

Philosophy produces food. Ethics from Soil to Table and from Table to Soil

'Applied philosophy, ethics in particular, makes a difference in producing and eating food. The current food system, resulting from cooperation between scientific, technological and industrial approaches, disconnects producers and citizens-consumers-farmers. Some try to bridge this gap by bombarding buyers with a stream of often bewildering, unreliable and incoherent facts. Food ethics shows why this gap can only be tackled fruitfully when science, technology and industry grant a structural place to the voices, fears, values and activities of consumers.'

Prof. Dr. M. Korthals, Farewell Speech after 21 years of full Professor of Applied Philosophy, Wageningen University

Music and Ethics of Food

The musical touch of this ceremony is performed by the Matangi Quartet and Michael Benedik. I appreciate it enormously that they want to play in the Aula of Wageningen University, and to play Boccherini. Matangi, the Hindu Goddess of music, learning and knowledge, represents also Uchistha (food), which implies that she is perceived as an outcast, associated with waste and people who collect waste: a clear reference to a circular economy, dumpster diving, sustainability and cradle to cradle.¹

Matangi with Michael played the second part, Allegro, of Luigi Boccherini's Quintet from 1798, called Fandango, and they will let you hear the other parts after my speech. Most certainly you immediately became aware that melodies are folk music, made a little bit more sophisticated by the composer.² The fandango is traditionally a dance during marriage meals. Music connects to meals, eliciting all the senses. This is my main message for Wageningen today: just as composers do, so scientists and engineers and companies should listen more and better to what happens during meals and farming and not try to frame society with fairytales, promises and naïve intuitions about consumers and society. Food, just like music, provokes you to enjoy the ups and downs of life, not to worry about life.

This simple message of food democracy is the result of my more than twenty years research and education on agriculture and food at this university. Why did it take me so long? Well, to quote the New York Times, March 1, 2014, 'Food production is not just about food — it's about almost everything else, too, from politics to culture to economics'. Indeed, everywhere is food; everywhere are opinions of food, even opinions that deny that they are opinions and claim to be facts; everywhere we see altercations, hate, riots, even wars, all about food and agriculture. How to make sense of this complex, übercontroversial and often 1000 Celsius degrees heated minefield, where accusations, claims and promises galore?

¹ Matangi is the Tantric goddess of learning, speech, knowledge music and the arts and one of the ten tantric goddesses called the Mahavidyas. In one of her most well-known embodied form she is represented as an outcast in Hindi society and is associated with left-over and wasted food (Kinsley, David R. (1997). *Tantric visions of the divine feminine: the ten mahāvidyās*. University of California Press). For circular economy using human excrements, see: King, F. H., 1911, *Farmers of Forty Centuries, Permanent Agriculture in China, Korea and Japan*, reprinted by Dover.

² Le Guin, Elisabeth, 2006, *Boccherini's body: an essay in carnal musicology*, University of California Press, Berkeley; Rothschild, Germaine de, 1965, *Luigi Boccherini: His Life and Work*, London: Oxford UP. Boccherini lived 36 years in a small Spanish town near Madrid.

Introduction: does philosophy produces food?

Yes, I will argue in this lecture and here is the menu. First, I will serve you some antipasto, in the form of an overview of the first and second wave of research of my group, Applied Philosophy, and the lessons learned. Next I will, as the Italians do, fill the table with the main course, first the primo piatto, in the form of a discussion of ethical criteria, and then the secundo, in the form of an ethical reconstruction and evaluation of current food and farming styles. The finale is a dessert, a dolce, with some sweets to take home. Hopefully this evokes some desire with you to renovate the food landscape, inspired by my ideas on food democracy.

Courses on the long and difficult road toward food and nature democracy: antipasto

The first wave of teaching and research (1993-1999)

For philosophy it is not easy to make a difference in food and agriculture. The philosophical barriers to explore food are huge. Philosophers like Plato argue that philosophy is a way of dying, not a way of making your food and eating it; Heraclitus says ‘It is not possible to step into the same river twice’ and not ‘it is not possible to dip into the same sauce twice’; philosophers write books like ‘thus spoke Zarathustra’, and not ‘thus ate Zarathustra’, they argue ‘the Nothingness nothings’, and not ‘food foods’.



Picture 1. APP approximately 1995, 16 members

The lack of any philosophical concepts or approaches of agriculture and food was the first thing I stumbled upon when starting the job of professor of philosophy of agricultural and environmental sciences in 1993 at this university (later, applied philosophy). So I, or better

we, Henk van den Belt, Jozef Keulartz and me, started with some already known concepts used in social philosophy and ethics to do the research. We started in 1993 with a group composed of approximately 16 members, mostly people very much concerned with teaching and talking philosophy. With my arrival we proposed PhD and postdoc research on deliberation and democracy in the field of environment and food. The nine dissertations and more than fifty publications of that period show that we as philosophers were busy in making a difference by focusing on deliberation. In particular the work of Marianne Deblonde and Volkert Beekman was impressive. Their dissertations, one in 2001 titled *Economics as a political muse: philosophical reflections on the relevance of economics for ecological policy* (published with Springer), and the other also in 2001 on *A green third way? Philosophical reflections on government intervention in non-sustainable lifestyles*, are valuable contributions to the field.



Picture 2. APP in 2001, six members

After this first phase we got some time to reflect and formulate lessons learned. Indeed, our ideas about involvement of citizens in environmental issues had born some fruit; participation and deliberation became more than in the seventies and eighties an important item in environmental and nature policies. But we found that it was necessary to think about science and technology and their role in society, and about the role of ethics, and to reconstruct the normative assumptions internally shared by scientists, technologist, farmers and businesses and to stretch them and to expand them into a more reflective way. This is how we interpreted constellations expressed by others with terms as ‘coproduction of science and social order’ (Jasanoff 2013), ‘coproduction of sciences and societies’ (Latour 1993: 134), ‘co-shaping of technology and society’ and ‘socio-technical regimes’ (Bijker and Law 1992). We thought it necessary to unpack the intricacies of the coevolution of science, society and ethics. Life

sciences and technologies are in all its forms impregnated with values; how do values and other considerations work together in socially aligning (or not) a scientific product and what type of values *should* influence and accompany science and technologies and their products? We also found it necessary to take account of the pluralism of values and world views and to explore how societies and people can flourish with fundamental differences of values, a line of thought we later encountered in the work of Amartya Sen (2009).

The second wave (1999-2014)

In discussing these challenges we developed some tools, like mapping different arrangements of the interaction between science and societal developments, developing imaginary futures by aesthetic explorations and by scenarios, by different moral screenplays and dramatic rehearsals, deliberative leadership, fair representation of worldviews and designing deliberation eliciting technologies. Mapping different arrangements of science and society made it necessary to make a distinction between individual moral value judgments and worldviews or vocabularies in which the individual judgments are embedded, and the way individual judgments are justified and these broader worldviews are dealt with. Again and again we encountered the circumstance that people can agree or disagree about some individual judgment for instance about efficiency of a certain technology but also about the underlying cognitive and normative worldview that is connected with this technology and the types of efficiency. One can agree for instance with the statistical judgment that an individual bomb chicken (plofkip) emits less carbon dioxide, but reject the worldview that allows humans to treat animals as bomb chickens. Therefore, in line with the pragmatism of Dewey and Habermas, our research makes a distinction between deliberations, aiming at individual judgments and decision making that may or may not be based on consensus (type a1 and a2, see table 1) and deliberations aiming at the development and aligning of interesting worldviews, vocabularies and narratives, where no consensus is necessary (b1 and b2, see table 1). In these last two types of deliberation vocabularies are renewed and ethical experiments can be done or various vocabularies can be brought in contact not to determine the validity of the individual judgments but to find out in how far constructive cooperation is feasible. In these types of deliberation, stretched to cooperation, the fruitful matching of worldviews is at stake. Here one experiments with experiencing imaginatively at first non-visible moral subjects and constructing less harmful alternatives. Also the construction of boundary objects can take place to reduce the unnecessary friction between until now very different practicing worldviews. In a fully-fledged 'pragmatist's ethics' the four types of deliberations should be taken into account.

Deliberation and cooperation	Product: valid judgments	Process: fair deliberation and cooperation
Individual value judgments: ethics of justification and discourse	(a1) Providing arguments and justifications for or against courses of action (<i>traditional ethics</i>)	(a2) Structuring and safeguarding fair public deliberation and decision making (Habermas' <i>discourse ethics</i>)
Worldviews or vocabularies: ethics of discovery and cooperation	(b1) <i>Dramatic rehearsal</i> : Criticizing and renewing vocabularies, exploring possible future worlds (scenarios)	(b2) <i>Confrontation and Cooperation</i> : Explicating, confronting and aligning heterogeneous normative vocabularies and worldviews

Table 1. Judgments and vocabularies, adapted from Keulartz et al 2004

To deal with the pluralism of moral vocabularies and the intrinsic connections between individual values with respect to food and agriculture, I developed the concept of *mosaic of concerns* and *ethical room for maneuver* (ERM; Korthals 2008). With these concepts we recognized cognitive and normative pluralisms and uncertainties that galore in agriculture food production and in the life sciences like biotechnology respectively we explicate the normative assumptions, often in the form of the different scripts that steer the type of outcome of research, products and services. Dependent on the framing, the products and services look differently. This normative reconstruction led us towards a vision on pragmatist research, deliberation and cooperation. This endeavor implies an aversion of absolute doubts and other forms of skepticism, because there are always lived experiences and practices where cooperation and deliberation can make a difference. Moreover, conceptual distinctions should be made on the basis of these practices and not be employed as barriers.³ So we took the decision to optimize the co-evolution of for example customized nutrition and society, i.e., the reciprocal stimulation of both developments. We looked for chances for a fruitful match between normative concepts and strategies of both. We stumbled upon the multi-level problems, in particular the relationship between local, regional, national, international opinion formation and decision making. And we found that some scientific and technological projects can have a large and severe deliberative impact and others not.

We were also considering that global justice requires that science considers seriously the question how to reduce the gap between rich and poor people, in particular with respect to food, agriculture and nature. Methodologically, it became clear to us that only very careful organized interviews and stakeholder meetings could give data and inspirations to carry on our research. So, in the beginning of this century, we undertook from a more elaborated pragmatist' frame work a new series of PhD and postdoc research, which can be divided in three strands.

³ Pragmatism is famous for its three antis: no unnecessary dualisms, no unnecessary and fictitious skepticism, conceptual distinctions should be made on the basis of practices and not to be used as barriers, for instance: nature/culture; expert/layperson; human/animal; life/death; citizen/consumer; commodity/public good (Keulartz et al 2004).



Picture 3. APP in 2009, 15 members

In a first strand of research, we reflected on the often non-synchronized co-evolution of life sciences and society due to mismatch and asked ourselves how can life sciences align with a pluralist society? In her PhD research project Rixt Komduur analyzed the prominent worldview in customized nutrition and uncovered three normative concepts. First, food is exclusively interpreted in terms of disease prevention. Second, striving for health is interpreted as quantifying risks and preventing diseases through ‘positive’ food–gene interactions. The third normative idea is that disease prevention by minimization of risks is an individual’s task. We did empirical and conceptual research on the worldview consisting of these assumptions and our thesis is that this worldview will not match easily with a worldview on food and health of various food styles that one can find in daily life. Most people don’t want to be a health freak. Rixt defended her dissertation in 2013, titled *Considering the path of nutrigenomics*.

But our research on co-evolution of science and society focused also on soil and water management and sciences in a non-western country. In his PhD research of Mohammad Balali analysed matches and mismatches between assumptions of traditional, modern and postmodern worldviews on water technologies, social orders and ethical systems. His dissertation from 2009 is published as *Towards reflexive land and water management in Iran. Linking technology, governance and culture*.

In the agricultural and food sphere, we discovered that there are many different world views of what is important and not important in this sphere; in this sphere worldviews are specified in different food and farming styles. To deal with the pluralism of food and farming styles we introduced the concept of *fair representation of foodstyles*. To synchronize and optimize the co-evolution of customized nutrition and society we proposed that customized nutrition’s research policy changes to a research partnership with society on the basis of fair representation of various food styles, in which health is not the only food value. We connect

with current research programs that develop those more encompassing views on customized nutrition.

