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„The *Slow Food* movement - Towards a more
sustainable food system? –
A bottom-up approach for a community-based food model as
driver for food sovereignty and self-determined development“

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Madeleine Pühringer

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1 Introduction

*“The current global food system [...] generates uneven outcomes, manifest in vast wealth accumulation by corporate interests and massive hunger for over a sixth of the globe.”*¹

Despite significant technological achievements and scientific research, with the objective to promote productivity to meet the growing demand of food, the neglected social and ecological consequences have created new far reaching issues.²

The challenge of the future is the need to respond to the “doubling food demand, to meet food safety standards, enhance rural livelihoods and stimulate economic growth”, in a way that is environmentally and socially sustainable. This is quite a difficult task, since the initial situation is dominated by concerns of productivity, weakened workforce as a result of HIV and other endemic diseases, competition among scarce resources, loss of arable land, biodiversity and climate change.³

The global food system faces a range of global challenges putting food and nutrition security under high pressure. The academic and public concerns over the implications of industrialization and globalisation in the food system finds its expressions in the numerous new occurring trends of organic and local food, and the rising number of movements that are engaged with these issues.

The objective of this thesis is to give an overview of the current food system and the main factors that threaten food and nutrition security as a desirable outcome. Industrial agriculture brought along with it high ecological, social and economic costs. This development is highly questionable and will be discussed in the course of this thesis.

Furthermore the aim of this thesis is to outline the major challenges of promoting a sustainable food system that guarantees food and nutrition security to a growing world population while respecting environmental conditions. The *Slow Food* movement will be at the center of my elaboration. I will illustrate the philosophy of the *Slow Food* movement, that provides an innovative approach towards sustainability in food

¹Watson 2009, p. 9.

²Ibid., p. xi.

³Ibid., p. xi.

systems. *Slow Food* is a global grass roots organisation, which is engaged in “linking the pleasure of food with commitment to community and the environment.”⁴

*“Slow Food believes food is tied to many other aspects of life, including culture, politics, agriculture and the environment. Through our food choices we can collectively influence how food is cultivated, produced and distributed [...].”*⁵

The *Slow Food* philosophy gives importance to the central role of food. What is often missed out on is that food has a cultural, ecological, social and political dimension, which needs to be involved in the discussion.

Food is the basis for a sustainable community. Food is what connects people directly to the environment and therefore plays an essential role in protecting ecosystems. The *Slow Food* perspective is a potential approach which provides a powerful basis for non-market relationships between people, social groups, communities and institutions.

By including the concept of sustainability it's obvious that the current food system is not only causing harm to the environment but also to a huge part of the global population. Food and nutrition insecurity still exists for a considerable number of people. Therefore we need a change in global society as a whole.

The complexity of the field and the various initiatives and approaches towards a more sustainable food system make it difficult for both consumers and producers to identify challenges and opportunities for change. As Kloppenburg and his colleagues state:

*“We start with food. Given the centrality of food in our lives and its capacity to connect materially and spiritually to each other and to the earth, we believe that it is a good place to start.”*⁶

With time we have started to consume more and more food from various parts of the world. The consequence of this development is that people get disconnected from the food they consume, as well as the knowledge and consciousness of how and by whom their food is produced, processed and transported. These processes tend to have lasting negative effects on natural resources like water, land and air as well as on human communities.

⁴Slow Food International n.y.(c).

⁵Ibid.

⁶Kloppenburg, Hendrickson, and Stevenson 1996, p. 41.

Consumers are not aware of the influence of their participation in this global food system and are therefore not capable of taking responsibility of changing it. Lacy underlines this by declaring, that “[r]aising and eating food has lost the aspect of communication and interaction.”⁷

The concept of sustainability reached world wide acknowledgement and is recognized as a benchmark on the international agenda. Food offers a holistic way to address sustainability in all its dimension, as we all eat food, its something everyone can relate to. Food further more food connects the environmental, economic, and socio-cultural, as well as the political dimension of sustainability, which facilitates the exploration of interconnections and relations within the food system.

The *Slow Food* movement promotes locally based food systems, with a special focus on local communities, local knowledge and tradition. In the following chapters I will illustrate the potential outcomes of community based food systems for food and nutrition security and food sovereignty.

1.1 Structure and research questions

By giving a brief overview of the global food system and its major challenges I will discuss the *Slow Food* philosophy as a possible alternative to current food politics, by putting food back to the centre of humans life.

In the course of this thesis the question is how the *Slow Food* movement can contribute to initiate a community based food model, that promotes food sovereignty and self-determined development. I will therefore analyse the ideology of the *Slow Food* movement and its action in food related issues. I will examine the assumption that the *Slow Food* movement can strengthen local communities, by encouraging local knowledge of food and traditional agricultural production.

In the first part of my thesis I will introduce the *Slow Food* movement and how it all started. I’m taking the *Slow Food* manifesto to outline the main aspects that shape the *Slow Food* network and how their ideas and approaches have changed over time.

I will then outline the current global food situation. Central to my examination in this part are questions like, what are the major challenges for the current and future

⁷Lacy 2000, pp. 19 sqq.

food system. What are the major factors for environmental change and food and nutrition insecurity?

I will further use the food system approach to give an theoretical overview of food system activities and outcomes. The value of this approach is that it can be used as an analytical tool to identify the main actors and elements, that influence the various processes and outcomes of a food system. Through this theoretical framework it is possible to recognize certain vulnerabilities within the food system and it outlines what drives global environmental change and food and nutrition security. It further more demonstrates courses of action and the consequences these actions have on various actors as well as on the social, environmental and economic dimension.

I will then focus on the discussion around sustainability and what importance the concept has for different types of food systems. I consider it necessary to briefly discuss the concept and its origins. Since it's a very common and widely used term I find it essential to outline the meaning and how it's been used.

The main interest of this thesis is the ideology of the *Slow Food* movement and I will therefore outline the sustainability strategy of *Slow Food* around the three principles of “*good, clean and fair*” and illustrate what the main objectives are.

The *Slow Food* movement promotes a community based food model that emphasizes on food and nutrition security as well as food sovereignty. It is of my special interest to elaborate what aspects are central within the *Slow Food* philosophy to promote a “*good, clean and fair*” food system. What will be important in this section is the reacquisition of the local within a food system and the central role and potentials of communities.

In the last section of this thesis I will give a practical example, which demonstrates how the implementation of the *Slow Food* philosophy works in practice. I chose the “Thousand Gardens in Africa” project, to point out how the central elements of the ideology can guarantee better food for people living in developing countries. I'm linking the *Slow Food* gardens with the discourse on food and nutrition security to identify possibilities for an environmentally and socially just food system.

1.2 Methods

This thesis is mainly based on secondary sources and contemporary articles. I've analysed certain studies on the topic of sustainable food systems and food sovereignty to consolidate the *Slow Food* philosophy. According to my estimation, the literature on *Slow Food* lacks of scientific discourse and research studies. Therefore I've based my work on reputable references and food system research.

Based on the assumption that *Slow Food's* community based food model provides an alternative to the current food system, I was searching for papers that support this hypothesis. The objective of the widespread engagement with scientific papers was to find significant research that supports my assumption, that the focus on local communities, traditions and knowledge can have positive impacts on food sovereignty and therefore food and nutrition security. Most of the sources I have used acknowledge the importance of food sovereignty and the empowerment of local communities in order to address global food and nutrition insecurity.

I follow a holistic perspective, that food and nutrition insecurity research needs an interdisciplinary approach, in order to allow a full-scale analysis of challenges and opportunities for the current and future food system. Based on this assumption I use the food system approach as a theoretical construct to facilitate my examination on the topic.

The main part of my research is covered by readers and articles that address the interface of food and nutrition security, food systems and global environmental change. The main information on the *Slow Food* movement and their idea is based on papers and manifests published on their internet platform. The topic on food systems for a better nutrition is frequently discussed at the moment, which provides a significant amount of scientific sources and studies.

For the analysis of the practical implementation of "A thousand gardens in Africa" I interviewed Marta Messa, who is the Technical and Operations Coordinator of the project at *Slow Food Foundation for Biodiversity*. The interviewing was a process, divided in three parts. The first part was a written interview, based on a questionnaire I developed in order to underpin my examination on the gardens. In the following I had a skype conversation with Miss Messa to get a better understanding for the

implementation of the gardens, and what difficulties and challenges the project faces. On the basis of the collected information I further developed, more detailed questions, that provide relevant information for answering my research questions. The results of my analysis of the "Thousand Gardens in Africa" is based on the interaction with Marta Messa and certain meeting records of the *Slow Food* garden coordinators, published on the *Slow Food* website.

Based on the project handbook and protocols, the interview and the academic discourse around food systems, I compared the projects' aims with the four dimensions of food and nutrition security to link it with the debate on sustainable food systems.

2 The *Slow Food* movement

As outlined in the introduction, food plays a vital role of meeting the challenges sustainability and *Slow Food* manages to connect exactly at this point by recognizing food as a crucial and strategic issue. Right from the beginning the aim has been to promote alternative patterns of production and consumption.¹ To get a better understanding of the *Slow Food* philosophy I will start my examination with the origins of the *Slow Food* movement. I will take a closer look on the political and social background of the organisation, and the people behind *Slow Food*. What does “slow” mean, and what activities are undertaken by the members?

2.1 The origins of *Slow Food*

Following the early paths of the *Slow Food* movement, the way leads to the small town of Bra in Italy starting from the 1970s. Bra, which is also the home-town of founder Carlo Petrini, is known for its leather industry and cheese production. The area is well connected to its food and wine traditions which strongly influenced the emergence of this gastronomic revolution.²

The origin of *Slow Food* was very much shaped by the political background of that time. The people behind *Slow Food* were young left wing activists including Carlo Petrini, Azio Citi and Giovanni Ravinale. In 1974 they set up the monthly left wing newspaper called “In Campo Rosso”, which later on led to the launch of the first independent political radio station called “Radio Bra Onde Rosse”, where their thoughts and ideas were broadcasted.³

Petrini and his fellows called themselves the “philoridiculous” group. They were also members of *Arci*, the cultural organisation of the Italian Communist party, which was formed in 1957. The year 1986 was a very important one for the *Slow Food* history. The formation of *Arci Gola* (later *Arcigola*) became one of the biggest sections of *Arci*. “Gola” means appetite, so the focus was clearly on issues of food-politics. The group

¹Tencati and Zsolnai 2012, p. 347.

²Schneider 2008, p. 385.

³Andrews 2008, p. 5.

was supported by the left wing paper *Il Manifesto*. Petrini was the first anonymously elected president.⁴

The year 1986 was overshadowed by many events. The incident, where nineteen people died after having cheap wine, which was spiked with methanol to increase the alcohol content, placed the wine production of the Langhe Region in a very unflattering light. This occurrence brought the recognition of quality and education in pleasure of wine, back on the agenda for *Arcigola* activists.⁵

The key event took place in 1986 in Rome, where a new Mc Donald's store was about to open up. *Arcigola* organised a demonstration at the Spanish Steps which can be seen as a response to the appearance of a more globalised eating culture. As a result the term *Slow Food* first emerged to name the culture that stood in contrast to Fast Food.⁶

Petrini explains the choice to keep the name *Slow Food*:

*“Those two words, a reaction to the Big Mac phenomenon, became the best way to spread the group's philosophy. Another kind of food could exist, another way to eat, another way to comprehend the pleasures of life.”*⁷

The philosophy behind the *Slow Food* movement was illustrated in the *Slow Food* Manifesto, which was published in *Il Manifesto* in November 1987. Starting in Italy the idea spread and gained more and more international attention. The launch of *Slow Food* as an international movement took place in Paris in December 1989. This was the beginning of the international *Slow Food* movement.⁸ In 2002 *Arcigola* officially changed its name to *Slow Food*.⁹

2.2 *Slow Food* as a global movement

Slow Food describes itself as “a non-profit member-supported association” with supporters in 150 countries around the world, with the intention of linking the pleasure of good food with a commitment to the community and the environment.¹⁰ Part of

⁴cf. Andrews 2008, pp. 7 sq.

⁵Schneider 2008, p. 386.

⁶cf. Andrews 2008, p. 11.

⁷Petrini 2005b, p. 73.

⁸Andrews 2008, pp. 11 sq.

⁹Schneider 2008, p. 386.

¹⁰Slow Food International n.y.(c).

the organisation is also a huge network of 2,000 food communities and of small scale farmers. The organization is arranged in local sections – the “*Convivia*”, which are all coordinated by the international headquarters based in Bra. Currently there are many projects – the “presidia” – running both in the global North and South, with the intention to protect local small scale farmers all around the world.¹¹

The activities of *Slow Food* involve events and campaigns all around the world, including local community activities developed by the *convivia* as well as regional and global actions initiated by *Slow Food*’s national offices. The activities are set up with the aim to create networks among producers, as well as between consumers and producers, to promote the defence of biodiversity and education in food and taste.¹²

Among their various activities “A Thousand Gardens in Africa” was initiated together with the *Terra Madre* communities. The idea is to create food gardens in 25 African countries with the objective to preserve biodiversity and promote farmers autonomy and strengthen local communities. The gardens will be discussed in detail later on.¹³

2.3 The ideology

The final version of the *Slow Food* Manifesto was translated into eight languages and signed in Paris 1989 by representatives of fifteen countries. I discovered some key points in the manifest, which I linked with the ideology of the *Slow Food* movement. In my examination of the topic of food sovereignty I find it essential to take a closer look at this manifest, to find out more about the ideas behind *Slow Food*.

2.3.1 Slow vs. Fast

“Our century, which began and has developed under the insignia of industrial civilization, first invented the machine, and then took it as a life model.”¹⁴

The general statement, according to my understanding, is that the industrial revolution brought not only technological innovation but also changed society and the way people live their lives. It indicates that *Fast Food* comes with the philosophy of a Fast Life.

¹¹Sassatelli and Davolio 2010, pp. 203 sq.

¹²Slow Food International n.y.(e).

¹³Ibid.

¹⁴Slow Food International n.y.(d).

The critique of *Slow Food* is mostly aimed at contemporary global capitalism and how it affects people and their livelihoods. Globalisation as a transnational process is characterised through homogenization and integration of finance markets, states and technologies within free-market capitalism on a global scale. The term “fast” in this context refers to speed of commerce, travel and communication.¹⁵ It describes economic efficiency in order to achieve progress, not taking into account the social and ecological consequences. Globalisation brought technological benefits, and more mobility and freedom for one part of society. At the same time it promoted standardisation over diversity, quantity over quality and the suppression of traditional knowledge. Economic growth was put above social, cultural and environmental interests.¹⁶

2.3.2 Right to self determination

“We are enslaved by speed and have all succumbed to the same insidious virus: Fast Life, which disrupts our habits, pervades the privacy of our homes, and forces us to eat Fast Foods.”¹⁷

The term “enslaved” and “forces us to [...]”, lead to the assumption, that there is an extrinsic power which influences peoples choices. It brings in the aspect of self-determination and raises the question on who decides what people produce and eat. I would like to link this idea with the debate on food sovereignty, which is the call for people’s rights to shape their own food system.¹⁸ I will elaborate that topic in the following chapters.

The phrase “*pervades the privacy of our homes*” can be linked with the thought that “The personal is political”, which derived from the feminist theory and was very much discussed in the 60ies and 70ies. It also fundamentally shaped the development that food became a political issue.¹⁹ Combining the personal and the political makes food a political decision. It’s connected to personal freedom, leisure, artistic appreciation and quality of life and connects pleasure and taste with the question of responsibility. The gastronomic movement combines the quality of life with the appreciation of food

¹⁵Lacy 2000, p. 7.

¹⁶Andrews 2008, p. 35.

¹⁷Slow Food International n.y.(d).

¹⁸Patel 2009, p. 663.

¹⁹Andrews 2008, p. 15.

and wine and the political. The political movement in that time and the activism showed that, access to good food and a good life, is a democratic question and should be obtainable for everyone.²⁰

The role of the consumer is essential in the *Slow Food* ideology. Consumers are seen as co-producers and are equally important in the whole food system. The idea of political consumption implies that the food choices people make can be seen as political statements or even further as protest against the current food system²¹.

Furthermore *Slow Food* argues that consumers are by no means only passive subjects. Looking at food as a product with a history involves both producer and consumer at the same time. Plants are of different origins and places where they evolved naturally or where they were cultivated. Alongside with the place of origin comes the environment and the local knowledge. The product is shaped through the local community, the processing techniques, the recipes, storage, marketing, and of course the culture of eating.²²

2.3.3 The Revolution

*“Our defence should begin at the table with Slow Food. Let us rediscover the flavors and savors of regional cooking and banish the degrading effects of Fast Food.”*²³

This statement clearly indicates that the origins of *Slow Food* were accompanied by revolutionary ideas, and thoughts with the aim to trigger a wide spread protest that starts with food and that evolves into a global movement. The critique of *Slow Food* is mostly aimed at the contemporary global capitalism and how it affects people's lives. The critic of globalisation was shaped by many various intellectual supporters of the movement.²⁴ The intention was to raise awareness, that globalisation made the world faster and at the same time smaller. The critic of the fast life focuses on the global inequalities and the changing way of living.

²⁰Ibid., p. 9.

²¹Sassatelli and Davolio 2010, pp. 203 sq.

²²CSA Centro Piemontese di studi africani n.y.

²³Slow Food International n.y.(d).

²⁴cf. Petrini 2001, pp. 26 sq.

I find the definition originally from Franz Lechner used by George Ritzer very suitable, which describes globalisation as a worldwide dissemination of practise, the extension to relationships across continents, the organization of the social life on a world scale and the creation of a common global awareness.²⁵

Petrini states that Globalisation as such is not all bad. It creates international networks of communication.²⁶ Whereas the position of *Slow Food* is, that cultural standardization is the greatest risk of globalization.²⁷ The main idea however was not to fight against Mc Donald's, which in some respects symbolizes the globalization process of food. It was more about saving local hosterias, to increase the value for local and traditional food in contrast to standardized fast food.

“Our choice is to focus our energies on saving things that are headed for extinction, instead of hounding the new ones we dislike.”²⁸

Eventually Stephen Schneider describes *Slow Food* as “new social movement” that takes over the role of collective action in the context of contemporary capitalism.²⁹ *Slow Food* as a global movement acts as a progressive answer to the standardization of food, and focuses on putting food back in the centre of human culture. Petrini further argues that food is a network “*of men and women, of knowledge, of methods, of environments, of relations – a network in which all participants are co-producers of cultural and culinary knowledge and traditions.*”³⁰

Food has become a highly politicised topic on the international agenda. The modern globalized industrial food system is rather intransparent, which means that the origin and quality of food is not immediately obvious for the consumer in most cases.³¹ Food, food choices and food practices are political. The *Slow Food* movement recognizes the central role food plays in bringing people together in social collectives. It's furthermore a cultural expression.

²⁵Ritzer 2005, pp. 128 sq.

²⁶Petrini 2001, p. 28.

²⁷CSA Centro Piemontese di studi africani n.y. P. 6.

²⁸Petrini 2001, p. 26.

²⁹Schneider 2008, p. 396.

³⁰Petrini 2005b, p. 175.

³¹cf. Lien and Nerlich 2004.

2.3.4 Biodiversity

“In the name of productivity, Fast Life has changed our way of being and threatens our environment and our landscapes”³²

One big part of the *Slow Food* philosophy, which has become even more important lately is the engagement with biodiversity. Central to the discussion is the term eco-gastronomy, which is defined as *“A recognition of the strong connections between plate and planet and the fact that our food choices have a major impact on the health of the environment and society.”³³*

The combination of ecology and gastronomy is very important, both on a global and local scale. Petrini furthermore argues that *“agriculture and ecology are part of gastronomy because they help us understand where our food comes from and produce it in the best possible way – by simultaneously observing the principles of taste, respect for the environment, and biodiversity”³⁴*. Within the community the combination of the two concepts of ecology and gastronomy is a fundamental aspect, which helps individuals to combine both pleasure and responsibility.³⁵

Slow Foods’ official goal is to “[protect] traditional foods, primary ingredients, [conserve] methods of cultivation and processing, and [defend] the biodiversity of cultivated and wild varieties.” The *Slow Food Foundation for Biodiversity*, which was founded in 2003, is active in various activities to “protect food biodiversity and traditions, promoting sustainable agriculture and food sovereignty.”³⁶

The effort to safeguard biodiversity includes the promotion of food products that are close to local communities and traditions. “Artisanal processing methods are the basis of unique products which are an expression of local cultures and free producers from seasonal cycles and market fluctuations.”³⁷

Among the various activities are the “Presidia” projects, with the aim to “sustain quality production at risk of extinction, protect unique regions and ecosystems, recover traditional processing methods and safeguard native breeds and local plant varieties.”³⁸

³²Slow Food International n.y.(d).

³³Slow Food International n.y.(a).

³⁴Petrini 2005b, p. 64.

³⁵Andrews 2008, pp. 19 sq.

³⁶Slow Food International n.y.(c).

³⁷Slow Food Foundation for Biodiversity 2012, p. 9.

³⁸Slow Food International n.y.(e).

