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Organic agriculture and ecological justice: ethics and practice

Hugo F. Alrøe, John Byrne and Leigh Glover*

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Summary

Ecological justice is a challenging concept in relation to the current development of agriculture, because it positions social and ecological interests against market liberalism and economic growth. Ecological justice concerns fairness with regard to the common environment based on the idea that environments are fundamentally shared. This chapter investigates the role that ecological justice may have in relation to the global challenges of organic agriculture. We perform a philoso-

* Corresponding author: Danish Research Centre for Organic Food and Farming, Research Centre Foulum, Blichers Allé 20, P.O. Box 50, DK-8830 Tjele, Denmark. Hugo. Alroe {AT} agrsci . dk http://hugo.alroe.dk

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phical analysis of the ethics of ecological justice and the relation to sustainability and globalization. On this basis, we discuss the challenges that this important concept poses to organic agriculture and how it can be put into organic practice. Organic agriculture is in an advanced position with regard to ecological justice, since it aims to interact in a positive way with the environment. But ecological justice also poses significant challenges to organic agriculture. The three main challenges are: the commodification of hitherto commons; external environmental and social costs that are not accounted for in the market; and growing distances in form of distant trade and ownership in the organic food systems. We conclude that the ideas of ecological justice can be promoted in three ways by means of organic agriculture: by implementing ecological justice more fully in the organic certification standards through incorporating a measure of 'nearness' and developing a fair organic trade; by promoting non-certified agriculture based on the organic principles as an alternative development strategy for local sustainable communities and food security; and by organic agriculture serving as an alternative example for the broader implementation of ecological justice in agriculture and society.

Introduction

Organic production, processing, distribution and sale have grown immensely in size and efficiency in the past two decades, and organics has become a global player. The International Federation for Organic Agriculture Movements (IFOAM, www.ifoam.org) states that its goal is the worldwide adoption of ecologically, socially and economically sound systems that are based on the principles of organic agriculture. But at the same time, like mainstream agriculture, organic agriculture is faced with the all-pervading trends of globalization and the ensuing challenges of sustainable development.

The current trends in mainstream agriculture have implications for social and environmental values, and most trends are to some degree shared by organic agriculture. The organic standards do secure a more sustainable development in the areas that they address, such as the regulations on fertilizers, pesticides, genetic engineering, additives and animal welfare. But on areas that are not, at present, covered by regulations, organic agriculture tends to follow the mainstream path. Some characteristic features of modern organic agriculture are thus:

- Large-scale efficient productions, incorporating modern technologies.
- Trade of feed, seed and other inputs through conventional companies.
- Global trade with organic feed and food products.
- Processing and marketing through large conventional food companies.
- Sale through supermarkets, sometimes using supermarket brands.

This market based 'modernization' and 'conventionalization' of organic food systems and the involvement of non-organic actors have been important factors in the recent growth of organic production and trade. On the other hand, this development can, in itself, lead to unwanted social and environmental impacts (Rigby and Bown, 2003), by way of reduced landscape diversity, increases in food miles, greater distance between producers and consumers, unfair competition from large players, reduced food diversity, etc. And it can also put pressure on the local adaptation and integrity of the organic production systems by imposing constraints on the selection and diversity of crops, varieties, farm animals and breeds.

In accordance with the strategy of the organic movement to operate both in and against the market, Alrøe and Kristensen (2005) identify two problematic issues relevant to the trade of organic products: how to remove unfair obstacles to free trade with organic products, and how to avoid negative effects from free, global trade.

There are trade barriers and other economic impediments that organic products from low-income countries must overcome in order to compete fairly with similar conventional and organic products. Of particular concern are state subsidies for conventional agriculture. Subsidies may also distort the competition between organic products from different regions. Moreover, conventional agricultural products are offered at prices that do not reflect the environmental and social costs entailed in their production as well as organic products do, and thereby local environments and communities are forced to bear the burdens of externalities from the production. Finally, the organic standards and control systems themselves can be a barrier that hinders the potential growth and spread of organic farming (e.g. Fuchshofen and Fuchshofen, 2000; Haen, 2000). Global uniform standards are likely to be unfair to some, because they do not attach importance to the different cultural and natural conditions in different regions. The issue of free trade with organic products is treated further in Chapter 5.

With regard to the second issue, the identity of organic farming must be broadened and strengthened to avoid negative environmental and social consequences from free, global trade with organic products. Distant trade may conceal complex systemic costs connected to organic production processes and transportation. In particular, while the present organic certification schemes do promote soil fertility and to a large degree prevent environmental degradation, they do not consider issues such as: commodification of hitherto commons like soil, water and land; social impacts and consequences for agricultural and natural biodiversity of globalized organic productions (such as when large corporate organic operations establish themselves in low-income areas and productions for self-sufficiency are replaced with organic cash crops); environmental costs connected to international transportation; and unfair prices and profits in the organic food systems.

Reflections on the current trends in the development of modern organic food systems have led to a new and renewed interest in values and principles of or-

ganic farming that can guide the future development of organic agriculture (DARCOF, 2000; Lund, 2002; Alrøe and Kristensen, 2004). With this in view, IFOAM is currently rewriting the principles of organic agriculture (see Box 3.1). All the principles have something to say in relation to the trends of globalization, but the principle of fairness speaks most directly. It says: 'Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities'. This principle refers to the concept of ecological justice, which in recent decades has been subject to a fair amount of interest (e.g. Low and Gleeson, 1998; Byrne *et al.*, 2002a; Baxter, 2005; see also Chapter 2). Based on the idea that environments are fundamentally shared, *ecological justice concerns fairness with regard to the common environment.*

Box 3.1. The proposed Principles of Organic Agriculture.

The hitherto 'Principal Aims of Organic Production and Processing' are being rewritten by IFOAM as the 'Principles of Organic Agriculture' (Luttikholt, 2004). These are the proposed principles as of June 2005:

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

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

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

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

The proposed principles have been presented and discussed at several occasions in and outside the organic movement in 2004–05 and there has been a comprehensive hearing process with IFOAM membership and other stakeholders. In September 2005 the IFOAM general assembly will vote on the principles. All drafts of proposed principles and details of the hearing process, including questionnaires, feedback and minutes of Task Force meetings, are available at an open website (http://ecowiki.org/IfoamPrinciples) and on the IFOAM website (http://www.ifoam.org/organic_facts/principles). The new principles are also to be used as a basis for future revisions of the EU regulation on organic agriculture, according to the plans of the EU-financed targeted research project 'Organic Revision' (http://organic-revision.org).