A second strand of research concentrated on the match or mismatch between worldviews assumed by the Human Rights Declaration (as an expression of global justice) and Intellectual Property Rights (IPR). Henk van den Belt and I, and our PhDs Bram de Jonge and Cristian Timmerman, found out that indeed the current system of Intellectual Property Rights needs reform considering the increasing gap between rich and poor and mismatch with the human rights vocabulary. Bram de Jonge wrote *Plants, Genes and Justice. An inquiry into fair and equitable benefit-sharing* in 2009 and Cristian Timmermann (2013) *Life Sciences, Intellectual Property Regimes and Global Justice*. Patents promote a particular type of innovation and stand for a specific worldview. This world view or system works in a context of social inequality, and therefore the need and demand from the wealthier customers doesn't honor the needs and wishes of the poor. Property rights (as regulated by WTO) are ethically seen not on the same level as human rights, but subordinate. In the projects on Global Justice, Agriculture, Plant Genomics and Intellectual Property Rights our researchers argued that the human rights to adequate food and to participate in the achievements of science collide with liberties granted by the use of exclusive rights secured by IP regimes.

Human Rights and Justice demand not only a fair distribution of the availability of biotechnological solutions for the often life threatening problems that the poorest people in the world are confronted with. Justice is also at stake because of the way the current IPR regime restricts freedom to operate of farmers and give rise to the perception that high-level science is left to be a luxury reserved for the developed world alone. Acquiring and creating knowledge and learning skills (and not only benefitting from knowledge) by everyone is an essential form of human flourishing and should therefore be recognized as such. The uneven distribution of Intellectual Property Rights between North and South and as a consequence of that of opportunities to do research distorts a fair appraisal of research achievements.⁴

In a third strand, we focused on the question what type of deliberation and cooperation the ongoing co-evolution of science and technology and society needs. The concept of *Ethical Room for Maneuver* we developed started as a half-baked idea, but further research improved its edibility and it enabled us to unpack this question. Vincent Pompe concentrates on businesses like food services in his dissertation of 2011, *Quality work in the food service sector*. Gilbert Leistra asks in *Different Shades of Green. Reflection on the legitimacy of Dutch Nature Policy*, 2014, how to enhance legitimacy by dealing with pluralisms of different views on nature? Clemens Driessen who will hopefully finish his work this summer, focuses on animal practices and sciences and technologies. Clemens in particular does research on aligning, matching and stretching vocabularies of human and non-human animals.

⁴ For a recent overview, see Timmermann 2014 and Kers et al 2014: 'Continents show different patterns over time, with the global peak in 2000 mainly explained by the USA and Europe, while Asia shows a stable number of 41000 per year. Nine countries together account for 98.9% of the total number of genetic patent applications.'



Picture 4. App in 2013

Subject matter	Issues	APP Research project
Life Sciences	Co-evolution of science and society/ vocabularies/values	<ul style="list-style-type: none"> • Nutrigenomics: mismatch; • Water and soil science: match; • Biotechnology
Intellectual Property and Global Justice	Human rights, food security	<ul style="list-style-type: none"> • Seeds and patents • Benefit sharing
Deliberation, Ethical Room for Maneuver	<ul style="list-style-type: none"> • Deliberation and cooperation in food business • Deliberation and cooperation human-animals • Food democracy 	<ul style="list-style-type: none"> • Agribusiness • Nature policies • Ethics on the Farm • Fair representation of food- and farming styles

Table 2. Applied Philosophy Research, 2001-2014

The research starts with the idea that knowledge comprises never only fact finding, but is always intrinsically connected with contextual values, emotions and practices. In particular is this the case for the life sciences whose subject matter is so intertwined with mostly not reflected upon non-scientific issues of what is life, what is nature, what is food and what is health. It takes some methodological effort to lay bare these often hidden worldviews or vocabularies. For the life sciences the main challenge is to do justice to the often justified knowledge claims and practices of non-scientific approaches. Our research not only tries to lay bare unequal participation in deliberations and the often more dark ways alternative voices about food, health, nature and animals are silenced. We also undertake the effort to rethink cherished, often opposite, philosophical categories, like consumer and citizens, global and local, body and mind, mastering and leaving nature, purity and danger, simple and complex, deliberation and cooperation, human and animal, technology and culture.

Primo piatto: The food foods, some philosophical considerations⁵

All this work on conceptual, empirical and normative tools, together a nice antipasto, culminates here in the main course of this philosophy meal that I will serve you now. The main course circles around the question, what does this reflective work imply for the

⁵ Wrote Martin Heidegger: ‘The food foods’? No, Heidegger wrote in ‘What is Metaphysics?’ ‘The Nothing nothings’

evaluation of local and global food and farming styles and for the sector as a whole? What are our duties, desires and acceptable opportunities for the agro-food sector? This main course consists of several dishes. In the primo piatto, I dish out ethical criteria and some considerations why dealing with food is an essential aspect of human beings; in the secondo piatto, I sketch dominant and alternative farming and food styles and in how far they fulfill or can fulfill the outlined ethical criteria.

The primo piatto is the implication of the previous ethical framework, and consists of an introduction of six ethical criteria according to which food and farming style can be evaluated. *Can the farming and food style reduce hunger, poverty and malnutrition? Is it sustainable? Is it animal welfare friendly? Is it fair and just to farmers and others?*⁶ *Does it stimulate rural liveability? Is it consumer friendly: does it decrease the gap between production and consumption and does it connect positively with urban areas?* Together, the balanced fulfilment of these criteria comprise something like a *fair representation of food and farming styles* in science, governments and markets, that culminates in food democracy where gaps between consumers and producers are mitigated, bridged or deconstructed.⁷ The first five criteria are quite in agreement with what many people will endorse. The last one is an implication of the consideration that food is an essential aspect of human identities. It needs some explication here, because it comprises an important dish of the primo piatto of this philosophical meal.

Why should one strive for decreasing the gap between production and consumption, although many involved in the food sector try to increase the gap? Why is the resulting alienation of consumers with food a serious ethical problem?

Food has identity achieving functions for human beings, and it is here that I dare to say that, food and philosophy come together. Food feeds and philosophy produces food. Philosophy produces food? Yes, thoughts, concepts, maybe designs. Half-baked ideas mostly? But material things? More strange, edible things or even foods? Yes. Indeed, fine words do not butter parsnips, but, so many disciplines contribute to food processing why not philosophy? Indeed, for Wageningen University this sounds maybe strange, because the last ten years the number of students that got a philosophy and ethics course is in dramatical decline resulting in approximately 4 staff positions (fte) in 2013. Nevertheless, I am encouraged by many outside this university that ethics and philosophy can make a difference.⁸ Let's see what difference we can make.

Identity achieving functions of the meal

Consumers are not simply buyers, and producers not simply suppliers and food is not a simple commodity. Even in modern and postmodern times, despite of the gap between production and consumption, consumers are moral and social actors that anticipate and consider the interests of others, which often culminate in boycotts, buycotts and other protests.⁹ Consumers are constantly in need of deliberation about what best to buy and eat, about which information to take serious and how to connect it with daily life plays an important role. In

⁶ I understand this criterion here in the sense of John Rawls' *Theory of Justice*, allowing, as under the condition of the veil of ignorance, competition and unequal distribution of resources of as long as the losers are as well off as they can, see my *Before Dinner*, 2006, Chapter 5.

⁷ For an elaboration of the first four of these criteria, see my *Before Dinner*, 2006, Chapter 7 and 8

⁸ Interestingly, Harry Paul, Inspector-general of the Dutch NVWA, Nieuws.nl, April 3 2014, complains about the lack of ethical consciousness in the meat sector, assuming that ethics can make a difference.

⁹ See: Eric Holt-Gimenez and Raj Patel, 2009, *Food Rebellions: Crisis and the Hunger for Justice*, Cape Town: Pambazuku Press; Gailus, M., Volkmann, H., (eds), 1990, *Der Kampf um das tägliche Brot. Nahrungsmangel, Versorgungspolitik und Protests 1770-1990*, Opladen; another example, the struggle about milk distribution in the thirties in the Netherlands, see *Techniek in Nederland*, TIN, p. 330

discussing food preferences during a meal, the whole gamma: prize for others, sustainability, animal friendly, and other values can be raised. I call this the *information-exchange function* of having a meal together. As a matter of fact, the exchange has also a place outside having a meal, in other public or private places.

But a meal is more than deliberation. Because food has *identity constructive* characteristics, people are emotionally and attached to the food they eat (and, as I will argue, attached to the people they eat with). I will call this the *emotional function of food*, which is connected with the personal and social identity function of food.¹⁰ Directly connected with the emotional function, is the *bodily function*. Simply tasting food illicit all the senses, and energizers all bodily functions. Preparing a meal for others is also a quest for what your guests and you really like in for instance a cabbage dish or a wholegrain bread. This is the *discovery function* of food. It is a simple way of getting the perspective of the others and of maintaining and intensifying relationships; having a meal with others has a *social identity achieving function*.

Food can even be used to stretch these identities and at least to desensitize the often tense relations with strangers or with people that are seen as enemies.¹¹ This also implies that the personal relations people have with food and with the people they share the food with can never be totally substituted by large scale companies that somewhere in an nowhere world, not accessible to the consumers, produce food items. Formal, large scale, anonymous organizations steered by money and power can never replace the personal and social identity achieving dimensions of living with food. Experiences of meaningfulness in what one is eating is possible on the basis of a social shared or self-made meal, or one where one has played an organizing role. The call of some scientists to get rid of the idea of authentic or personalized food and home cooking and to be satisfied with standardized food items in packages, pills, bottles and bags goes against the grain of every psychology of food and daily life.¹² Besides that these identity achieving functions of food contribute to living a good life, humans need a certain amount of personal trust: not everything they buy, cook or prepare for a meal and eat, can come from large companies that are processing food anonymously at a distance.¹³

Trust in persons performing in the context in which food is made, has its anchor point in daily, informal contacts. Trusting companies and the processes and persons functioning in the anonymous and distal food chains requires complex achievement that is conditioned by personal encounters. First, you have to transpone the official claims of trust, done by certification, branding and marketing, and translate them into your own belief system. Secondly, people need narratives to understand and place the companies and their food items in their own world, in their own range of accepted and esteemed practices. The gap between

¹⁰ Michael Pollan in *Cooked*, 2013, gives some nice examples of how food items represent dimensions of the meanings of life; for instance, cheese is all about the dark side of life, p. 360.

¹¹ Instead of an academic reference, a reference to Salman Rushdie, who in his nice book *Shalimar the Clown* (2009) describes how Bulbul, a Sufi saint, converts Rinchin, Lord of Ladehk, to Islam and so makes Islam one of the many religions of this small landlocked mountain state where a feast has at least 36 courses. Unfortunately later religious disputes degenerated in religious radicalization; this turn of events shows the vulnerability of meals and the need to maintain and to invest time and energy in meals.

¹² See for example Fresco 2013 and Laudan, R., 2013, *Cuisine and Empire. Cooking in World History*. University of California Press: 'If our vision of the way to have better food is to have less processing, more natural food, more home cooking, and more local food, we will cut ourselves off from the most likely hope for better in the future.'

¹³ Busch 2011: 'Even as such forms of trust are necessary in some settings, living in a world in which all forms of trust were monological, I submit, would be nearly intolerable; it would replace the richness of dialogue and experience with a focus on surface characteristics. Moreover, it would require constant auditing and certification of everything and everyone.'

producers and consumers makes it very difficult to decipher the real messages of food industry; decoding is a necessity.

The daily routine of eating (in combination with the estrangement of consumers from their food) often lures us into oblivion of its values; it induces us to frame eating as downing, as grazing and nothing else, and the food environment with its urge to have as many eating moments as possible strengthens us in that feeling. Often it seems as if eating is not about the process from farm to table but from lab to esophagus. Daily routine of preparing a meal can feel to be boring, and this makes it possible to feel relieved by the possibility to buy readymade, standardized meals made by some anonymous machinery. It is indeed sometimes difficult to do something with pleasure that repeats itself every day. However, spending more time, not less, in acquiring tasty things from engaged people (craftsmen and craftswomen) and in finding out new recipes can make pressures of daily life durable, even and transform them into events of pleasure. Co-creation of farmers and consumers also has this effect. Art and new technologies, with its deregulating and world disclosing dimensions can have also the effect that gives one once in a while the feeling that cooking is a discovery, a quest for the good and tasty (Driessen and Korthals 2012).