To present there are more than 400 Presidia around the world, involving over 12,000 producers.³⁹

“The arc of taste” for example is a project, with the aim to protect endangered food from extinction through standardization. It’s about preserving local food, recipes and production methods. There are about 1,100 foods listed.⁴⁰

2.3.5 Concept of quality – Good, clean and fair

*“Slow Food guarantees a better future”*⁴¹

Following the argumentation of *Slow Food*, sustainability is a big part of their philosophy. Within the *Slow Food* community there is a intensive debate about the quality of food. It’s a very complex issue to find the right parameters to define quality. *Slow Food*’s approach to agriculture, food production and gastronomy is based on a concept of food quality defined by three interconnected principles: “good, clean and fair”. In the manifest for quality the terms are defined as the following:

Good: “a fresh and flavorsome seasonal diet that satisfies the senses and is part of our local culture”;

Clean: “food production and consumption that does not harm the environment, animal welfare or our health”;

Fair: “accessible prices for consumers and fair conditions and pay for small-scale producers”.⁴²

The three principles are part of the *Slow Food* concept of quality. The understanding of quality is a very complex issue. The term was mostly used in reference to certain food scandals. *Slow Food* redefined the concept and linked it with the “local” and “traditional”.⁴³

Petrini states, that “quality is a commitment that is made by the producer and the buyer [...], a political act, and a cultural act [...]” In order to be able to judge quality,

³⁹Slow Food International n.y.(e).

⁴⁰Ibid.

⁴¹Slow Food International n.y.(d).

⁴²Slow Food International n.y.(b).

⁴³Petrini 2007, p. 92.

one needs a lifelong education in food and taste. Quality demands respect for the environment and those producing food.⁴⁴

2.3.6 Networks and Food communities

“That is what real culture is all about: developing taste rather than demeaning it. And what better way to set about this than an international exchange of experiences, knowledge, projects?”⁴⁵

Since 1999 one can observe a thematic change of the mission of *Slow Food*. The focus was shifted from eco-gastronomy to issues concerning developing countries, especially small scale farming and biodiversity. The cultural change of the *Slow Food* mission was obvious by setting up the first *Terra Madre* in 2004. This global event can be seen as a gathering of local *food communities*, farmers, cooks and academics who share ideas, knowledge and passion about food and develop concepts for new food politics action. It’s about creating links and networks for people who share an interest in issues concerning biodiversity and traditional and sustainable agriculture. The aim is to create an international network of food communities, by coordinating the local and national structures and the cultural exchange of local producers worldwide.⁴⁶

The foundation of *Terra Madre* was an important development towards tackling political issues. This was the point where *Slow Food* took an essential step from dealing with gourmet and pleasures to becoming a political movement. It was also the beginning of a new agenda and an enhanced concept called *food community* where producers and consumers were identified as equally important participants in working towards the goals of the organisation.⁴⁷

Especially developing countries were integrated in the agenda by forming a new concept with a strong focus on sustainable agriculture due to the drastic conditions for smallholder farmers in the global South. The first *Terra Madre* in 2004 was fundamental for reach out to a wider public. The emergence of this international event was also crucial in regard to discussing sustainable development. In various panel discussions the focus was to rethink former development concepts whereat “the answer to global

⁴⁴Ibid., p. 93.

⁴⁵Slow Food International n.y.(d).

⁴⁶Sassatelli and Davolio 2010, p. 211.

⁴⁷Andrews 2008, p. 49.

crisis such as hunger and food insecurity cannot be fought with donations”.⁴⁸ The unmistakable critic about western aid approaches was attended by the concept of self-determined development through empowerment of the local population by strengthening local policies regarding food production and education.⁴⁹

Slow Food, as a grass root organisation defines itself not simply as a consumer movement, but more precisely describes itself as “a movement which is committed to the liberation of the producer.”⁵⁰

2.4 The central role of food

The *Slow Food* manifesto was the first paper that described the philosophy of the movement. Throughout the years the mission and aims have evolved. The initial ideas were based on the right to pleasure and the awareness of the changing living conditions and the increase of speed of the rhythm of life. From the mid 90ies onwards the focus shifted more towards protecting “a great agrifood heritage threatened by mass production”. The Ark of Taste and the Presidia were set up to defend local varieties, animal breeds and knowledge.⁵¹

With the first *Terra Madre*, in 2004 the principles of “good, clean and fair” as a strategy for a sustainable food system were introduced.

*“Terra Madre makes us think about a concept of food quality based not only on taste properties, but also on respect for the environment and fair earnings for producers.”*⁵²

Food communities were put at the center of attention. In 2007 the World Congress in Puebla, was then the starting point for a new approach taking place not only within the *Slow Food* movement. A holistic vision of gastronomy which respects various cultures and the limits of ecosystems.⁵³

Terra Madre was also a sign of increasing international networking, especially in developing countries. The FAO acknowledged the “Slow Food Foundation for Biodi-

⁴⁸Frei Betto, quoted in Andrews 2008, p. 51.

⁴⁹Ibid., pp. 50 sq.

⁵⁰Ibid., p. 88.

⁵¹Petrini et al. 2012, p. 3.

⁵²Ibid., p. 4.

⁵³Ibid., p. 4.

versity” as a non-profit partner to cooperate with. This enabled *Slow Food* a better collaboration with NGOs involved in various development projects.⁵⁴

The early path and orientation of the *Slow Food* movement has changed from proclaiming the right to pleasure towards defending agricultural biodiversity with a special focus on developing countries. One of the newest projects “GranOS” underpins the continuation of this new path. Initiated by the Foundation for Biodiversity this encyclopaedic web catalogue of seeds aims at protecting vegetable varieties from extinction.⁵⁵ “The project will collect and publish genetic, anthropological, gastronomic, pharmacological, and cultural information on the GranOS website.”⁵⁶

The new path is based on the central role of food, which goes beyond the right to food for all human beings and respects the rights of the whole planet. “The central role of food as a point of departure for a new form of politics, for a new economy and for new social relations — has become a shared certainty.”⁵⁷

The articulation of *The Manifesto* enables to identify the multiple goals of *Slow Food* and the ideology behind their actions. Basically what *Slow Food* provides is education about food and agricultural production in order to raise awareness and to find ways for promoting a “good, fair and clean” food system with all of its aspects. The movement calls for a critical reflection on the industrialisation of food, and offers a holistic approach to rethink food production in order to make it more sustainable.

⁵⁴Sassatelli and Davolio 2010, p. 211.

⁵⁵Petrini et al. 2012, p. 4.

⁵⁶Slow Food International 2008.

⁵⁷Petrini et al. 2012, p. 5.

3 The Food System Approach – A theoretical concept

In this chapter I will describe the Food System Approach, that I will later use to analyse the ideas of the *Slow Food movement* for a more sustainable food system. I decided to use the food systems approach for further analysis, based on the assumption that the growing size and complexity of food systems and the long ways of transportation, have not only enforced the degradation of our natural environment, but also have made it more difficult to identify the interactions within the food system. In addition to climate change, biodiversity loss and water scarcity have brought along new challenges for farming and agricultural production.

For my examination I'm working with the following definition on food systems.

“Food systems encompass the ecosystem and all activities that relate to the production, processing, distribution, preparation and consumption of food. A food system also includes the inputs needed and outputs generated by each of these activities as well as their outcomes, insofar as they contribute to food and nutrition security. Such outcomes include food availability, access and use. A food system operates within, and is defined by, social, economic and environmental contexts. Interactions between and within those contexts influence both activities and outcomes.”¹

Basically food systems determine the quantity, quality, diversity and nutritional outcome of food that is being consumed, and whether it is available, affordable, acceptable and of adequate quantity and quality. Factors that influence food systems are alongside to agricultural production, public investments, and infrastructure. Food based approaches recognize the central role of food in improving nutrition, and moreover illustrate the nutritional, physiological, mental, social and cultural aspect of a healthy diet.²

The FAO even more states that

“Creating a strong nutrition-enhancing food system is arguably the most practical way to address malnutrition, as food choices and consumption patterns ultimately become integrated into the lifestyle of the individual.”³

¹FAO 2012, p. 5.

²FAO 2013b, p. 6.

³Ibid., p. 6.

In fact there is not a single food system, but rather multiple systems that are constantly changing. The global trend is going from a local to a global level which influences the whole food chain and how people produce, process and acquire food. Even smallholder farmers rely on products which have been processed in other parts of the world. As a result, supply chains are lengthening, which directly enlarges the distance between consumer and produce and therefore improves transportation networks and increases trade.⁴

These new dimensions of food systems are raising questions on what is needed to create a viable food system that accounts for social, economic and environmental concerns for people living in the global north and south. The Food System Approach, as a theoretical concept, offers a lens to dissect the new emerging actors and relationships. Especially towards the question on how to feed the growing world population, a systems approach can help to identify the various interactions taking place within the system. The approach is meant as a tool to recognize the various consequences that interventions and food policies can have to certain actors.⁵

Food and nutrition security as such is one desirable outcome of food system activities. The FAO defines global food security as following:

*“Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.”*⁶

Therefore the food system approach is used as a research tool to address issues of malnutrition and hunger. Nevertheless it's influenced by multiple factors. When a food system is not able to deliver food and nutrition security, it means that it's vulnerable to certain stresses. These stresses can arise from economic shocks, institutional failure, actors in conflict, or environmental change. The outcomes of a certain food system are triggered by these influences or decisions taken from individuals or households. This leads to certain consequences effecting the ecosystem, such as global environmental change.⁷

⁴FAO 2013b, p. 6.

⁵Ericksen 2008b, p. 3.

⁶FAO 2003.

⁷Ericksen 2008b, p. 2.

Food Systems function as a construct that underpins global food and nutrition security, by linking food chain activities of producing, processing, distributing and consuming food to a range of social and environmental contexts.⁸ System theories are useful to describe interactions and processes on various scales and dimensions, in order to get a better understanding of the complex construct.⁹

3.1 Identifying the problem

The fact that the global food system is under high pressure has become widely recognized and is being discussed frequently. Elementary is, that despite of many efforts made in the past century, chronic and acute food and nutrition insecurity persists in parts of the world. In this current situation almost one billion people worldwide go hungry, which is defined as a caloric intake of less than 1,800 calories a day.¹⁰ Two billion are malnourished, lacking the essential micro-nutrients they need to lead healthy lives. One billion adults are overweight and almost half a billion are obese. These figures show profound imbalances in consumption and diets within societies.¹¹

“The world now produces enough food to feed its population. The problem is not simply technical. It is a political and social problem. It is a problem of access to food supplies, of distribution, and of entitlement. Above all it’s a problem of political will.” (Boutros Boutros-Ghali, Conference on Overcoming Hunger, 1993)¹²

The *IAASTD Synthesis Report* announces that the world food system provides an adequate supply of protein and energy for over 85 % of the global population. In fact only two thirds have access to sufficient dietary micronutrients. The poor diet diversity is a result of the increasing monocultures of staple food crops like rice, wheat and maize.¹³

About 75-80 % of the world population lives in rural areas and is directly or indirectly dependent on agriculture and food production to secure one’s livelihood. Among the causes for food and nutrition insecurity are limited access to natural or financial

⁸Liverman and Kapadia 2010, p. 3.

⁹Eriksen 2008b, p. 3.

¹⁰FAO 2013b, p. 3.

¹¹Ibid., p. 3.

¹²Conference on Overcoming Global Hunger, Washington 1993, quoted in Ingram 2011.

¹³IAASTD 2009, p. 54.

resources, inequitable trading conditions on the world market, marginalisation of small-scale farmers and lacking infrastructure as well as political support. In many areas people are confronted with violence and war. Other factors are environmental stresses, and the degradation of ecosystems.¹⁴

Agricultural production is by far not the only factor that's important when discussing food and nutrition security. A holistic understanding recognizes the importance of linking food and nutrition security to health issues. It's not only the amount of food, that is crucial in this context, but the access and availability of the quality and variety of food, which represents a nutritious diet that is essential for a healthy life in dignity. Above that, inadequate access to clean drinking water, health care and sanitation, as well as food education, can have tremendous effects on the nutritional status of people.¹⁵

The four dimensions of food and nutrition security include "availability", "access", "use and utilisation" and "stability" and will be discussed in detail later on.¹⁶

On a political-economic level, the current food system is built on the ideology that justifies exploitation of natural resources and labour. The system based upon free trade and open market generates uneven outcomes, manifests wealth accumulation by corporate interests and hunger and food insecurity for a huge part of the population.¹⁷ Perhaps food is unique among commodities since it is fundamentally necessary for human existence. In this respect, "any solution to the current crisis should begin with the premise that food should not be subject merely to regulation of the market, that food and nutrition security should be a central goal for state policy."¹⁸

3.2 Food Systems for Food and Nutrition Security

I consider food as the starting point for all examinations on food and nutrition security and food systems. Food production is directly connected to the environmental conditions, weather extremes and climate fluctuations. Since the scale of interaction has become more global, food systems and networks of production, consumption and

¹⁴Gruber and Hauser 2011, p. 11.

¹⁵Ibid., p. 12.

¹⁶InWEnt 2009, quoted in *ibid.*, p. 20.

¹⁷Rosin, Stock, and Campbell 2012, p. 9.

¹⁸Zerbe 2009, p. 172.

governance have become increasingly complex. The risk of climate change, biodiversity loss, soil degradation and water scarcity are threats that raise even more concerns for global food and nutrition security. Food systems offer a lens to study these new relationships. The concept of food and nutrition security alone has advanced over time. I'd like to outline the following definition on food and nutrition security.

“Food and Nutrition Security is achieved, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactorily utilized by all individuals at all times to live a healthy and happy life.”¹⁹

The concept of food security was developed over time. The focus was once, specially followed by the World Bank, to secure access to food.²⁰

The broadening of the definition evolved over time. By including the nutrition aspect to the food security concept proposed by the FAO, the linkage between food security and individual health becomes more obvious. A holistic understanding of food and nutrition security recognizes the nutritional value of food, in terms of protein, energy, vitamins and minerals. The importance of caring practices, health services and healthy environments refers to the “nutrition security” and is vitally important for the health status of individuals.²¹

Most food security research was based on aspects around questions, on how to increase food production. As mentioned above more than enough food is produced to adequately feed the global population, however yet 868 million people remain undernourished in terms of energy consumption and two billion people suffer from one or more micro-nutrient deficiencies.²² This indeed indicates that research is needed, which considers the various aspects of food and nutrition security and food systems.

Over the recent decade there was a shift within the research community towards a more holistic approach facing long-term food and nutrition security. The more integrated concept involves Global Environmental Change (GEC) as well as social and political dimensions as an important factor in the whole debate. The increasing complexity in this field, triggered amongst others by globalisation processes, and the

¹⁹Weingärtner 2009, p. 5.

²⁰Weingärtner and Trentmann 2011, p. 4.

²¹Ibid., p. 4.

²²FAO 2013b, p. 3.

many actors involved in the food system and their interaction with each other require an interdisciplinary approach.²³ The food system approach is a theoretical concept for framing food systems. The basic principle is that food systems encompass social, economic and political as well as ecological issues. The approach is used in the new interdisciplinary food security research project with the value to link ecosystem services to human well-being.²⁴

The discussion of food and nutrition security also gained more importance on the *Slow Food* agenda. Starting as an anti-globalisation movement, *Slow Food* as well has shifted its main focus towards addressing food and nutrition security. “*While the approach, objectives and methods remain the same, there is a change in the importance attached to different aims: priority is given to fighting poverty and achieving food security through the reacquisition of local agricultural tradition.*”²⁵

Especially through the implementation of *Terra Madre*, the movement addresses food and nutrition security by stating that access to quality and diversity of food is only guaranteed by a systems which connects with the local culture. I will outline the *Slow Food* sustainability strategy in detail later on. The *Slow Food* movement wants to emphasize on certain aspects concerning food systems, and aims at improving the basic conditions for better nutritional outcomes by targeting a long-term goal.

3.3 Food System Activities

Food system activities have contributed to a considerable extent to food and nutrition insecurity and global environmental change. The current food system promotes global imbalances and puts global food security under immense pressure. In the following sections I will outline the food system activities and their contribution to environmental change and food and nutrition insecurity.

3.3.1 The activities

Food systems comprise a set of activities and outcomes ranging from production to consumption, which involve both human and environmental dimensions. The primary

²³Ingram 2011, cf.418.

²⁴Ingram, Ericksen, and Liverman 2010, p. 40.

²⁵CSA Centro Piemontese di studi africani n.y. P. 7.

goal of food systems is to safeguard food and nutrition security. The food system activities involve the following steps:

Producing

The *producing of food* includes all activities involved in the production of raw materials. Amongst others these include cultivating land and seeds, breeding and slaughtering animals, or planting, growing and harvesting food. Actors involved are farmers, hunters and fishermen. The multiple suppliers of production inputs include agrochemicals, agricultural labourers, and land owners.²⁶

From a systems perspective there are various factors that have an impact on these activities, such as climate conditions, land tenure, prices of seeds and other input materials, agricultural technology, government subsidies and land rights.²⁷

Processing and packaging food

Processing and packaging food includes all transformations of raw food, like grain, vegetable, fruit and animals, before it gets sold on the market. This process is important for the economic value of a product, and is therefore also called “value addition”. These activities include storage, drying, transforming (f.e. grain into bread) and packaging.²⁸

Retailing and distributing

Retailing and distributing is the step between the producer and the final market. This includes transportation, delivery, trading, marketing and supermarkets. This level is very much influenced by transportation networks, infrastructure, trade regulation, and government programs. What matters are how markets are organised and located and which global markets are accessible.²⁹

Consuming

Consuming includes all consumers and the actors who have an influence on what is being consumed, for example advertisers, consumer groups or market regulators.

²⁶Ingram 2011, p. 420.

²⁷Ericksen 2008a, p. 238.

²⁸Ibid., p. 238.

²⁹Ibid., p. 238.

Among the activities are purchasing, preparing, eating and digesting food as well as handling food waste. This level is very much influenced by the purchasing power of people, income levels, cultural traditions or preferences and social values, as well as education and health status.³⁰

3.4 The Food System Outcomes

The food system approach, illustrates the outcomes of a functioning food system for the long term. The outcomes should generate food and nutrition security in all of its dimensions.

3.4.1 Food Availability

In general *food availability* refers to the “physical existence of food” either from its own production, or from the market. Food availability is determined by the physical quantities of food that are produced, stored, processed, distributed and exchanged.³¹

On the national level food is made available through domestic food production, commercial food imports, food aid and domestic food stocks.³²

Concerning ***production***, this would address the question of how much and which types of food are available from the local agricultural production. Land rights and ownership as well as human capital and environmental conditions are critical in this context.³³

In the case of ***distribution***, availability has a more physical approach and is based around the question on how food is made available for people, in what form, when and to whom.³⁴

Regarding ***exchange***, availability is also dependent on how much of the food is received through trading, purchasing or loans. This is where the aspect of purchasing power, gender and age structure, subsidies, terms of trade and currency value come in.³⁵

³⁰Ericksen 2008a, p. 238.

³¹FAO 2008b, p. 20.

³²Weingärtner 2009, p. 5.

³³Ericksen 2008a, p. 239.

³⁴Ibid., p. 239.

³⁵Ibid., p. 239.

The FAO explains in more detail, that the actual available food is “the net amount remaining after production, stocks and imports have been summed and exports deducted for each item included in the food balance sheet.” What plays a major role here, is international trade and domestic production, which assures that a country’s food supply is sufficient. On a household level this means that the food supply depends on the domestic market. High food prices are usually the result of inadequate availability, which causes food insecurity for those who are not able to afford enough food to cover their food demand. The consequences are food and nutrition insecurity, food riots and social unrest. In addition growing scarcities of water, land and fuel cause pressure on food prices.³⁶

3.4.2 Access to food

“*Food accessibility*” is a measure of the ability to secure entitlements, which are defined as the set of resources (including legal, political, economic and social) that an individual requires to obtain access to food”³⁷

The advantage of entitlements that determine people’s access to food depends on allocation mechanisms, affordability, and cultural and personal preferences for particular food products.³⁸

The purchasing power of households or communities in relation to the price of food, thus the *affordability*, is one aspect. *Allocation* describes the economic, social and political mechanisms that govern when, where and how food can be accessed by consumers. *Preferences* of consumers derive from social and cultural norms and influence the choices they make on which types of food they prefer. The pivotal factors are religion, season, advertising, preparation requirements, human capital, tastes, customs and female labour force participation.³⁹

Weingärtner states that “access is assured when all individuals within those households have sufficient resources to obtain appropriate food for a nutritious diet.”⁴⁰ Yet this is dependent on the level of household resources such as capital, labour and knowl-

³⁶FAO 2008b, p. 20.

³⁷A. Sen 1989, quoted in *ibid.*, p. 20.

³⁸*Ibid.*

³⁹Ericksen 2008a, p. 239.

⁴⁰Riely et al. 1995, quoted in Weingärtner 2009, p. 5.

edge. Changes in physical, social or policy environment can have drastic consequences for the food and nutrition security status of individuals, households or communities, as for instance droughts or social conflicts.⁴¹

3.4.3 Use and Utilization

Food *utilization* and the *use* of food address aspects on how a person is able to secure essential nutrients from the food it consumes.