As concluded in Chapter 2, there are potentially strong links between organic agriculture and explicit strategies to pursue the values of ecological justice. Organic agriculture has social and ecological goals that conform with the principles of ecological justice, including protecting the productive capacities of farming systems, meeting local needs, contributing to local community development and considering the interests of future generations. However, the forces of economic globalization offer a number of challenges to the ideas of organic agriculture and increase the incentives for the organic food systems to become more like conventional food systems. If the global development of organic agriculture is to succeed, the need is urgent to investigate what the concept of ecological justice means with regard to the development of organic food systems issues and what challenges and promises it holds.

Scope and purpose of the chapter

The present chapter investigates the role of ecological justice as a key ethical principle in relation to organic agriculture, globalization and sustainability. Ecological justice is a challenging concept in relation to the current development of organic agriculture, because it places social and ecological interests against market liberalism and economic growth, and it may suggest ways to resist the pressures of market globalization and current structural and technological developments. This chapter investigates the role that ecological justice may have in relation to the present challenges for the global development of organic agriculture. The main questions are: What is the meaning and context of ecological justice? How can these ideas help resist the pressures of globalization? How can ecological justice be implemented in relation to organic production and trade? And how can organic agriculture contribute to ecological justice in a global perspective?

The investigation has two interacting elements, a philosophical analysis of ecological justice in relation to other relevant concepts and a discussion of how the concept can be put into practice to meet the present challenges.

Sustainability, globalization and organic agriculture

The World Commission on Environment and Development raised sustainability on the global, political agenda. They stated that poverty, which is an evil in itself, but also makes the world prone to ecological and other catastrophes, is no longer inevitable (WCED, 1987). Technology and social organization can be managed and improved to make way for a new era of economic growth. This approach is now the main approach to sustainable development, often called ‘ecological modernization’ (e.g. Hajer, 1995). The commission further stated that the overall sustainability goal of meeting the essential needs of the present requires an as-

surance that those poor get their fair share of the resources required to sustain economic growth. Unfortunately, current policy makers generally emphasize the overall goal of economic growth through economic globalization and neglect the goals on poverty reduction, fair access to resources, and the needs of future generations. Therefore, while ecological modernization, globalization of markets and promotion of free trade constitute mainstream approaches today, they have also generated great resistance from many stakeholders, most noticeably developing nations, local communities, advocates of civil society, and environmentalists, and a call for social, ecological and environmental justice (e.g. Bond, 2002).

The important issues today with regard to sustainability and globalization are thus not questions of sustainability versus globalization, but of different understandings of sustainability versus each other and different understandings of globalization versus each other. For instance, as pointed out by Christoff (1996), the term ecological modernization has been employed in a range of ways, bearing quite different values. 'Consequently there is a need to identify the normative dimensions of these uses as either weak or strong, depending on whether or not such ecological modernisation is part of the problem or part of the solution for the ecological crises' (Christoff, 1996: 497). Byrne and Glover (2002) conclude that the goal of ecological justice is needed to effectively resolve the world's problems with environmental decline and social deterioration – and that this is a more controversial and problematic goal than that of sustainable development. In this section we will look at different understandings of sustainability and globalization in order to indicate the relation with the rising discourse of ecological justice, and in the next we perform a normative analyses of ecological justice in order to clarify the meaning and the values of this important concept.

Dimensions of sustainability

It is common to speak of three dimensions of sustainability: ecological, economic and social. But this distinction is not very helpful in the present context. Even though discussions on sustainability and globalization with regard to agriculture should be seen in the context of the more general discussions on these issues, agriculture also brings in new perspectives. In particular, agriculture makes the relationship between man and nature very explicit. From the perspective of organic agriculture, agriculture is an ancient and very intimate relationship between human and nature that involves both ecological and social systems – man is not separate from nature, human and nature are in many ways an integrated whole. Speaking of ecological, economic and social sustainability tends to remove focus from the relations between the three and thereby counteract the insights of organic agriculture. Moreover, it does not capture the really significant differences in how sustainability is understood and used.

Joachim Spangenberg (e.g. 2002) has formulated a broader framework of sustainability that includes a fourth dimension, institutional sustainability (which was introduced by the UN Division for Sustainable Development in 1995). This framework has been depicted as a sustainability prism (see Figure 3.1) with four dimensions/aspects/subsystems/imperatives (they are described in different terms) placed in the corners with six 'interlinkages' between them: justice, burden sharing, democracy, eco-efficiency, care, and access (e.g. Valentin and Spangenberg, 2000; Spangenberg, 2002).

This richer picture of sustainability is more useful in this context due to the interlinkages between different dimensions of sustainability, which are in accordance with a focus on the relations between human and nature, social and ecological. 'Access', the interlinkage between the environmental and social aspects, is thus described in ways that resemble ecological justice. This may be of some importance in relation to putting ecological justice into practice, since the sustainability prism is being used as a framework for development of indicators and since it provides an eye and a space for ecological justice in this type of work. However, while the sustainability prism does offer a rich view that opens up for discussions of ecological justice, there is still a need to look at the differences in how the concept of sustainability is used in different discourses and the meanings and values inherent in these differences.

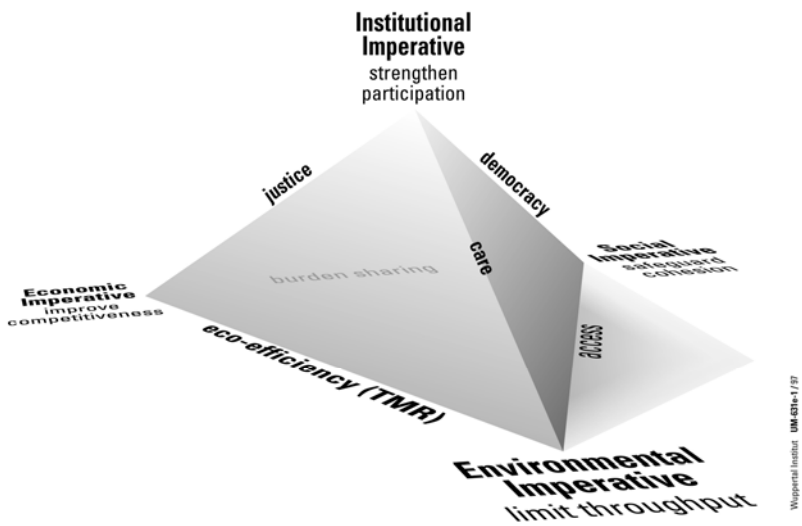

Figure 3.1. The sustainability prism (Valentin and Spangenberg, 2000).

Different meanings of globalization and sustainability

Globalization means that technological, institutional and social changes enforce global communications and interactions. There is absolutely no consensus on whether globalization as such is good or bad, but globalization seems to have accentuated both the positive and negative aspects of the global changes at the same time (Halle, 2002). The concept of globalization therefore should not be used in an unqualified way for analysis of globalization processes.