Nevertheless, it is not necessary to be continuously busy with food.¹⁴ Routines and habits on the basis of experiences and trust that guarantee sustainable and pleasurable meals are therefore also important.¹⁵

Human life is embodied and bodily life, and therefore also the relationship with agricultural nature must be nurtured and exercised, especially through agriculture and cooking. Local attention and practices of farming, gardening and preparing food are an absolute requirement for an understanding what nature can offer in the edible sense to body and mind and what not, and what possibilities and impossibilities natural resources, including our own, can give us.

Involvement in agro-food practices contributes to seven values (food sovereignty)

In being involved in agro-food practices we learn, firstly, from nature, because we are creatures of nature itself. Nature inspires us about important events regarding ourselves because it teaches us to live the life cycle, with all the great questions of life: how to deal with illness, happiness, defeat, and resistance? In one way or another, people are always confronted with these vital issues, and with regard to these matters there is no loophole in better technologies, the prolongation of life, or life improvement. People have to maintain, stimulate and to exercise in those questions (themselves values) because otherwise they are more and more answered in panicking and desperate ways. Ethologist Wilson suggests that people are affected by 'biophilia' which is an 'innately emotional affiliation of human beings to other living organisms' (Wilson 1993, p. 31). He argues 'when humans remove themselves from the natural environment, the biophilic learning rules are not replaced by modern versions equally well adapted. Instead they persist from generation to generation, atrophied and fitfully manifested in the artificial new environments' (Wilson 1993, p. 31).

Secondly, in working with the soil, one learns to smell, hear, taste, see, and touch: one learns the intricacies of one's own body. Farming and gardening gives one a different orientation in life and it makes the worked on space (agricultural nature) an extension of the body, the French philosopher Merleau Ponty would say. Working with tools, with plants and with the soil, makes the tools, the plants and even the soil to extensions of the body. As extensions of the senses, arms and legs they give the original parts of the body additional

¹⁴ As I have elaborated elsewhere (Is nudging endangering autonomous food choices? Korthals 2012), it is not necessary to search continually for self-discovery for to become an autonomous person.

¹⁵ Therefore choice architecture and nudging are important devices (Thaler and Sunstein 2009).

feelings of working well. Cooking and gardening or farming let one acquire that special kind of ‘knowing how’ that is embodied knowledge or what Pollan calls ‘hand taste’.¹⁶

Thirdly, one practices in learning how to deal with one’s own vulnerability. The soil, the plants and the herbs, all have some good things for people, but you must treat them with care, so that the yield is good, and you do need to prepare carefully for yourself and other people by being plucked gently washed and sometimes cooked. Not always everything is edible, the shell cannot be eaten, cooking times should be considered, not everything tastes together, and some plants are poisonous. You discover so practically, via bodily knowledge and theoretical knowledge, to appreciate nature. Self-surveillance and disciplining can be a positive result of this but also autonomy and empathy.

In addition to these personal enrichment fourthly there is another value at work: sowing, gardening and preparing a meal makes you start thinking about what others want to eat, and this social feeling of togetherness is also quite important. This anticipation of the thoughts, needs and desires of others when preparing and cooking is an important element of ethical behaviour, in fact a form of taking the place of the other in finding out how others feel, and cultivating ways that other persons can let flourish.

Fifthly, involvement in those practices learns one to deal with scarce resources and with sustainability. One doesn’t make one dependent on far away lying anonymous resources of food production and strives for less complicated links in the food chains (as with intensive agricultural production), one wants to cause less transport costs, use less chemical pesticides and make use of ‘waste’.

Sixthly, urban and peri-urban gardening (Zasada 2011) also contributes to improving the urban climate, because the green in the summer lowers the temperature, and cleans the air of fine dust. With more green plants one has a better urban climate control, less heat, and therefore need less energy for the operation of technical air conditioning (Specht et al 2013). The local orientation makes it also possible that intentional design can have a place in farming or gardening that aims at stimulating and enhancing our and the animals’ capacities to discover meanings and to develop types of responsive interaction of humans and animals (Driessen and Heutink 2014; Korthals 2014).

Last but not least, being busy with food has also an important political value for the implementation of two very important Human Rights that until now are not everywhere respected, the right to know and the right to adequate food. Human Rights Law has been used to stipulate that Food is a Human Right, which shall be protected by the legal instruments of the UN system (Eide 1984). For consumers this implies the right to safety; the right to be informed; the right to choose, the right to be heard; the right to representation; and the right to adequate and legal protection. The Right to Food got in 1966 its full meaning in the International Covenant on Economic, Social and Cultural Rights (article 11), as the right to available, accessible and adequate food. Adequate means ‘culturally acceptable’. These rights are incorporated into the EU consumer policy program. After the Rio Convention (1992), in which the overall importance of sustainable production was agreed upon by most nations, and the formation of the European single market, the ethical consumer and diverse consumer concerns came to prominence. As is stated in General Food Law (178/2002/EC), which defines producer (food chain) responsibility, active consumers are to be informed according to their rights (for a more extensive elaboration of these rights, see Korthals 2014).¹⁷ These rights together form the core of *food sovereignty*. Food sovereignty allows greater

¹⁶ Pollan 2013, p. 404; this kind of ‘knowing how’ gives one also a sense of competence and independence, p. 407

¹⁷ Later I will say a little more about the fact that consumer concerns are multiple and often ambiguous.

accountability to ensure implementation and addresses the unique food needs of persons and communities. When food chains are short, local orientation allows easier and better control over food production, and one can quickly act if the production doesn't meet the preferences and if certain products produce health hazards or go against fundamental insights of sustainability.

Although philosophy and ethics wrongly have paid little attention to food production and consumption, it is obvious that it is an important philosophical ideal that people strive for an 'examined life', a life that is based as much as possible on valid insights and good decisions with respect to important issues in the context of social embeddedness. Therefore, I conclude the unexamined meal is not worth living and the current trend of increasing the gap between producing and consuming has gone too far.

Paradox of history: reduction of time for cooking and digesting, increasing gaps.

This trend has a long history (which, like many others such as that of slavery and mass killings, is not an excuse not to bend the trend). Wrangham (2009) has given some indication of the aeons during transformation as a combined effect of three developments that finally led to this gap. First, starting approximately a million years ago, cooking reduced the time needed to digest food, secondly, it made it possible that less and less people are involved in food production and thirdly, it encouraged to enlarge the distance between food production and food consumption. Were as our relatives in the animal kingdom have to spend a lot of time in digesting to get enough nutrients, humans can eat in a few moments a fast food item. A second development comprising this transformation is the reduction of people involved in producing food (Mazoyer and Roudart 2006). This reduction has now in the Netherlands reached the incredible low percentage of 1 percent of professional workers. Thirdly, while some food in the ancient period travelled significant distances, *nearly all* food today is consumed a long way from its site of production.¹⁸ Food items travel through many channels and links all over the world till they reach finally as an edible product the plate on the table. Although the current alienation between producers and consumers is the endpoint of a long history, its acceleration is the result of a strategy of the contemporary dominant farming and food style.

Secondo: Current agro-food systems, food from nowhere versus food from somewhere

Current agro food sector, in the Netherlands and globally, consists mainly of two agro-food regimes, intensive bio-industry (IBI) that delivers *food from nowhere* and agro-ecological food production (AECO), with low inputs and *food from somewhere*. In the first, agricultural production is treated as an industry like others, and is depended on high inputs to get high outputs and international corporations. The second one focuses on local food production, and strives for increasing production by using eco system services and low inputs and emphasizes short chains and crafts (practices). The food comes from somewhere, as in the 100 miles diet. This regime covers the total context of food production and consumption: livelihood, landscape, and good life (one of its names is therefore Community Supported Agriculture, CSA, and another one Conservation Agriculture).

¹⁸ For instance ingredients for strawberry yoghurt, milk, sugar, and strawberries have travelled at least 2,216 miles. www.farmland.org/programs/localfood/documents/foodmiles_Leopold_IA.pdf (more in Pfeiffer 2006).

Increasing the gap between farm and table: intensive bio-industry (IBI)

‘Whoever makes two ears of corn, or two blades of grass, to grow where only one grew before, deserves better of mankind, and does more essential service to his country, than the whole race of politicians put together’. Jonathan Swift words¹⁹ are for this regime still the law. This by no way factual, but very normative message, has become the basis of the current regime of agricultural intensification of production. It treats food and agricultural products as commodities, not different from cars and computers, with one remarkable difference, that nowadays consumers are alienated from the production process. Consumers don’t know what and how to eat. Comparative (economic) advantage nothing else determines what, where and by whom food is produced.²⁰ Producers are entangled in an economic treadmill, try to prevent the diminishment of their profit margins and go continuously for the cheapest.

Producing food is since the Second World War seen by many as an activity that can best be performed by something like IBI. In this industry sector (like that one of electronic devices and cars) ingredients for edible food items come from all over the world, and the final product should be as ready-to-use as possible so the consumer can put it in his or her mouth without any doing. The food comes from everywhere or better from nowhere, because nobody oversees to chains and knows anymore where exactly the ingredients come from. Farm and table are not connected; distances can be enormously and ingredients are changed into nearly unrecognizable substances, like ‘pink slime’ (Moss 2013). This is particularly the case with edible items that are composed of bulk ingredients like maize, wheat or rice. These bulk products are shipped from everywhere, mixed, shipped again, partly processed or packed in some location, and partly in another location.²¹

This type of framing of agriculture, farmers, food and consumers is to the advantage of many large companies and shareholders. This approach is also called the ‘productionist paradigm’ of agriculture; its main features are its high inputs and high outputs. Probably, it can produce food for even more than eight billion in 2050 but the cost will be enormously. The Dutch agriculture is a good example of intensive farming; less than 2% of the labor force is working in agriculture and its yearly use of chemicals is one of the highest in the world per hectare.

This regime has produced remarkable results, and inspired lots of scientific achievements, like the insights of food sciences about the importance of nutrients and ways to conserve food safely. Although this paradigm can be proud of its enormous success to feed the world, it also produces huge problems, which make it according to many unsustainable and socially not fair (Roberts 2008). One of the problems this system directly is confronted with have to do with the fact that the sources of food are natural items and run the risk of

¹⁹ Jonathan Swift, *Gulliver Travels* (or. 1726), 1863, London: Longman, Green, Longman, Roberts, & Green, p. 161

²⁰ This type of advantage, only directed to profit in terms of money, determines also what is seen as ‘efficient’; many think that free trade can effectuate it. Adam Smith, stressed this in his *Wealth of Nations*, p. 72, and followed Mandeville in this (*The Fable of the Bees*, pt. ii. 335–6, ed. Kaye ii.284): “‘Man’, as I have hinted before, naturally loves to imitate what he sees others do, which is the reason that savage People all do the same thing: This hinders them from meliorating their Condition, though they are always wishing for it: But if one will wholly apply himself to the making of Bows and Arrows, whilst another provides Food, a third builds Huts, a fourth makes Garments, and a fifth Utensils, they do not only become useful to one another, but the Callings and Employments themselves will in the same Number of Years receive much greater Improvements, than if all had been promiscuously follow’d by every one of the Five.”

²¹ What belongs to IBI and what not is not easy to say; there is a tendency to let the Intensive Bio-Industry cover all the good things and to put the negative aspect on the side of other societal processes, or vice versa. I have chosen here for a quite broad definition, because the immense power of this regime can only be maintained due to its strong connections with and stimulating influence on other social developments.

being contaminated, polluted and deteriorated, and are therefore object of food security measures from farm to table. Diseases and in general the safety of food due to the long (in space and time) are a concern for the more responsible partners due to often unclear chains that somewhere come together to finalize into an edible item. Disease control and surveillance of safety of food are often the main ethical issues that are addressed in this regime to reduce food borne pathogens and pesticide residues. Industry boasts about the huge efforts of sound scientific testing and transparency. Costs to clean up and to establish traceability and food safety systems (such as HCCAP and GRAS, generally recognized as safe) are increasing, next to the external costs of for instance antibiotics (Busch 2011; Coff et al 2009).