There are three aspects on *Food Utilization*. First of all ***nutritional value*** measures the nutritional value of the diet and indicates how much of the daily requirements of vitamins, protein, and micro-nutrients are ingested through food. It depends also on the composition and methods of preparation. Access to hygiene standards, and clean water, as well as education, quality and variety of food play an important role in this context.⁴²

The social value refers to the question, of how food is prepared and consumed and is very much shaped by cultural and social aspects. Community and household relation and cultural customs are important determinants in this context. This also includes the issue of what kinds of food should be served and eaten at different occasions and seasons.⁴³

Food safety is important in respect of food poisoning which could occur during production, processing and packaging, distribution or marketing. The quality and safety of food supply can cause a loss of nutrients in the food and spread food-born diseases like Salmonella.⁴⁴

In terms of the *Use* of food, the socio-economic aspect plays an important role. If there is sufficient and nutritious food available and accessible at the same time, households make decisions on what kind of food is purchased and allocated and in the end prepared and consumed. The social aspect of food plays a vital part and finds its expression in ritual meals, cultural habits, and traditions. What is important here, is

⁴¹Weingärtner 2009, p. 6.

⁴²Ericksen 2008a, p. 240.

⁴³Ibid., p. 240.

⁴⁴Ibid., p. 240.

the question on how the food is used, and is very much determined by knowledge and traditions.⁴⁵

Concerning food utilisation the linkage to health is vitally important. It depends very much on the ability of the human body to convert food into energy which effects the health status of individuals. What matters here is, if people live in healthy environments, where safe drinking water and adequate sanitary facilities and proper health care exist. Another aspect of food utilization is the knowledge of food storage, preparation and composition of a varied diet.⁴⁶

3.4.4 Stability

A level that is crucial for analysing the sustainability of the food system is the aspect of stability. What's important here is the temporal dimension of food and nutrition security. Inadequate access to food on a periodic basis can be a result of adverse weather conditions, political instability or economic factors.⁴⁷ The time span over which food and nutrition insecurity occurs is significant for temporal stability. Short-term, exogenous shock such as droughts or floods for example can generate a temporal food shortage. Cyclical food and nutrition insecurity results due to the various seasons (harvesting, plating of crops) which affects the availability of food.⁴⁸

3.4.5 Other outcomes

Food systems and food and nutrition security are affected by all kinds of social, economic or environmental changes, which make it a complex field of research. Socio economical factors and global environmental change have far reaching consequences both on the global and local scale of food systems. These factors produce environmental and socio economical feedbacks that effect social and environmental welfare.⁴⁹

Food system activities do not only contribute to food security but furthermore to environmental outcomes, which are described as “environmental security”.⁵⁰

⁴⁵Weingärtner 2009, p. 6.

⁴⁶Weingärtner and Trentmann 2011, p. 6.

⁴⁷FAO 2008a, cf.

⁴⁸Weingärtner 2009, p. 6.

⁴⁹Ericksen 2008a, p. 235.

⁵⁰Ibid., p. 240.

“Ecosystem services are those that people rely on for food production and health, as well as those services that ecosystems require to sustain themselves.”⁵¹

Ecosystem services involve natural capital such as land, water and other natural resources that can provide a basis for various activities. Moreover ecosystems provide services like provisioning, regulation, supporting and cultural services.^{52,53}

As outlined in the Millennium Ecosystem Assessments (MA), food systems and human actions effect and endanger ecosystem services.

The MA were initiated under UN Secretary-General Kofi Annan in 2001, with the aim to assess the consequences of the change of the ecosystem for human well-being. The MA should provide a scientific basis for developing strategies to “restore, conserve or enhance the sustainable use” of these systems.⁵⁴ One important discovery was that “human actions are depleting Earth’s natural capital, putting such strain on the environment that the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted.”⁵⁵

Another outcome is the “social welfare”. Food systems function as a source of income, wealth and social and human capital, for those people directly involved in the food supply chain.⁵⁶

The dimensions of food and nutrition security are sometimes hard to distinguish. This is because there are various definitions and studies. I follow a more holistic concept of food and nutrition security to underline the “good, clean and fair” strategy of *Slow Food*.

In this chapter I outlined the food system approach with the objective to embed the food and nutrition security debate in the broader theory of food systems to demonstrate the complex interactions and linkages. According to my research, *Slow Food* as a global movement, operates on the level of food system activities with the aim to generate sustainable environmental and socio economical outcomes that promote food and nutrition security in a way that respects the environment.

⁵¹Ericksen 2008b, p. 5.

⁵²Ericksen 2008a, p. 240.

⁵³Millennium Ecosystem Assessment 2005.

⁵⁴Ibid.

⁵⁵Ibid.

⁵⁶Ericksen 2008a, p. 240.

The *Slow Food* concept of quality refers to the nutritional value and outlines the social and cultural role of food. Their intention is to call for the right to *good, clean and fair* food for all, with a special emphasis on justice for the environment and the producers. *Slow Food* follows a strong and differentiated approach: “[F]ood security, seen as quality, access to and diversity of food is not guaranteed by systems which produce a few products over large extensions of land without connections with local cultures and with the sole objective of improving positions on international markets.”⁵⁷ This idea is implemented through various activities, like “The Thousand Gardens” project, where control over food gardens is given to the local community, with the objective to fight against land grabbing and dependency on the global markets or multinationals. For *Slow Food* “food security, [and] the right to food can only be achieved by respecting cultural diversities, which creates physical and psychological well-being inside communities, and also small local economies, which take care of their areas and revitalize business activities and human growth to become universally repeatable and adaptable model experiences.”⁵⁸

⁵⁷Petrini et al. 2012, p. 7.

⁵⁸Ibid., p. 7.

4 Food systems under pressure

4.1 Vulnerability of Food Systems

A food system is vulnerable when one or more of the four components of food and nutrition security – food availability, food accessibility, food utilization and food system stability is uncertain and insecure.¹

The vulnerability of food systems occurs, when food systems fail to deliver food and nutrition security, in all its dimensions. This can result due to economic or environmental shocks, structural issues, conflicts among actors, or environmental degradation.²

The vulnerability of humans and the ecosystem is dependent on the environmental conditions, changing ecosystems, degradation of ecosystem services and climate change. Secondly it's dependent on human potential to socio-cultural aspects like education, health, age, gender, ethnicity and consumption patterns.³

Food systems interact with culture, politics, societies, economies and ecosystems. Therefore, when discussing sustainable food systems I find it important to outline the current forces that put food systems under pressure.

Concerns over the current and potentially harmful consequences of global environmental change for food systems are motivated by certain aspects causing food system pressure. Food system activities implicate directly or indirectly a range of processes, which have negative social (in terms of health), economic and environmental outcomes. Global environmental change as an outcome in turn effects food system activities and outcomes, and can therefore have a negative impact on food and nutrition security, or food system performance. This means food systems are vulnerable to certain stresses, and it takes an interdisciplinary approach to understand the implications of it.⁴

The *Slow Food* movement emerged in reaction to, and gained its importance due the worrying consequences of a globalised food system. Therefore I find it essential to outline the most concerning trends and developments causing global environmental

¹FAO 2008b, p. 20.

²Ericksen 2008a, p. 240.

³Gruber and Hauser 2011, p. 66.

⁴Ericksen 2008a, p. 240.

change and socio-economic drivers that influence food system activities and food system outcomes. In order to further promote a more sustainable food system it's important to understand the major challenges effecting our food right now, and thus illustrate potential alternatives for the current system.

As the various outcomes of food system illustrate, the current food system is under high pressure and can not guarantee food and nutrition security for a global world population. I found the following aspects, discussed in the next section, important to understand what exactly threatens food system activities and outcomes.

4.2 Drivers for Global Environmental Change (GEC)

There have always been fluctuations in weather conditions and climate change. As a result of industrialisation however, changes in climate on a global scale have become more obvious. Human activities, especially the intensive use of fossil fuels for energy production, transportation, as well as industrial and agricultural production are the main drivers for this development.⁵ In the following I will outline the main causes for Global Environmental change.

4.2.1 Industrial Agriculture and GMOs

Since 1947, food systems have become more industrial, commercial and global. The use of mechanical, chemical and biological technologies for cultivating land has changed worldwide agricultural production.⁶

The gradual industrialisation is characterized by the use of chemical fertilizers, excessive cultivation, intensive soil watering, overgrazing and deforestation, along with exorbitant use of fossil fuels. The focus of intensified agriculture is on productivity and maximisation of yields. Undoubtedly the result of this kind of agricultural practice has tremendous effects on the ecosystem and environmental conditions. The consequences are the loss of biodiversity, soil erosion, water pollution and water shortage as well as climate change. The use of pesticides and chemicals effects soil and water quality in a

⁵Gruber and Hauser 2011, p. 13.

⁶FAO 2013b, p. 3.

negative way. It's not only the ecosystem that suffers from industrial agriculture but in the end it affects people's life and health.⁷

The dominant system of Industrial agriculture increases instability and vulnerability because it's built up on "uniformity and monocultures, on centralized distribution systems and on dependence on intensive energy and water inputs."⁸

When it comes to food and nutrition security, one essential part is selecting the seeds for the next season. Selecting seeds used to be family business. Through the appearance of Genetically Modified Organisms (GMO) the seeds got under the control of transnational concerns.⁹

The first commodification of seeds was with hybrids and was used especially for corn in the USA. The technology of splicing genes was initially developed at universities. The consequences of this technology was and is substantially unknown, and there is no system that assesses far reaching effects on humans and ecosystems. Global companies, like Monsanto, invested in this technology and claimed patents, to further sell the GMO seeds to farmers worldwide. GMOs were supposed to produce more food, yet it resulted in monocultures which destroy biodiversity and create monopolies. These developments in summary make up the term "The green revolution".¹⁰

Genetically modified crops are posing a tremendous threat for local species and the ecosystem, because there are still not enough long-term studies on the effects these crops have on people and the environment.¹¹

The critical aspect for farmers though, is that most of these GMOs increase yields in the first year, but cannot be cultivated for the following season, which puts farmers under high dependency. GMOs erase years of agricultural traditions and culture. This development is also part of the "Green Revolution"

4.2.2 The New Green Revolution

The FAO outlines, that by 2050 the world's average daily calorie demand could rise to 3 070 kcal per person, an 11 percent increase in comparison to the 2003 level.¹²

⁷Gruber 2009, p. 13.

⁸The International Commission on the Future of Food and Agriculture 2008a, p. 12.

⁹Shiva 2009, p. 44.

¹⁰Ibid., p. 44.

¹¹Petrini and Padovani 2005, p. 97.

¹²FAO 2006b, p. 3.

“In order to feed this larger, more urban and richer population, food production (net of food used for biofuels) must increase by 70 percent. Annual cereal production will need to rise to about 3 billion tonnes from 2.1 billion today and annual meat production will need to rise by over 200 million tonnes to reach 470 million tonnes.”¹³

The strategy to get there was announced by former general secretary of the UN, Kofi Annan and is mostly based on external inputs like industrial fertilizers, commercial seeds and agrochemicals. The solution for meeting the challenges of globalisation, was the increase in productivity, efficiency, as well as competitiveness and market inclusion for small holder farmers. African agriculture was forced to focus on products made for exports, like flowers, fruits and vegetables as well as agro fuels to increase income. The agro industry perceived potential for high profits in this sector and reinforced efforts to influence seed policies and trade agreements. Also bilateral donors as well as, development agencies and international financial institutions like the world bank raised their financial investments with the objective to develop the African agricultural sector.¹⁴

High financial inputs also came from the Rockefeller Foundation as well as from the Bill and Melinda Gates Foundation, who provide financial capital and formed the “Gates Foundation’s Alliance for a Green Revolution in Africa (AGRA)”.¹⁵

The high capital expenditures, provided by international donors and governments, were partly combined with economic interests.¹⁶ The new Green Revolution promoted to increase food security, resulted in increasing dependency on foreign inputs and patent-protected plant varieties, and foreign aid.¹⁷

4.2.3 Global Environmental Change

Ecosystems function as groundwork for food systems.¹⁸ As outlined previously, according to the “Millennium Ecosystem Assessments”, human activities threaten ecosystem services. Agriculture is in fact one of the leading causes for environmental pressure

¹³FAO 2006a, p. 2.

¹⁴Hoerning 2010, p. 74.

¹⁵Giménez and Altieri 2013, p. 92.

¹⁶Hoerning 2010, p. 75.

¹⁷Altieri 2009, pp. 102 sq.

¹⁸Ericksen 2008b, p. 3.

provoked mainly by intensified agricultural production and the change of consumption patterns.

Since the beginning of the Industrial Revolution, one can observe that the level of carbon dioxide in the atmosphere has increased exponentially. This increase was primarily caused by the burning of fossil fuels. Human activities, such as deforestation and the changing agricultural production methods, resulted in increased greenhouse gas concentrations (methane, nitrous oxide, carbon dioxide). The balance between absorption and emission of energy is disrupted, which leads to global warming and changes of climate.¹⁹

Carbon dioxide emissions are mainly caused by the loss of soil carbon to the atmosphere, which results as a consequence of intensive land use, like the drainage of wetlands, deep plowing, the use of heavy machines, overgrazing, desertification and the cultivation of large scale monocrops. Therefore industrial agriculture contributed to environmental change on a global level.^{20,21}

Global environmental change affects the whole world population, but has the most threatening consequences for the rural population of the global south. Small-holder farmers will have to expect a higher chance of extreme weather conditions due to climate change. These include hurricanes, droughts, as well as heavy rains and floods. Furthermore there will be a loss of arable land due to the rise of the sea level, as well as soil and water erosion.²²

Environmental changes will lead to the alteration of land use, with tremendous consequences for small-holder farmers. Among the most urgent challenges are the declining water availability, and its quality, the loss of biodiversity, access to seeds and local plants and animal genetic resources and local capacities to mitigate and adapt to climate change. All these factors will directly influence food production and therefore the availability of food.²³

Among the main challenges for guaranteeing food and nutrition security, in the context of climate change, is the loss of biodiversity and the degrading ecosystem

¹⁹Kromp-Kolb 2010, p. 42.

²⁰Ibid., p. 42.

²¹The International Commission on the Future of Food and Agriculture 2008a, p. 13.

²²Kromp-Kolb 2010, pp. 42 sq.

²³IAASTD 2009, p. 24.

services, which implies a destruction of livelihood and therefore the basis of existence. Conflicts over natural resources such as land and water can trigger political instability and violent actions.

Global Environmental Change has different consequences for local populations and regions, and threatens food and nutrition security in all its dimensions.²⁴

4.3 Socio-economic drivers

In addition to global environmental change there are various socio-economic drivers that interact with food systems. Social changes in demographics, economics, socio-political contexts, cultural context as well as in science and technology influence the food system activities and outcomes.²⁵ In the following I will outline the main socio-economic drivers and their effects.

4.3.1 The appearance of a fast life

Industrial Agriculture came along with the worldwide phenomenon of globalisation. In this context globalisation *“refers to the reduction in barriers to the cross-border the movement of goods, services and capital; an increased flow of commodities, technologies, information, financial capital, modes of distribution and marketing [...]”*²⁶

The process of globalisation has a huge impact on food systems all over the world. Food systems are not at all static constructs. Globalisation resulted in a greater availability and diversity of food for one party of the global society.²⁷

Many of these changes are connected with aspects like urbanization, increasing incomes, market liberalization and foreign direct investment. New players like huge supermarket chains occurred and posed a threat to small farmers markets and local structures. The global interactions and the growing size of food systems brought in even more complexity to the systems. Supermarkets offered competitive prices and convenience products, which satisfied the needs of more and more consumers living in a highly globalised world with “fast” lifestyles. Changes affected not only consumer

²⁴Gruber and Hauser 2011, p. 16.

²⁵Ericksen 2008a, p. 239.

²⁶Shetty 2003, quoted in Kennedy, Nantel, and Shetty 2004, p. 3.

²⁷Ibid., p. 1.

choices but also dietary patterns and food culture in a very dramatical way. Food availability seemed to have increased, at least for a large part of the world.

4.3.2 Population growth and urbanisation

Within the most discerning threats on the demand side for food are trends in population size. The latest revision of the UN population prospects states, that the world population will grow up to 9.1 billion by 2050. Most of this increase will take place in developing countries.²⁸

However the assumption that millions of people go hungry every day is due solely to the increase of the population would be narrow-minded. As stated already, global food and nutrition insecurity is a complex issue, which cannot be reduced to a problem of productivity alone.

Populations vary from country to country. One must distinguish between urban and rural populations. Especially developing countries face the challenge of urbanisation, which leads to the result that less people are involved in agriculture. By 2050 the UN expects that 70% of the entire African population will live in cities. The cities don't have the adequate infrastructure for this fast growing number of people moving there. Urban areas lack of basic services – like water, sanitation, electricity, health care and waste disposal. In most cases, this leads to the development of city slums.²⁹

The urban population is faced with a huge dependency on the agricultural production of its surroundings. Food insecurity for city dwellers will most likely be a consequence of unemployment, low income or fluctuating food prices.³⁰

4.3.3 Consumption patterns

Nevertheless the demand for food is not only caused by population growth, as Kearney states, but a rise in consumption per person.³¹ His thesis is, that there is a rising demand for “high energy food” which requires more resources. For example meat production requires first of all grain for feeding the livestock, which is then consumed by people.

²⁸FAO 2006a, p. 2.

²⁹FAO 2009, p. 3.

³⁰UNSCN 2010, pp. 87 sq.

³¹Kearney, quoted in Godfray et al. 2010, p. 2770.

The so called “nutrition transition” is what happens in many developing countries. It’s basically a shift away from diets based on grains, roots, tubers and pulses towards a diet which contains energy-rich foods like animal source foods, sugars, fats and sometimes alcohol.³² The growing consumption of “High energy food” causes both the risk of obesity for those people consuming more of these products, and causing pressure on scarce resources such as water and land.³³

According to Guyomard et al. the worldwide eating patterns indicate similar characteristics. The food transition process, which started in the developed countries, is now reaching developing and emerging countries, which implies that food chains are becoming more complex. In addition, more food is eaten away from home, which results in more waste and widens the gap between producer and consumer.³⁴

Furthermore the competing demand for food and other products like animal feed, fuels, agrofuels and textiles results in a conflict over land and the rights of its use. Another consequence is the increasing price for raw materials, which affects the poorest part of society.³⁵

The result is, that food production is put under high pressure and the circumstances will lead to increasing competition for the most essential resources such as water and land.³⁶

4.3.4 Marginalisation of Small scale farming

Small-scale farmers worldwide, and among them especially woman, are facing an on-going marginalisation, which makes their situation especially precarious. They are confronted with an uneven distribution of productive natural resources and are lacking access to adequate infrastructure and markets with fair trading conditions. According to FAO figures, around half of the people living in hunger are small-holder farmers.³⁷

In contrast to small-scale farmers, transnational companies have a powerful impact on global markets. The Common Agricultural Policy (*CAP*) of the European Union is still focusing on productivity. The implementation of subsidies for many agricultural

³²Popkin&Gordom-Larsen 2004, quoted in Godfray et al. 2010, p. 2770.

³³Ibid., p. 2770.

³⁴Guyomard et al. 2012, p. 2.

³⁵Koerber et al. 2009, quoted in Gruber and Hauser 2011, p. 16.

³⁶Godfray et al. 2010, p. 2771.

³⁷World Food Programm n.y.

products, coupled with the technological progress, resulted in excessive surpluses. The highly subsidised goods are flooding global markets, with cheap products, which are suppressing local small scales farmers.³⁸

Sofia Naranjo tries to deconstruct the prevailing role of peasants, which is dominating development policies and discourses. She argues that the prevalent view is “that peasant farming systems are of low productivity and therefore economically inefficient”. “Peasants are unable to even feed themselves, and that peasant farming invariably leads to environmental degradation”.³⁹ Her argument is, that this assumption is not true and that the current development policies achieved to understand that the core issue of peasants is not the production level, but the lacking access to markets, land, financial resources and the ability to define their own agricultural system.⁴⁰

Without a holistic understanding of their situation and acknowledgement of these requirements it will not be possible to improve their livelihoods.⁴¹

In the context of combating food and nutrition insecurity the IAASTD report pays special attention to the situation of small scale farmers. The report calls for a response to changing circumstances and new priorities and realizes the potential of local communities, local knowledge, and agricultural producers: “Small-scale farmers, particularly women, play a key role in promoting sustainable methods of farming based on traditional knowledge and practices.”⁴²

Local and traditional agriculture works with genetic material. The traditional knowledge supports the conservation of genetic diversity and facilitates local options and capacities for meeting the challenges of climate change. Policies that recognize the important role of rural family farming, can reinforce the achievement of development and generate goals towards sustainability and the improvement of local food crops to satisfy domestic markets.⁴³

³⁸Weingärtner and Trentmann 2011, pp. 71 sq.

³⁹Naranjo 2012, p. 231.

⁴⁰Ibid., p. 243.

⁴¹Ibid., p. 243.