Ritzer (2003) suggests that the conventional opposition between globalization and the local is of little use – 'it is increasingly difficult to find anything in the world untouched by globalization'. Instead, Ritzer proposes that it is more useful to look at the conflict between glocalization (the interpenetration of globalizing processes and local heterogeneous conditions) and grobalization (the imperialistic ambitions of nations, corporations and organizations to global growth in power, influence and profits) as a key dynamic under the broad heading of globalization. The global sale of local fair trade products and the local adaptations of the general principles of organic agriculture can both be seen as examples of glocalization. But the tag of glocalization may also be used as a thin disguise a to mask the ambitions of grobalization – as when McDonald's uses the figure of Asterix instead of Ronald McDonald in France.

Byrne and Glover (2002) identify three different positions that harbour different perspectives on globalization and sustainable development in relation to trade and environment (see also Chapter 2). The first position endorses the goals of growth and free trade and finds that sustainable development is best sought solely by means of the market. It harbours a 'weak' conception of sustainability. A characteristic approach to address environmental problems within this position is environmental economics. The second position shares the same goals, but deems that there are ecological limits that need to be considered separately and thereby harbours a 'strong' conception of sustainability. This is a characteristic perspective within ecological economics (see further in Chapter 4). The third position, on the contrary, sees growth and free trade as a recipe for ecological injustice and therefore opposes both globalization and ecological modernization. This perspective is characteristic of political ecology.

These three positions show that the perspective from which one observes the issues of globalization and sustainability strongly influences what one sees. All three perspectives can be useful, but in relation to organic agriculture it is important to consider how the chosen perspective relates to the basic aims and values of the organic movement. And it is important to realize that what can be seen from one perspective may not be visible from another. The issues of ecological justice can thus be observed from the third perspective, but may be more or less hidden from the other perspectives.

Sustainability and organic agriculture

Within the context of agriculture, Gordon Douglass (1984) described a distinction between three dominant visions of agricultural sustainability that are used by different groups with different views and values (a distinction that resembles the above one by Byrne and Glover, 2002). *Sustainability as food sufficiency* looks at population growth and speaks of sustainability in terms of sufficient food production, with the necessary use of technology and resources. Agriculture is an instrument for feeding the world and economic cost-benefit analysis is the instruction, which guides application of that instrument. In this group we find the defenders of the modern 'conventional', industrialized agriculture. *Sustainability as stewardship* is concerned with the ecological balance and the biophysical limits to agricultural production. From the ecological point of view, sustainability constrains the production and determines desirable human population levels. This is a diverse group of 'environmentalists', often with a concern for the limits to growth in a finite global environment. *Sustainability as community* shares the concern for ecological balance, but with special interest in promoting vital, coherent rural cultures. Cultural practices are taken to be as important as the products of science to sustainability, and the values of stewardship, self-reliance, humility and holism are encouraged. In this group we find the 'alternative' forms of agriculture, and the modern organic farming has originated from within the community group.

From a philosophical point of view, Paul Thompson (1996) suggested that there were only two different meanings of agricultural sustainability: resource sufficiency and functional integrity. *Resource sufficiency* is an 'accounting' approach that focuses on how to fulfil present and future human needs for food, and on how we can measure and calculate the proper balance between present resource use and future needs based on the relation between input and output from the system, seen from without. Environment and nature is considered a resource that is separate from humans and society. *Functional integrity*, on the other hand, sees humans as an integrated part of nature based on an ecological view of nature (Tybirk *et al.*, 2004). Humans and nature form vulnerable socio-ecological systems that have crucial elements, such as soil, crops, livestock, ecosystems, cultural values, and social institutions, which must be regenerated and reproduced over time. (This does not mean that functional integrity determines cultural values or social institutions, only that they need to perform certain functions for the system to survive.)

Functional integrity emphasizes resilience and recognizes the limits of human knowledge and the possible risks connected to new technologies, thereby incorporating the concept of precaution. Precaution does not denigrate scientific knowledge, but uses it as far as it can within the general context of uncertainty and ignorance. The distinction made by Thompson therefore reveals a close connection between different conceptions of sustainability and different views of

the scope and limits of human knowledge (for a fuller treatment of the ethical basis of sustainability and precaution, see Alrøe and Kristensen, 2003).

Thompson uses the two meanings of sustainability in analysing different case examples, showing how resource sufficiency and functional integrity each order our priorities, when we look for signs of sustainability or unsustainability.

> This means that certain kinds of values will inevitably be served in adopting one approach or the other, and in defining the system boundaries for articulating a conception of functional integrity. … It may be impossible to arrive at consensus on these value questions, but informed interdisciplinary research will be possible only when participants have a clear sense of where they stand with respect to one another.
>
> (Thompson, 1996: 92)

The views of the organic movement lean towards the more radical, systemic understanding of sustainability as functional integrity (as indicated by the principles of health, ecology and care in Box 3.1). However, from this perspective functional integrity may be seen as an extension of resource sufficiency – a more comprehensive perspective that can utilize the views and tools of resource sufficiency as far as their powers go, while putting them in a larger and deeper context.

In relation to ecological justice, functional integrity concerns the workings of the system as a whole, while ecological justice concerns the individuals in the system and their relation to the system. We will now turn to the meaning of ecological justice.

The ethics and justice of ecological justice

The roots of ecological justice are in the concept of environmental justice that arose from grass-root resistance movements in the United States in the 1980's – in particular the antitoxics movement, which focused on environmental health threats from waste dumps and pollution in local communities, and the movement against environmental racism, which focused on the disproportionate environmental risks to poor and coloured communities (Byrne *et al.*, 2002b; Schlosberg, 2003). Environmental justice is mainly concerned with the fair distribution of environmental ills among human communities.

Since then, these concepts have been treated theoretically by several authors in relation to environmental politics, justice and ethics (Low and Gleeson, 1998; Baxter, 1999, 2005; Shrader-Frechette, 2002; Bell, 2003, 2004; Schlosberg, 2003). Low and Gleeson (1998: 2) coined the term 'ecological justice' which broadens the scope of environmental justice to include the justice of the relations between humans and the rest of the natural world and between present and future generations (see also Box 3.2).

Box 3.2. Environmental justice and ecological justice

> '*Environmental* justice is about the fair distribution of good and bad environments to *humans*. *Ecological* justice is about fair distribution of environments among *all the inhabitants of the planet*. To speak of 'environmental' or 'ecological' justice means to recognise the values that an environment has for all creatures. An environment is comprised not only of people, but also nonhuman nature in all its abundance and diversity: animals and plants, landscapes and ecologies. An environment is not divisible like property but is fundamentally shared.'
>
> Low and Gleeson, 1998: [emphasis added]

This quote illustrates the difference between environmental and ecological justice. Note, though, that the reference to *distribution* only is expanded below to include recognition and participation as well.