In judging agro-food regimes according to the ethical criteria, it turns out that the current dominant food system of intensification and quantification is suffering from unresolvable problems, from environmental impacts, to health problems like obesity, to endemic fraud and to deactivating citizen consumers. It does not fulfill the six ethical criteria earlier mentioned: *Can the style reduce hunger, poverty and malnutrition? Is it sustainable? Is it animal welfare friendly? Is it fair and just to farmers and others? Does it stimulate rural liveability? Is it consumer friendly: does it increase or decrease the gap between production and consumption and does it connect positively with urban areas?*

First, although there is enough food to feed eight billion people, more than one billion people on earth suffer from hunger and even more from malnutrition (FAO 2010). The current system is not able to feed everyone. This is often an issue of people not having enough to buy food (no entitlements, no jobs, not in possession of their own plots anymore, etc.). Nevertheless, the increase of population and of demand and degradation of arable land make the problem of food security for the next decades the more urgent. Harvest catastrophes, more mouths to feed, and speculation will cause the rise of prices. Moreover the increase in demand of animal products and, therefore, crops for animal feed and of biofuels (which has as a side effect a higher pressure on food crops)²² will also increase prices. Rising food prices play a role in food riots in countries in which people have to spend a lot of their household budget on food (Pinstrup-Andersen 2007; Sen 2010; Tansey 2008).²³ But a big blow to this regime will be the depletion of mineral oil reserves, the main resource of the chemicals and fuels used; in the coming twenty years shortages will become more radical and only the rich can afford to buy these products.

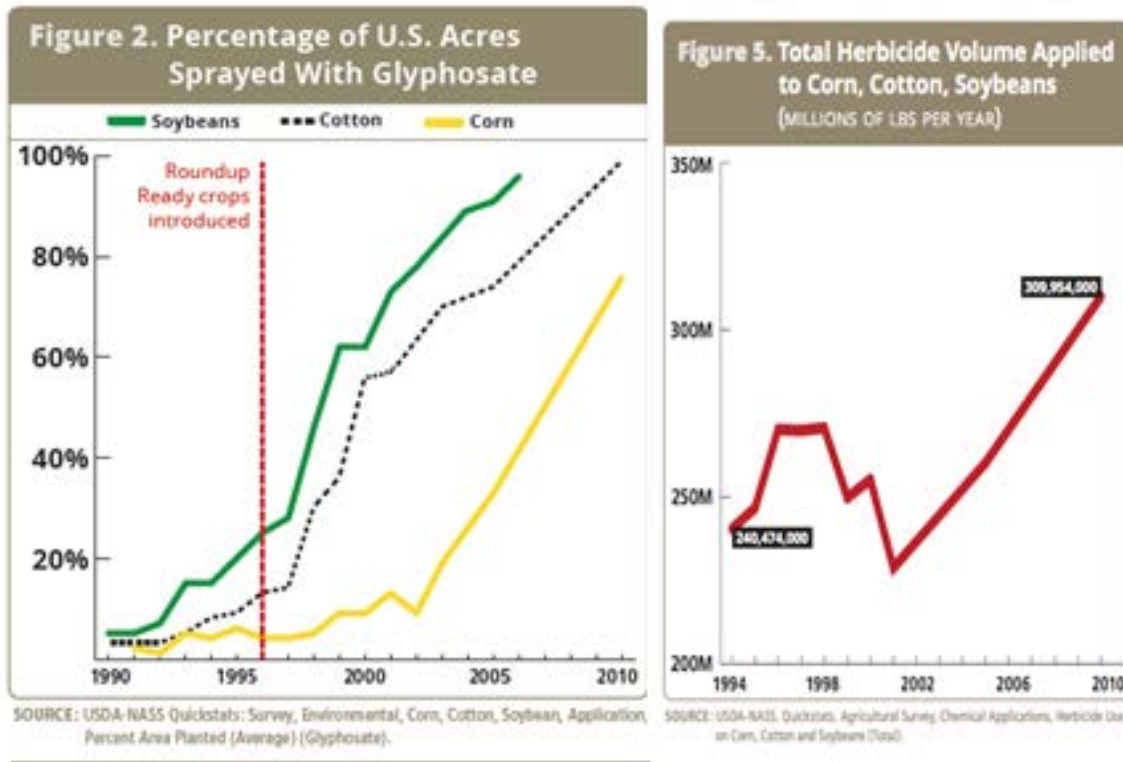
Secondly, the current food and agricultural system is not sustainable. The current system of intensification depletes finite resources in a high speed. It is responsible for degradation of the soil by over intensification and for deforestation (in particular in Latin America and Southeast Asia). It pollutes water and soil by manure and chemicals.²⁴ Take the use of herbicides; although many believe that GM crops enable using less pesticides, now,

²² Schutter, de, O., (2010), *Food Commodities Speculation and Food Prices Crisis*, Briefing note 02, United Nations

²³ Connected with the first issue is that of malnutrition. Many people in the poorer areas having often enough to eat suffer from severe diseases due to lack of necessary micronutrients (vitamins, minerals), such as stunted growth, blindness, and concentration problems. In the richer areas, there are also problems of malnutrition due to long-term unhealthy effects of the current food regime, including obesity (Critser 2003), cardiovascular diseases, type 2 diabetes, and various types of cancer (Lang and Heasman 2004; Korthals 2011).

²⁴ Carolan, M. 2011 *The Real Cost of Cheap Food*. Abingdon: Earthscan; In the Netherlands the use of chemicals per hectare (pesticides, herbicides, fungicides and nematicides) is still thrice as large as in Germany, and four to five times larger than in Denmark (LEI 2013, p. 94 and TIN, 5, p. 224; World Resources Institute. Aggregates compiled by NationMaster. Retrieved March 2014, <http://www.nationmaster.com/country-info/stats/Agriculture/Pesticide-use>. Dutch agriculture has been compared with the Olympic champion Usain Bolt; a comparison with cyclist Lance Armstrong is more apt.

after several years, the Darwinian struggle between pests and humans result in higher resistances among pests and GM crops need the last years even more chemicals than in the nineties with conventional crops, as this USDA and Food and Water Watch chart shows (Table 3). As said, IBI is heavily dependent upon fossil fuels. Moreover, they increase global warming (Pfeiffer 2006). Crops yield will due to soaring prices of oil diminish in approximately 10 years and after another ten years the resource is depleted and chemical pesticides have to be produced according to another method or cannot produced anymore.



as many as 14 years) creates the perfect scenario for

Table 3. Increase of use of herbicides to corn, soybeans, cotton (the dip in use in the first years of use of GM crops and the huge increase afterwards is nicely illustrated)

The antibiotic resistance in humans is increasing by abuse of antibiotics in intensive animal factories (people involved in pig farming have their own entrance gate in Dutch hospitals). Unbridled fishery and aquaculture empty the seas quickly. The use of pesticides has huge costs according to Pimentel (2005), among others the deaths of 200.000 people globally due to overuse. All these material and immaterial costs are externalized and the burden is put on the shoulders of taxpayers and nature (Tansey 2008). Consider the question of consumption of animals as food, though it constitutes only one of many effects of agriculture as a whole. Animal husbandry contributes disproportionately to climate change, approximately 18% due to its methane emissions (Steinfeld 2006). Global meat consumption has been estimated at 228 million tons (FAO 2009) and is expected to double by 2050 to 465mt. Given that livestock currently account for 40% of global grain production by 2050 livestock will be consuming

food that could feed 4 billion people directly (Carolan 2011).²⁵ Eating meat is not caused by Intensive Bio-industry but this regime has a big stake in letting people eat meat and will not implement policies out of free will that reduce meat eating.

This regime reduces agrobiodiversity in a fast tempo. Only a few races of wheat, corn, soy and rice are used. The standardized and uniform crops and animals destroy the basis of a healthy agro system, because disposing over a lot of different variants of one species functions as a kind of safety system and reduces the risks of losing the battle with pests and abiotic stresses.²⁶ Standardization is a consequence of the economic trend towards monopolies of seed production, see criteria four. Some of the proponents like Borlaug (2000) stick to the idea that intensification of agriculture sets free more wild nature. This idea has been proven false by social science research. In countries where intensification takes place, like Brasilia, nature loses more and more due to the treadmill in which farmers feel pressed to acquire more land to safeguard their investments (Ewers et al 2009). Moreover, the use of chemicals on agricultural areas in this regime has deteriorating consequences for the level of biodiversity in neighboring natural areas (Stevens et al 2004; Van Swaay 2008).

Thirdly, human use of animals in intense systems raises ethical issues; the animals, not having a voice, endure pain and suffering by being confined in very small pens, inhumane forms of slaughtering, and degrading treatment as mere objects. Approximately 55 billion land animals are slaughtered every year. The breeding industry boasts about an increase per annum of at least one egg, more meat and milk from chickens, pigs²⁷, and cows. In the western countries, there is a growing concern and sensibility for the abuse of animals, which gives rise to strong NGOs and sometimes governmental measures, and increasing intensification will not make these concerns disappear (Palmer 2011).

Fourthly, in terms of economic impacts, IBI with its food and agro-monopolies, being an important part of the global trend of the establishment of monopolies, does not treat farmers and consumers fair. Large, private companies determine more and more what food is produced, where, under what conditions. What people eat is determined by a very few top managers in the world. Concentration of food production in fewer hands is often pictured by the famous Supply Chain Funnel of glass hour of Grievink 2013; others have also documented the trend of control in fewer hands.²⁸ These companies and monopolistic

²⁵ Titonell, 2013: 'Due to poor practices in harvesting, storage and transportation, as well as market and consumer wastage, it is estimated that 30 to 50% (or 1.2 – 2 billion tonnes) of all food produced never reaches the human stomach (Gustavsson et al., 2011; IMECHE, 2013). Wastes may occur post harvesting, post processing, and post consumption. In SE Asia, for example, postharvest losses of rice can range from 40 to 80%. In India, 21 million tonnes of wheat are wasted every year due to poor storage and distribution systems. To assess the order of magnitude of such a figure, it suffices to compare it against the total annual production of wheat in The Netherlands, of 1.2 million tonnes per year. Every year, India loses the equivalent of 18 times the total production of all Dutch wheat farmers considered together.' Malnutrition is often not due to lack of sufficient micronutrients but these post-harvest losses.

²⁶ That is one of the reasons why UNCTAD in *Trade and Environment 2013, A Wake up call*, pleads for: 'A rapid and significant shift from conventional and monoculture based and high-external-input dependent industrial system towards mosaics of sustainable production systems that also considerable improve the productivity of small scale farmers.'

²⁷ Jeroen Visscher, ISA Senior Geneticist, of Hendrix Genetics promises for example "Our mission to breed for 500 first quality eggs without molting, is expected to be reached for commercial egg producers by 2020", www.hendrix-genetics.nl.

²⁸ Grievink 2013; UNCTAD 2013; IAASTD 2009; Annie-Rose Harrison-Dunn, 03-Feb-2014, Sustainability review: Huge growth of sustainable companies but developed nations dominate, Food Navigator; the article presents a review of the International Institute for Sustainable Development (IISD) that in particular larger firms are entering the market of sustainable foods, but putting small and integer firms at a disadvantage. Still, food industry stays behind these small firms, as Oxfam Novib noticed in her *Behind the Brands* (2013). 'The ten

networks operating on a global free market are more powerful than individual states; large shareholders speculate with food and make the food trade a casino, with all the risks for food security and price stability (Nestle 2002; De Schutter 2010). As Larry Busch argues:

‘In their quest to limit the power of the nation-state proponents of neoliberalism worked hard for more than a half century to reduce direct state regulation of markets, create international institutions that limit state power, and whenever possible employ markets as distributive systems. In so doing, they have opened the door to the creation of private governance systems such as those described here’ (Busch 2011, 346)

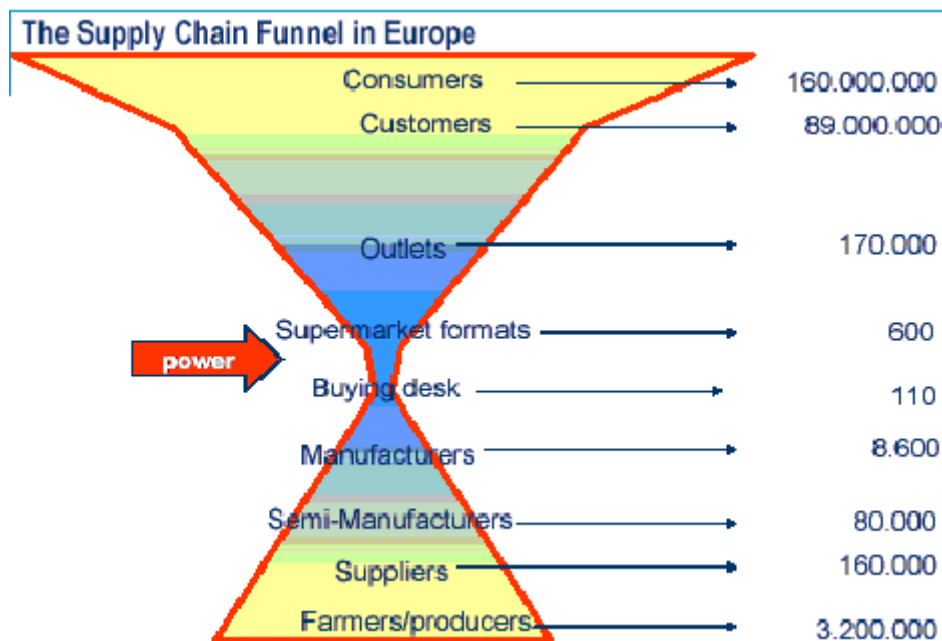


Figure 1. Supply Chain Funnel in 2009; in 2013: 400 supermarkets; 70 buying desks, see Grievink, EFMI.nl

biggest food companies still earn the most with drinks, breakfast cereals, chips and bars loaded with sugar and unhealthy fat. Those 10 companies in the middle are now the biggest food and beverage companies in the world. Together, they generate revenues of more than \$1.1 billion a day. They also employ millions of people in poor countries, directly and indirectly, to grow and produce their products. Because of their global reach and influence, these companies could play a big role in reducing poverty, hunger, and inequality. But right now, they're not doing enough.' Oxfam spent 18 months looking closely at how the "big 10" say they do business. 'Then we created an easy-to-use scorecard—a "behind the brands" look—comparing and contrasting their policies and commitments. We discovered that all 10 need to do a whole lot more to support farmers, communities, and our planet.'

