companies, but pure business relationship cannot explain the role those companies have continuously played in the development of organic market.

Migros, for example, carries out the concept of social responsibility—in the words of Migros’ own presentation, “En effet, dès l'origine, son fondateur Gottlieb Duttweiler s'est fait le champion d'un profond et sincère engagement social, qui portait bien au-delà de l'amélioration de l'approvisionnement matériel des gens.”<sup>16</sup> Its commitment to sustainable development, especially Swiss organic farming, has its base on the philosophy of the social responsibility. This group is now increasing in its demand for organic food on its shelves, reaching 3.39% out of all revenues in 2008.<sup>17</sup>

#### *Farmer’s market*

Although supermarket chains’ partnership in the organic market has proved to be highly effective in that it guarantees a wide and highly effective distributional system, for the consumers the route to direct participation in organic production is limited: either through petitioning or by becoming a member of Migros cooperative.<sup>18</sup> Most consumers do not fall into either of two, and both require extra effort on the part of the consumers.

The alternative way of having access to the organic products is through direct farmer’s market. With less retail steps involved, the price gap of between the conventional and the organic products decreases. Moreover, consumers can build

---

<sup>16</sup> Migros. (2007). *L'homme au centre des préoccupations*. Retrieved April 15, 2008 from <[http://www.migros.ch/FR/A\\_propos\\_de\\_Migros/Durabilite/Principes/Ideaux/Seiten/L\\_homme.aspx](http://www.migros.ch/FR/A_propos_de_Migros/Durabilite/Principes/Ideaux/Seiten/L_homme.aspx)>.

<sup>17</sup> Vidon, Isabelle. <Isabelle.Vidon@GMGE.MIGROS.CH>. (2009, April 16). infos complémentaires sur produits bio Migros [personal email].

<sup>18</sup> Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.

personal relationship with the producers and producers in the process receive valuable feedbacks on their products. This particular market is growing within the region but still is a minority in the organic food distribution system.

#### **IV. Evaluation**

##### **1. Environmental Impact**

The beneficial or less harmful effects to the environment by organic agriculture are well-known and well-documented. Although it is important to identify exactly how the organic agriculture benefits the environment, for the purpose of this paper with a focus on the social aspect of organic food and agriculture, this topic is too technical. I will only briefly summarize the arguments by FiBL.<sup>19</sup> Organic production protects birds and insects that interact with the plant varieties, directly increasing the biodiversity of a given region. It is also argued that soil fertility and structures are better in organic agriculture, and there is a less risk of water contamination. The energy efficiency, and therefore the global climate change, is another reason why the nature prefers the organic, according to FiBL.

##### ***Local Vs Organic: Are they mutually exclusive?***

One of the classical critiques of organic agriculture is that organic production, to stay competitive in the market, sometimes needs food miles—the distance the food travels to finally reach the consumer—about the same amount if not more than what is required for conventional agriculture system.<sup>20</sup> Since organic production cannot use

---

<sup>19</sup> FiBL. (2007). *90 arguments en faveur de l'agriculture biologique*.

<sup>20</sup> The argument in this part has been influenced by “Omnivore’s Dilemma” by Michael Pollen (2006).

chemical fertilizers nor preservative in the packaging, organic fruits and vegetables especially have to be grown in the suitable climate zone and then air-freighted to stay fresh, emitting CO<sup>2</sup> into the atmosphere in the process.<sup>21</sup> This kind of practice does not necessarily benefit the environment, as the organic movement was aiming to do according to its philosophy. Still, some argues that organic production is better than conventional production method in terms of carbon emission in that it utilizes less of outside output and less petroleum-based chemicals. The question then remains: how do we decide which is better for the environment? Balancing the impact on environment one-by-one basis, if it is even possible, for all the products on the market?