⁴²IAASTD 2009, p. 78.

⁴³Ibid., p. 79.

“Address the needs of small-scale farms in diverse ecosystems and create realistic opportunities for their development where the potential for improved area productivity is low and where climate change may have its most adverse consequences.”⁴⁴

In this chapter I pointed out that both global environmental change and socio-economic changes are influencing food systems and its outcomes. The changes are happening simultaneously and in interaction with each other, which causes rapid and complex processes with uncertain consequences. As a result changes in socio-economic or environmental conditions cause feedbacks to the food system activities and directly effect food and nutrition security in all its dimensions.⁴⁵

Both the GEC and socio-economic drivers are moreover “a combination of local and non-local in origin.”⁴⁶ Climate change, trade agreements, world prices for energy and food are global forces, thus affecting local and regional food systems like local markets, land rights, and therefore local communities.

In the concept of alternative approaches to sustainable food systems, as in my example the *Slow Food* movement, the challenge is to find ways for adaptation to improve food and nutrition security. In the case of *Slow Food*, the implementation strategies for targeting better food and nutrition security on a local level, are triggers themselves that create certain feedbacks to food systems both on a global and local level.⁴⁷

For analysing alternative approaches towards sustainable food and nutrition security, a more holistic food system approach is vitally important and can help to perceive the full set of food system activities, and provide an overview of the range of possible outcomes and consequences for both people and ecosystems.

⁴⁴IAASTD 2009, p. 4.

⁴⁵Ingram 2011, p. 420.

⁴⁶Ibid., p. 422.

⁴⁷cf. ibid., p. 422.

5 Focus on Sustainability

The concept of sustainability is amongst the key factors for discussing food systems. As a concept recognizing the need for balance among the social/cultural/political, environmental and economic dimension it can demonstrate practices that threaten societies and the ecosystem. The term itself has become very popular within the last century, and is widely used for justifying current practices. I find it important to keep in mind that it's a normative concept when discussing sustainability. In the following I will briefly outline the origins of the concept and link it to the alternative food discourse.

5.1 Origins of the concept

The origins of the term “sustainable” can be traced back to the year 1713. The term initially derived from forestry and was shaped by Hans Carl von Carlowitz who followed the rule to fell just enough trees, as many trees that grow back again.¹

“Our Common Future”, published in 1987 by the United Nations World Commission on Environment and Development, known as Brundtland Commission, was the first document in which the interdependency of environment and development was outlined and formulated.

According to this commission paper “Sustainable Development” means *“development that meets the needs of the present without compromising the ability of future generations to meet their own need.”*²

The concept of sustainability was then elaborated at the UN Earth Summit and resulted in the Rio Declaration on Environment and Development with the principle that *“The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”*³

The focus on sustainability lies in three dimensions: economic efficiency, social adjustment (justice) and ecological compatibility. The concept puts the human well-

¹Gruber 2009, p. 15.

²Schönberger and Brunner 2005, pp. 9 sq.

³UN 1992b.

being in the center and implies both intragenerational and intergenerational equity. The political institutions have the responsibility to structure the implementation of these dimensions and can be further described as the forth dimension.⁴

The weighting of the dimensions is sometimes causing conflicts. Some authors therefore follow the concept of strong sustainability. This implies that the dimensions are not equally important and not interchangeable. Based on the assumption that the ecosystem services can not be replaced by humans or any capital, like the ozone layer for example, the dimension of ecological sustainability is in the center of attention. This indicates that the ecological dimension determines the boundaries for social and economic development. It's the health of the ecosystem that further affects the human well-being.⁵

The concept of strong sustainability therefore puts an special emphasis on discussing natural capital in physical instead of monetary terms.⁶

5.2 Sustainable development

Sustainable development means that the development of the global society is examined on its ecological and economic compatibility and its social justice towards future generations. The concept of sustainability is meant as an approach or a vision, which indicates that it's shaped by various actors with different ethical values, ideas and objectives. Despite the multiple approaches the concept gained a lot of international attention. In the scientific debate it was primarily used for discussions about environmental resources.⁷

“Sustainable Development is the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such sustainable development (in the agriculture, forestry, and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable.”⁸

⁴Gruber 2009, p. 15.

⁵Ibid., p. 16.

⁶Ang and Passel 2012, p. 253.

⁷Schönberger and Brunner 2005, pp. 9 sq.

⁸FAO 2002.

What I want to point out here, is that this definition reflects the predominant anthropocentric approach, that the natural environment is reduced to a resource available for human beings, a natural capital for producing goods. A holistic understanding of sustainability although respects the intrinsic value of ecosystems and appreciates the socio-cultural and spiritual aspects of the natural environment.⁹

Sustainability has become a widely used term, that describes a very vague concept which depends on the political and ideological perspective of the user. It's kind of a "strategy of choice".¹⁰

Monsanto Corporation for example, describes itself as "*sustainable agriculture company*", that delivers "*agricultural products that support farmers all around the world.*"

On their website the company states that "*Our vision for sustainable agriculture strives to meet the needs of a growing population, to protect and preserve this planet we all call home, and to help improve lives everywhere. In 2008 Monsanto made a commitment to sustainable agriculture – pledging to produce more, conserve more, and improve farmers' lives by 2030.*"¹¹

Sustainability is therefore a term that is used by different stakeholders for different meanings. In this sense, it's not an objective condition, but can be seen as a discourse that can imply different aims according to the political, ideological or paradigmatic approach one takes. Therefore it's important to understand that sustainability indicates a normative discourse.¹²

Agyeman and Evans offer a concept of "just sustainability" which links environmental justice with sustainable development. According to their work, sustainability is "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems."¹³

5.3 Sustainability in Food Systems

Strategies to adopt sustainability are necessary for the food system to be resilient when facing future challenges. Due to the fact that the current food system harms people

⁹Gruber 2009, p. 18.

¹⁰Koc 2010, p. 38.

¹¹Monsanto n.y.

¹²Koc 2010, p. 38.

¹³Agyeman and Evans 2004, p. 155.

as well as the environment in an alarming way, the movement for sustainable food systems has grown fast over time. Interdisciplinary approaches to food have triggered new trends like organic farming, farmers' markets, community supported agriculture, urban gardening and farm-to-school programs.¹⁴

The determining factors, which make a food system sustainable, depend on what outcome one wants to achieve of the food system.¹⁵

The current food system resulted in environmental degradation and economic stresses for small scale farmers, community processors and local businesses connected to food production. Communities, especially in developing countries do not have access to an adequate and healthy food supply.

“People have become disconnected from the sources of their sustenance – the land, the people who grow and harvest their food and fiber, and from the taste and quality of the food itself. They have become passive recipients in a rather homogeneous system of nutrient distribution in which real food is almost considered a luxury – for upper and middleclass eaters.”¹⁶

By definition of the FAO, sustainable food systems *“produce nutritious diets for all people today while also protecting the capacity of future generations to feed themselves. Sustainable food systems use resources efficiently at every stage along the way from farm to fork. Getting the most food from every drop of water, plot of land, speck of fertilizer and minute of labour saves resources for the future and makes systems more sustainable. Turning waste products like manure and food scraps into valuable fertilizer or energy can improve sustainability. Pests and diseases damage crops and animals, and reduce the quantity and quality of food available for humans. Using safe and effective methods to control these losses in production, processing and storage helps make food systems more sustainable. Consumers can do their part by choosing balanced diets and minimizing food waste.”¹⁷*

Blay-Palmer and Koc advocate a more holistic understanding of sustainability “that goes beyond the economic and ecological concerns and priorities by imagining a food system that nourishes one’s body as well as one’s cultural, spiritual and pleasure needs, to embrace such as accessible, affordable, culturally appropriate, healthful

¹⁴Blay-Palmer 2010, p. 18.

¹⁵Kloppenburg et al. 2000, p. 179.

¹⁶Feenstra 2002, p. 100.

¹⁷FAO 2013a, p. 4.

food.” Referring to the hegemony within food systems, this would implicate to use the potential for a democratic, inclusive, social innovation policy, especially for marginalized communities in the global south to reduce the equity gap.¹⁸

The objective of this chapter was to underline, that the concept of sustainability is used for many different interests and purposes. As the example of Monsanto shows, it’s necessary to question why the term is used and what the intentions are. Kloppenburg et al. state that “ people from many backgrounds and social locations are participating in initiatives and movements for food system sustainability.” It’s essential to understand the “multiple dimensions of motivation and intent that people bring to the transformative project [...]”¹⁹

On the basis of this understanding, the focus of the next chapter is to outline the main principles and the motivation that drives the *Slow Food* engagement in initiatives addressing sustainability issues. Sustainability in food systems is unlikely to have resulted from one universal recipe. I therefore identified the major cornerstones by linking sustainability to food systems and the *Slow Food* movement.

¹⁸Blay-Palmer and Koc 2010, p. 227.

¹⁹Kloppenburger et al. 2000, p. 185.

6 “Good, clean, fair” - The *Slow Food* Sustainability Strategy

In this chapter I’m focusing on the *Slow Food* philosophy on sustainability. Since *Slow Food* is a movement that takes food as its central point to discuss environmental and social problems driven by the current system, I will outline the major aspects of their vision.

“A sustainable food system is one in which the health of the environment is sustained and enhanced for use by all beings and by future generations. Sustainable methods entail working with nature to replenish soil and other resources through recycling, composting, and use of animal nutrients. Ecologically sustainable production means creating farms that are “self-sustaining organisms” where “production increases soil and water quality” and growers “take advantage of local environment and resources [like] local crops and seed.”¹

This definition identifies the major aspects, that can also be found also in the *Slow Food* philosophy. The *Slow Food* movement has its roots in the socio-cultural dimension of sustainability and its concern for the destruction of the pleasures of taste and quality by the global food system. *Slow Food*’s work has always revolved around food. Over the years the ecological and social dimension of food has gained more importance in the *Slow Food* philosophy.

In order to discuss sustainability in food systems, I will use the “good, clean and fair” principles of the *Slow Food* movement, to illustrate the potential of a more sustainable food systems that promotes food and nutrition security as well as food sovereignty. The *Slow Food* idea of sustainability is tied to the aspect of quality of food. It emerged from the symbolic meaning of the arc, which is there to save quality from the flood of standardization.²

A qualitative approach to food, is a lot more than feeding a world population with enough calories. The concept of quality takes into account that food has a social, cultural and political role. Food is the center of human life, and through food culture,

¹Kloppenburger et al. 2000, p. 182.

²Petrini 2005a, p. 91.

community and identity are created and reinforced. Quality refers to food that is produced in socially, environmentally and economically just ways.³

The holistic concept of quality is tied to the three principles of “good, clean and fair”. In the following I will go into further detail by explaining the three principles for food system activities.

6.1 What is good?

The term “good” depends on one's individual taste, influenced by the personal, cultural, historical, and socio-economic factors. Petrini identifies two major indicators that describe whether a product is good or not. Taste - which is personal - linked to one's sensory sphere, and knowledge, which is influenced by cultural aspects, tied to the environment and the history of communities and places.⁴

The concept of *Slow Food* operates on this level by putting the social aspect of food in the centre. “*Food is far more than a simple product to be consumed: it is happiness, identity, culture, pleasure, conviviality, nutrition, local economy, survival.*”⁵

For Carlo Petrini food is a network of people to share cultural and culinary knowledge and traditions. Developing taste is part of *Slow Foods* understanding of cultural knowledge. It's about international exchange of experience and the building of networks. *Slow Food* identifies both the biological and cultural aspect of food production and consumption and puts food in the centre of human culture.⁶

The “fast” lifestyles, as mentioned above, and the standardization of food, have led to a decline in the ability to describe food in its variety and diversity. The changing consumption patterns towards convenience products which contain a lot of sugar, fat and flavour enhancer promote global malnutrition.⁷

A good diet is one which contains natural products, which means mostly raw materials, that are not highly processed. It contains knowledge of food and food production in order to be able to judge if a product is good or not.

³Andrews 2008, p. 113.

⁴Petrini 2007, p. 97.

⁵Petrini 2005b, p. 166.

⁶Ibid., p. 175.

⁷Braun 2009, pp. 195 sq.

Pleasure is also essential for good food. As Petrini states: *"Since pleasure is a human right, it must be guaranteed for everyone, so we must teach people to recognize it, to create the conditions whereby "naturally" good products are producible everywhere."*⁸ A good food system combines biodiversity, cultural diversity and variety in taste.⁹

6.1.1 Tracking the roots - Creating knowledge

As Petrini states, knowledge is important for judging what is good. Tracing a regions history to find its own regional food system can create a special relationship between people and their environment. It encourages people to get in touch with traditional varieties and agricultural production methods, and has the potential to contribute to a greater agricultural diversity.¹⁰

Slow Food promotes the reacquisition of the local and regional cuisines, production and food manners. One of the organisation's aims is "to explore, describe and improve the culture of food, to develop a proper education of taste and smell from childhood and to safeguard and defend the agroindustrial heritage while respecting the cuisines of each single country". A sense of taste and the appreciation of food are attributes of cultural capital.¹¹

Slow Food further more argues that history and tradition are closely linked to restore dignity and pride. Farmers in the global south tend to see western agriculture as better, and are amazed when people show interest in their products and culture.¹²

"Food [is a] cultural product that at all points participates in the broader political and cultural identities and histories that surround it."¹³

By giving higher priority to local knowledge and farming procedures, the system can be shaped more towards a locally structured food model, where food communities can actively participate in food policy decision.

Emphasising on local knowledge can furthermore contribute to improving nutrition on the production level. This aspect is illustrated in the focus on the "local" within a food system. The local serves as a source of identity. It's about local knowledge,

⁸Petrini 2007, p. 104.

⁹Gruber et al. 2008, p. 1.

¹⁰Feenstra 2002, p. 32.

¹¹Slow Food International 2003, quoted in Pietrykowski 2004, p. 311.

¹²Ibid., p. 311.

¹³Schneider 2008, p. 289.

artisan skills and traditional food production passed on from generation to generation. Local identity is closely connected to the geographical space where people live. There is a certain respect for biodiversity and the preservation of nature.¹⁴

Locally structured food systems connect all participants of a community, so the potential for creating space for learning and educating offers high potentials. Eating is a political act that requires awareness and information.

“The awareness of the complexity of the food system is acquired by education, study, and the exercise of the senses.”¹⁵

*“Food is a network: of men and women, of knowledge, of methods, of environments, of relations. The multidisciplinary nature of gastronomy makes it possible to interpret it, analyse it, evaluate it, and perhaps even know the other people who make up the network.”*¹⁶ For *Slow Food* food is all about networks, and the aim of all the people participating is to create food, that is good, clean and fair.

A clean food system is based on small-scale agriculture and appreciates diversity in plants, crops, food and culture as common good, that needs to be preserved for future generations.¹⁷

6.2 What is clean?

How “clean” a product is depends on the production and processing, which means all the human interventions that are made from the raw material to the final product. The food processing industry and the global distribution networks are causing environmental costs, that need to be included in the product.¹⁸

Ecological sustainability may involve organic and biodynamic methods, but more importantly is characterized by a philosophical relationship to the land that is nonexploitative and regenerative.¹⁹

*“To be able to judge the sustainability of food product, we need to know the ecological consequences of the actions carried out during their journey from the land to the table.”*²⁰

¹⁴ Andrews 2008, p. 130.

¹⁵ Petrini 2005a, p. 150.

¹⁶ Ibid., p. 175.

¹⁷ Gruber et al. 2008, p. 2.

¹⁸ Petrini 2007, p. 121.

¹⁹ Kloppenburg et al. 2000, p. 180.

²⁰ Petrini 2007, p. 115.

The principle of “clean” refers to the ecological sustainability of food. All production steps of food systems that respect ecological diversity and a sustainable use of resources are considered “clean”. The concept of agroecology and biodiversity plays a major role in this context.

6.2.1 The concept of agroecology

The primary suspect of the *Slow Food* investigation of environmental sustainability is agriculture. The philosophy is tied to the concept of agroecology, which functions as a principle to achieve ecological sustainable agriculture.

The term comes from integrating ecology into agriculture. It can be defined as “the application of ecological science to design and manage sustainable agroecosystems.”²¹ For *Slow Food* agroecology is based on the proper management of natural resources, on knowledge of local agriculture, on implementation of the traditional and modern techniques that are adapted to environmental conditions, and the exclusion of genetically modified products, monocultures and chemicals.²²

The concept of agroecology evolved mainly as rejection of the present food regimes underpinned through neoliberal politics and functions as a barrier for the “Green Revolution”.²³ The “Green Revolution” was initiated to increase food production in order to feed the growing world population. In the end it caused a major damage to the environment and resulted in loss of biodiversity and traditional knowledge.²⁴

The development of agroecology as a science was built up on traditional agriculture. It’s based on smallholder systems, that rely on agroecosystem management rather than external inputs. Small scale farming, diversified agriculture and knowledge systems can function as a barrier to the capitalist agriculture.²⁵

“Agroecology is knowledge intensive (rather than capital intensive), tends toward small, highly diversified farms, and emphasizes the ability of local communities to generate and scale-up innovations through farmer-to-farmer research and extension approaches”²⁶

²¹Dalgaard, Hutchings, and Porter 2003, p. 40.

²²Anthony Olmo et. al n.y.

²³Giménez and Altieri 2013, p. 92.

²⁴Altieri 2009, p. 102.

²⁵Giménez and Altieri 2013, p. 92.

²⁶Ibid., p. 92.

Agroecology describes a more holistic approach, where the importance of biodiversity, and soil and water management is in the centre of the involvement in agriculture and the interaction between plants, animals and soil is being recognized.²⁷ The concept has gained more attention through the efforts of NGOs, farmers' movements and various projects. Nonetheless it's still marginal on the agenda for agricultural development plans. The concept is built up on the understanding of nature and agroecosystems.

6.3 What is fair?

The term “fair”, in the *Slow Food* strategy, connotes social justice especially for those who produce food. It's about social and environmental sustainability and puts the value of labour, therefore the producers, in the centre. The principle of “fair”, is based on the assumption that those working in the agricultural sector suffer from very poor basic services, uneven trading conditions and interdependencies. A “fair” system indeed, is giving farmers and local communities the possibility to generate their own seeds and produce local adapted plants, in an sustainable way. It's about the basic human right to food and to reveal inherent power relations. In this section I will point out the main cornerstones that contribute to a fair food system.

6.3.1 The right to food - A Right for all

When we talk about fair conditions, we first of all talk about the the basic human rights to food. The right to food is grounded in the Universal Declaration of Human Rights. I would like to outline here the definition of Jean Ziegler, the first UN Special Rapporteur on the Right to Food:

*“the right to have regular, permanent and unrestricted access, either directly or by means of financial purchase, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear.”*²⁸

²⁷Slow Food Foundation for Biodiversity 2011, p. 2.

²⁸Jean Ziegler 2006, quoted in Mahon 2009, p. 84.

Most governments have ratified the international convention that includes the right to food and therefore accepted their obligations to respect, protect and fulfil the right to food.²⁹

Experiences so far show that the right to food is still not realized for most of the world population. Industrialized agriculture and the focus on global markets, did not solve the problem, but enforced an even more tenuous situation. The global food crisis of 2008 and the high number of people living in chronic hunger, show profound human rights violation.³⁰

Looking at the global food situation from a human rights perspective, a structural change would require the re-framing of agricultural plans and policies around principles of participation, non-discrimination, transparency, empowerment and especially human dignity. Good governance, enforcing of local capacities and infrastructure as well as the empowerment of sustainable agriculture and the local community are amongst the most crucial steps to alleviate these global imbalances. Above that, the right to food is tied to the right of access to land, water, infrastructure, seeds or financial resources. Evidently it's about food sovereignty, the right of every nation and every community to shape it's own agricultural policy and to produce food for daily need in order to ensure food security.

Since the emergence of the *Slow Food* movement, the aim became to protect the right to pleasure, and “pleasure based on the suffering and slavery of others cannot exist.”³¹

The right to food is equally important as the right to freedom from hunger. The *Slow Food* policy strategy developed at the Sixth *Slow Food* International Congress in Turin, Italy in October 2012, outlines that the right to food is a central task of policy and means to put people, not markets, in the center of concern.³²

When talking about *Slow Food* and the *Food Sovereignty* movement, I find it essential to outline, that these are both movements, that claim the right to food for all. It's not just a movement for farmers but also for consumers and traders, it involves everyone.

²⁹Ibid., p. 85.

³⁰Gruber 2009, pp. 21 sq.

³¹Petrini et al. 2012, p. 5.

³²Ibid., p. 5.