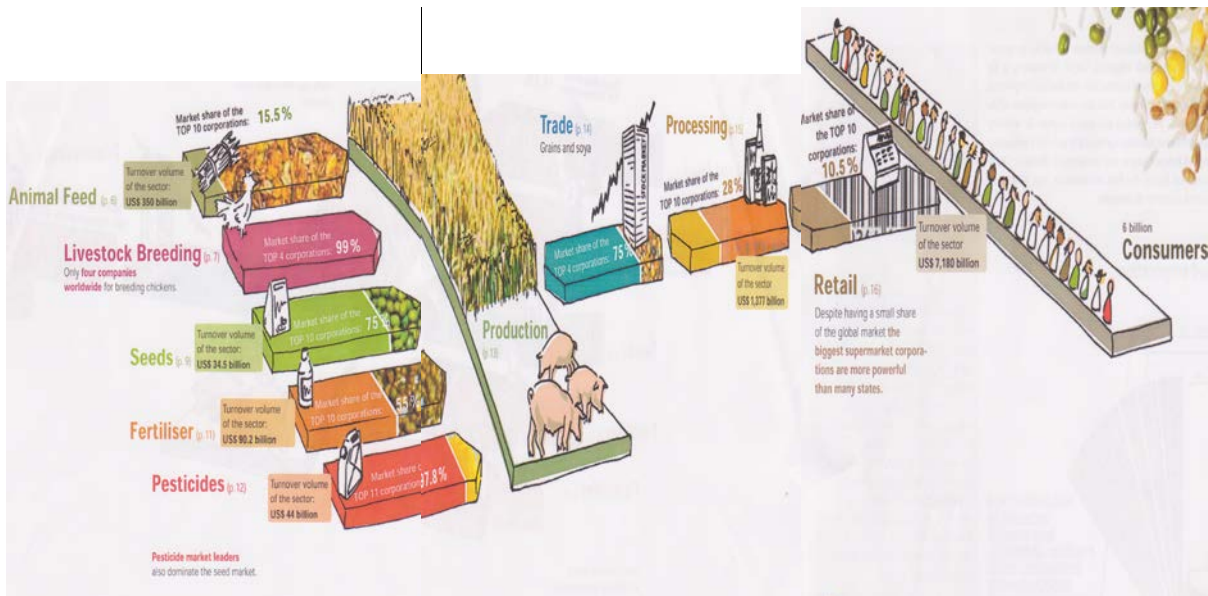


Figure 2. Supply Chain, Berne Declaration 2013

For many, the ultimate commodification of food production has unacceptable consequences for food and for small farmers. First, this commodification of food has unfair distributive consequences according to the Rawlsian principle. It increases the gap between rich and poor by suppressing poor farmers and even chasing them from their land in exchange for large plantations that are managed mechanically. Prices show huge fluctuations (GM seed for cotton is now three to four times more expensive than during the introduction), which makes it difficult for a farmer producing for the market to plan ahead. Moreover, high prices, for the most part, do not translate into high revenues for farmers, and low prices paid to farmers do not necessarily mean low prices for consumers. Often, the worst situation happens: the few rich farmers get the highest prices, and simultaneously for consumers in poor areas, living in towns, the prices soar. The large farmers get richer, the smaller get poorer, and in the end, the small farmers have to give up their land and become jobless slum inhabitants. The economic treadmill (Cochrane 1993) displaces small farmers, and makes them potential victims of urban poverty and unemployment. Unemployed farmers move to slums, without a chance for a decent job and are trapped in the urbanization trap (World Bank 2013). The price fluctuations also stir up speculation which often has disastrous consequences. Moreover, the policy of vertical integration, which means that stronger companies higher up in the chain (for example manufacturers like ADM or retailers Ahold and Nestle) determine what farmers have to produce, makes farmers still more dependent (James 2013). The current patenting system contributes to this increasing the gap between rich and poor, thereby producing inherently instable social relations and enhancing food insecurity. Moreover, according to many, the extension of intellectual property rights over organisms both hinders bottom-up innovation and stimulates the growing gap between rich and poor countries.²⁹ While in the West the consumer class thrives, great disparities remain. Worldwatch notices: ‘The 12 percent of the world’s population that lives in North America and Western Europe accounts for 60 percent of private consumption spending, while the one-third living in South Asia and sub-Saharan

²⁹ See reference 4

Africa accounts for only 3.2 percent.³⁰ Medicin sans Frontiere speaks about the ten ninety gap with respect to medicines and the resources used for them³¹, and the same gap can be identified when one looks at agricultural research investments: only 6 per cent of privately funded agricultural research is focused on developing country agriculture.³² This gap between research investments in crops for the North and for the poor South is also the case with respect to conventional and organic farming (see Tittonell 2013).

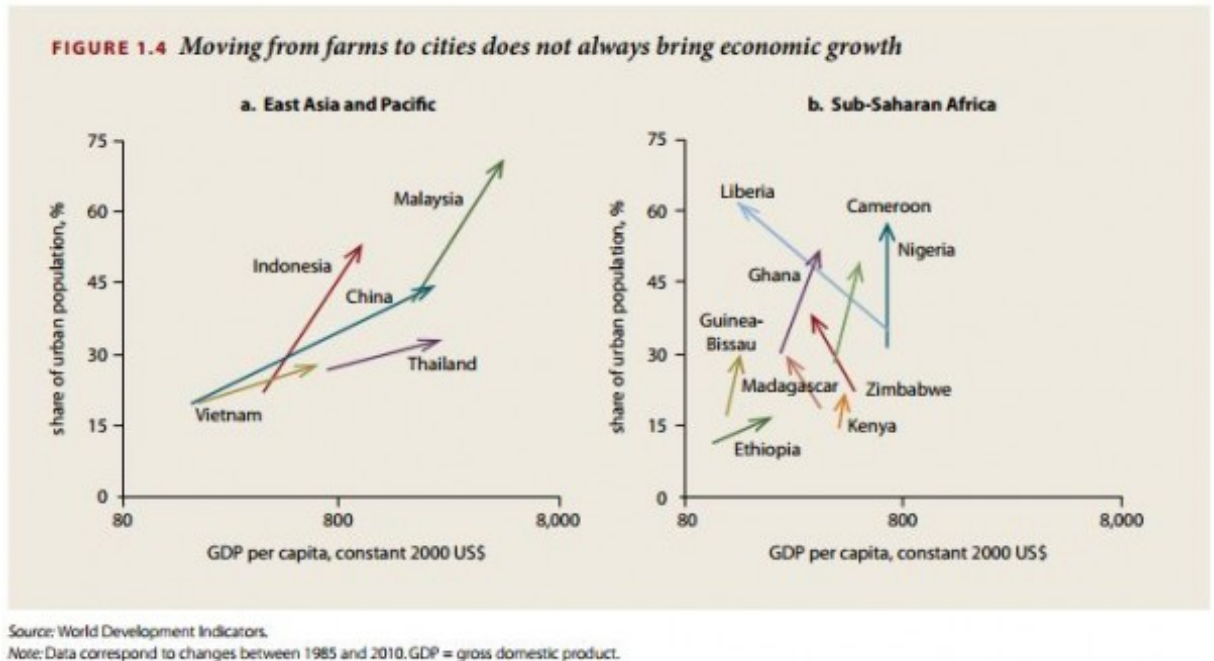


Figure 3. Urbanization trap, World Bank, World development indicators

A second criticism of commodification concerns the fast reduction of labor in agriculture and time spent for cooking and eating, implies outsourcing skills and capacities to maybe 1% of the labor force and large processing industries (as is the case in one of the most intensive agricultural countries, the Netherlands, the Lance Armstrong of agro-food). These capacities are essential to bring humans into contact with nature and the world. This lack of engagement with the living environment is a common trait of radical commodification: it allows only passive consumption (Sunder 2012). A consequence is the enormous waste of food, because producers and consumers don't respect food. Economic policies premised on free global markets are held in some ethical systems to run the risk that commodification of nature becomes a universal dogma.³³ When, for example, ecosystem services, like fresh water or

³⁰ <http://www.worldwatch.org/node/810>: The "ecological footprints" range from the 9.7 hectares claimed by the average American to the 0.47 hectares used by the average Mozambican.

³¹ Ten percent of the world population enjoys ninety percent of the resources in making drugs, Drugs for Neglected Diseases Working Group. 2001, Fatal Imbalance, p.10,

http://www.doctorswithoutborders.org/publications/reports/2001/fatal_imbalance_short.pdf

³² Wallace, H., 2010, Bioscience for Life? Who decides what research is done in health and agriculture? London: Genewatch; <http://www.project-syndicate.org/commentary/agricultural-investment-or-third-world-land-grab-by-peter-singer>; only 6 per cent...: Nienke M. Beintema and Gert-Jan Stads, Measuring Agricultural Research Investments: A Revised Global Picture, 2008, available from http://www.asti.cgiar.org/pdf/global_revision.pdf.

³³ Efficiency is often measured according to one dimension, like yields per hectare, or yields per animal (eggs, meat) or yields per labor hour. However, what is left out are the contexts and external costs, like animal welfare, environmental (current and future) costs, like resource depletion, adaption and accommodation to climate change, loss of biodiversity, health costs (use of pesticides) etc. (Tittonell 2013)

carbon sequestration are monetized, this imposes, first, that the biosphere is sliced into components or itemized, and then these items get a price tag. Rich groups or nations can afford these prizes and, therefore, deplete these services. The ensuing disaggregating of nature's functions in the end destroys them (O'Neill, Holland, and Light 2008). A last socioeconomic issue is the drive of powerful companies and nations to buy arable land from governments, often neglecting informal local rights, with the consequence that poor farmers have to live elsewhere. 'Land grabbing' as this is called by critics, implies producing biofuel or animal feed for livestock (farmlandgrab.org; Liberti 2013).

Another concern connected with the still growing importance of monopolies in the food sector is the confusing relation between private and public in science and technologies blurring private and public goods. The Dutch Top sector policy encourages the connection of science, be it natural and social sciences or the humanities, with large companies and industry and is a barrier for the essential trait of science to be critical, doing extra ordinary things and to share ideas, theories and data with peers. Private companies are doing their best to balance their private interests with general social rules, but they are not interested in funding and participating in research that goes against the grain, that presupposes that there are no trade secrets and for which educating and teaching people that are talented, and not that have money, are vital in developing new ideas.