For many of the arguments in this chapter, it will make little difference whether we speak of environmental or ecological justice. Protecting disadvantaged people and protecting the natural environment are not at odds; they tie in with each other (e.g. Shrader-Frechette, 2002). However, the discourses of the organic movement seem to be more compatible with the broader scope of ecological justice than with the more narrowly anthropocentric concerns of environmental justice. Therefore, we use the term 'ecological justice' as the common designation for environmental and ecological justice in the present chapter and only distinguish the two where there is a need to do so. In distinction from social justice, which has generally focused on inequalities in relation to the labour market, income and wealth, the distribution of goods and burdens by society, and human rights, ecological justice concerns fairness with regard to shared environments.

This section investigates the meaning of ecological justice as an ethical principle with reference to environmental ethics and liberal ideas of justice and, in particular, what the justice of ecological justice means.

Ecological justice as an ethical concept

As ethical concepts, environmental and ecological justice are placed squarely across the fields of *environmental ethics*, which considers the extension of moral considerability beyond humans or persons (e.g. Goodpaster, 1979), and *liberal theories of justice*, which focus on fairness to persons within human societies (e.g. Rawls, 1971). The discursive force of the concepts of environmental and ecological justice therefore depends on whether they can be successfully grounded in these two well-established theoretical bodies. We cannot attempt to

fully accomplish this theoretical grounding here, but for the purposes of the present chapter we will briefly consider some key issues of these two conceptual sources. (For a broader treatment of the philosophy of justice and environmental politics in relation to ecological justice, see Low and Gleeson, 1998).

With regard to environmental ethics, both environmental and ecological justice entail a systemic conception of ethics, where the moral concern for other individuals includes a concern for the parts of their environment that they depend on for their life and well-being (Alrøe and Kristensen, 2003). Though they have a common focus on justice and fairness in relation to the environment, 'environmental' and 'ecological' justice differ in the extension of the moral concern for fairness. 'Environmental' justice limits the moral concern to humans, whereas 'ecological' justice has a broader concern that entails moral concern for non-human nature (Low and Gleeson, 1998: 21, 133).

Ecological justice extends moral considerability to animals and other living organisms and to ecological communities and systems. From the perspective of environmental ethics, limiting moral considerability to humans is arguably a chauvinistic view (Singer 1979), whereas limiting moral concerns to persons is logically consistent, but morally unsatisfactory to most ('persons' in this ethical context designate self-conscious individuals that are thus capable of moral acting – so small children and mentally disabled people are not persons in this sense). The anthropocentric position is therefore not as unproblematic as its predominance might suggest. We will not, however, consider the issue of the proper extension of moral considerability further in this chapter (see instead Low and Gleeson, 1998: Chapter 6; Alrøe and Kristensen, 2003; Baxter, 2005: part 2), apart from two brief remarks.

First, in agreement with the broader moral scope of ecological justice, we note that this concept has implications for animal welfare as well. The fair distribution of environments to animal husbandry speaks to support the concern for the possibilities for expression of natural behaviour that characterizes organic agriculture (Alrøe *et al.*, 2001; Lund *et al.*, 2004).

Second, it is important to note that the extension of (equal) moral considerability to include animals, living organisms and ecosystems does not imply that these are as morally significant as humans or persons. Moral 'ecologism' does not necessarily imply environmental fascism as one might otherwise conclude from the well-known critiques of deep ecologists and ecological holists (e.g. Ferry, 1995). Justice in the Aristotelian sense means proportional treatment where like instances are treated alike and relevant differences are taken into account. Treating plants and pigs alike is unjust if sentience is morally relevant, and treating pigs and persons alike is unjust if self-awareness is morally relevant (Alrøe and Kristensen, 2003: 75).

> All life forms deserve certain rights to the fullness of their natural existence but a biospherical egalitarianism cannot be sustained logically or practically
>
> (Low and Gleeson, 1998: 157).

The second conceptual source of ecological justice besides environmental ethics is the influential liberal ideas of justice in the Kantian and non-utilitarian tradition of Rawls (1971). These are mainly concerned with the lives of individual humans and the issues of social justice. Hence, on a first look, it seems like ecological justice is incompatible with liberalism. But the two may be reconciled if liberalism can be extended like the extension within environmental ethics that has been described above. *Environmental* justice can without too much effort be understood as Rawlsian liberalism with a special concern for the environment and its implications for the opportunities and limitations of the individual (Low and Gleeson, 1998: 89; Bell, 2004). But this first, anthropocentric, path to an extension of liberalism is not sufficient in the present context, because it is not compatible with the more comprehensive views of organic agriculture. *Ecological* justice seems more difficult to reconcile with liberalism, because the moral extension beyond persons, which is the hallmark of a genuinely ecologic ethics, goes against the reciprocity of Rawls' political conception of justice as fairness, which is based on the idea of a cooperative democratic society of citizens acting as responsible persons. But Bell in fact challenges the incompatibility between ecologism and liberalism and argues 'there is nothing in Rawls' political liberalism to exclude the possibility of liberal ecologism' (2003: 2, see also Low and Gleeson, 1998: 84-90, 199-205; Baxter, 1999: chapter 8, 2005: chapter 7). Bell's arguments are: (a) that Rawls considers the further extension of justice as fairness to animals and the rest of nature (besides his extensions to future generations, international justice and health care) and leaves open the possibility of justice to nonhuman nature; and (b) that liberal ecologism must reject biospherical egalitarianism and be substantively biased towards humans (citizens), and that most ecologists do this.

The above considerations have clarified the distinction between environmental and ecological justice, decided the focus on ecological justice here, and argued the basic coherence of this concept. But what does the justice of ecological justice mean? A more detailed understanding of this will be helpful when putting the concept into practice.

The justice of ecological justice

In political theory in general, justice has been defined almost exclusively as equal distribution of social goods. Baxter (2005: 8) remains focused on distributive justice while extending it to non-human life forms, whereas Low and Gleeson (1998: 133) argue that ecological justice is different from environmental justice in that we here have to consider our moral relationship with the non-human world in a deeper sense. As we shall see, this deeper moral understanding of justice is pertinent for both human and non-human relations.