Food policy issues are preoccupations of people and citizens. Both movements are supposed to be bottom up approaches to define alternative practices.³³

6.3.2 Food Sovereignty

*“Fair is sustainable; it creates wealth, and establishes a more equitable order among the peoples of the world.”*³⁴

The discussion about fairness raises the question over who controls in what manner and under which circumstances food is produced, processed and accessed. The concept of food and nutrition security does not take these questions into account. Who shapes and implements food policies and strategies to achieve food security?³⁵

I would therefore propose to add food sovereignty as a possible additional outcome of a sustainable food system. Food security begins and ends with food sovereignty.³⁶

In the “Manifesto of the Future of Foods”, *Slow Foods* states, that the organisation supports the principle of national, regional and community food sovereignty.³⁷ The movement postulates that every human being on the planet should have the “right to access and/or produce sufficient food to sustain their lives and communities.”³⁸

The origins of Food Sovereignty

Food sovereignty as a concept emerged in the 1980s and early 1990s. The inclusion of agriculture in the General Agreement on Tariffs and Trade (GATT) resulted in a widespread loss of control over food markets, environments, land and rural cultures. The term enunciates the political and economic power dimensions inherent in the food and agriculture debate.³⁹ It’s a radical alternative to the current food systems that put the control of productive resources (land, water, seeds and natural resources) in the hand of those who produce food.⁴⁰

The term owes its origins to the international coalition “La Via Campesina” which means “peasant way”, taking place in Mexico in 1996. Various movements of peasants,

³³Wittman, Desmarais, and Wiebe 2010, p. 7.

³⁴Petrini 2007, p. 143.

³⁵cf. Gruber and Hauser 2011, p. 21.

³⁶Patel 2009, p. 667.

³⁷Slow Food International n.y.(b), p. 12.

³⁸Ibid., p. 11.

³⁹Wittman, Desmarais, and Wiebe 2010, p. 2.

⁴⁰Ibid., p. 3.

farmers, rural women and indigenous people, reunited to discuss their common concerns about the effects of an increasing globalised food systems on their livelihoods, communities and ecologies.

In fact *“smallholder farming remains the most common form of organization in agriculture, even in industrial countries.”*⁴¹

The predominant development paradigm with its focus on increasing the production output of peasants in order to improve their livelihoods, was implanted through industrialisation, modernisation of agriculture, export-led growth and globalisation. The effort of transforming small holders into global traders has not improved their situation at all.

La Via Campesina is a movement which consists of peasants and small scale farmers to empower their position and stands up for their rights.⁴²

The movement grew very quickly over time and drew more and more attention, also on an international level. The definition of food sovereignty was established in 2007 at the international forum on food sovereignty, held in Nyéléni, Mali, attended by 500 representatives from eight countries.

Thus food sovereignty is

*“the right to people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods and their right to define their own food and agriculture systems.”*⁴³

Hannah Arendt explains it by saying, it’s the right to have rights.⁴⁴

Moreover the concept of food sovereignty recognizes that small-scale farmers have *“the right to obtain access to land, seeds, forests and water resources, as well as to key services such as credit, transportation, storage, market information, research, extension services, capacity building, etc. in order to practice and improve their agriculture.”*⁴⁵

In 2007 at the “Nyéléni Forum for Food Sovereignty” six key points were identified. Therefore food sovereignty focuses on food for people, values food providers and localises food systems. It places control locally, builds knowledge and skills and works with nature.⁴⁶

⁴¹The World Bank 2007, p. 89.

⁴²Naranjo 2012, pp. 231 sq.

⁴³Wittman 2011, p. 87.

⁴⁴Ibid., pp. 87 sq.

⁴⁵Naranjo 2012, p. 243.

⁴⁶Gérard Choplin and Alexandra Strickner and Aurélie Trouvé 2011, p. 60.

Koc argues that alternative discourses such as food sovereignty are important tools within a democratic engagement for transforming the food system and the existing social institutions and practices.⁴⁷

Human Rights and Self determination

The concept of food sovereignty claims that the right to food is not only a fundamental human right, but also a individual right, with respect to human dignity by the national state.⁴⁸

*“Long-term food security depends on those who produce food and care for the natural environment. [...] Food is a basic human right. This right can only be realized in a system where food sovereignty is guaranteed.”*⁴⁹

In the *Slow Food* Manifesto on the Future of Food it is outlined that “food is a fundamental human right”. Furthermore “[e]very government – local, regional, national, international – is obliged to guarantee this right. It may not be denied in the interests of international commercial or trade processes, or for any other reason.”⁵⁰

Concerning power relations, the concept of food sovereignty puts an emphasis on many collective human rights - the right to self-determination, the right to permanent sovereignty over natural resources and the right to development. The motive of *La Via Campesina* is to revitalise those rights by putting them in the current international context.

Self determination means peoples’ right to choose their own political, economic and social system. It rejects the current food regime, which is defined by global markets and institutions, international governments, agri-food monopolies, that set up rules like free trade agreements, or the Common Agricultural Policy (CAP).⁵¹ It gives the control back to people, by demanding smaller political units and participative community structures.⁵²

When discussing food sovereignty, it’s critical to mention, the term “food regime”, which is describes as “a rule governed structure of production and consumption of food

⁴⁷Koc 2010, p. 43.

⁴⁸Windfuhr and Jonsén 2005, p. 12.

⁴⁹Via Campesina 1996, p. 1.

⁵⁰The international Commission on the Future of Food and Agriculture 2006, p. 11.

⁵¹Giménez and Altieri 2013, p. 91.

⁵²Claeys 2012, p. 849.

on a world scale”.⁵³ The “Food regime theory” plays a relevant role in describing the power relations within the food system, therefore it is important to mention but does not require priority in this thesis.

Another argument is, that it’s not only about political independence but rather about economic independence. *“Today decolonization is not about a state in relation to another, but about a state in relation to transnational corporations.”*⁵⁴

The definition of *La Via Campesina* of 2007 on food sovereignty outlines the key principle of the concept. *“It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.”*⁵⁵

In the *Slow Food* Manifest on the future of food it’s stated that: *“We reject the notion that the globalization of industrial technological agriculture and the homogenization of farms brings greater efficiencies than local diverse community farming, or traditional agriculture deeply embodied in local cultures.”*⁵⁶

In both statements there is as strong implication on the importance to value those who produce, distribute and consume food. In other words, those people involved in the whole food system need to be in the centre of concern, and involved in decision making processes.

Localise food system – vs. global trade?

Both the *Slow Food* philosophy as well as the *Food Sovereignty* movement promotes a more localised food system. The important thing to notice here is that localising food system activities don’t deny trade at all. I’d like to outline the definition of food sovereignty announced by the Peoples Food Sovereignty Network in 2002.

“Food sovereignty is the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-resilient; [...] Food sovereignty does not negate trade, but rather, it promotes the formulation of trade policies

⁵³McMichael 2009, p. 281.

⁵⁴Claeys 2012, p. 849.

⁵⁵Via Campesina 2007.

⁵⁶The international Commission on the Future of Food and Agriculture 2006, p. 11.

*and practices that serve the rights of peoples to safe, healthy and ecologically sustainable production.”*⁵⁷

In the Peoples Food Sovereignty statement it's outlined that global trade must not be preferential to “local and national developmental, social, environmental and cultural goals. Priority should be given to affordable, safe, healthy and good quality food, and to culturally appropriate subsistence production for domestic, sub-regional and regional markets.”⁵⁸

The *Slow Food* ideology proposes a new meaning of trade. The current principle of trade promotes buying and selling at prices that allow the biggest possible profit. The consequence of this mindset is that food is mainly dominated by trade. As Petrini argues, “even the traders role loses all dignity, reducing the value of food to its mere monetary value [...]” *Slow Food* argues for a more holistic understanding of trade that involves social justice and respect for the environment. Trade must therefore assure rights to equity and fairness, with respect for those who produce and those who eat.⁵⁹

The objective of this chapter was to give an overview of the “good, clean and fair” strategy. The concept was developed out of the understanding that quality means more than just taste. I outlined various aspects around the three principles summing up a model that aims at developing a understanding for taste and food involving respect for the environment and fair earnings for the producers.⁶⁰ In the next chapter I will be engaged in discovering the potential benefits implementing this strategy in a community based food model.

⁵⁷Peoples Food Sovereignty Network 2002.

⁵⁸Ibid.

⁵⁹Petrini 2005a, p. 230.

⁶⁰Petrini et al. 2012, p. 4.

7 Potentials for a “Good, Clean and Fair” Community based food model

From a historical perspective, the global food production, distribution and consumption has been organised within a local and regional context. The system however transformed rapidly due to changes triggered by industrialisation and globalisation processes.¹ In this thesis I’ve discussed the results of these changes in the beginning.

The *Slow Food* movement promotes a community food model that is tied to the principles of “good, clean and fair”. *Slow Foods*’ involvement in developing countries does not aim at replacing the role of governments, or NGOs. It’s concern is to provide non-financial resources that can be shared and obtained by everyone. The major purpose is to trigger a multiplier effect for other local initiatives. *Slow Food* as an international movement that features a bottom-up approach, to activate local networks and introduce an innovative management approach, where food communities are the main actors in the process.²

Slow Food proposes the return to work on a regional scale, not by proclaiming the “everything was better in the old days” mentality, but to invent new channels of production and supply on a local level, in order to safeguard quality and sustainability requirements.³

The assumption is, that locally structured food systems are creating social space that provides opportunities for social interaction to take place among community members. This involves for example, farmers markets or community gardens. These occasions create space for communication and problem solving processes. This is the place where democracy starts, where people are encouraged to speak up and participate in political activities.⁴

The “good, clean and fair” strategy of *Slow Food* is the introduction of a new concept of sustainable quality. As Petrini argues quality is a very complex concept, and needs transparency in order to follow the three principles of “good, clean and fair”. I will

¹Tavanti 2010.

²CSA Centro Piemontese di studi africani n.y.

³Petrini 2001, p. 86.

⁴Feenstra 2002, pp. 101 sq.

discuss the main aspects supporting the idea of creating a more sustainable food system and how we can get there.

7.1 Towards a good food system

In the first part I'm focusing on the social infrastructure of food systems. *Slow Food* identifies the food communities as the main actors in their community food model. Therefore the role and impact of communities, social structures are in the centre of discussion on how to create a more sustainable food system. The term social capital is used to describe the importance of social relationships in cultural and economic life. Social bonds and norms are essential for communities, since trust and solidarity are important factors for collective actions. Social capital therefore has a crucial role in adopting sustainable behaviours and technologies.⁵

The role of social capital has gaining more importance lately. A supporting social background, family bondings and networks provide social security and trigger political participation. Human potential is another important factor. People that possess knowledge, education and certain skills, and are healthy and able to work, are in a better position to make use of opportunities to safeguard a healthy life in dignity, guaranteeing a diversified and nutritious diet, and are more capable to adapt to consequences of climate change.⁶

7.1.1 The role of a community

Globalisation, defined here, as a transnational process of economic integration, has resulted in the decreasing importance of communities as a social unit. The entire focus was on the global scale of economies, the mobilisation of capital, transnational firm expansions and international commodity chains. Regarding to power relations, Lacy further more argues, that globally managed economic growth views towards integrating the global financial system and the conditions favouring transnational corporate capitalism. The effects this process has on people though, varies and is tied to different consequences. Globalisation as such effects people differently.⁷

⁵Pretty 2009, p. 24.

⁶Gruber and Hauser 2011, p. 25.

⁷Lacy 2000, p. 7.

*“Globalisation enriches the consumer in us, but [...] can also shrink the citizen in us and diminish the space for individual, cultural and political expression.”*⁸

For my exposition on the role of local communities, I’m using the following definition, that I find representative for this discussion:

*“A group is a community to the extent that it encompasses a broad range of activities and interests, and to the extent that participation implicates whole persons rather than segmental interests or activities. The emergence of community involves a complex and balanced mix of interacting variables, the most important of which are: a shared history and culture, mutuality, plurality, participation and integration.”*⁹

This definition on communities is very closely linked to the central aspects that are defined in the motive of *Slow Food*.

The reason why food is placed in the centre of people’s life, is because it combines all the aspects, that are essential to unite communities and social units with their environment. It’s about history, and the tradition of food, the origins of our lives, and the place we live in, which makes people care for their direct environment and their natural habitat. The cultural aspect of food is a vital factor, because it brings people together, and triggers social linkages within a community.

Bridger and Feenstra introduce the concept of the sustainable communities, which are determined through the ability to both protect environmental concerns and development objectives and at the same time enhance local social relationships. The major aim is to meet the economic need of their residents, protect the environment and promote more human local societies. Sustainable communities rely on increasing the local economy and self-reliance. This induces the development of local markets, production, local processing of previously imported goods and greater cooperation among local economic entities. This doesn’t mean that communities isolate themselves totally, they would still be linked to larger economic structures, but the strong local economy would be able to protect the people from foreign investments or global regulations.¹⁰

⁸Friedman 1999, quoted in *ibid.*, p. 8.

⁹Selznick 1996, p. 195.

¹⁰Bridger and Luloff 1999, p. 381.

7.1.2 Food Communities

The *Slow Food* movement identifies the main actors of a food system in the *Food communities*. These *Food communities* are defined as

*“all those who are involved in a food production chain who are historically, socially or culturally linked to a specific geographical area and to a product that represents the area of question: chefs, farmers, seed specialists, fishermen, wild plant gatherers, animal breeders and researches.”*¹¹

Every food community is a network of local and non-local actors.¹² It's essential to integrate food communities in changes or interventions, because they contribute to a functioning food system with their heritage knowledge.¹³ The term came up together with the first “*Terra Madre*”. Food communities unite producers and consumers together in a mutual dialogue. It is about to giving priority to small scale producers, for valuing their work and their skills. The “*Terra Madre*” united 1,000 food communities on themes such as biodiversity, sustainability, traditional food production, animal husbandry, the role of women in food production and organic agriculture.¹⁴

Amongst the key note speakers of the first “*Terra Madre*” in 2004 was Frei Betto, who argued that: *“Famine cannot be fought with donations. There must be effective policies of structural change, including agricultural and fiscal reform, capable of demonstrating land rents and financial revenues. This must be supported by [...] an intense programme of education, according to the model of Paolo Freire, thus becoming socio-economic protagonists and political and historical actors.”*¹⁵

The community is understood as a network with benefits, not only for those practising agriculture, but for the whole community. *Slow Food* promotes to define community not only from a geographical standpoint, but from a holistic one as:

*a group of individuals (producer, processors, chefs, restaurant owners, journalists, ...) who share systems of meanings that define feelings of self-recognition and collective identity.”*¹⁶

¹¹CSA Centro Piemontese di studi africani n.y. P. 5.

¹²Ibid.

¹³Ibid., p. 5.

¹⁴Andrews 2008, p. 51.

¹⁵Frei Betto, at *Terra Madre* 2004 quoted in ibid., p. 51.

¹⁶CSA Centro Piemontese di studi africani n.y. P. 20.

The network itself serves as a system of relationships which creates a space for sharing and exchanging. The community as such is neither local nor global. As far as relationships and interactions among the various figures are concerned, it is local. But as soon as the community connects with other systems it becomes global.¹⁷

When considering a food systems perspective, communities can have an impact on all activity levels. What I find important in this context is, that if food communities are acknowledged as key players in the whole food production, they can unlock potentials to create new paths for food production.

7.1.3 Identifying the local

Communities need a shared territory for creating a space where social interactions, collective actions and mutual identity can happen. It's a frame for a common life in a shared territory for interacting, collective actions and mutual identity. Identifying the local, recognizes local social life holistically, and contributes to the well-being of the local society as a whole.¹⁸

Moreover it creates a certain sense of place which connects people with their heritage of food and their traditional cuisine. Beyond that, connecting with a place can create an accountability for it and therefore makes people sensitive to environmental issues. The character of a certain place, in combination with tradition and the skills of the producers, become meaningful information for the consumers and connects them with their own origins and culture.¹⁹ Since modernisation threatens rural traditions and local specialities, *Slow Food* is not the only movement concerned with the search for authenticity and quality.

The significance of *Slow Food* lies in the assumption that food is a source of identity, because “the local” is directly connected to local knowledge, artisan skills and food production. Some critics say, that *Slow Food* presents a nostalgic view of local places as a strategy to enhance tourism and the marketing of local products.²⁰ As the organisation states, the sense of local identity goes beyond the marketing of local products. In the center of *Slow Foods'* action, is nonetheless a critical engagement with globalisation,

¹⁷Ibid., p. 21.

¹⁸Lacy 2000, p. 5.

¹⁹Feagan 2007, p. 26.

²⁰Andrews 2008, p. 133.

which is described as a fundamental threat against local skills and traditions. It's the "McDonaldisation" which endangers local cultural differences and diversification.²¹

Slow Food follows a different idea of "re-localisation". The focus are local communities, free from economic and cultural constraints of the global market. Petrini states that "Our organisation will be in harmony with all those working at a local level - traditions, legends, local memory will be preserved"²²

The importance of the local in *Slow Food* politics and the emphasis on building local economies was driven by the concept of food communities. The meaning of the local is moreover tied to the particular context. In western countries, for example, it's more about recovering the local, seasonal products through the development of farmers' markets, rising awareness of local produce and creating empathy for the producer. Whereas in the global south the focus is on empowering communities and producers to participate in creating a food system that is adaptable to the local context.²³

"The Food Community Model" of *Slow Food* is described as an alternative to the industrial production and focuses on small-scale high-quality products. The idea is to specify on local products by highlighting their special character to create value. Wealth creation through diversification of local products is seen as a strategy for developed as well as developing countries.²⁴ *Slow Foods'* concept of territory is not only described through the specific geographic locations but also through natural factors, like soil, water, slopes, sea level vegetation, micro-climate, as well as tradition and practice of cultivation. All these factors create a unique character of the agricultural locality.²⁵

Territories can give a special identity to certain products. This kind of "labelling" describes the cultural branding of a product. Highlighting the speciality of a product can lead to a greater association with a region or method of production, which increases the value of a product.

²¹ Andrews 2008, p. 133.

²² Carlo Petrini quoted in *ibid.*, p. 136.

²³ *Ibid.*, p. 137.

²⁴ CSA Centro Piemontese di studi africani n.y.

²⁵ Petrini 2001, p. 8.

7.1.4 Localising Food Systems

Localised food systems holistically engage the entire local community. The importance of re-localising food systems derived from the early sustainability concerns calling for decentralization, democratization, self-sufficiency and subsidiarity. The crucial factor was the undesirable effects of the industrialized agriculture and its fatal ecological consequences.²⁶ Globalisation and market orientation result in homogenized processes, contradictory to sustainable development based on social and ecological diversity. These circumstances disrupt local communities, destroy traditional methods of cultivation and increase pressure in ecosystem. In addition they cause urban social and environmental problems and results in floating populations of migration movements. Globalisation as a global process has the potential to create wealth, and at the same time to increase economic inequalities and effect society and ecosystems.²⁷

Globalized, industrialised and standardized food systems have resulted in a greater anonymity. Strengthening producer - consumer relationships are therefore in the center of attention for food movements engaged in localizing food systems. Larger food chains are less transparent, and consumers have no insight on food production, processing and distribution. The discourse against certain effects of globalization encourages much civil engagement and activism, amongst others the *Slow Food* movement, that focus on the local within a food system.²⁸

As suggested by Pretty “eating is the most political act we do on a daily basis because of its effect on farms, landscapes and food businesses.”²⁹ It is in this context that initiatives focusing on local food have acquired a new relevance. “Localising” food does not only imply the need to shorten transport ways, it’s more a strategy to shorten the distance by adding a history and identity. The discourse of the local has also changed over time. “It’s not the local any more it’s the local in the global.”³⁰

Food systems and the way food is produced, distributed and consumed effects not only the ecological and economic dimension of a society, but it directly effects the “*environmental, social, spiritual, and economic well-being of a community*”. Local food

²⁶Feagan 2007, p. 25.

²⁷Harris 2000, pp. 6 sq.

²⁸Roos, Terragni, and Torjusen 2007.

²⁹Ibid., Pretty 2005, quoted in.

³⁰Ibid.

approaches can therefore have the potential to trigger certain forces within a community towards self-determination, political participation and locally structured food chains.

Local economies do not “completely isolate themselves from trade, but [...] they adapt local food production and markets based on local environmental and community health priorities.”³¹

Important determinants for local food systems are economic viability for farmers and consumers, ecological production and distribution practices, social equity and democracy for all members of the society. There are many initiatives to link the individual members of a community and businesses directly with local farmers with the aim to improve their local food economy. Among these initiatives there are farmers’ markets, community-supported agriculture projects, urban farms, or community and school gardens, like the “1000 gardens in Africa” of the *Slow Food* network.³²

The focus of each local food system is usually to educate people about agriculture and food system activities, in order to integrate them in the process. The potential of locally based, self-reliant food communities is to improve access to all community members to support an adequate and nutritious diet.³³

7.2 Towards a clean food system

A “clean” food system needs to protect and respect the ecosystem. In the terms of environmental justice, sustainability is defined as “the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems.”³⁴ The *Slow Food* strategy towards a “clean” food system concentrates primarily on sustainable agriculture. This implies following the concept of agroecology, that I explained above. The promotion of local food and quality small-scale food production also addresses issues of environmental sustainability, to protect animal breeds and plant varieties. *Slow Food* is engaged in raising awareness of the potential of quality food for the conservation of biodiversity, both biological and cultural.³⁵

³¹Feenstra 1997, p. 28.

³²Ibid., p. 31.

³³Petrini et al. 2012, p. 21.

³⁴Agyeman, Bullard, and Evans 2003, p. 5.