The application of the fifth ethical criterion encounters the consequences of the commodification of food. When farmers are evicted from their land, they leave behind rural areas that are increasingly toxic, monotonous and populated by a small army of often immigrants or uprooted people (Patel 2008). The economic treadmill (Cochrane 1993) reduces chances for flourishing rural areas, and produces inherent instable social relations and food insecurity (Glover 2010). The proponents of this regime defend it often by remarking that it is able to engage poorer areas in the world market with the consequence of higher prices, higher profits and higher food supply. The preference for local food would according to Standage be 'tantamount to denying them (Southern farmers) the opportunity of economic development' (2009, 75). However, the common idea that agricultural investments in poor countries will give those countries an economic boost is a fairy tale. For example, according to estimates of SEO, 'the gross margin of the supermarket on red pepper can be up to 63% of consumers euros, the rest will go to wholesalers (7%), grower (24%) and VAT (6%).' (<http://www.seo.nl/en/page/article/van-teelt-tot-schap/>). Another example: 'for Pangasius Western consumers pay approximately 10 \$ per kilo, the farmer in Vietnam gets 1\$, and has after deduction of costs less than 0.1 \$ in his hands' (Berne Declaration 2013). Profit margins of Western companies on fresh products from the South are high, and the profits are not channeled back to the South.

Six, IBI increases the gap between production and consumption in several ways. One way covers the lack of trustworthy methods to handle food risks, zoonosis, or technological risks developing with new biotechnologies (like nanotechnology or genetic modification) (Kaplan 2012). Food safety is a problem for many, although probably behind the fear of contamination, residues, and pollution lurks the often unspoken distrust of the public toward a food system that exercises immense but not controllable power. Governments, pretending to be guardians of risk management, are often not trusted. In the Netherlands in 2014 the *Onderzoeksraad voor de Veiligheid* published the report *Risico's in de vleesketen* (Risk in the meat chain) with a devastating verdict on the current safety system in the meat sector, more directed to free trade than to the safety of products. The concerns about safety, other food risks and problems can often not be silenced by claims of scientific testing and transparency because many doubt that the public-private partnerships produce objective information and impartial testing. Moreover, these other concerns are often inspired by different worldviews than the one underlying these claims. Critical consumers put in doubt the values and

connected worldview that are underlying this intensive regime, such as convenience, efficiency in producing the largest volume of edible things and uniformity.³⁴

Consumers feel left in the dark due to what they see as the distorted relationship between science, technology and business. They fear that technologists go too far in denaturalizing food items and in the use of recombinant DNA technology in transforming agricultural plants and animals (Gaskell et al. 2010). Science-based health claims connected with (functional) foods are encountered with criticisms (and they change every year). Scientists bring in the so-called advantages of lower farm cost determined by genetic modification, but there are no advantages for consumers. Moreover consumers are concerned due to arguments about environmental costs of genetic pollution, food safety, and hazards (Thompson 2007).

Another way in which food industry makes it increasingly difficult for consumers to live a good life with food is that in using normative expressions like consumer free choice, it tries to expel as much as possible consumers out of the kitchen by providing processed food. For IBI, convenience food (fast food) and the convenience consumer are the standards. The portions of processed food — from cakes to ready meals— are way larger than they were in the nineteenth, with lots of sugar, salt and fat (Moss 2013; Schlosser 2002; Nestle 2002). A study by the British Heart Foundation from 2013 (BHF 2013) claims that supersize portions of food sold by some leading supermarkets are ‘out of control’ and harming people, fuelling an obesity crisis and contributing to heart disease. Industry and its shareholders strive for profits in selling more and more, including bigger portions with as cheap ingredients as possible.³⁵ Marketers and nutritional scientists construct, in their textbooks, the consumer into a convenience shopper who no longer wants to spend time in the kitchen; in leaving food preparation to the food industry, it is supposed that she or he, in fact, entrust the food industry to develop and sell ready-made foodstuffs with additives and other chemicals. These constructions of the consumer as either lazy or irrational are often barriers for a fruitful understanding of the motives of consumers.³⁶ As a consequence, differentiation of food purchasing through labeling and certification allows at least some consumers to express ethical concerns through their purchasing choices. Alternatively, many politicians and scientists perceive consumers’ opinions, in particular with respect to genetically modified organisms (GM) and additives as irrational and emotional.

The regime of intensive or industrialized agriculture with high (artificial) inputs and high outputs are seen by many as unsustainable; it decreases (agro-) biodiversity, it increases erosion, it is animal unfriendly and it depletes scarce resources.

Indeed, this system doesn’t have good scores on the six ethical criteria: *Can the style reduce hunger, poverty and malnutrition? Is it sustainable? Is it animal welfare friendly? Is it fair and just to farmers and others? Does it stimulate rural liveability? Is it consumer friendly: does it increase or decrease the gap between production and consumption and does it connect positively with urban areas?*

³⁴ See for example, Moss, 2013, p. 67, and reference 36

³⁵ It is silly to read how captains of industry repudiate their responsibility: NRC 10-08-2013, Hessel de Jong, CEO Coca-Cola Benelux, ‘we do not cause obesity. NRC, 31-1-04 ‘the proposition of Anthony Burgmans (CEO Unilever): a Magnum fits in a good diet’.

³⁶ There is evidence that food industry started and stimulated the trend of convenience, Shapiro for examples shows that the industrialization of eating, i.e, the move out of the kitchen, is a supply driven phenomenon. Shapiro, L. 2004, *Something from the oven. Reinventing Dinner in 1950s America*, New York: Viking; also Pollan, *Cooked*, 2013, p. 185. Haen (2013) shows that in many academic handbooks about food additives convenience is supposed to be the standard of rational eating, together with micro-wave and other material devices.

Because of these concerns, business as usual in the sense of continuing the current dominant agricultural and food regime is ethically seen not acceptable. Some agronomists believe that only new sciences like genomics or biotechnology can contribute in alleviating these problems³⁷; but the complexity of the issues and the multi functionality of agriculture and food prevent solutions on the basis of one branch of science. Moreover, the claims of agro- and nutrigenomics are nowadays by many perceived as exaggerated.³⁸

More important than these efforts is setting targets for radical reform which the cooperation of scientists, farmers and consumers step by step can realize. I am thinking of halving hunger and malnutrition and halving chemicals in ten years, with exclusion from markets for companies that didn't contribute to these targets, stop on more milk from cows, more eggs from chickens more meat from livestock and giving them the five freedoms in ten years, stop on agricultural investments in the South for products in the North, a ban on dumping of agricultural products in the South, shrinking of food chains, the obligation of supermarkets to sell local food not less than thirty percent of their products, to oblige corporations to publish yearly ethical reports with targets, to appoint citizen juries that monitor these reports and targets and to fine companies that not do reach their targets, to channel all private money streams for public research institutes into several independent committees that distribute the money according to a substantial evaluation of project plans, etc, etc, etc.

Food from somewhere: agro-ecology, farm to table, agrarianism, glocalism

The majority of farmers live in the South (approximately 1.5 billion people) and more than 85% are poor, often not owning their own land. They are involved in a different agro-food regime, producing for local or regional markets. Being poor, pesticides and fertilizers are used in small amounts (Millstone and Lang, 2008). Many of these farmers have learned to improve the soil with organic material, and intercropping (agro-ecology and agroforestry). Two more sophisticated methods, applying principles of scientific trial and error, are agro-ecology (Altieri et al 2011; Tomich et al 2011) and the system of rice intensification (SRI), applied also to wheat and corn (Stoop et al 2002; Uphoff et al 2009). These two methods can increase current yields with a factor two or more, with less environmental and economic costs than further intensification by chemicals such as IBI prescribes. Tittonell (2013) argues convincingly that ‘... most importantly, food will be produced where it is urgently needed, and where the surpluses can generate extra income for poor rural households.’ (see also De Schutter 2013). It is important to emphasize that this movement has not much to do with a so-called romanticism of Western consumers and is not anti-science. Farmers in developing countries started movements like Via Campesina; they are proud on their work and are eager to learn from others which can strengthen their food sovereignty. According to this regime, the cooperation of “external science”, indigenous technological development, and cash-crop orientation can increase harvest quality and quantity, partly for the market and partly for the subsistence of farmers. For example in the Kilombero Valley, Tanzania, rice is a cash crop as well as a subsistence crop; the subsistence crop serves as an income generator for technological investments in the cash crop.

³⁷ Borlaug, N. E. (2000). Ending world hunger: The promise of biotechnology and the threat of antiscience zealotry. *Plant Physiology*, 124, 487–490

³⁸ Ford Denison, R., 2012, *Darwinian Agriculture*, Princeton University Press, p. 150: ‘The likely near term benefits of biotechnology and genomics have been exaggerated.’ Scientists are often in the emotional overdrive when talking about the future outcome of molecular biology research, like, promising that hunger will be something of the past.

The two methods connect soil and table; they imply a route toward food sovereignty and local employment different from that of the cheapest price and the highest externalities. These methods also have found a lot of interest in the rich West.³⁹ Food should come from somewhere, from places that can be located and are by preference near. As a matter of fact, not all products need to come from nearby, and not every country can produce citrus fruits, coffee or banana. Depending on the area, and the preference of citizen/consumers, some products can come from far. Therefore, this connection is often called glocal, mostly local, and when necessary, global.

Evaluation of the agro/ecological regime according the six criteria

Can the style reduce hunger, poverty and malnutrition? Is it sustainable? Is it animal welfare friendly? Is it fair and just to farmers and others?⁴⁰ Does it stimulate rural liveability? Is it consumer friendly: does it increase or decrease the gap between production and consumption and does it connect positively with urban areas?

With respect to the first question, the answer cannot directly be proven positive, just like with the other regime. However, the statistics of yield improvements and of transforming infertile land into arable land that are made on the basis of the two methods are very impressive, in particular because these methods take the whole context of farming and food production into account. According to the research of Van Ittersum, agro-ecological crop methods have nowadays a yield of approximately of 80% of IBI, which is, compared with the other advantages of agro-ecology, and the quite lower ecological footprint, a small difference (Van Ittersum et al 2008).

More certainty can be given about the second criterion. The use of integrated pest management and of integrated farming methods reduces the need to use chemicals enormously. Moreover, intercropping and rotation, and experimenting with and learning from ecosystem services make the ecological footprint of this regime quite low.⁴¹ It is sometimes said that the habit to put aside fallow land makes this type of farming less sustainable, and the use of manure requires even more land⁴². However, I have never seen an alternative farmer who put aside his land (fallow), because farmers do intercropping with legumes and other edible crops (or animal rotation); moreover, manure is not always necessary to get the needed ingredients (Tittonell 2013).

Third criterion about animal welfare: because of the local production, animals are not kept on a mass scale in large barns; available feed determines the number of animals, which sometimes can be quite high. Sometimes the management of animals is not very animal friendly, like keeping them all winter long tied with a rope in a barn. However, long transports will not take place. Livestock remains the most important capital of some of the poorest people on earth. Livestock as a component of mixed farming systems can via its manure be one of the possibilities to reduce the use of chemical fertilizers.

³⁹ Examples can be found on www.farmtotablecoop.com. In the Netherlands: www.varkenshuis.nl; www.rotterdamseogst.nl; growingpower.org; transformers.nl.

⁴⁰ Again, I understand this criterion here in the sense of John Rawls' *Theory of Justice*, allowing, as under the condition of the veil of ignorance, competition and unequal distribution of resources of as long as the losers are as well off as they can.

⁴¹ Tittonell (2013) stresses the need to increase complexity in dealing with agricultural systems, taking into account for instance 'organic matter decomposition or biological N₂ fixation for nutrient supply, ... soil-root feedbacks or ...rotational carry-over effects for suppression of soil-borne diseases, ...crop livestock interactions for nutrients.'

⁴² See Louise Fresco, Herzberg lezing 2013; and with the same words, Joost van Kasteren in his food blog 2013.

Focusing on the fourth criterion gives a positive result. Food and farmer sovereignty are the core values of this regime. Farmers in this regime do not strive for efficiency according to the definition of the IBI regime. In this last regime one strives for the cheapest very far is sometimes cheaper. In neoclassical economic terms, an entrepreneur should look for ‘comparative advantage’, i.e., for products that are wherever made the cheapest (measured in money terms). However, comparative advantage doesn’t take into account values that cannot (instantly) be measured in money, like employment, animal welfare, quality and sustainability and other long term values. These external costs are probably higher (or valued more) and the possibilities of control and quality are lower. More important, the social effects of learning to work with nature and with each other are completely left out in this type of efficiency.