In an analysis of the justice of environmental justice, Schlosberg (2003) describes three conceptions of justice in form of equitable distribution, equal rec-

ognition and participative procedures. Within environmental justice, *the distributive notion of justice* focuses not on wealth or money, but on the distribution of environmental qualities, be they 'bads' in form of risks and costs or 'goods' in form of access and opportunities in relation to environments (Low and Gleeson, 1998: chapter 5). *Justice as recognition* concerns equal rights and ownership to environments and the recognition of connections between community and place. Injustice is here based on a lack of recognition of identity or equalness or a lack of recognition of difference, uniqueness and heterogeneity of views, values and interests. *Justice as participation* entails that communities and persons 'have a say' in environmental matters that concern them, and that there are democratic procedures for participation and representation in relation to ecological injustices and decisions on environmental matters. Related notions are citizen sovereignty and food sovereignty. Schlosberg emphasizes that these three conceptions of justice are not competing, contradictory, or antithetical. Environmental justice requires more than an understanding of unjust distribution and lack of recognition; it requires an understanding of the way the two are tied together in political and social processes. 'The combination of misrecognition and a lack of participation creates a situation of inequity in the distribution of environmental dangers' (Schlosberg, 2003: 98).

The three-fold understanding of justice can be applied as well to ecological justice. But from an ethical point of view, there are a number of important points to make. The first point is that moral responsibility is constrained to self-aware beings. Within environmental ethics it is common to distinguish between moral agents, who are capable of acting morally and taking on moral responsibility, and moral objects, which are taken into moral consideration by others. Animals and ecosystems can not be moral agents, while persons, organizations, companies and states can. The capacity for moral responsibility works both ways. This means that the capacity of moral agents to take responsibility for their actions should be respected by involving them in democratic participatory decision-making processes, either directly or by way of representation (Bell, 2003). And it also means that demands can be made on them to act morally responsible in accordance with their capacities for doing so. Furthermore, powerful, knowledgeable agents must take on larger responsibilities than those without much power and knowledge, because the moral responsibility for ones actions relates to action ability as well as to awareness (Alrøe and Kristensen, 2003). That moral responsibility is a correlate of power seems crucial in questions of ecological injustice where large differences in power and action abilities are common. In relation to Schlosberg's analysis of justice, it is clear that the three conceptions of justice relate differently to the distinction between moral agents and objects. The participatory processes of justice are only open to moral agents, while distribution and recognition concerns all moral objects (some of who may be moral agents as well).

The second important point is that there is more to ecological justice than the distribution of known risks and options. First of all, ecologism entails that mor-

ally considerable entities should have the opportunity to exist, flourish and develop in accordance with their natures (e.g. Baxter, 1999: 95). The recognition of such identities (equally considerable rights to freedom) and differences (in accordance with their natures) is quite different from distributional ideas of justice. Second, the diversity of morally considerable entities makes rational distributional policies quite unmanageable. More generally, the application area of ecological justice – global markets, global social and ecological systems, immense heterogeneity of moral objects and moral agents – indicates that there is an obvious need to be able to address ignorance, unknown consequences and unknown impacts.

In ethical terms, there is a need for new moral reasons beyond the intentions, virtues and duties in non-consequentialist ethics and the rational calculations of consequentialist ethics. Alrøe and Kristensen (2003) suggest that this new moral ground must be based on self-reflexivity, and refer to the precautionary principle as a well-known example of this development of ethics. Ecological justice as recognition must involve similar reflexive attitudes towards the limitations of knowledge and rationality.

Summing up

Summing up, ecological justice implies a necessary bias in relation to moral responsibility and participation in decision–making processes on environmental matters, since only self-reflexive beings (such as persons and some kinds of social systems) can be moral agents; an arguable absence of bias with regard to moral considerability, extending justice and fairness to animals and other living beings and systems; but also an arguable bias in moral significance based on persons, animals and plants being different kinds of entities with different types of capacities and senses, and which should therefore be treated differently. Moreover, fairness with regard to shared environments is not just about distribution of environmental goods and bads; more fundamentally it concerns recognition and participation based on a universal right to freedom and with an eye for ignorance and uncertainties in decision–making processes.

Ecological justice is not an entirely new and different response to the problematic trends of global development – it has much in common with other concepts and reactions such as sustainable development, functional integrity and social justice. But it does have its own very specific angle, which defines the problematic in an importantly different way.

Challenges for organic agriculture: commodification, externalities and distant trade

Ecological justice is a challenging concept in relation to the current globalization and structural and technological development of organic agriculture, because it positions social and ecological interests against market liberalism and economic growth. Therefore, it may suggest new ways to look at the challenges and promises connected to the global development of organic agriculture.

In particular, ecological justice can be applied to three, related, aspects of the current trends: the commodification of hitherto commons, the externalization of environmental and social costs, and the growing distances of trade and ownership due to globalization.

- *Commodification* is the transformation of non-commercial relationships into relationships of buying and selling, based on the concept of private property. Commodification of commons brings common goods, such as land or water, into the market by way of enclosure and exclusion of others from the benefit stream.
- The term *externalities* is an economic term that refers to production costs that are not paid within the market. There is an empirical aspect of this, concerning what the costs connected to the production actually are and how they might be reduced, and a normative aspect, concerning whether the costs are to be reduced or internalized by compensations.
- The *growing distances*, inherent in the globalization processes, between those who pay the costs and those who enjoy the benefits aggravate the problems of both commodification and externalities. Distance can create problems of transparency and democratic participation in relation to ownership and trade (though globalization can also benefit transparency) and problems of externalities connected to transport.

Somewhat caricatured, market economics can be characterized as the art of externalizing social and ecological costs, and private property as a way of internalizing social and ecological benefits. Ethics, in contrast, based on the principle of responsibility (Jonas, 1984), can be seen as the art of internalizing social and ecological costs, and ecological justice as a way of externalizing social and ecological benefits. In this section we will discuss the three challenges of commodification, externalities and growing distances in relation to organic agriculture.

Commodification of commons

As argued in Chapter 2, the concept of ecological justice is closely connected to the general idea of 'commons'. The language of commons brings us to focus on the question of what aspects of the environment are or should be shared and in what respects, and what that means for ecological justice. The scope of ecological justice then depends on what rights or claims individuals and communities have or should have on these aspects of their environments. Commodification of commons can lead to unsustainable exploitation (e.g. in form of ranching, logging, mining) and ecological injustice by undermining sustainable commons systems and community governance and negatively influencing the life opportunities of those that hitherto used the commons. Issues of externalities and distant trade may add to problems of commodification, but they may also be problematic in themselves.

The idea of commons is traditionally found in relation to common lands where the use by local people for grazing or gathering is managed according to traditional rights and rules, and debates on the commodification of these common lands by way of enclosure and private property. But it is now used in a broader sense to include forests, freshwater supplies, inshore fishing grounds, etc. (The Ecologist, 1993). There are furthermore explorations of a new category of international initiatives known as 'global commons', which concern such problems as ozone-depleting emissions, climate change, biodiversity protection, international toxic waste trade, international endangered species trade, and the use of the high seas and the polar regions (Volger, 1995; Buck, 1998; Byrne and Glover, 2002). In relation to organic agriculture, soil as a production resource may also be considered a global commons (see Chapter 2).