³⁵Petrini 2005a, p. 128.

7.2.1 Biodiversity

The idea for a clean and sustainable food system can not be implemented without protecting the planet's biodiversity. Biodiversity and identity are closely linked with each other. The biodiversity of a place generates local agriculture and cultural identity. The locally adapted plants and the harvesting creates traditions and cultural customs within a community. Identity of a community is determined by the variety of living organisms and the various cultural habits of people. Biodiversity can strengthen a system and make it more resilient to react to certain stresses and therefore needs to be protected.³⁶

Slow Food began to address biodiversity in 1997. “Biological diversity” means the variability among living organisms from all sources including, ‘inter alia’, terrestrial, marine and other aquatic ecosystems and the ecological complexes which they are part; this includes diversity within species, between species and of ecosystems.³⁷

Slow Food identifies three components of food biodiversity: Biodiversity of crops (varieties, ecotypes, native or selected breeds), dietary biodiversity (variety of traditional products) and wild biodiversity (resulting from harvesting and hunting).³⁸

The organisations’ philosophy includes the understanding, that an integrated knowledge of food and production is essential to understand the importance of safeguarding biodiversity and the appreciation of the producers.

The “*Slow Food* Foundation for Biodiversity” was founded in 2003. The focus is based on the protection of genetic resources and combines traditional knowledge, farming, food processing techniques and ecosystems, local cultures and paying attention to taste. The organisation runs various projects with the aim to protect biodiversity (Ark of Taste, Presidia, Earth Markets, community and school food gardens).³⁹

The main objective contributing to the food system activities, is the “support and value of small-scale producers”, which are characterised as “custodians of agrobiodiversity, to “safeguard the environment, territories and culture”, and to “promote awareness of the value of biodiversity”.⁴⁰

³⁶Petrini 2011.

³⁷UN 1992a.

³⁸CSA Centro Piemontese di studi africani n.y. P. 9.

³⁹Slow Food Foundation for Biodiversity 2012, p. 9.

⁴⁰Ibid., p. 12.

The strategy to obtain a clean food system is first of all to recognize and manage the limits of ecosystems. The principle of clean is interdependent to good and fair. It's the fundamental concept for the discussion on quality. A clean product is of great significance to taste, as Petrini states, and goes hand in hand with the principle of good.⁴¹

7.3 Towards a fair food system

The purpose of creating a fair food system addresses the quality of people's lives. This implies that the local incentives should save traditions and promote self-sufficiency by guaranteeing sovereignty to people over their own food. The way to get there is to create conditions for social justice for those working on the land. I already outlined the importance of food sovereignty in this context. In the following I will outline the main aspects that are important for creating a fair food system.

7.3.1 Empowerment and Political Participation

Slow Food is not the only movement that proclaims food democracy. Lang for example emphasizes the need to democratize food systems, to ensure that all people have access to affordable, decent and health-enhancing food. In order to work towards sustainability we need to create spaces for participation. What make community based approaches so valuable, is that first of all they offer alternatives to social, environmental and economical degradation and in addition set examples for alternative ways of democratic involvement and governance structures.⁴² *Slow Food* for example sets up the food gardens in Africa, with the target to start small initiatives that promote food sovereignty and self-determined development through community participation.

William B. Lacy states, that “the way we view and structure work, the way we generate and disseminate knowledge, and the way we produce, distribute, and consume food are essential factors affecting the viability and empowerment of our communities.”⁴³

A community that is empowered, is characterized as a group of people that is able to initiate “a process of social or community action to change their economic, social,

⁴¹Petrini 2005a, p. 129.

⁴²Lang 2007, quoted in Koc 2010, pp. 42 sq.

⁴³Lacy 2000, p. 5.

cultural, and/or environmental situation.”⁴⁴ Therefore initiatives for strengthening local forms of social organization and forms of interactions that enable the discovery of solutions to certain challenges, are the foundation for empowering communities.⁴⁵

Democracy is a key mechanism for ensuring participation. Busch stated that there is a need to restore moral responsibility to individuals. He argues that “if individuals are social, then moral responsibility develops through interaction, through participation in the affairs of daily life.”⁴⁶

7.3.2 Self-determination

Self-determination is another aspect of empowerment and sovereignty. It’s crucial for sustainable food systems, as well as for food and nutrition security and plays a key role in *Slow Foods*’ activities.

*“The problem inherently wrong with the food system is that local crops such as cassava and sorghum, for example are not wanted by international agribusiness and therefore local farmers grow crops like coffee, cocoa, tea, cotton and flowers and afterwards use the export earnings to purchase food [...] [Farmers] are producing what they do not eat, and eating what they do not produce.”*⁴⁷

Food communities can provide alternatives to global trade only if they develop the necessary infrastructure, adequate farm land and provide technical and practical knowledge.⁴⁸

7.3.3 Decentralisation of agriculture

What is mentioned very frequently in the *Slow Food* philosophy, is the necessity to decentralise agricultural production. Over the course of industrialisation of agriculture, the development moved towards a focus on huge farms. One can observe how the development was steered towards standardisation of technology, crops and monocultures. Petrini argues that huge farms may seem productive in the first place, but only if you forget to include the damage and cost the huge machines cause to the soil and the

⁴⁴Ibid., p. 5.

⁴⁵Ibid., p. 5.

⁴⁶Busch 1999, p. 11.

⁴⁷ITUC 2009, pp. 36 sq.

⁴⁸Lyson 2004, p. 103.

environment as a whole. *Slow Food* promotes small scale farming, with the intention that they are equally productive and that they protect biodiversity and the environment. Decentralisation of agriculture leads to a fairer food system for people involved in food production as well as for the ecosystem.⁴⁹

7.3.4 Keeping the food chain short

In the context of fairness, economical sustainability is one important aspect to be addressed.

What is especially important to the concept of *Slow Food* is keeping the food chains as short as possible. This as a result would have an impact on all of the activities of a food system. It would directly shorten the transport chains and reduce the energy expended on packaging refrigerating, storing and processing.⁵⁰

Food chains have become more complex and global-orientated. Modern food systems show that as food chains become more complex, the result is a physical and psychological displacement of production from consumption.⁵¹

The result of shorter food chains is that the various actors involved, are drawn closer together, which triggers interactions and consciousness about food production and food chain activities. Farmers' markets for example function as a place where consumers and producers get in touch with each other and interact socially. Another important factor in this context is quality, which is tied to trust and knowledge. The farming practices play an essential role in this setting. Therefore sustainable production methods are gaining more importance and are determining the quality of the food. A short food chain triggers consumption based on local agriculture and promotes the "reconnection" of nature, quality, region and locale, producers and consumer.⁵²

The *Slow Food* principles of "good, clean and fair" propose an innovating approach towards food systems as a whole. In contrast to the current global food system the focus is on local interactions and local production with shorter food chains to enhance transparency and to protect the environment and biodiversity of a place or region. The independence and sovereignty of local communities, as well as their participation

⁴⁹Petrini 2011.

⁵⁰The International Commission on the Future of Food and Agriculture 2008b, p. 20.

⁵¹Feagan 2007, p. 39.

⁵²Ibid., p. 25.

in defining their own food system aims at increasing food and nutrition security. The objective is to protect the rights and needs of small scale producers and local communities and to put food and nutrition security before interest of the global market or multinationals. The *Slow Food* model includes respecting the limits of ecosystem services and the need to protect local knowledge and traditions as well as biodiversity. How this strategy can be implemented is shown in the next chapter.

8 Practical Implementation – “A Thousand Gardens in Africa”

This last chapter will address the “A Thousand Gardens in Africa” project to further discuss the practical implementation of the *Slow Food* philosophy.

The gardens were initiated by the “Slow Food Foundation for Biodiversity” in the year 2010. The aim was to create a thousand sustainable food gardens with the *Terra Madre* communities across Africa. Two years after the project started, this goal was already achieved.¹

“A Thousand Gardens in Africa” was launched in many African countries and with the help of the *Terra Madre* communities, food gardens were created in schools, villages and urban fringe areas in 25 African countries. The project targeted sub-Saharan Africa first as this region suffers from severe food shortages.

The project encourages communities and families to set up food gardens, to cultivate local varieties, using sustainable and organic methods, by intercropping vegetables with fruit trees and various herbs. It’s about promoting seed exchange among the communities in order to preserve biodiversity and enhance farmers’ autonomy.

The general aims therefore are to preserve biodiversity and community strength by cultivating local varieties using sustainable and organic methods and to encourage knowledge exchange and seed preservation.²

The idea came up in response to the ongoing disappearance of local food traditions, the rising interest in growing food for global markets and export goods, rather than local varieties. The general interest in food and the involvement in agriculture especially among the younger generation decelerated. The gardens aims at increasing awareness about sustainable agriculture to produce clean food all over the world. The gardens should counter the loss of interest in food and local production. The idea to teach families and children how to grow food in in all kinds of areas (on rooftops, on very small spots, ...) and in this way involving more people in agricultural production. This should encourage people to stay in rural areas instead of moving to cities.³

¹Slow Food Foundation for Biodiversity 2012, p. 63.

²Khaled 2012.

³Ibid.

Since the *Slow Food* mission changed over time, the network is growing especially in developing countries. The project is supported by many organisations (associations, farmers' cooperatives, NGOs, etc.) working across Africa.⁴ Right now there are gardens in 25 countries, involving around 30,000 people working together in the gardens.⁵

The project integrates all parts of the community and people of all social backgrounds, especially small-scale farmers, students and schoolteachers and particularly women. A third of the gardens are in schools, that function as open-air classrooms providing fruits and vegetables for school meals. Besides that there are family and community gardens.

8.1 Contribution to Food and Nutrition security?

In regards to the discussion around sustainability in food systems I'm engaged to analyse how the *Slow Food* sustainability strategy of "good, clean and fair" food is implemented in the field. In the following I want to find out how the gardens can contribute to food and nutrition security and further more food sovereignty. I will embed the *Slow Food* strategy in the food system approach, by analysing the contribution of the gardens to food and nutrition security in all its dimensions. As argued in the beginning, *Slow Food* aims at promoting locally based food systems, with a special focus on local communities, local knowledge and tradition and small scale production.

With the "good, clean and fair" strategy the *Slow Food* movement operates on the level of food system activities to better adapt to drivers like global environmental change and to promote food and nutrition security as outcome. The focus is put on small scale producers and their interaction with the consumers and the environment. By promoting a local food system the whole food chain stays more transparent and relationships and interactions are more obvious.

8.1.1 Food Availability

In order to achieve food availability for the community, the gardens follow the principle of the *good, clean and fair* concept. In this context "good" means, that the gardens

⁴Slow Food Foundation for Biodiversity 2011, p. 2.

⁵Slow Food Foundation for Biodiversity 2012, p. 61.

should contribute to “a *fresh and flavorsome [sic!] seasonal diet, that satisfies the senses and is part of our local culture.*”⁶

The gardens belong to the local communities and are organised by the local *Slow Food* convivial. The food is used for self-consumption, to prepare school meals and for exchange. A part of it is sold directly on the local market, or in times when there is a surplus, people make preserved food products for local markets. It’s supposed to be a community project, therefore people are not paid for working in the gardens, but they work for social purposes and to share and exchange knowledge. It’s more of an educational project. The food is produced from the community for the community with the aim to include people of all social classes, age or gender.⁷

Marta Messa, *Slow Food* coordinator of the gardens, states that the gardens “first and foremost aim to satisfy the nutritional needs of the families growing them.” The school gardens tend to improve school meals and to get young people involved in agriculture.⁸

Since the gardens are completely independent from local markets, global food prices do not effect the availability of food in this context. The community itself decides what food they produced.⁹

The size of the gardens varies strongly, though indicates how much food is made available for families and communities to secure the nutrition. Marta Messa roughly estimates that in family gardens 90-100% of the garden grown food is consumed by the families, the other 10% are exchanged with neighbours or sold on the local market. Community gardens provide 80-90% food for household consumption, the rest is sold on local markets. For School gardens it’s slightly different, and depends on the size of the garden and if there is a canteen or not. The main objective however is to improve school meals or if food is sold, to generate income for the school.¹⁰

The availability of food in the gardens is dependent on the engagement and motivation of the people working in the garden. Another important driver are climate conditions.

⁶Slow Food Foundation for Biodiversity 2011, p. 1.

⁷cf. *ibid.*, p. 1.

⁸Messa 2013, p. 2.

⁹*Ibid.*, p. 1.

¹⁰*Ibid.*, p. 3.

As Messa points out, if there is no rain or rainfalls come late, many gardens cannot grow food.¹¹

8.1.2 Access to food

Concerning the access of food, the determining parameters are “Affordability”, “Allocation” and “Preference”.¹²

The question of affordability is not a critical one in this context due to the fact that, the food is produced for self-consumption or community concerns. Concerning the preference of food, cultural norms and value play a dominant role. The control and decision over what type of food and which amount of it should be cultivated is the full responsibility of those participating in the food gardens.¹³

Food communities play an important role in this context. The gardens should encourage the local community to understand the system and steer production in a direction they want, instead of being dictated by the food market industry. Marta Messa argues that the “family growing the garden has full access to the food.” “In community gardens, the families involved in the cultivation of the garden have access to food.”

The access to food in this case is tied mostly to the engagement in the gardens and contributes to food and nutrition security for those participating in the gardens.

As Weingärtner states, “food access is assured when all individuals within those households have sufficient resources to obtain appropriate food for a nutritious diet.”¹⁴

Within the *Slow Food* community there is no sufficient research data providing information for analysing the access to food provided by the garden in its entirety. What can be stated is that the garden grown food is a contribution to a nutritious diet of families and individuals. Since gardens are very dependent on the size and on weather conditions they cannot guarantee access to food at all times. The garden also provide first and foremost fruits and vegetable, while staple food is grown on bigger

¹¹Messa 2013, p. 4.

¹²Ericksen 2008a, p. 240.

¹³Slow Food Foundation for Biodiversity 2011.

¹⁴Weingärtner 2009, p. 5.

fields. “Gardens are seasonal and are meant to be complementary to the other family activities.”¹⁵

8.1.3 Use and Utilisation

Concerning utilisation, a particular goal of the gardens is to support the nutritional value. The gardens should encourage people to get involved in agricultural production and to eat fresh and healthy food. It’s not simply about the amount of food, but of the diversity, and the type of proteins, vitamins and micro nutrients the food provides.

With regards to the use, I identified that education plays a major role in this context. Therefore the project should function as a learning experience and to raise awareness of food and cooking, as well as food safety, healthy environments, hygiene, and causes of malnutrition. It’s about getting people concerned about food and traditional recipes and connecting with their own heritage and culture.¹⁶

According to the nutritional value, Marta Messa stated that the gardens “improve the availability of fresh product” and promotes diversity of food.¹⁷ The gardens support the concept of agroecology and raise awareness on issues of food safety and healthy environments.¹⁸

Slow Food offers various trainings for families and communities working in the gardens. Food processing and hygiene standards as well as nutritious diets are important topics discussed in this context. Available on the “Slow Food Foundation For Biodiversity” website, there are publications on “Manual good hygiene practices”, as well as a report on indigenous plants that are useful for cooking traditional meals.¹⁹

The social value of food plays an important role as well. The gardens serve as an example how children can get closer to their environment by participating in the school gardens. They learn how to produce food, and how to prepare meals, that they share afterwards. The engagement in sustainable food production is a contribution to guarantee food and nutrition security for the whole community. Training offered by *Slow Food* promote traditional agriculture and sustainable methods. Raising awareness

¹⁵Messa 2013, p. 6.

¹⁶Slow Food Foundation for Biodiversity 2011.

¹⁷Messa 2013, p. 5.

¹⁸Ibid., p. 5.

¹⁹Slow Food Foundation for Biodiversity n.y.

of the effects of industrial agriculture and monocrops, can create knowledge that, one generation passes on to the next.²⁰

Aurelia Weint, the local coordinator of Egypt states that: “Although the garden won’t provide the person with all the food they need for a balanced diet, at least it guarantees a daily supply of fresh and healthy food that can help families reduce the amount of vegetables they buy from the market.”²¹

According to the interview and the question on food utilisation, I have the impression that *Slow Foods* understanding of food safety is mostly based on the principles to agroecology. There is not enough evidence that this understanding involves the linkage between individual health based on a diversified diet, clean drinking water, and access to sanitary fittings and health care with a healthy environment. Further analysis on the gardens and the contribution to food and nutrition security would require a widespread scientific study on the outcomes of the gardens for individual and community health.

8.1.4 Stability

The stability refers to the temporal dimension of food and nutrition security. As outlined in chapter three inadequate access to food on a periodic basis can be a result of changing weather conditions, political instability or economic factors.²²

According to stability the gardens are vulnerable to certain weather conditions like any other farming activity. Marta Messa states that “if the rainy season is late, there is not much that can be done in the gardens.”²³ Nevertheless the food production in the gardens is independent of fluctuating food prices, since it’s “far removed from the demand of the global market and [...] corporations”. There are no cash crops produced in the garden. The aim is instead to strengthen local food production and the cultivation of traditional seeds for the local communities.²⁴

The political situation in Africa varies from region to region. Messa explains the difficulties of the gardens due to insecure political situations: “In the case of the *Slow Food* gardens, they mostly started in areas where a number of preconditions were

²⁰CSA Centro Piemontese di studi africani n.y. P. 23.

²¹Khaled 2012.

²²FAO 2008a, p. 240.

²³Messa 2013, p. 3.

²⁴Ibid., p. 3.

fulfilled - availability of land, access to water, motivated community etc. Of course, not all preconditions held at all times - imagine Mali, where shortly after the project started the civil war broke out: in many cases people had to flee their homes.”²⁵

Despite the difficult political situation in some African regions, there are gardens in Somalia and even in a refugee camp in Mauritania. Messa explains, that “meetings and gatherings just need to be arranged carefully to avoid security problems.”²⁶

Concerning the question if gardens can promote food and nutrition security at all times, Marta Messa outlines, that “Gardens are seasonal and are meant to be complementary to the other family activities (also food generating activities; as explained above, men for instance often work on other crops). The risk of seasonal insecurity is then linked to the ability of the family/community to create food reserves for the non-productive seasons.”²⁷

Depending on the climatic regions, the garden grown food contributes to food and nutrition security from six to eight months.²⁸ According to several protocols of meetings, *Slow Food* networks are engaged in training workshops on value additions, like frying, drying, or processing, making jams, juices or chutney that preserve food for a longer period of time.²⁹

8.2 Identifying the Sustainable aspects of the gardens

According to the main research question of this thesis, I’m interested in identifying the main aspects of the “1000 Gardens in Africa” and their contribution to sustainable food systems. I will therefore divide my conclusion in to the three main dimensions of environmental, economic and social sustainability.

A major benefit of the garden project is that it’s very easy to set up. On the website of the “Slow Food Foundation for Biodiversity”, there is a handbook, as well as other publications and meeting protocols provided, comprising the basic instructions of what is needed to create and sustain a garden. The project can be realized in every geographical position, due to the fact, that it’s adaptable to every local context and its

²⁵Ibid., p. 4.

²⁶Ibid., p. 6.

²⁷Ibid., p. 6.

²⁸Ibid., p. 6.

²⁹Slow Food Foundation for Biodiversity May 2013, p. 31.

various natural environments. The focus of the project lies on sustainable agricultural techniques.

8.2.1 Environmental sustainability

The environmental aspect is central to the projects aims. The focus lies on defending biodiversity, sustainable food production and local agricultural knowledge. The project is tied to the principle of agroecology. It focuses on local farming knowledge, traditional and modern techniques that are adapted to the respective local conditions, to manage natural resources in a sustainable way, including the determining factors of biodiversity, soil and water, as well as social justice.³⁰

The environmental aspect lies in aiming to defend biodiversity and sustainable food production. The project is based on local agricultural knowledge, and the application of traditional and modern techniques adapted to the local climate and soil conditions.³¹

The project handbook and meeting reports offer suggestions for sustainable water management, the importance of intercropping, and how to recover soil fertility. It contains recommendation for soil protection, biological control of insects, diseases and weeds, the cultivation of seeds and highlights the importance of the right crop rotation and potential of intercropping. The gardens actively use concepts of organic crop control and organic agriculture. Not necessarily in terms of certification, but more out of a general understanding of the importance of sustainable agriculture.³²

Slow Food supports the development towards environmental sustainability in food producing, as well as animal welfare and health, by providing trainings, handbooks or guidelines and a production protocol. These protocols describe the main steps to straighten all dimension of sustainability. The protocol must be shared and followed by all producers that are participating and should serve as a certification of quality. Moreover the producer should gain pride and recognition by signing it.³³

³⁰Slow Food Foundation for Biodiversity 2011, p. 2.

³¹CSA Centro Piemontese di studi africani n.y. P. 23.

³²Ibid., p. 23.

³³Ibid., p. 23.