Evaluating the agro-ecological regime according to the fifth criterion gives also positive results because farmer livelihood and food sovereignty is such a regulating principle next to that of optimal use of ecosystem services. This regime produces employment, enhances rural livability and brings people in contact with each other and with the soil. So this movement is proud on its economic meaning for local people. (How the *Farm-to-Table* Movement Is Helping Grow the Economy www.entrepreneur.com/article/220357 21 sep. 2011). Nevertheless, the movement is also an international movement that is part of a global network of food movements just like Slow Food. Important are nearby networks that focus on food production and consumption. These networks establish community relationships and bring people from different ages, cultures and sexes together.

In judging this regime according to the sixth criterion one gets a differentiated picture, depending on the different variants that emphasize either the importance of production or that of consumption or that of both. Agrarianism, one variant, focuses on local farming practices and their traditional activities (Crichtley, 2010; McMichael 2009). The farm dictates what to serve at the table. This production movement also implicitly acknowledges the ethical value of how to lead a good life. This variant gives farmers full priority in what and how to produce (like in agrarianism: Berry 2010; Thompson 2010). The editor of the *Essential Agrarian Reader*, Norman Wirzba argues: “agrarians stress the importance of living as much as we can within local economies, economies that keep the loop between production and consumption as small as possible” (Wirzba, 2003). Consumers are not conceived as important stakeholders due to the fact that they are often seen to prefer convenience and therefore processed food. The agrarian tradition is also often wary of innovation (according to Wendell Berry, a farmer who uses a computer, is not to be trusted) and tries to stick to traditional methods.⁴³ Another variant is the ‘food-as-art’, and that one tries to modify ingredients and the final product in a way that is unrecognizable and uses for the preparation all kinds of chemical and physical instruments. This variant, oriented towards consumption, is called “molecular gastronomy”, and this branch has many famous chefs like Ferran Adrià and Grant Achatz as its proponents (Parish 2011).

For other variants however, exclusive emphasis on farmers or using technologies or not are not the issues to focus on; for them the core of this regime is the reciprocal learning process of farmers (producers) and consumers in having a meal. This is also understood by the chefs. They are members of what is called the G9, and they have rather pathetically

⁴³ This is in line with what Borgman, who inspired agrarianism, writes: ‘Agronomy, scientific husbandry, agribusiness, and the globalization of the agricultural commodities market are conspiring to pure agriculture of everything focal and familial.’ See p. 360 of Higgs, E., Light, A., Strong, D. (eds.) 2000, *Technology and the Good Life?*, Chicago: Chicago University Press

appealed from behind the stove to the next generation of chefs to change the world through the dinner plate. René Redzepi, Ferran Adrià and others argue ‘cooking is not there only to nourish the body and is also more than a quest for happiness (...) cooking is a powerful weapon with which co-producers - chefs, farmers and eaters - can change the way the world feeds itself.’ A large minority of consumers agrees (see reference 45). Often, consumers have taken the lead as in Community Supported Agriculture or in (peri-) urban gardening (McWilliams 2009; Müller 2011). Here citizens together with farmers organize either all the links of the chain between farm and table or part of them. For example with respect to markets, some neighborhoods, worrying about the decline of the number of whole food shops, organize markets of fresh products, also by assisting on a voluntary basis some small entrepreneurs (see zuidermrkt.nl). Other variants are neighborhoods that provide capital and voluntary labour to neighboring farmers. In all these cases, consumers have a considerable say in what will be produced and how. The food preferences of consumers with children, with special dieting or cultural preferences, with work elsewhere or of elderly consumers can so be better taken care of. Here is a conception of social justice at work (Alkon and Agyeman 2011; Gottlieb and Joshi 2010). This branch realizes that due to the dynamics of social, economic and cultural systems, agricultural priorities cannot anymore be established one sided by either farmers (or producers) or consumers on their own (Van der Schans 2010; Veenhuizen 2006; Visser et al 2009).

To sum up, agro-ecological regime covers ethically seen important methods to reach a sustainable society. Most of its variants are animal welfare friendly; are fair and just to farmers and others involved; do stimulate rural liveability. A challenge is how to become consumer friendly, and how to pay attention to the reverse process from table to soil and to connect positively with urban areas.

Objections to localized food: emotions, misleading facts and denunciations

As I have put forward, food has important identity achieving functions, which implies that people are sometimes quite agitated in defending their claims which makes a debate about food often heated. The all-encompassing features of food not only incorporate a lot of deep grained emotions but evoke also a lot of emotions. Even so-called objective statements and declaration of food conceal messages that frame people and food items in a certain way. The urge of many with a stake in the food sector involved to go into the emotional overdrive is inconsumable. Food experts often openly declare when people make different food choices than scientific ones that these people are stupid or they confess their sadness in the sense of Mama is disappointed. It is quite common to denigrate opponents in a debate about food for example by saying that he or she doesn't know anything about food or seeds or whatever (the exclusive appeal on knowledge as a matter of fact is often done by scientists). In forewords of food books or papers written by scientists one often encounters sentences like: what only the expert knows... They imply often that people are dismissed as irrational and moral inferior. Knowledge on food is framed as a moral capital and used to moralize. If one eats according to scientists the wrong food item, one is not only making a mistake but one is also morally tainted.

What often isn't considered is that people can have strong moral objections against certain practices, and the quasi factual statement that bomb chicken or minks in the Netherlands are better off or have environmental advantages, doesn't hit the point. Nevertheless, I will counter a few often repeated statements here because those who offer objections to these alternatives are owed a reply. Some scientists, journalists and captains of

industry say it loud and clear that intensive bio-industry is a moral duty in battling world hunger.⁴⁴ What one often hears when pleading for a more diverse food landscape against the monopoly of IBI, is that the implication is that poor farmers should remain poor, and moreover do the back bone breaking work that they and their forefathers do already for ages. In the same line, MacWilliams (2009) accuses the locavore movement of making it impossible to feed 7 billion people. However, the current intensive system cannot feed 7 billion people either and makes it even harder for the very poor to feed themselves. Local food movements can improve their misfortune (for a sophisticated treatment see Dupuis and Goodman 2005). The trend towards food sovereignty is philosophically and ethically only to be welcomed. It is quite plausible, that due to the complexity of agriculture and food, only pluralist approaches can reduce the number of hungry and malnourished people.

Criticism that ask for less processed and more local foods are often in their turn criticized as nostalgic and romantic arguments of spoiled luxurious citizens of the grachtengordel of Amsterdam. Fresco (2013) and Dijkhuizen argue something like that. However, this type of criticism is already at least as old as scientists and industrialists are busy in producing additives and other conservation items, it has nothing to do with a self-annoying highbrow class of intellectuals that feel sorry about the lack of their own manual labor. Adding chemicals to food and sweats was already criticized around 1890 in 'Aaltje', a cook book, in which the writer wrote about 'akelig gekleurd suikergoed' (TIN, 20-3, Chapter 5). Moreover, the quest for local food is not typical a Western ideal; the farmers and local food movement of the South (like Via Campesina) have the same kind of ideal (see also Herring 2014). Is it only romanticism, this search for purity, seasonality and locality? When one of the main features of romanticism is the focus on the extraordinary meaning of the individual, one can answer this question negatively because the movement stimulates cooperation and social justice.

Furthermore, the agro-ecological and farm to table movement focuses next to social justice, also on the good life and the quality of food and social relations. Its multi-functionality makes it difficult to fit in the quite useful scheme of three food approaches distinguished by Warren Belasco in his *Meals to Come. History of the Future of Food* (2006). The first is a Malthusian approach, in which population growth and hunger is emphasized, the second is represented by the Enlightenment thinker Condorcet, and stressed progress of science and industry to alleviate the search for daily bread, and the third one is represented by the father of anarchism, Godwin, who focuses on better distribution (justice), egalitarian moral order and ask therefore for change of food style (for instance less meat) when necessary. Indeed Malthusian motives cannot be discerned, but the enlightenment motive is too short sighted (although the movement is not anti-science) and the Godwinian approach is too limited. In my view this new movement tries to overcome old dichotomies that hamper thinking and acting when attempting to grasp the complex reality of food production. Flower garden, lawn and wild nature are not necessarily in contradiction: the kitchen garden integrates many aspects of nature. Second, the new movement is trying to integrate in a new way town and country (Heynen et al 2012). Thirdly, it highlights the integration between physical and mental labor and bridges nature, culture, and even spirit, mind and body (Brook 2010). Fourth, this type of agricultural work also overcomes the dichotomy between mastering nature and passive subjecting to nature. A gardener must actually do both, and yet join with nature. The same applies to the distinction between technology and nature. The

⁴⁴ Ralf Bodelier, Trouw, 21-09-2013, 'Intensive bio industry is a moral duty'. Mike Mack, CEO Syngenta, good for \$5,450,079 : 'Many think that they will save the world by consuming organic food, but in this way they destroy the planet.'

distinction between consumer and citizen is also put into brackets (Renting et al 2012); and in the field of philosophy, the distinction between justice and good life.

What can good food for all mean? Soil to table: networking the shortest distance

More and more people realize that the problems of the current long and opaque food chains require a completely different approach, and that food production should be something completely different from producing computers and cars. According to the *Food Monitor 2012*, the total consumer spending on durable food (all non-conventional food) in the Netherlands in 2012 amounted to 2.22 billion. In 2011 it was 1.77 billion, in 2012 there was a rise of 25.2 %. The market share of durable food has grown from 4.4% in 2011 to 5.5% in 2012. Conventional food expenditures went down 4.7%.⁴⁵ The last decade sustainable, animal friendly, and fair trade food items are easier accessible and this is reflected in the long term trend of an increasing market share of durable food.

Ethical consumers do everything to come as close possible to the places where food they like is produced. The sources of their daily food should be as much as possible near home, which is to say near urban areas because most people nowadays live in urban areas. This implies a renewed interest in vegetable gardens and fruit farmers and extinct traditions are breathed new life. Often, these initiatives cannot compete with regard to yields with conventional producers; however, the social and personal normative meanings of these initiatives are huge and their wider social impact can be enormous. Conscious consumers will more and more asking questions about conventional production, and therefore these initiatives can have a larger social meaning.

Next, conventional food production should fall into the hands of both producers and consumers, and not in those of a very small group that tries to get the ingredients from anywhere without direct control of anyone. Simultaneously do consumers, farmers and farmer researchers learn that sustainability and climate change require a change of consumer food styles, and new life styles of consumers (in expanding urban areas) require a change of farming styles. Farmers and consumers should cooperate and negotiate about their interests, preferences and values.

The different variants of this farm to table / soil movement deserve equal consideration; this is a type of elaboration of the more general notion of fair recognition and representation of farming and food styles, a type of social justice. This ethical notion enables to take into account the pluralism of farming and food styles and their various interactive ways of intensification and innovation with consumers. It is sometimes said that sustainability requires large, superlocal companies, because they can better control their in- and outputs streams. However, it is on a global scale very difficult to overview these processes and international corporations are not inclined spontaneously to act in a responsible and accountable way; for example their international character allows them to disregard national regulations and concerns. The advantage of small scale companies is exactly that they can better be overviewed and held accountable.

Challenges for agro-ecology and Farm to Table: Table to Soil

⁴⁵ There are different estimations how many people are interested in sustainable food. According to Reinders et al (2009) there are in the Netherlands about two million people, about 15 percent of the population that are 'Cultural Creatives' (Reinders et al. 2009), a term used for a group of consumers who pursue a sustainable lifestyle (Ray & Anderson 2001). 'Almost all the 'Cultural Creatives' are familiar with and positive about organic food (as opposed to two-thirds of the entire population). Other estimations are from the 'Euro Socio Styles indeling' (ESS) of GfK. In the Netherlands one can distinguish eight groups, of which four are open for sustainable consumption, approximately 64 percent of the Dutch population' (Reinders et al. 2009).

One of the most relevant challenges is not in how far the farm to table movement can feed the world, but how it will upscale and increase its market share to feed the urban world in a sustainable, fair and animal friendly way. Craftsmanship and traditional knowledge and practices are important to preserve, but not under all circumstances. Innovations, to adapt to changing circumstances like climate change, and social developments are necessary, just as accommodation to needs of farmers and consumers and upscaling to regional levels (Katchva and Woods 2013). An exclusive orientation to farmers is not feasible in a world with more people living in urban areas than in the rural areas, and who cannot afford to spend the whole day farming and may have dietary wishes. The gap between consumption and production can only be closed when the table is heard on the farm as well and the movement from table to farm and soil is taken seriously. Variants of this regime need to get rid of the common (with IBI) prejudices about consumers(-citizens).