Organic agriculture is more dependent on the environment than conventional agriculture, because the production is based on close cooperation with natural ecological systems and processes, it has fewer technological remedies available to counteract depletions and malfunctions of these systems, and there is a special focus on maintaining the local resources for production such as soil fertility. What we may call 'ecological commons' therefore have a special importance in organic agriculture. Nature plays a key role in the provision and reproduction of ecological commons whereas public goods (or public commons), such as roads, libraries and systems of justice, are produced by human actors. This distinction is important to keep in mind in relation to organic agriculture because the provisions by nature tend to be overlooked in policy analyses directed towards the challenges of globalization (e.g. Kaul *et al.*, 2003).

The question of whether something is to be considered as a commons (and thereby whether its commodification is problematic) is determined by ethical and political criteria, not by empirical criteria such as the ones found in economic textbooks: whether the benefits from the resource are excludable (whether they can be withheld from others, e.g. through the enclosure of land and water supplies) or rival (whether they are depleted when used). Technological and struc-

tural developments keep shifting the ground for such empirical criteria, and technically and economically excludable resources may well be considered commons from the ethical perspective of ecological justice.

The concepts of commons and ecological justice can be put into practice in different ways that institutionalize the fair usage of common environments. Examples are sustainable production methods, local community institutions of co-management and cooperative food networks; certification and labels that involve the consumers as a responsible actor; state or supra-state regulations of the market and environmental impacts; and global institutions under the mantle of the United Nations. Organic agriculture has little direct influence on the latter, but it can play a key role in the first. Further below, we look in more detail at how certified and non-certified organic agriculture, respectively, may promote ecological justice.

How to address externalities

Externalities are costs and benefits connected to the processes of production, processing and distribution, which are not accounted for and which do not enter into market transactions. With regard to ecological justice, externalities can appear in form of localized impacts on the living and working environment from production activities, in form of deliberate localization of environmental bads (placing of waste dumps and harmful industries, export of waste, etc.) to the disadvantage of local communities near such places, or in form of globalization of environmental bads (climate changes, ozone depletion, pollution of the global environment with heavy metals and other persistent harmful substances, etc.) to the disadvantage of those communities that are most vulnerable to such global changes.

Commodification of food systems is a frequent source of externalities. External costs in agriculture, such as biodiversity impacts and pollution, often stem from agricultural practices shaped by the economics of surplus production. That is, modes of agricultural production that require large and continually growing surpluses for sale in markets as the basis for profitable operation can find externalization of costs a key ingredient for successful development.

Today, we can find examples and suggestions of different ways to address externalities, which directly regulate the sources of externalities within the production or valorize external costs and assign their incurrence in a manner that discourages harmful practices and ecological injustices: governments and supranational institutions like the EU enforce environmental laws that regulate agricultural productions to avoid or reduce externalities. Global institutions and international agreement like the Kyoto Protocol to the UN Framework Convention on Climate Change may lead to changes in production that reduce externalities on a global scale. Low and Gleeson (1998: 199ff) propose new global institutions under the mantle of the United Nations, the World Environment Council

and World Environment Court, to instigate ecological justice. Developments within the WTO also harbour possibilities for regulating global trade in a more sustainable direction (see Chapter 5). Brown (2002) lists four other forms of market regulation for sustainable development: eco-labelling, tax shifting, subsidy shifting and tradable permits. The three latter are economic means to internalize the external costs in the market, which can to some degree reduce externalities, and which may also create a revenue that can, in principle, be used to pay compensations for external costs.

The certification of environmentally friendly agricultural production and processing, which is a form of eco-labelling in Brown's sense, may be seen as a way to realize ecological justice within a distant, non-localized food system that works across national and regional borders based on certification standards that describe the rules for how to use environmental commons. Such alternative ways of production based on certification are immediately realizable by pioneer groups – they do not (at least in principle) depend on national or international regulations. Ideally, they are competitive within the mainstream market system due to consumer preferences for socially and environmentally friendly food products. Organic agriculture is a prominent example of eco-labelling, though it remains to be clarified how the current certification standards fare with regard to ecological justice and how they might be improved (see below). However, the competitiveness of such an alternative may be hampered by subsidy structures, and if the alternative is not supported by societal actions the responsibility for the commons is placed solely in the hands of the individual consumer and their daily consumer choices. Such non-localized institutions for ecological justice, which work only by way of certification and consumer preferences, will therefore have a hard time growing to be a dominant influence on global commons.

The three positions on globalization and sustainable development that we described above (see also Chapter 2), show different approaches to address externalities. Environmental economics focuses on how to internalize external costs, ecological economics focuses on identifying overall ecological limits to economic growth and the associated externalities, and political ecology focus on ecological justice and the way externalities inflict on different communities. The above examples of ways to limit, avoid and compensate externalities will fall out differently if they are analysed in relation to these distinctions, and they will have different potentials for taking on the different approaches. This is not the place to perform such a general analysis (some aspects are addressed in The Ecologist, 1993: 117–121). But there is an aspect that seems important to, at least briefly, point out: the limitations of knowledge and the associated impotence of compensation.

We typically only have limited knowledge of externalities and limited means of identifying them. This goes for the nature of the external consequences and impacts as well as for who suffers from the impact, and thereby who are to be compensated for what impacts. This is even worse when non-human beings are taken into consideration, and it is aggravated in cases of long term, systemic

effects. Furthermore, there are no adequate means of compensation for severe and irreversible impacts. This is what has motivated the inclusion of a precautionary principle in environmental regulations, a principle that formulates deliberate strategies for handling ignorance and uncertainty (O'Riordan and Cameron, 1994; Raffensperger and Tickner, 1999). The precautionary principle requires preventive actions before conclusive scientific evidence of severe and irreversible externalities has been established (e.g. by saying no to unpredictable technological activities), and in addition it supports the development of society's capacity for early detection of dangers through comprehensive research and the promotion of cleaner technologies.

Growing distances

Trade is an inherent aspect of commodification, but the concept of distant trade brings up two important issues with regard to ecological justice: transport and transparency. The transport issue is pretty straight forward, since the physical exchange of the commodity and the money exchange are understood as essential processes in a market system, while the externalities connected to different transport means, the options for limiting them by more local trade and the resulting consequences for ecological justice are mostly not a factor in market transactions. The issue of transparency is somewhat more intricate, since there are very different motivations and interests (profit, branding, market domination, public health, competition and choice, transparency, consumer needs and preferences) involved in the communication of knowledge about products in market systems – and growing distances can help reduce transparency for those who wish so – but on the other hand globalization also entails better possibilities for transparency due to new communication technologies. Both transport and transparency influence the options for democratic participation in decisions on issues of commodification and externalities from the production.