Marta Messa, coordinator of the *Slow Food* gardens stated, that the gardens aim at “adopting agroecology and progressively move away from conventional agriculture/mono-culture”, but that it’s nevertheless “a process, [that] doesn’t happen overnight.”³⁴

Slow Foods activities towards environmental sustainability are all based on the knowledge of local communities. The movement follows the understanding that indigenous populations play a crucial role in preserving biodiversity and ecosystems. The *Terra Madre* network for example functions as platform for those producers sharing their special traditional knowledge and sharing of information with other producers, or researchers.³⁵

8.2.2 Economic sustainability

In terms of economic sustainability the project handbook recommends to connect with the local market to sell products and organize events, or get in contact with local restaurants. The funding of the gardens is part of the *Slow food* network. In their social report they state, that “[a] food garden can be adopted with a minimum donation of 900 Euro.” The Organisation provides the contacts, so the donors can follow the work and proceeding of the project.³⁶

In the explanation of the community food model, it’s outlined that in regards to economic terms *Slow Food* promotes decentralised decision making and food sovereignty. The overall aim is to eliminate the marginalisation of small-scale producers. The idea is to support small-scale farmers by identifying new outlets. The *Slow Food* networks enable producers to link with consumers by organising events, markets, etc. *Slow Food* tries to create opportunities for farmers to present and sell their products by giving them a platform. The idea is to encourage producers to find a way to promote and market their products, to exchange and share knowledge. Marketing should only be done by the producer. What is central to the *Slow Food* model is that the producer gets the opportunity to interact directly with the consumers, without any intermediaries that extend the distribution chain.³⁷

³⁴Messa 2013, p. 1.

³⁵CSA Centro Piemontese di studi africani n.y. P. 24.

³⁶Slow Food Foundation for Biodiversity 2012, p. 62.

³⁷CSA Centro Piemontese di studi africani n.y. P. 26.

8.2.3 Social sustainability

The leading part, for the dimension of social sustainability, are the communities. Around the community model of *Slow Food*, the main goal is to improve the social role of the producers and to promote local culture. The network of communities that enable the exchange of experience and knowledge is essential for strengthening communities and their abilities.

The contribution to self-determination and dignity is at the center of interest. Marta Messa explains it, by giving an example from Côte d'Ivoire. Schools there were supplied with sacks of rice from the World Food Programme. The community saw no need to cultivate rice and therefore focused on growing onions for the local market. The prices though for onions were rather low, due to the big supply. After setting up the gardens, the community was encouraged again to make the decision over what food they want to grow and eat. The gardens revitalised the participation of the community and promoted self-determination instead of being totally dependent on external aid.³⁸

The overall goal of the gardens is not to boost production through any chemical fertilizers or pesticides or huge concentrations of monoculture and livestock farms. The varieties and specialities of the special locality are at the centre of concern.

In regards to the gender balance, Marta Messa stated that it's mostly the women who are in charge of the garden, while men often concentrate on other cultivations like cereal.³⁹ Considering the local coordinators of the garden Marta Messa estimates that there are as many male as female coordinators. There is no data giving evidence to this estimation though.

One key principle of the gardens is the combination of agricultural experience, community activities and educational aspects. It's a place for sharing experience among people from various generations and social levels. In the school gardens for example, farmers, grandparents, parents and pupils are working together and learn about traditional crops and methods for harvesting and preparing food. Cooking traditional dishes together is also a big part of the community experience. Communities

³⁸Messa 2013, p. 8.

³⁹Ibid., p. 3.

are encouraged to produce their own seeds and cultivate traditionally and locally adapted products.⁴⁰

The project works with the *Terra Madre* communities across Africa. Every garden is part of the *Slow Food* gardens, although each garden works independently. There is a national and regional coordinator, who manages the interaction between the communities all over the country with the aim to promote exchange. The experiences of the various communities are shared through regional seminars, information exchanges and meetings. *Slow Food* is cooperating with many other organisations like NGOs or farmers' cooperatives across Africa that are working towards sustainable agriculture and food systems. The interactions and exchange of experience can support the movement to grow and to create a broader network for the purpose of enabling a more sustainable food system that promotes food security and food sovereignty.⁴¹

8.3 From Subsistence to Food Security and Food Sovereignty

One of the main goals of the gardens is to promote food sovereignty and to get the community engaged in shaping their own food system.

The gardens give communities the opportunity to decide which seeds they want to cultivate and what food they want to grow. The networking promotes political participation and creates space for new ideas and farmers movements. The projects, implemented by *Slow Food*, consider food to be a starting point. The food products must represent a territorial identity. *Slow Foods* focus lies on the “participative project style”, which means that the local community is the main actor. It's a bottom up approach that empowers food communities to take action in developing their own ideas for a more sustainable food system.⁴²

Marta Messa gives an example of one garden in the Ivory Coast, where women in each community used to work by themselves. They used to growing on small plots around their houses and planted mostly onions, in order to sell them at the local markets. Since many people grew onion, their value was not very high. Through the emergence of the garden, the coordinators encouraged the women to work together on a bigger

⁴⁰Slow Food Foundation for Biodiversity 2011, p. 61.

⁴¹Ibid., p. 2.

⁴²CSA Centro Piemontese di studi africani n.y. P. 18.

space, where they are now able to grow a variety of crops. The local coordinators raised awareness of the importance of growing diverse crops and outlined the benefits, such as crop rotation for better fertility, diversified diet for better nutrition and cultivating cycles, so there are always crops to harvest and therefore to sell. Marta Messa pointed out that this improved not only the social situation for women but also their economic situation.⁴³

The development paradigm of *Slow Food* changed significantly over time. The focus now lies on the communities and their existing modes of production. It's not about teaching them how to increase yields through chemical and technical inputs, or making them specialise on export goods, which forces them into the global free market. The main interest instead is, that communities are effectively working in the interests of their own food sovereignty.⁴⁴

“The time has come to stop telling farmers how to do their job. The time has come for them to say no to the system and start again from where their fathers and mothers left off.”⁴⁵

Subsistence agriculture is often ascribed to the poor farmers in developing countries. It's associated with “backward” communities in the global south. In fact subsistence is any form of self-consumption, therefore even food gardens in a courtyard or on a rooftop are a form of subsistence.

The argument of *Slow Food* is, that subsistence agriculture is not an attempted return to the past, it's more determined as the right to produce food for oneself, ones own family or the community. It's an alternative approach on how to change the food system we live in, that's based on industrialised agriculture and relationships of dependence.

“This is where a food system that guarantees food sovereignty has to start; from subsistence, from the right of producers to produce food first and foremost for themselves, from the freedom of anyone to grow plants and raise livestock.”⁴⁶

⁴³Messa 2013, p. 2.

⁴⁴Petrini 2010.

⁴⁵Ibid.

⁴⁶Ibid.

Further more it promotes democracy and the right to chose one's own agricultural policies: "On the contrary, it lays the foundation for a more democratic food system, controllable and capable of yielding a reasonable profit, without infringing on anyone's rights, least of all those of nature: a system in which food is produced first of all to be eaten, then to be sold."⁴⁷

⁴⁷Ibid.

9 Conclusion

*“That how you eat and how you choose your food is an act that combines the political - your place in the world of other people - with the most intensely personal - the way you use your mind and senses together, for the gratification of your soul.”*¹

With this quote of Alice Water I want to wrap up the discussion on tracing sustainability in food systems. Michael Pollan argued that most of our food system depends on not knowing. I do agree with this view, thus this is the point where we should seek for alternatives and new paths for our food to make its way from field to fork.²

In this thesis I elaborated on the philosophy of *Slow Food* and their activities towards a more sustainable food system.

The theoretical background of the *Slow Food* movement is based on the assumption that food is not a mere quantity but has a social, cultural and political dimension, that needs to be recognized. *Slow Food* is committed to issues concerning food since its very beginning. The various activities aim at strengthen networks and interactions among producers and consumers. The movement raises awareness for food and its traditional and cultural origin, and at the same time supports educational goals.

The *Slow Food* movement emerged out of a critical discourse on the consequences of globalisation and the effects it has on food systems. Their main purpose is to demonstrate that the flood of standardisation has led to an alarming situation for both humans and the environment. “We oppose the standardization of taste and culture, and the unrestrained power of food industry multinationals and industrial agriculture.”³

The *Slow Food* spirit though is not meant to combat multinationals, but to save the energy for developing new ideas that make change happen.⁴

The central arguments of this thesis are based around the discussion on sustainable food systems.

This thesis provides an overview of the global food system and its main challenges for the global population and the environment.

¹Waters 1995.

²Pollan 2007.

³Slow Food International n.y.(c).

⁴Petrini 2001, p. 26.

The current food system creates uneven outcomes which are based on corporate interests and wealth creation on the one hand, while a significant part of the world population is faced with malnutrition and hunger.⁵

The food system approach serves as an analytical tool to research the various outcomes of food system activities and the social and environmental drivers that affect the whole food system and its consequences for various actors.

The *Slow Food* movement operates on the level of food system activities with the aim to generate environmental and socio-economic outcomes that promote food and nutrition security. *Slow Food* considers a community based food model as necessary to encourage food sovereignty and self-determination.

The strategy is based on the principles of “good, clean and fair.” Therefore the food that is produced, processed, distributed and consumed should be of high quality, to satisfy ones nutritional and cultural needs, with respect to all participants within the food system, as well as to future generations and the environment. It should acknowledge the limits of ecosystem services and respect the rights of all people to food.

What *Slow Food* provides is a holistic approach towards sustainable food systems that puts food in the center of concern.

This thesis makes a contribution to identifying the main potentials of local structured food systems, and the opportunities and benefits for local communities. The “good, clean and fair” strategy is introduced in the “Thousand gardens of Africa”, initiated by the “Slow Food Foundation for Biodiversity”.

According to my analysis, the gardens show profound potential to contribute to food and nutrition security in its four dimensions. The locally structured food activities encourage people of different generations, age and gender to participate in local sustainable agriculture.

The implementation of the *Slow Food* community based food model resulted in many cases to a considerable extent to self-autonomy, dignity and food sovereignty. Food sovereignty is enhanced through the importance of networks, the several meetings and trainings. According to my findings and the examples given by Marta Messa, the *Slow*

⁵Watson 2009, p. 9.

Food movement encourages the local community to participate in shaping their own food system.

Yet the gardens in many cases can not entirely satisfy the nutritious need for a balanced diet. The sizes of the gardens indicate how much food is produced, therefore small gardens are not capable to generate enough food to safeguard food and nutrition security at all times. As Marta Messa states, the gardens are meant to be complimentary to other activities. This indicates, that self-autonomy is not guaranteed by the gardens alone.

There are nevertheless some questions remaining open in the discussion.

As the interview has shown it's mostly women who are working in the gardens, while men are engaged in other activities. This indicates certain social imbalances that need further attention and scientific research.

A critical aspect in this context is that sustainability in food systems, as I described above is a process and not a linear development.⁶

According to the interview and the question on food utilisation, I have the impression that *Slow Foods* understanding of food safety is mostly based on the principles of agroecology. There is not enough evidence that this understanding involves the linkage between individual health based on a diversified diet, clean drinking water, and access to sanitary fittings and health care with a healthy environment. Further analysis on the gardens and the contribution to food and nutrition security would require a widespread scientific study on the outcomes of the gardens for individuals, families and communities.

What the "Thousand Gardens in Africa" indeed demonstrate, is that there are possibilities to change how food systems operate. The gardens show, that even if one starts at a very small local level, the outcomes can have far reaching consequences for a whole community, region or even country. What is of importance when looking at the gardens is, that control is given back to those people producing and consuming food. Like Michael Pollan states, the challenge is to change the system more than it changes you.⁷

⁶Blay-Palmer and Koc 2010, p. 223.

⁷Pollan 2007, c.f.

9.1 Critic and personal opinion

It's not my intention to present the *Slow Food* movement as an exclusive solution to the current challenges. There is indeed much criticism of *Slow Food*, which addresses in particular the linkage of quality and the right to pleasure.

Stock and Carolan argue, that it's completely acceptable that food combines social, cultural and political aspects but how can we produce such food? According to their understanding it's a case of luxury to be a conscientious consumer. The prices of quality products make it more than obvious that they are only affordable to a very small part of society.

"Yet being 'slow' for the sake of slowness doesn't feed people either. Feeding a soul is fine when the body is nourished. We still need to produce food - a lot of it - if we want to feed the world's growing population."⁸

It is agreed, that the price is one important aspect for both the producers and the consumer. While food can be sold at a very cheap price, it's only possible with great expense to the culture, biodiversity, human and environmental health. When we want to understand food and nutrition security, we need to think in both ways, quantity and quality.⁹ We need a widespread understanding of the issue, and I consider the *Slow Food* philosophy as a possible approach to this matter.

The *Slow Food* movement, with Carlo Petrini leading the way followed, from the very beginning, an utopian idea by proclaiming the right of pleasure to everyone. Some critics might say it's even cynical to demand pleasure in the context of food while others suffer from chronic food insecurity. In the course of this thesis, I argued that identifying possible solutions for hunger in promoting GMO crops and food aid, creates dependency and is too narrowly considered. I find it essential to realize that it's not about the amount of calories and about boosting production alone. It's about recognizing that food is more than plain surviving, it's a human right, it's dignity, it's the expression of ones social and cultural belonging.

⁸Stock and Carolan 2009, p. 120.

⁹Ibid., p. 124.

It's about connecting with the earth and the natural environment, and it's about making one's own food choices and participating in shaping the food system in a way that protects societies and the ecosystem.

Food as a topic concerns all people to the same extent. Malnutrition occurs in various forms and illustrates an issue, that occurs both in the northern hemisphere, as well as in the global south. One has to get deeper into the philosophy of *Slow Food* to understand that pleasure as such is tied to principles of education and the awareness of social and environmental aspects around food. And above all it's about rights and self-determination.

Slow Food follows the statement that food should be "good, clean and fair" for all people worldwide. I understand that this indicates that malnutrition, food production and consumption is no longer considered a third world problem alone, and doesn't have to be treated as such.¹⁰ It concerns all people to the same extent, and requires to rethink the current food system as a whole in order to induce change.

Slow Food creates and strengthens global networks and food communities. In this sense innovation at local and global levels can trigger alternative ways of production and consumption. What I find crucial in this context is the participation of all people involved in food system activities. Producers just as much as consumers and the interaction amongst them.

The gardens show, that exchange is important to keep up an idea for long term goals. Especially when I consider the *Slow Food* gardens as an idea that encourages more and more people to set up gardens, it's vitally important that the network grows, without *Slow Food* being involved as initiator.

Due to the globalisation of food, and the world market, food is before all, a global good, and it connects farmers in India with consumers in Europe. The ongoing disconnection from producer and consumer is a threatening development. *Slow Food* highlights the need to rethink the role of food and how we want to connect with those producing it.

¹⁰cf. Shiva 2009, p. 43.

9.2 Future outlook

Sustainable food systems are a desirable vision for the future. As Shiva states, monocultures in minds produce monoculture on the fields.¹¹ There are plenty of visions on how to make the food system better and how to extinguish global malnutrition.

What is important and what we should not forget in this context is that terms such as food, system and sustainability are all used in different ways, and mean different things to different people. There is no universal definition or solution. It happens that the terms are overused to the extent that they become totally meaningless, which has become the case for ‘sustainable’.¹² It’s been used by all kinds of stakeholders, so I don’t find it significantly beneficial as a benchmark, without knowing the meanings, intentions and prospects behind it. *Slow Food* defines its understanding of sustainability in the three principles of “good, clean and fair”.

According to my impression there are some questions that remain unanswered, where *Slow Food* cannot provide adequate research data. There are no statistics and studies of how effective the gardens can contribute to food and nutrition security. I would encourage *Slow Food* to rethink its own understanding of the basic concepts around food sovereignty and food and nutrition security. What is needed is a scientific analysis of their activities.

Finally I want to comment on a quote by William B. Lacy by arguing that “think globally - act locally” is no longer suitable. “[It’s] necessary to think and act at all levels - locally, regionally, nationally and internationally - to ensure long-term sustainability.”¹³

“Slow Food is an idea, a way of living and a way of eating.”¹⁴ What *Slow Food* has achieved already, is that it has contributed to put food on the global and local agenda again. The movement has created an international network where issues about food are discussed and implemented through various activities. Change first of all requires the awareness of the importance to respect environmental limits. To change the food system in a way that meets the needs of the entire global population, involves more

¹¹Shiva 2009, p. 42.

¹²38 Koc 2010, cf.

¹³Lacy 2000, p. 23.

¹⁴Slow Food International n.y.(c).

than changing individual behaviour. Governmental structures are essential in this context.¹⁵

Moving towards a sustainable food community needs civil engagement and the participation especially of those involved in the food production, like farmers and small holders. Social justice and equitable access to food is the key to reach food sovereignty and therefore food and nutrition security. Encouraging interaction amongst various actors, and making people realize the role they play in this system, is vitally important for shaping a system that can respond to future challenges.

Finally I'm returning to the question I posed in the beginning on how *Slow Food* can contribute to a more sustainable food system. What the *Slow Food* movement provides, according to my judgement, is a new way to look at the food system as a whole. Their focus is to start with food, and to connect people, food and the environment. I identified many aspects that have the potential to improve the livelihood of small scale farmers, as well as communities and families. The gardens are a small step into the right direction towards better nutrition and food sovereignty. The *Slow Food* movement, as I understand is giving new input in the debate on food systems, and can contribute to shape a more positive picture. It's about empowering and valuing what is already there, local knowledge and traditions. This is by far not the ultimate solution. According to my opinion the *Slow Food* movement requires scientific research to reflect and improve the outcomes of their activities. There are open questions remaining, that need further scientific analysis.

I want to finish with the quotation I outlined in the beginning. *Slow Food* is not the exclusive solution to the complex issue of food and nutrition security, but it's a place to start.

*"We start with food. Given the centrality of food in our lives and its capacity to connect materially and spiritually to each other and to the earth, we believe that it is a good place to start."*¹⁶

¹⁵Rosin, Stock, and Campbell 2012, p. 225.

¹⁶Kloppenburg, Hendrickson, and Stevenson 1996, p. 41.

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Interview Marta Messa – October/November 2013

Organisational structure

How is the organisational structure of the gardens? Who is in charge of the local implementation of the gardens? And who decides who is in charge?

The organisational structure of the gardens changes according to the type of garden: family, community, school.

For family gardens:

Organisational structure: as the family is involved, it is usually the parents or older members of the family (in case of extended families, as it often happens in Africa) who coordinate the work, in collaboration with the younger family members.

Who is in charge: again, the parents or older family members?

Who decides: the family, so the decision making falls within the usual decision-making dynamics of the family?

For community gardens:

Organisational structure - very often community gardens are cultivated by families or women (from different families) together, in a very collaborative way: land, work, tools, seeds and at times even produce are shared.

Who is in charge: in the community gardens visited there was not one person identified as being in charge, as the garden is run collectively and everyone has a very strong interest in the well-functioning of the garden. It might be the case that one or two people are identified as "coordinators" - meaning they are the link between the group working in the community garden and the local/regional slow food coordinators.

Who decides: the community

For school gardens:

Organisational structure: usually the most active teachers coordinate the activities in the garden and try to get the other teachers on board, so they integrate the gardens activities in the school curriculum

who is in charge: the above mentioned teachers; in some schools, the school director also takes an active interest and is involved in the coordination

who decides: the school

One note about "who decides": for a slow food garden to be started, the commitment of the family/ the community/ a number of teachers are fundamental and a precondition for establishing the garden.

Who controls what food is produced and which agricultural production techniques are being used?

The local coordinators, the slow food staff during the local missions, at times even slow food members who travel to the country independently.

Please note: slow food is not a certifier and we are aware that many communities adhered to the slow food gardens with the aim of adopting agroecology and progressively move away from conventional agriculture/monoculture. It is a process, it doesn't happen overnight. So, controlling is a way of knowing what is going on not for the sake of deciding who is in or out, but rather for understanding what is the commitment level and the steps to be taken to reach a fully slow food garden.

In terms of what food is produced: the community chooses, giving priority to local products and to the diversification of the cultivation. This often is a process too. Read the following case story about the community gardens in Ivory Coast:

before the launch of the 1000 gardens, the women in each community used to work individually on small family plots close to the house. With the 1000 gardens initiative, the local coordinators invited the women to start working together and join forces in community gardens - this has given them more space to grow their crops, hence the chance to have more fresh produce for their family as well as to be sold. Also, the women used to grow just onions to be sold at the local market and a few other crops. The local coordinators raised the awareness of women on the importance of growing a diversity of crops in the gardens, as it is beneficial in many respects: a diversified garden is easier to maintain from an agricultural point of view (with more crops, it is easier to rotate them, maintain soil fertility, associate crops etc.), different crops have different cultivation cycles (some have short ones and can be harvested more often, some have longer cycles) and combining them can ensure having always some crops to harvest and sell.

The women we talked with were all very happy with how the garden has improved their situation, also in terms of family income.

Food & Nutrition Security

In my thesis I'm concentrating on food and nutrition security outcomes, based on the following definition „Food and Nutrition Security is achieved, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactorily utilized by all individuals at all times to live a healthy and happy life.” Therefore I'm interested, if the gardens can make a contribution to food and nutrition security, in all its four dimensions: Availability, Access, Utilisation and Stability?