I inquired after this dilemma to every interviewee, whether they put a higher priority in local or organic production. Though both local and organic products would be an ideal situation, in reality this is not always the case. Historically speaking, Switzerland has started an effort for the local production long before the organic movement came, and it still remains active. Migros, for example, adopted already in 70's "le programme intégré" to help domestic production, while Bio Suisse products started appearing in this supermarket shelves in 1995. Coopérative-Migros-Genève also started an initiative called "Genève Region Terre Avenir" in 2000, in partnership with the canton of Geneva government, marketing its regional specialties to its chains. This initiative was so successful that it spread to national level after a few years. Likewise, the public image of Switzerland as a rural, agricultural society reinforces the historic trend of local production-consumption.<sup>22</sup>

---

<sup>21</sup> BBC. (Feb. 2009). Food matters. Food miles. Retrieved April 18, 2009 from <[http://www.bbc.co.uk/food/food\\_matters/foodmiles.shtml](http://www.bbc.co.uk/food/food_matters/foodmiles.shtml)>.

<sup>22</sup> Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.

It is therefore not a surprise that despite well-established organic market in Switzerland, consumers in general prefer to buy Swiss products whenever possible. However, Swiss government is pushing for “l’agriculture durable” as a main objective of rural development and it is now well integrated into all sectors of agriculture, and as a result local producers in most cases has to ensure high quality and to adopt ecologically sound production method even if their products do not have a Bud label on them.<sup>23</sup> For the same reason, Bio Suisse adopted a new label with Swiss flag behind the Bud to indicate it is both local and organic. At the same time, no Bio product can be air-freighted, a policy that demonstrates a conscientious effort to lower the environmental impact of agriculture.<sup>24</sup>

In Switzerland, where spread-out, small-scale agriculture system facilitates both local and organic production method, the organic and the local may not be mutually exclusive. Combining the organic and the local production can even work to have a synergic effect, especially from consumer’s perspective. As mentioned before, Swiss agricultural system, especially dairy farming in the mountain regions—a typical image of Switzerland—necessitates organic production because of environmental regulation.<sup>25</sup> Swiss consumers pay premium for Swiss dairy products not only to support the local production, but at the same time to enjoy environmental benefits driven from more environmentally friendly agriculture. Mme Vidon agrees with this argument, pointing out that the project Migros initiated in 2000, Genève-région-terre-avenir, not only promoted

---

<sup>23</sup> Ibid.

<sup>24</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>25</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.

local production but included social and environmental dimensions as well.<sup>26</sup>

Considering higher direct payment for organic farmers from the government, it is in the benefit of local population to buy local and organic products, because the environmentally positive effects driven from organic farming would stay in the same region.

## **2. Market Structure and Food Security**

Swiss products, especially foodstuff, have always been high-priced compared to those in neighboring countries. With even more elevated premium put on most of the organic products in already expensive food price, it seems surprising that organic food finds its niche in Swiss market at all, and that organic farming stays financially viable at the same time.

On the producers' side, the answer seems to be fairly simple. Swiss farmers receive certain amount of "direct payment" from the government, conventional and organic farmers alike. The direct payment used to be calculated based on the amount of products that a given farmer can put to the market, which favored the conventional farmers who are generally more productive per hectare. Since the government recognized the importance of sustainable farming method, and in part as a response to a rising level of lake pollution due to agricultural waste water, the policy changed to favor organic farming. Now, a farmer receives direct payment based on the hectare he uses to produce, and organic farmer receives more payment per a given hectare, exactly the opposite of

---

<sup>26</sup> Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.

the former practice.<sup>27</sup> This new direct payment policy compensates for the higher input price and more labor-intensive method of organic farming.

Organic farmers, moreover, perform other functions to the society and the food market than merely reducing water pollution level. As mentioned above, Switzerland has a generally high price for its products, a situation that disadvantages it in the export market. The excessive production in this context poses a greater risk to Swiss market than it would to other countries, as Swiss has to digest its own excess with no export market as an outlet.<sup>28</sup> In the case of excess production, the scenario of plummeted price can therefore easily take place, which in turn threatens the livelihoods of the producers. Switzerland has a high percentage of domestic production, an average of 73% from 1961 to 1998, and it is essential to maintain the balance in the food market to ensure stable price for producers.<sup>29</sup> Food security, in the definition of the 1974 World Food Summit, is “availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and *to offset fluctuations in production and price*”<sup>30</sup> [emphasis added]. Organic farming, by producing less per hectare, helps avoid a potential overproduction in Switzerland and restores the equilibrium in the market. In this sense, it ironically contributes to the food security of the nation by producing less food.