So, the growing distances in food systems, which were illustrated in Chapter 1, aggravate the problems of commodification and externalities that were discussed above. Furthermore, the idea of the local has played, and still plays, a characteristic role in the organic movement due to the emphasis on working in closed systems and drawing on local resources (e.g. Woodward *et al.*, 1996: 262). We will therefore take a closer look at nearness and distance in food systems.

The pioneer farming initiatives that eventually led to modern organic farming, were mainly localized systems that focused on the living soil and its importance for agricultural production. Localized agricultural systems are characterized by close relations where owners, workers and consumers share a local environment with other local residents. In Figure 3.2 the monetary and non-monetary exchanges of a localized food system are illustrated as flows of value (commodity and money exchanges, external costs and benefits) between the production

and local stakeholders. In very localized systems that mainly make for community self-sufficiency, the owners, workers, consumers and residents may even be more or less the same persons. The value flows are often not well known and difficult to identify (see also Chapter 4).

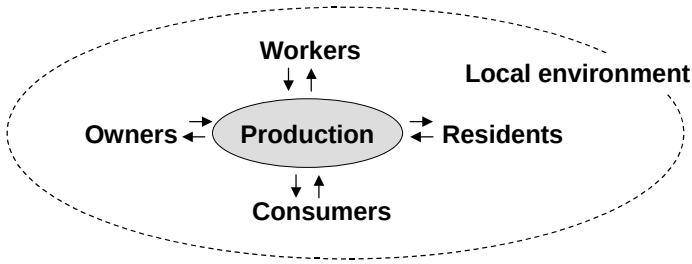

Figure 3.2. A localized food system. Arrows denote flows of value (commodity and money exchanges, external costs and benefits). Owners, workers, consumers and residents may be the same persons.

In terms of nearness and distance there are a number of steps from the very localized system towards a globalized system. Commodification and market exchange is a first step, though the markets may be very localized, because nearness is to be understood not only as physical distance, but also in terms of knowledge, communication and awareness. And market exchange in itself does introduce a distance in this regard, since the market provides strong incentives not to disclose disfavourable information about external social and ecological costs and to manufacture fictional good stories about the products instead. This is often of little consequence in a very localized market system, because people are well aware of how the local productions take place: they can see and experience the productions directly and they have other available channels of communication than the market; and they belong to the same local ecological community (and in some sense localized ecological unit, such as a watershed). Examples of such local food systems still abound in less-industrialized countries, whereas in highly industrialized countries they are found almost only as counter-reactions to the mainstream food systems, such as ‘community supported agriculture’ systems (e.g. Cone and Myhre, 2001) and the ‘food-shed’ and ‘eco-localism’ movement (see Chapter 1).

The erosion of barriers to distant trade and ownership, inherent in globalization, leads to increasingly non-localized systems characterized by distant relations and value flows (Figure 3.3). In global trade, the consumers are physically very far away from the production; in vertically integrated corporate businesses

the owners are often far away and intermediary products are transported between different production facilities across the globe; and modern agriculture influences the global environment as well as local living and working environments due to the development of technologies and the increase in inputs of (e.g. fossil fuel) and production levels.

As such, long distance trading is nothing new; it has existed for several thousand years (e.g. spices). But the level of long distance agricultural trading is rising, as a key aspect of globalization. (The average distance of trade, and thus the *share* of global trading in relation to regional trade, seems not to be growing, however, see e.g. Davidson and Agudelo, 2004). (See Chapter 1 for an overview of the actual development of global trading in agriculture and organic agriculture). Conventional agriculture is inseparable from the global economy. There are a multitude of ways in which conventional agricultural practices and outputs are shaped by factors related to globalization, such as technology, markets, international transport, and the activities of multinational corporations. Central to these influences is the role of international trade as an agent that promotes commodification of social and environmental values, resources and services.

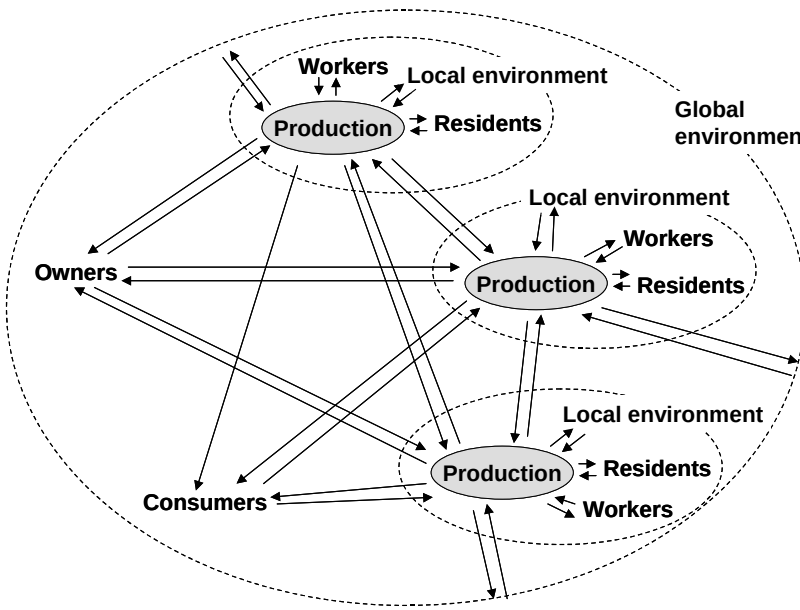

Figure 3.3. A non-localized food system with distant flows of value. Arrows denote commodity and money exchanges as well as external costs and benefits to local communities and environments and to the global environment.

Distant trade has the effect of obscuring or effectively eliminating the connections between production and consumption and thereby hampering transparency and the options for democratic influence on how the production takes place. Where production and consumption are closely linked, the costs and impacts of production are part of the awareness of most consumers, and the effects of local social values and regulations influence consumption. Similarly, in democratic countries with well-developed institutions, there is a good chance that the consequences connected to home production will come to the attention of consumers, citizens and authorities, so that they can take action in terms of market choices or societal regulations. But when products are sold at a great distance from the site of production, the social and environmental costs of production are less likely to be known and less likely to influence market choices.

The same mechanisms will work in alternative trade movements, such as certified organic agriculture, unless something in the certification standards prevents them from doing so.