This challenge becomes particularly risky because some variants of the farm (soil) to table movement are disposed to the exclusion of certain groups of people that do not agree with the group ethos and are not accepted by the community. The fore runners of the farm to table movement like the urban gardening movement from the twenties and thirties of last century suffered from that problem. Gaston Bardet (1907-1987), a disciple of Lewis Mumford, and one of the architects of that movement, writes: ‘The new urban design must be biological; in that sense it will give priority to women and children. It should “feminize” the urban environment to incorporate nature and renewal in it; it should fulfill children’s needs, the need to expand, let off steam, which are not adult needs (...) the urban designer’s basic mission is to be a pied piper of souls’ (Paquot 2005). Emphasizing not only the material aspects of gardening but also the need to unite mentally and spiritually implies exclusion of all those who fail to agree. It is here that I disagree with Thompsons’ strong ideal of local food community in his plea of agrarianism:

‘The ideal of a local food community (...) anchors our hope by expressing (and through material practice, cultivating) the first-person plural perspective that both licenses the use of words such as *we* and *our* and orients hope toward the sustainability of the soil, the earth, that binds our practices together’ (Thompson, 2010).

The emphasis on a strong feeling of ‘we’ and ‘our’ suggests forms of exclusion, either by not accepting or excluding disagreeing members of the group or people outside the group (Keulartz 1998).

Food democracy from soil to table and table to soil: prospects

‘Philosophers have only *consumed* the food differently, what matters is to *reform* it’,⁴⁶

In the earlier section I have argued that with regard to the current dominant food regime, consumers and farmers have no control over the priorities what to produce and to invest in and therefore no control over the relation of society with nature and agriculture. This lack of control and involvement makes of citizen-consumers a debilitating force. Democracy cannot be realized when citizens are fully dependent on industrial food production. For citizenship to be realized it is not only necessary to maintain positively public conditions like health, education, and mass media that offer interesting facts about important social issues (and not only about careers of soccer players or film stars).⁴⁷ Citizenship cannot thrive on the basis of a

⁴⁶ See Marx in his *Eleventh Thesis on Feuerbach*: ‘The philosophers have only *interpreted* the world differently, what matters is to *change* it’.

⁴⁷ John Dewey develops in his *The Public and its problems* a theory of media still relevant for today’s media.

regime of an anonymous and distantiated agro-food system that increases the gap between producers and consumers due to the economic value of profits and comparative advantage.⁴⁸ Free from democratic input and motivation, this regime is stimulating individualistic greed, creating a poor and malnourished underclass and is more and more insensitive to judgments, worldviews, fears and emotions from its end-users.

My conclusion on the basis of the evaluation of current evidence is that the dominant IBI regime is to be changed to an ethical acceptable regime. Due to the uncertainties, complexities of agriculture and food production but also to some of the recent innovations in this regime, it is too early to give a definitive conclusion, and I cannot give a total negative evaluation. The issue is not, do we need IBI, or the agro-food regime, but in what form and measure. Therefore, the question of either reforming the current dominant regime (IBI) or starting alternatives is not an important issue; both are necessary. The pressing issue is to organize the fair representation of food and farming styles, which means how to deal with the different food and farming styles in a constructive way that gives *opportunities to all in a fair and just process* (Sen 2009, 228). Food democracy from table to soil and from soil to table starts with the idea that ‘there may not indeed exist any identifiable perfectly just social arrangement on which impartial agreement would emerge’ (Sen 2009, 15). Food and farming styles will differ, and it is meaningless to try to overcome these differences by an appeal on mostly controversial facts or some other rock-bottom. Deliberation about deeply felt frictions between styles and cooperation are more fruitful strategies.

With respect to food production and consumption, it means that the deliberative approach cannot stand on its own. Sure, it needs tools like scenario building, and looking for positive matches between technologies and deliberative openings, and deliberations about uncertainties, fears and new ideas and opinions.⁴⁹ But more is necessary. Cooperation, working together and collective action with regard to food give meanings and experiences to democratic control and formation of beliefs. In bringing together eating, cooking and farming personal and social identity activities are affirmed, maintained and renovated. It is this connection of food production, of the *soil*, with the life world where philosophy can make a difference, because it shows that what is made according to current IBI definition of efficiency is not the best for having a good life. Cooking and eating are not simply activities that keep our day-to-day life going but they are identity-achieving activities: they contribute to what we are and how we appreciate ourselves.

Deliberation about food is only fruitful when participants do something where food comes from: cooking, farming, producing some food or organizing some process or product. This practical knowledge is an inspirational basis of being able to remain connected and to acquire new insights and to put forward fruitful opinions. Deliberations on food enhance their quality when fed by embodied knowledge. This knowledge improves when it is daily exercised and it deteriorates when not exercised, just like a bodily condition needs exercises to remain in good shape. Shared internalized norms are helpful, but they are not necessary, cooperation and exercise does.

The governance of food should be a polycentric affair, where civil society actions and movements together with governmental policies implement the right to adequate food and where governments organize this public good and provide a regulatory frame work for food

⁴⁸ Against Axel Honneth, *Das Recht der Freiheit*, Frankfurt: Suhrkamp, p. 546

⁴⁹ These are the main ethical tools that Dewey in his *The Public and its problems* recommends and which Habermas has updated.

companies and other private enterprises to do their work on markets (Ostrom 2009). Ostrom remarks: ‘We need to ask how diverse polycentric institutions help or hinder the innovativeness, learning, adapting, trustworthiness, levels of cooperation of participants, and the achievement of more effective, equitable, and sustainable outcomes at multiple scales.’ She discovered that ‘local incorporated communities can contract with larger producers and change contracts if not satisfied with the services provided, while neighborhoods inside a large city have no voice.’ Life sciences in close cooperation with social sciences can encounter a lot of opportunities on the basis of this governance structure. Science and technology can work in both ways, either reducing the labor force by focusing on monocultural plantations or encouraging social and biological biodiversity by improving the quality of labor and food by making farming more pleasant, more productive, and less tiresome.

Conclusion

For many, philosophy is an interesting, but damn serious business, with not much enjoyment. Hegel alluded to this with his idea that philosophy paints gray in gray, and the Dutch poet Der Mouw wrote (p. 36 and p. 476):

De tafel ligt vol opgeslagen boeken:
mijn leven heb ik
vermorst met wijsheid-zoeken

The table is loaded with unfolded books:
I have squandered my life
With seeking wisdom

and

Tulpen zijn rood, filosofie is grijs - Tulips are red, philosophy is gray

However, applied philosophy can make food and farming, soil and table more colorful. I have tried to show that from an ethical point, diversity of agricultural regimes, initiating and supporting new connections between rural areas and citizen-consumers, and intimate attention for the route from soil to table and table to soil are values to be cherished and to strive for. Food ethics can give arguments and examples why the gap between producing and consuming processes can fruitfully be tackled when science, technology and industry give a structural place to the voices, fears, values and activities of consumers.

The current landscape of food and agriculture covers at least two regimes. One is the intensive bio-industry (IBI) and this regime covers a process that produces food in a complex, long, tortuous and opaque way. Food ingredients travel through many channels and links all over the world till it finally as an edible product reaches the plate on the table; this is food from everywhere and nowhere. The problems of this regime of food production and consumption on a global and local scale are huge: obesity, malnutrition, lack of quality, unsustainable impacts, animal welfare deficits, destruction of rural areas and rural livelihoods are the most salient ones. The regime’s framing of consumers as exclusively oriented towards convenience, low price and spending as less time as possible in the kitchen is cognitive and normative flawed (to say the least), not validated by social scientific research and experiences. Many consumers do want to pay more time, but often the common prejudices and material structure of buying and preparing food (choice architecture) in favor of convenience are barriers. Moreover, ethically seen, a future view that strives for a reduction of people working in the food sector to less than 2% of the global labor force, and where more than 12% is jobless, living in slums or hungry, is not acceptable.

The current regimes of agricultural and food production IBI, or the ‘productionist paradigm’ and the agro-ecological / alternative regime have their pros and cons. The productionist paradigm of agriculture and food is dominant and aims at high inputs and high outputs. Although this paradigm has succeeded in feeding billions of people, it also produces huge problems, which make it unsustainable and socially not fair. Nevertheless, this approach is dominant today. In order to produce good food for enough people, a radical reform of this regime is ethically seen necessary. But more important, we need a pluralist approach that take seriously the best practices of small and medium farmers and innovators and the pleasure and social interaction that food for consumers can bring. Alternatives as agro-ecology propose as short links as possible between farm and table and represent a much broader approach that covers localized food production and consumption, and aims at food from somewhere. In often elaborate but nearby networks, without as little long distanced production elements as possible, food is produced and prepared as near as possible to the table.

Food democracy, dealing with pluralism in a fair way and fair representation of farming and food styles requires that the Glocal and agro-ecological movement deserves a lot more scientific, social and political attention than now is the case, and it is to be hoped that that movement will grow the next decades. This will only happen when the farm also listens to the table, and considers seriously the various food preferences of people living in urban areas. Life sciences have a responsible task in improving these agricultural and food practices by taking into account the complexities not by selecting only a few variables. Natural scientists and social science should work together to find how a just and fair match between agriculture and society can be established. This is in particular necessary given the often naïf and not validated social intuitions about consumers for instance that they are convenience or cheap food driven.

Acknowledgements

After 21 years I will now resign as Professor Applied Philosophy of Wageningen University. During those years I encountered many happy and sad events. I got successes and disappointments. I know that many have done a lot of effort to give philosophy and ethics in particular a better place in this university, however to no avail. I have had an incredible good time with my collaborators, Jozef, Henk, Leon, and later with Cor, and as a matter of fact with Bram, Tassos, Rixt, Mohammad, Clemens, Cristian and Bea. Thanks to all, I enjoyed the work, hope you did it as well.

During the day we got presented a sample of issues of philosophy and ethics of agriculture and food. I am proud that sprouting from the edges of philosophy, a new fundamental discipline is born, food philosophy and food ethics, which I hope to see blossom the next years, and to which blossoming I love to contribute. I am very glad and thankful that I can continue my work at the group Metamedica chaired by Prof Guy Widdershoven of Free University. I wish my colleagues at Wageningen University all the best.

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Enough words have been spoken; it is time for our other senses to be addressed. You will now hear the other three other parts of Boccherini's quintet played by the Matangi Quartet and guitarist Michael Benedik. The Matangis are: Maria-Paula Majoor, Daniel Torrico Menacho, Karsten Kleijer, Arno van der Vuurst en Michael Benedik.

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Biography

Michiel Korthals is Professor of Applied Philosophy at Wageningen University. He studied Philosophy, Sociology, German and Anthropology at the University of Amsterdam and the Karl Ruprecht Universität in Heidelberg. His academic interests include bioethics and ethical problems concerning food production and environmental issues, deliberative theories, and American Pragmatism. Main publications: *Filosofie en intersubjectiviteit*, Alphen a/d Rijn, 1983; *Duurzaamheid en democratie* (Sustainability and democracy, Boom, 1995); *Philosophy of Development* (Kluwer, 1996 with Wouter van Haften and Thomas Wren), *Tussen voeding en medicijn* (Between Food and Medicine), Utrecht 2001, *Pragmatist Ethics for a Technological Culture* (with Keulartz et. al.; Kluwer 2002), *Ethics for Life Sciences* (Springer, 2005), *Before Dinner. Philosophy and Ethics of Food* (Springer 2004), and in 2006, *Pépé Grégoire, Een filosofische duiding van zijn beelden / A Philosophical Interpretation of his Sculptures*, Zwolle: Waanders; Korthals, M. (Ed.), 2011, *Genomics, Obesity and the Struggle over Responsibilities*, Springer. Korthals publishes regularly in i.a. *Journal of Agricultural and Environmental Ethics*, *New Genetics and Society*, *Journal of Social Philosophy* and *British Journal of Nutrition*. He was director of the Department Social Sciences (1996-2000) and till 2014 president of the Foundation FREE (Foundation for the Restoration of European Ecosystems), which manages 1500 Highlanders, Konikshorses, Wisents and Rode Geuzen, and chair of Wouter Schatbornstichting voor nieuwe energie. He presents regularly his thoughts and poems about agriculture, food and the meal.

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