The demand of the organic market is mostly driven by large supermarket chains, Coop and Migros as leading partners of Bio Suisse products. There are definitely positive outcomes with this particular demand structure. An anecdote of M. Hockenjos testifies to

---

<sup>27</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.

<sup>28</sup> Ibid.

<sup>29</sup> World Resources Institute. (2006). Agriculture and Food. Country Profile-Switzerland. Retrieved April 18, 2009 from <<http://earthtrends.wri.org/text/agriculture-food/country-profile-174.html>>.

<sup>30</sup> Food and Agriculture Organization. (2003). Trade Reforms and Food Security: Conceptualizing the Linkage. Rome: FAO.

this argument: currently he owns more than 2,000 chickens and their egg production is one of the major revenue sources for him. Comparing this situation to year 1992 when he switched to organic farming before Coop came to his town in Palézieux, even the number 2,000 was an impossibly large scale for him since he could not find for himself a market to sell all of his organic, more expensive eggs.<sup>31</sup> Coop has been buying and distributing all of his eggs for the past years as well as dealing with publicity.

Although the partnership of large supermarket chains stimulates demand for organic products and facilitates distribution over the nation, it is still an incomplete picture without consumers' direct interest in the subject. Coop recorded the sale of 722 millions CHF out of 1444 millions distributed through its chains in 2008 alone. Migros follows by a significant amount of 345 millions, whereas direct local markets "vente directe" remains a minority of 73 millions.<sup>32</sup> There is always a possibility of oligopolistic power on the part of two retailers in this structure, and the price of organic products remains as a thorny issue, with little bargaining power for the producers.<sup>33</sup>

However the local farmer's organic markets, as well as other smaller chains, are steadily growing in number, showing a desirable transition to diversified retail systems, though still small compared to Coop and Migros.

In farmer's market, the direct contacts with the producers and the simplified retail system help reduce the price of organic products without compromising financial status of organic farmers, and it also serves as a ground for information exchange. Consumers are more and more aware of the societal and individual value of organic production,

---

<sup>31</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.

<sup>32</sup> Bio Suisse. (2009). Nombre des entreprises agricoles selon le nombre et la surface en 2008.

<sup>33</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.<sup>33</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

which will eventually lead to an increased demand for organic products.<sup>34</sup> The fact that the demand remains steady and even increasing for some of the products in the midst of economic crisis shows increasing interest in organic food from Swiss public.

### **3. Cultural Influence**

The ideal and the reality do not always match and it is frequently the case for a nation as well. The public perception of Switzerland more often than not involves the image of pasturage, “pays du lait,”<sup>35</sup> a handful of cows feeding themselves in picturesque mountain ranges, although in reality the milk market is dwarfed by other industries such as service part.<sup>36</sup> Perhaps it is an over-generalization to characterize Swiss identity as based on traditional rural farming community, and it is too big a subject to analyze the impact of cultural image on the whole agricultural system. I nonetheless included this section because during my interactive research this subject was brought up several times, and especially for my study the unique way in which Swiss culture affects organic agriculture is the single most important factor in explaining the disparities in regional production and market share. For the purpose of this paper, I adopt the definition of culture as “the set of shared attitudes, values, goals, and practices that characterizes an institution, organization or group.”<sup>37</sup>

#### ***Swiss political system and the establishment of the organic movement in Switzerland***

---

<sup>34</sup> Cretegny, Willy. (2009 April 2). President, Bio Genève. Interview.

<sup>35</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.

<sup>36</sup> Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.

<sup>37</sup> Merriam-Webster’s collegiate dictionary. (2005). Springfield, MA: Merriam-Webster.

The system of direct democracy is unique in Switzerland. It is not my intention to discuss in depth Swiss political system, but it is certain that the system of direct democracy has influenced or has created by the culture of negotiation and concordance in Switzerland. “En Suisse ces institutions ont notamment contribué à l’intégration des différentes forces dans le système politique.”<sup>38</sup> The establishment of Bio Suisse and the political culture in Switzerland has a similarity, and it can be argued that the former is a result of the latter in that Bio Suisse functions as a representative of all organic stakeholders, who organizes and harmonizes different opinions, instead of being an organization to speak for a certain interest groups.