Food availability

How does the distribution of food works? In what form, when and to whom is the garden-grown food available? Is the project in charge of infrastructure like storage, transportation, etc.?

The slow food gardens are first and foremost aiming to satisfy the nutritional needs of the families growing them.

Family gardens:

Food is used for family consumption; the food is available fresh, depending on the season different crops will be harvested, and it is available to the family. The project is not in charge of infrastructure.

The same goes for community gardens (involving more families). Often some of the exceeding harvest in community gardens is sold locally, to generate some additional family income (for expenses like school fees etc.)

School gardens:

The setting can vary greatly, depending on the size of the garden and of the school. School gardens are primarily meant to be educational tools.

The harvest is used for one of the following:

- to improve the school meal
- to reward the students involved in the garden (not all the school is involved all the time)
- to contribute to the work of the person / teachers taking care of the garden when the students cannot do so

- it's sold locally to generate revenues for the school (some school reduce school fees for the most disadvantaged students thanks to the revenue from the garden)

Who controls the distribution of the food?

It is up to the family/community/ school.

In the case of schools, the local slow food coordinator can suggest how to make the most of the garden harvest

When we take the whole net amount of food that is produced in the community garden, can you give an overview in percentage of the distribution (according to your experience)?

This is a very rough estimate, very very rough. But approximately:

- in family gardens: 90%-100% goes to household consumption, 10% is exchanged with neighbors/sold on the local market

- in community gardens: 80-90% goes to household consumption, 10-20% is sold on the local market/donate to help centres or schools (e.g. in South Africa)

- in school gardens: that's an even more difficult estimate, as it depends on the size of the garden vis-à-vis the size of the school, whether the school as a canteen or not etc. The produce of a school garden can be used, for instance, for one or more of the following purposes:

- used in the canteen to improve the school meal, if there is a canteen

- given to the pupils involved in the project

- given to the most needy pupils

- sold to create some income for the school, to cover school fees for the most needy students/to purchase books/school equipment

Referring to the community gardens, from the part that is going directly to the households, according to the amount of the food they need to secure a nutritious diet, how much of it (in percentage) is covered by the food they get through the gardens?

A rough estimate is around 50-70%.

It depends very much on the staple food of the country in question, for instance:

- in many countries in Western Africa, the staple food is rice or cereals like fonio, to which vegetable or meat sauces (or a mix of the two are added); in that case the staple food covers much of the food needs

- in other areas yam (e.g. in Northern Benin), maize or some banana varieties (like the Matoke, in Uganda) etc. constitute the staple food; in such cases the garden provides a higher percentage nutritious intake

According to your experience what drivers influence the availability of the garden grown food? (Climate, droughts, natural resources, the engagement of people working in the gardens...?)

Of course, a mix of drivers influences the availability of the food grown:

- The first and most important driver is the engagement and motivation of people working in the garden: without that, there is no garden in the first place;
- The second is climate: if rainfalls are late or don't come, many gardens simply cannot grow food

In the case of the Slow Food gardens, they mostly started in areas where a number of preconditions were fulfilled - availability of land, access to water, motivated community etc. Of course, not all preconditions held at all times - imagine Mali, where shortly after the project started the civil war broke out: in many cases people had to flee their homes.

The availability of food in the gardens is very much dependent on the engagement and motivation of the people working in the garden. Another important driver are climate conditions. As Messa points out, if there is no rain or rainfalls come late, many gardens cannot grow food.

The garden grown food can contribute to a nutritious diet for families and individuals

Access to food

Access to food is assured when all individuals within those households have the required resources to obtain access to food.

What is needed in order that the individuals can obtain access to the food grown in the garden? Is it dependent on the engagement in the gardens? (Labour, knowledge, social and political resources)

The family growing the garden has full access to the food.

In community gardens, the families involved in the cultivation of the garden have access to food.

In school gardens, the distribution of the food grown (remember, it might be very little compared to the number of students hosted in the school!) varies greatly (see examples above of how food is used).

When, where and how can the food be accessed by the people?

At any time

What happens in times of surplus? Are the products sold on the local market?

Yes.

How is the price level compared to products of the same kind from local farmers?

For that I have no data, but I believe the price does not change much compared to other products

There are cultural norms and values that influence food choices. Who decides what food is being grown in the gardens and consumed by the communities?

the community itself

Is there a special emphasise to support the role of women in the project? If yes, can you describe how this is implemented?

There is no special emphasis, as women are the ones who anyway most of the times and in most countries are in charge of the garden. Oftentimes men concentrate on other cultivations, like cereals

Utilisation:

Utilisation describes the nutritional value, social value and food safety.

In terms of the nutritional value. How much of the daily requirements of calories, vitamins, protein and micronutrients are provided by the food produced in the gardens?

For that I have no data. But considering that each garden should be a garden of biodiversity, with a diversity of crops being grown, than the nutritional value of the harvest can be balanced.

Can the gardens influence diets of people, in order to improve the diversity of food consumed?

yes: first of all the gardens improve the availability of fresh product, and then the diversity of foods too

Is there a special focus on the social value of food, by means of eating meals together?

yes, the aspect of conviviality and solidarity is encouraged throughout the project (see the project handbook)

Are there certain mechanisms to assure food safety?

Observation and monitoring, especially in the production phase, and especially for the communities that are moving away from conventional agriculture to agroecology (so, those who abandon synthetic chemicals)

Stability

The dimension of stability declares that food should be available and accessible at all times and on a temporary basis. Food insecurity issues are mostly triggered by certain shocks as changing weather condition, fluctuating food prices or political instability.

How resistant are the gardens to these occasions?

-Weather condition:

The gardens are resilient in so far as they use rationally resources like water and soil. That said, if the rainy season is late, there's not much that can be done in the gardens.

-Fluctuating food prices

That is of no concern to the gardens as the communities grow their own food (from their own seeds) for their own consumption

-Political instability.

It is an issue in Somalia, for instance. But even there (or in the refugee camps in Mauritania!) there are gardens: meetings and gatherings just need to be arranged carefully to avoid security problems. In Mali, on the other hand, the situation has seriously hindered the coordination of the gardens, as it was impossible for the local coordinator to travel across the country - but many of the gardens blossomed nonetheless.

Can the food gardens promote food security at all times? How high is the risk of seasonal food insecurity?

Gardens are seasonal and are meant to be complementary to the other family activities (also food generating activities; as explained above, men for instance often work on other crops). The risk of seasonal insecurity is then linked to the ability of the family/community to create food reserves for the non-productive seasons.

How frequently is it happening that food surplus is sold on the local market? Can the gardens secure income for the communities on a regular basis?

How frequently: very frequently, almost always - unless the food is exchanged with neighbors or donated (e.g. in South Africa).

Rather than income for the communities, is income for the families engaged in the community garden. Not all families within the community may be involved in the garden, it depends very much on family needs, priorities, opportunities.

Referring to the various seasons: How many months a year can the garden contribute to food and nutrition security of the community?

It ranges roughly from 6 to 8 months - imagine that alone in Ethiopia there are three different rainfall regimes in different areas of the country.

Also consider the climate range moving from the Mediterranean (Egypt, Tunisia, Northern Morocco) to the Sahel, to the tropical area to the Southern hemisphere subtropical zone.

Is there a time of the year where the gardens could provide the total amount of food for families to secure a nutritious diet?

If cereals or the local staple foods are also grown in the garden, then yes - there can be times of the year when that happens.

Food Sovereignty

In my thesis I'm concentrating on the concept of food sovereignty. The concept contains six key points which state, that food sovereignty focuses on food for people, values food providers, localizes food systems, puts control locally, builds knowledge and skills and works with nature.

According to these six key points, do you think the gardens can contribute to food sovereignty as possible outcome? If yes, can you explain how?

food for people:

yes: the garden is grown by the community for the community
values

food providers

yes. Also if you look at the Slow Food video, the gardens and the project help re-establish the dignity of farmers

localizes food systems, puts control locally, builds knowledge and skills and works with nature.

yes, all of the above

gardens are for the family/community, who control the gardens

They build knowledge and help share it, among farmers and across generations

Being agroecological gardens, they work with nature

You mentioned the gardens are complimentary to other activities, can you explain why the gardens cannot provide sufficient food for the whole family/community?

For the reason mentioned above: they do not always provide the staple food. For instance, rice cannot be grown in gardens.

What would be needed that communities/individuals/households can cover their total demand of food from the gardens, to secure a healthy and nutritious diet at all times?

Gardens are by their nature seasonal. In some season and areas, gardens are simply not cultivated because it is not possible (e.g. during the heavy rainfalls in Senegal, cereals are cultivated and stored to be eaten also during the horticultural season): the water falls too heavily on the ground and would ruin the vegetables.

According to your experience, to what extent are people dependent on other activities? (in percentage)

Roughly, they depend on 10% -20% on other activities (also food transformation, e.g.)

Compared to food gardens in industrial countries? Where are the main differences?

In industrial countries, like anywhere else worldwide, you can have gardens that range from being agroecological (or even biodynamic) to entirely conventional (with a heavy use of chemical inputs).

So, if we take a comparison agroecological gardens in industrialised countries, the differences are not many - of course the crops are different (in agroecological gardens indigenous crops are preferred), but else the concept and application are similar

The gardens aim at contributing to self-determined development of the local communities. How can do the gardens support this, and can you recognize certain efforts made in this context?

I give you one example, from Ivory Coast.

Before the beginning of the project Mangeons Ivorien (that preceded the 1000 gardens in Africa initiative), in the North of the country all school received free sacks of rice from the World Food Programme. The community saw no point in growing their own food and focused solely on cultivating onions to be sold locally (the problem being, so many communities grow onions in the region, so the point of growing them to generate revenue fails, as market prices are low with so much onion available).

With the project Mangeons Ivorien, the community was invited to think about the food they wanted to eat and grow, and how the community could re-establish their self-determination - instead of being merely dependent on external aid. That's when the first gardens were launched in the country.

Also, before the launch of the 1000 gardens in Ivory Coast, the women in each community used to work individually on small family plots close to the house. With the 1000 gardens initiative, the local coordinators invited the women to start working together and join forces in community gardens - this has given them more space to grow their crops, hence the chance to have more fresh produce for their family as well as to be sold. Also, the women used to grow just onions to be sold at the local market and a few other crops. The local coordinators raised the awareness of women on the importance of growing a diversity of crops in the gardens, as it is beneficial in many respects: a diversified garden is easier to maintain from an agricultural point of view (with more crops, it is easier to rotate them, maintain soil fertility, associate crops etc.), different crops have different cultivation cycles (some have short ones and can be harvested more often, some have longer cycles) and combining them can ensure having always some crops to harvest and sell.

The women we talked with were all very happy with how the garden has improved their situation, also in terms of family income.

Funding

According to the funding of the gardens. Where is the money coming from?

Most of the money comes from the Slow Food Convivia and private donors.

Then some foundations have contributed too.

Please find the list of donors on our website for an overview.

Once the gardens are set up, who finances the maintenance of the gardens and the other running costs?

The community/family/school, at times through the sale of some of the harvest or through contributions by each member of the garden (as in the case of community gardens).

Who owns the land, where the gardens are set up?

The community/the school. Mind that in some countries the community land is managed by the community leaders, who can decide who can cultivate where. The land ownership works differently compared to Europe.

Creating networks – Political participation

Do you think the gardens and the involvement in food related activities can promote political participation of communities? If yes how?

It depends what you define by political participation.

If you mean in local institutions, I wouldn't know.

If you mean being politically active, on issues like access to land for women, opposition to GMOs ect, then yes.

The participation in this case can take the form of lobbying for access to land for women, to creating synergies with other NGOs to take a strong stand against GMOs (in Uganda the network wrote a petition to the government with other NGOs)

To what extent can the gardens contribute to independence from the demand of global markets and corporations?

The gardens are small plots, where those cultivating it are invited to decide what they want to cultivate and why.

So, in this sense they are far removed from the demand of the global markets (gardens are not producing cash crops) and corporations (the small plot belongs to the family/community).

In this sense they contribute to independence by focusing on local production of local crops for the local communities - as a concrete example of sustainable agriculture.

How important is the creation of networks between communities? Is there any exchange of knowledge/experience, etc?

Fundamental! please have a look at the project handbook. The gardens are all connected and we invest greatly in strengthening the network, locally as well as across Africa - see the meeting that Petra Braun attended in Uganda.

You mentioned networks are amongst the main efforts of the gardens. Concerning to the networking between various communities, how frequently do the coordinators meet?

Varies greatly across countries: e.g. in Uganda they meet regularly, also through the Slow Food convivia, in other areas, like Congo, they rarely meet simply because the country is huge.

Within one community, how frequently do people meet to discuss problems or outstanding decisions?

On a daily basis - it comes by itself: as people work in the garden and also take breaks together, they have plenty of chances on a daily basis to discuss.

When communities meet, who is involved in decision making processes? How can those people working in the gardens influence decisions being taken in the gardens?

When the families growing the community gardens meet, they take the decision and fully influence those (they are the decision makers!)

How frequently is it happening that individuals of a certain community come up with new ideas for the gardens?

Impossible to say, it's a process that it is impossible to monitor.

Gender equality

You mentioned the gardens are meant to be complimentary to other activities. In average how many hours do women spend per day working in the family/community gardens?

During the horticultural season, a rough guess it's around 4-6 hours a day - but mind, we never measured the time spent in the garden!

In average how many hours do men spend per day working in the family/community gardens?

It can be the same as women, or less if they are engaged in other types of farming/food and revenue generating activities (e.g. also fishing)

If you consider all local coordinators, can you give an overview in percentage, how many are male/female?

Very roughly, they split down to half/half.

Abstract (English)

This thesis examines the contribution of the *Slow Food* movement to a more sustainable food system. More specifically it provides a basic introduction in food system theory with a special emphasis on food and nutrition security as possible outcome. The main focus is on the examination of the *Slow Food* philosophy and its involvement in enhancing food and nutrition security and further food sovereignty. The current food system is based on free trade and open markets regulations which generate uneven outcomes and results in environmental degradation and food and nutrition insecurity for a significant part of the global world population. The *Slow Food* movement provides an innovative approach towards a more sustainable food system. In the center of attention is the importance of local traditions and local food systems that encourage social and political participation of the local community and at the same time acknowledge the limits of ecosystem services, in respect to the environmental dimension. This thesis makes a contribution to identify the main potentials of local structured food systems, and the main benefits and opportunities for local communities. The *Slow Food* movement operates on the level of food system activities with the aim to generate environmental and socio economic outcomes that promote food and nutrition security and further food sovereignty. The practical example of the “Thousand gardens in Africa” demonstrate the importance of food communities and food relationships. The gardens are meant to addresses small holder farmers in Africa, giving them the opportunity to produce “good, clean and fair” food for their own consumption. The main interest of *Slow Food* is to empower the marginalized participants in the global food system, by highlighting their essential role in food system activities. The aim is to encourage communities and families to participate in food policy in order to generate self-determination and autonomy. In general this thesis provides a critical examination on the current global food system with the intention to demonstrate new approaches towards sustainability in food systems.

Abstract (German)

Diese Diplomarbeit beschäftigt sich mit der *Slow Food* Bewegung und stellt die Frage, in wie weit deren Ideologie und Aktivitäten einen Beitrag zu einem nachhaltigen Ernährungssystem darstellen. Meine Auseinandersetzungen basieren auf dem theoretischen Hintergrund des “Food System Approach”, mit besonderem Augenmerk auf nachhaltige Ernährungssicherung und Ernährungssouveränität. Das derzeitige Ernährungssystem unterliegt den Grundsätzen des freien Handels und der globalen Märkte. Die vorherrschenden, globalen Handlungsstrukturen und die industrialisierte Landwirtschaft gefährden Ökosystemleistungen weltweit, was die Lebensgrundlage für einen großen Teil der globalen Bevölkerung massiv bedroht und Hunger und Mangelernährung zur Folge hat. *Slow Food* verfolgt den Ansatz, dass Lebensmittelsysteme, welche lokal strukturiert sind, die Grundlage für soziale und politische Partizipation schaffen und gleichzeitig die Erhaltung der Umwelt fördern. Ziel der Arbeit ist es, Potentiale und Möglichkeiten der lokalen Bevölkerung aufzuzeigen, um ein nachhaltiges Ernährungssystem zu ermöglichen. *Slow Food*, als globale Bewegung, rückt marginalisierte Akteure des globalen Ernährungssystems ins Zentrum um deren Rolle zu verdeutlichen und zu stärken. An Hand des Beispiels der “Thousand Gardens in Africa” werden die Herausforderungen der praktischen Umsetzung der *Slow Food* Strategie demonstriert und analysiert. “A Thousand Gardens in Africa” wurde von der “Slow Food Foundation for Biodiversity” initiiert, mit dem Ziel die Rolle von Kleinbauern und Kleinbäuerinnen in Afrika zu stärken. Die Gärten sollen zudem zu einer gesunden und nährstoffreichen Ernährung beitragen und die lokale Bevölkerung ermutigen an der Strukturierung und Gestaltung ihres Lebensmittelsystems aktiv teilzunehmen. Die Gärten sollen “gute, saubere, und faire” Lebensmittel produzieren welche im Einklang mit der Natur und den Interessen der lokalen Bevölkerung stehen. Im Allgemeinen stellt diese Diplomarbeit eine kritische Auseinandersetzung mit dem derzeit vorherrschenden Ernährungssystem und den globalen Machtverhältnissen dar. Die Philosophie der *Slow Food* Bewegung dient als Grundlage für meine Untersuchung und soll ein Beispiel für alternative Ansätze sein, mit dem Ziel potentielle Lösungen zu identifizieren, welche nachhaltige und langfristige Ernährungssicherung ermöglichen.

LEBENS LAUF

Name: Madeleine Pühringer
Geburtsort: Wels (OÖ)
Staatsbürgerschaft: Österreich
Familienstand: ledig
Eltern: Melita Pühringer
 Josef Pühringer
Geschwister: Mario, Philipp, David

SCHULBILDUNG

1994 - 1998 Volksschule Neuhofen an der Krems
1998 - 2002 Stiftsgymnasium der Abtei Schlierbach
2002 - 2007 HLW Steyr für Kultur- u. Kongressmanagement
2008 - 2013 Diplomstudium Internationale Entwicklung - Uni Wien
Seit 2009 zusätzlich Studium für Umwelt- und Bioressourcenmanagement an der Universität für Bodenkultur Wien

SPRACHKENNTNISSE: Englisch (sehr gut), Italienisch (gut),
 Französisch (gut), Spanisch (Anfängerin)

EDV-KENNTNISSE: ECDL - Computer Führerschein

AUSLANDSAUFENTHALTE:

Juni - Oktober 2007: Italien	Au-Pair Aufenthalt in der Toskana
Jänner - März 2008: Belgien	Marktforschungsinstitut in Antwerpen
April – Mai 2008: Belgien	Aushilfe in einem Café in Antwerpen
Juni - September 2008: Dänemark	Europäischer Freiwilligendienst in Roskilde und Århus. Projekt: Air & Music
Juli/August 2012: Uganda	ITCOA – International Training Course On Organic Agriculture mit der BOKU Wien

ARBEITSTÄTIGKEITEN / PRAKTIKA:

Juli 2008	Vier wöchiges Pflichtpraktikum:
Akademie für Gesundheit und Bildung	Mithilfe bei der Organisation des Studienlehrganges „Public Health“
Kreuzschwerstern GmbH Grieskirchen	

August 2005

**Kremstaler Kulturinitiative
Funkenflug (Kirchdorf)**

Vier wöchiges Pflichtpraktikum:
im Bereich Kulturmanagement

Juli 2009

**OMS - Objekt Management Service
GmbH (Wels)**

Ferialarbeit:
Büroorganisation, Datenarchivierung, Telefon-
dienst

18.-23. Juli 2010

International AIDS Conference

Freiwillige Mitarbeiterin
Hostessendienst, Infostand

Mai 2010 – Februar 2011

**Die Grünen Wien – Verein zur Erhal-
tung Grüner Alltagskultur**

Karenzvertretung:
Verkauf im Grünzeux-Shop und Mithilfe bei
diversen Veranstaltungen

Oktober 2011 – Februar 2012

**Umwelt und Kulturpraktikum bei
GLOBAL 2000 (Wien)**

Öffentlichkeitsarbeit, Umweltbildung, diverse
Umweltschutzaktionen, Organisation und Mit-
hilfe beim Global 2000 Fest im WUK

November –Dezember 2011

Weihnachtsmarkt Schönbrunn

Verkauf bei Gastronomiestand

April 2012

Ostermarkt Schönbrunn

Verkauf bei Gastronomiestand

Februar –März 2012

Gesunde Leopoldstadt

Fahrradbotin, Bewerbung von Veranstaltun-
gen, Projekten

November 2012 – Juni 2013

Denre Naturkost

Geringfügige Beschäftigung für Kundenbera-
tung und Kassa

Juli –September 2013

Ottakringer Brauerei

Rathausplatz Filmfestival - Gastronomiemitar-
beiterin

Seit Jänner 2014

Umweltdachverband

Internship im Bereich Bildung für Nachhaltige
Entwicklung