It is also the cultural attitude that explains in part why there is a regional discrepancy in accepting organic production. German part of Switzerland has been leading the movement, and while French part is catching up fast enough, it is still lagging significantly in terms of percentage of organic farms: only 4~5% in French-speaking regions compared to 11.24% national average.<sup>39</sup> Although this difference in number can be due to various factors, the most salient seems to lie in the philosophical influence on the pioneering works of Dr. Steiner and Dr. Müller. In Germany, Austria, and German Swiss, the proximity and the common language allow them to share the philosophical influence of those two pioneers, and the population in these regions has higher sensitivity to environmental aspects of agriculture, and more open to the idea of organic food as a result.<sup>40</sup> It is therefore not surprising to see the world-renowned organic research center FiBL and the head office of Bio Suisse established in German part of Switzerland.

---

<sup>38</sup> Association des Etudiants en Science Politique et Relations Internationales. Le système politique suisse : résumé. Retrieved February 9, 2009 from <<http://www.aespri.unige.ch/>>.

<sup>39</sup> Organic-world.net. (2009). Statistics. Basic Data. Retrieved on April 18, 2009 from <<http://www.organic-world.net/statistics.html>>.

<sup>40</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

Another explanation is in the public perception of producers in French part of Switzerland. The population of French part also recognizes the benefits of organic agriculture as consumers, but the challenge, according to M. Bovigny, is the image the producers have about organic agriculture among themselves.<sup>41</sup> Sometimes organic farmers are stigmatized as extreme environmentalists, and it takes time to change such a perception.

The relationship between Swiss culture and Swiss organic agriculture is not one-way interaction. Rather, organic agriculture also creates and influences new market cultures. In Switzerland the local farmers markets are not as widespread as in France or Italy; it is a tradition that is in the trend of disappearance after the Second World War.<sup>42</sup> However, local farmer's markets are currently in resurgence, in part thanks to the growing number of direct market stands for organic food, as organic farmers sometimes use local market place to sensitize and have a direct interaction with the public.<sup>43</sup> There now exist 49 such markets in the canton of Vaud alone.

#### **4. Food Quality and Food Safety: Building Trust**

While it is the ecological and social conscience on the part of both consumers and producers that started organic movements, it is now more of a concern for quality that sustains this particular market. It is for this reason that ensuring quality of organic products is becoming more important, especially given that organic products are 25~33%

---

<sup>41</sup> Bovigny, Christian. (2009 April 9). Consultant, Ecole cantonale d'agriculture de Grange-Verney. Interview.

<sup>42</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>43</sup> Bovigny, Christian. (2009 April 9). Consultant, Ecole cantonale d'agriculture de Grange-Verney. Interview.

more expensive than conventional counterparts.<sup>44</sup> Swiss consumers are willing to pay this premium for improved quality, putting trust in the standards Bio Suisse has set.

It is perhaps a human nature to be self-interested, and it is certainly the case for organic food as well. According to Mr. Arbenz, there are three different stages for organic food movement: first environmental concern, then social responsibility, and finally quality of life.<sup>45</sup> While the environmental concern is still alive in Swiss public conscience, Bio Suisse is focusing more on the quality insurance at present. Social responsibility is a dimension that partly affects the decision of Bio Suisse and its member producers, but there are other groups in Switzerland that principally deal with this issue, such as Fair Trade Organization. Mme Vidon also confirms that for the most part consumers who buy organic products are concerned with their own health, although the image of clean environment does appeal to them as well.

### ***Quality Monitoring***

No matter how thoroughly the organic product standards are developed by Bio Suisse, it would be a futile effort were it not for a trustworthy and stable monitoring system. In Switzerland, there exist separate and private organizations such as Bio Inspecta and Bio Test Agro, to which Swiss federal government delegates the certification and monitoring of organic farms and processors.<sup>46</sup> Bio Inspecta is the largest organization in Switzerland with 5,000 organic farms and 800 processing companies and

---

<sup>44</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>45</sup> Ibid.

<sup>46</sup> Organic-Europe. (2009, Jan. 27). Organic Farming in Switzerland in 2008. Retrieved April 14, 2009 from <[http://www.organic-europe.net/country\\_reports/switzerland/](http://www.organic-europe.net/country_reports/switzerland/)>.

traders, and its certification range from Bio Suisse to Demeter to international ones such as USDA.<sup>47</sup>

M. Hockenjos explained the inspection process for organic farms. A government official monitors the condition of the farm every month, while Bio Inspecta performs inspection without prior notice every year.<sup>48</sup>

The presence of such organizations can facilitate the inspection process by pulling expertise, and also by having experience in other labels around the world, they hold potential for harmonizing the organic criteria and expedite the movement of organic goods across the border.

### ***Food safety: traceability***

Traceability plays a significant role in ensuring the quality of food, both conventional and organic, and it is an already well-established system in Switzerland. Although strictly speaking it does not uniquely belong to organic production, it is certainly a dimension that pertains to the discussion of quality insurance. For example, all the calves have its own identification number with a barcode assigned from Bern office. Every time the calf is transferred to another farm, it has to be re-registered, up to the point it finally reaches consumers. This system was designed as a response to the mad cow disease outbreak in Europe in 2001, which led to millions of financial loss, but more importantly a loss of trust among the public.<sup>49</sup>

---

<sup>47</sup> Bio.Inspecta. (2008). Food Industry. Services. Retrieved April 14, 2009 from <<http://www.bio-inspecta.ch/htm/lebensmittelbranchendienstleistungen.htm>>.

<sup>48</sup> Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.

<sup>49</sup> Ibid.

Now the traceability of foodstuff is not confined to beef. Migros, as a part of its commitment to quality insurance, implemented a complete traceability system of all kinds of foodstuff, indicating the origin and the name of producers when possible.<sup>50</sup> This shows the importance of ensuring the quality in Swiss food system.

## **5. Organic Food Trade and Social Justice**

Although generally higher price of organic food in Switzerland is not considered as a sign of luxury good to the public, the strict quality regulation and direct payment from the government put as a result limitation on the organic food imports. This structure, in the face of neo-liberalism in the trade sector around the world, cannot easily escape the criticism of protectionism. It is not a purpose of my paper to explore in depth the trade relationship between Switzerland and other countries; however the question of whether to increase the organic food imports directly and indirectly affects the domestic market, and looking at some of the challenges and promises in this subject will show the future of Swiss organic food movement at least to some extent.

The assortment of organic goods for Swiss consumers is quite impressive, but constraints on consumer choice on Bio products still exist: currently Bio products can not be air-freighted, which makes it hard for its consumers to buy fresh fruits and vegetables other than from neighboring countries. Around two-thirds of all the organic products sold in Switzerland are also produced domestically and Swiss consumers prefer locally

---

<sup>50</sup> Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.

produced whenever possible. For this reason, the importation of organic goods is at present limited to supplement seasonal variation in the domestic supply.<sup>51</sup>

The importation of organic food from foreign countries however need not lead to lowered quality in Switzerland, nor a threat to the livelihood of domestic producers. It is acknowledged that healthy doses of competition in the market can be beneficial to the domestic producers as well, especially considering the dominant presence of one private organization in Swiss organic market.<sup>52</sup> To be more precise, a larger selection of organic products coupled with some lower-priced organic goods can draw new consumers and stimulate the growth of organic market—a change necessary for Swiss organic food system which seems to reach a certain level of stability and therefore its development might be stagnated otherwise.

Just as importantly, it is not simply a question of expanding consumer choice, but also of increasing opportunity for developing countries and countries in transition where the smallholders live off air-freighted exportation.<sup>53</sup> Organic agriculture has a positive spillover effect in the country of origin by encouraging environmentally friendly management of local resources and also sustainable social development, if the traded goods are fairly priced and the part of profits indeed go to the producers.

In recognition to this potential, Bio Suisse is currently at the stage of designing a new project combining fair trade and organic food into one label, as they once combined locally produced and organic food label together. About three quarters of imported Bio Suisse products are already eligible for fair trade label, which will allow consumers to

---

<sup>51</sup> Organic-Europe. (2009, Jan. 27). Organic Farming in Switzerland in 2008. Retrieved April 14, 2009 from <[http://www.organic-europe.net/country\\_reports/switzerland/](http://www.organic-europe.net/country_reports/switzerland/)>.

<sup>52</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>53</sup> International Trade Centre UNCTAD/WTO. (2004). World Markets for Organic Fruit and Vegetables. Retrieved on April 14, 2009 from <<http://www.intracen.org/Organics/documents/Switzerland.pdf>>.

make a conscious choice when they pay for these products.<sup>54</sup> This project is only discussed as a tentative possibility at this point, but if implemented it could add a highly positive value to the Bud label. FiBL also has a role to play in the situation. With different climates and varying degree of social infrastructure in those countries, it would be unrealistic to expect them to the same production, processing, inspection and certification as Swiss organic products. FiBL, with its expertise and years of experience in the field, could provide technical assistant and extend such technical cooperation partnership where there is potential.<sup>55</sup>

Organic movement in Switzerland originated from the conscientious effort to ameliorate its domestic producers and the environment where they grow food. It is only just then that this effort should be extended to other countries as well in a context of increasing international trade and interaction.

## **V. Conclusion**

At this point, I will make some suggestions for future study. Two significant processes that affect the organic movement are not mentioned in my study: politics and food processing. I approached my subject mainly from the perspective of private organizations, and to keep the analysis manageable given the time frame of the research project, I excluded the political processes that led the government to decisions supporting sustainable rural development. Considering sometimes controversial nature of the subject, politics will add new, valuable analysis to the organic market. The other factor is processing industries. Since recently pre-made microwaveable organic dinner has been

---

<sup>54</sup> Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.

<sup>55</sup> FiBL. (2008). Activity report 2008.

made available in the supermarket. To explore the reason and attempt to answer a question the idea of “organic” in this context would open another intriguing discussion.

In summary, the organic food movement in Switzerland owes its success to the trust relationship among producers, retailers and consumers alike. The higher quality of organic food compared to those of neighboring countries, as well as the visible effort to maintain the quality with highly-recognized label certification scheme, allowed organic food to find a secure niche in supermarket shelves despite a higher price in an already expensive country. The market structure—Bio Suisse as an association of organic producers who set the criteria, and separate institutions for each research, inspection and distribution—maintains the careful balance in the market which explains the stability of this market even in the face of economic crisis.

Change to existing system is nonetheless inevitable, for Swiss organic movement to enjoy continuous future development. The partnership Bio Suisse has with other institutions should be strengthened and it should further seek out other local institutional capacities, for instance, cantonal agricultural schools, to disseminate the organic farming techniques more effectively, while diversifying the retail system to increase accessibility to a larger population and facilitate direct contacts between producers and consumers.

What is organic after all? It has originated from fundamental re-thinking of conventional system, and thanks to pioneering works it is now well-established within Switzerland. The ultimate goal of organic movement should be in the sustainability of the system, economical, environmental and social. An opportunity for a more equitable market, for this reason, should also be included in the organic movement as well. Alliance with other NGO’s dealing with social equity issues, such as the Fair Trade

Foundation, will therefore bring a positive scaling-up to the existing system. More direct consumer participation should also be encouraged, and more diversified routes to participation are necessary to achieve this goal. Instead of remaining as passive takers of organic movement, consumers, or rather “co-producer,”<sup>56</sup> can ultimately support and sustain the system in the long-run. Organic movement is about looking into the food system as an entity, a holistic approach to the relationship that agriculture has to food production and food to the humankind. Only with the active and closely-linked interaction is the organic movement possible to continue.

---

<sup>56</sup> A term coined by Slow Food. It signifies “[...] a new approach to food consumption [t]o highlight the fact that consumers can stimulate decisive changes in the agrifood sector. The consumer not only purchases from these people but asks them for information and advice so as to recognize qualitative differences and be able to eat in a healthier, tastier and more responsible way. With more aware and informed consumers—co-producers—farmers are more motivated to work using traditional techniques that assure product biodiversity and quality.” <[http://newsletter.slowfood.com/slowfood\\_time/07/eng.html#item1](http://newsletter.slowfood.com/slowfood_time/07/eng.html#item1)>.

## **Bibliography**

- Association des Etudiants en Science Politique et Relations Internationales. Le système politique suisse : résumé. Retrieved Feb 9, 2009, from <<http://www.aespri.unige.ch/>>.
- Arbenz, Markus. (2009 April 3). Director, Bio Suisse. Interview.
- BBC. (Feb. 2009). Food matters. Food miles. Retrieved April 18, 2009 from <[http://www.bbc.co.uk/food/food\\_matters/foodmiles.shtml](http://www.bbc.co.uk/food/food_matters/foodmiles.shtml)>.
- Bio.Inspecta. (2008). Food Industry. Services. Retrieved April 14, 2009 from <<http://www.bio-inspecta.ch/htm/lebensmittelbrandedienstleistungen.htm>>.
- Bio Suisse. 6,300 Bud Farms. Retrieved April 2, 2009 from <<http://www.bio-suisse.ch/en/association/informationassociation.php>>.
- Bio Suisse. (2009). Nombre des entreprises agricoles selon le nombre et la surface en 2008.
- Bovigny, Christian. (2009 April 9). Consultant, Ecole cantonale d'agriculture de Grange-Verney. Interview.
- Cretegnny, Willy. (2009 April 2). President, Bio Genève. Interview.
- Food and Agriculture Organization. (2003). Trade Reforms and Food Security: Conceptualizing the Linkage. Rome: FAO.
- FiBL. (2007). 90 arguments en faveur de l'agriculture biologique.
- FiBL. (2008). Activity report 2008.
- Hockenjos, Christian. (2009 April 9). President, Bio Vaud. Interview.
- IFOAM. Growing Organic. Definition of Organic Agriculture. Retrieved April 18, 2009 from <[http://www.ifoam.org/growing\\_organic/definitions/doa/index.html](http://www.ifoam.org/growing_organic/definitions/doa/index.html)>.

- International Trade Centre UNCTAD/WTO. (2004). World Markets for Organic Fruit and Vegetables. Retrieved on April 14, 2009 from <http://www.intracen.org/Organics/documents/Switzerland.pdf>.
- Marriam-Webster's collegiate dictionary. (2005). Springfield, MA: Marriam-Webster.
- Migros. (2007). L'homme au centre des préoccupations. Retrieved April 15, 2008 from [http://www.migros.ch/FR/A\\_propos\\_de\\_Migros/Durabilite/Principes/Ideaux/Seiten/L\\_homme.aspx](http://www.migros.ch/FR/A_propos_de_Migros/Durabilite/Principes/Ideaux/Seiten/L_homme.aspx).
- Niggli, Urs. (2000). Organic farming in Switzerland. Bad Dürkheim: Stiftung Ökologie & Landbau (SÖL).
- Organic-Europe. (2009, Jan. 27). Organic Farming in Switzerland in 2008. Retrieved April 14, 2009 from [http://www.organic-europe.net/country\\_reports/switzerland/](http://www.organic-europe.net/country_reports/switzerland/).
- Telfer, Elizabeth. (1996). Food for Thought: Philosophy and Food. London: Routledge.
- Thommen, Andreas. (2009 April 3). Researcher, FiBL. Interview.
- Vidon, Isabelle. (2009 April 15). Responsable Relations Publiques, Coopérative-Migros-Genève. Interview.
- Vidon, Isabelle. <Isabelle.Vidon@GMGE.MIGROS.CH>. (2009, April 16). infos complémentaires sur produits bio Migros [personal email].
- World Resources Institute. (2006). Agriculture and Food. Country Profile-Switzerland. Retrieved April 18, 2009 from <http://earthtrends.wri.org/text/agriculture-food/country-profile-174.html>.
- Organic-world.net. (2009). Statistics. Basic Data. Retrieved on April 18, 2009 from <http://www.organic-world.net/statistics.html>.