Putting ecological justice into organic practice

There are several different ways in which the organic movement can implement the idea of ecological justice in relation to organic production and organic trade. This section discusses how the previous considerations can be put into practice and provides a background for a closer investigation of these issues. Three main ways are described, the ways of certified and non-certified organic agriculture (see definition in Box 3.3) and the way of organic agriculture as an alternative example for agriculture, research and society.

Box 3.3. Certified and 'non-certified' organic farming.

When assessing the potential benefits and problems of the global development of organic agriculture in relation to the principle of ecological justice, there is a need to distinguish between certified and non-certified organic farming (in line with Scialabba and Hattam, 2002). Certified organic productions compete with conventional products in regional and global markets, even though the organic production levels are usually lower than conventional, based on consumer preferences and premium prices. 'Non-certified organic farming', on the other hand, is a term for farming systems that are based on principles and practices similar to 'branded' organic agriculture, but which are targeted at local consumption based on close relations and not at the distant sale of certified products.

The way of certified organic agriculture

As discussed briefly in the previous section, certified organic agriculture is an example of an 'eco-labelling' type of market regulation for sustainable development (Brown, 2002). This solution incorporates the production process context into the market by way of elaborated certification procedures and extensive standards of production and processing that provide the foundation for an alternative way of trade, located (to large degree) within the ordinary market structures. Hence, the existing organic system already shows some promises with regard to the implementation of ecological justice in so far as the certification standards do indeed promote ecological justice by working against commodification and externalization of costs.

Organic certification

As argued above, certified organic production and trade can be seen as an example of a type of institution that may secure ecological justice across a distant, non-localized food system. The identification of organic produce by way of certification and labelling allows for the formation of alternatives on the market for farm produce and for consumers to express their preferences.

There are, however, a number of important challenges with regard to the implementation of ecological justice through certified organic agriculture. First of all the organic trade needs recognition within the World Trade Organization that organics products are different from similar conventional products (see Chapter 5). The idea that conventional and organic products of the same kind are 'like products' in the WTO sense, and therefore cannot be discriminated in the free market, runs counter to the recognition of the importance of the processes behind the products, which are of central concern in relation to social and environmental impacts and ecological justice.

Global markets are characterized by the strong role played by large, multinational corporations in transport, handling, distribution, marketing and sales. When the organic products compete on the market with conventional products they experience the economic conditions and pressures that are typical of a free market system, and which have shaped conventional agriculture and made sustainable practices unattractive. In particular, there are pressures to conceal information on the production process and possible ecological injustices and to manufacture attractive stories with no real background; pressures that will work against the goals of transparency and authenticity inherent in certified trade. These mechanisms are supported by the international goals of free competition of products without concern for the production process. There is a real threat that these pressures will erode the principles of organic farming. A further concern is that global markets are uncertain and often volatile, which has the effect of re-

ducing the security of farming enterprises, and which adds to the economic incentives for larger-scale enterprises to replace small-scale farms.

To resolve these challenges the organic movement must create and maintain a system that reflects both community and farming interests and values and democratic objectives. And for the non-localized system to function across distant markets, ecological justice goals must be implemented clearly in the organic certification standards.

The implementation of ecological justice in the organic certification standards must consider the issues that have been outlined in the previous sections. Possible injustices connected to the commodification of commons, such as the use of land for large-scale (organic) cash crops instead of local sustenance and nature areas (in terms, also, of justice to wildlife and biodiversity), have so far not been implemented in the standards, though the key goal of maintaining soil fertility certainly implements an aspect of justice to future generations. Certain types of production systems that make extensive use of large, non-enclosed areas and natural resources, such as pastoral systems, fisheries and wild harvesting, entail special issues in this regard. Environmental externalities connected to agricultural production have to a large extent been covered in the existing standards to the benefits of local and, to some degree, more distant communities and to biodiversity in general. This has been a key concern in modern organic agriculture in line with the understanding of sustainability as functional integrity, even though the movement until now has had to compromise its goals on some areas such as the use of fossil fuel. The principles and standards on agricultural production also implement aspects of ecological justice to local residents, livestock, and biodiversity and wildlife in the area. Environmental externalities connected to processing and, in particular, distribution are less well covered in the standards. A key question in relation to the globalization of agriculture, the (distant) transport of organic certified products and intermediary products and the externalities connected to this, is not covered at all (see further below).

However, it is not possible to guide the development of organic agriculture solely by way of standards due its heterogeneous and dynamic nature (Alrøe and Kristensen, 2004). The ideals of ecological justice therefore also need to be adapted explicitly into the principles of the organic movement (as it has already been proposed, see Box 3.1). First of all to guide the development of certification standards in the directions outlined above, but also to enable regionalization of standards in consideration of the need of organic productions to adapt to different local climatic, edaphic, and cultural conditions and to serve directly as a guide for organic practices where standards are hard to define. In the same way, principles that clearly express the ideals of ecological justice can guide the practices of non-certified organic agriculture.

Organic and fair trade

The implementation of ecological justice in organic standards also includes the question of commodification of commons – which is of course a real challenge for a market-based system – and more generally justice considered as distribution, recognition and participation with regard to shared environments (as discussed above). There is a widespread recognition of the claims of husbandry to a fitting and more natural environment within organic agriculture, and some recognition of the claims to life and space for other living beings, formulated as requirements on biodiversity, for instance. For humans, social considerations are to a certain degree covered in some organic standards, such as IFOAM's standards, but not in all. Some inspiration for the implementation of these issues can be gained from fair trade, as indicated by the following, strong statement:

> Most Latin American organic bananas are grown on plantations. For example, Dole Food Corporation – which controls 25 percent of the conventional banana trade and a significant share of the US organic sector – has in recent years become a major organic banana supplier. Some Dole banana plantations might be able to pass IFOAM's relatively weak social standards; outside of IFOAM they can be certified as organic irrespective of even gross labor violations. Without the strict social standards and restrictions on eligible producers found in fair trade, organic production clearly risks being transformed from a form of alternative agriculture to a segment of the traditional corporate dominated global agro-export trade.
>
> (Raynolds, 2000: 303)

Fair trade certification is a second well-known example of an alternative form of trade that has the potential to work across globalized food networks in distant trade relations, and which goes some way towards meeting the principle of ecological justice (see also Chapter 2). But both organic and fair trade fall short of the target in some respects. Fair trade goes further in specifying the social conditions and costs of production, but is lacking in ecological considerations. Organic trade, on the other hand, goes further in detailing the ecological conditions and costs of production, but is lacking in social considerations (e.g. Raynolds, 2000). We may therefore think that organic and fair trade movements can simply combine forces to meet their ecological and social ideals and that their standards can complement each other to fulfil the promises of ecological justice. However, both standards omit, for instance, considerations on distant transport. Furthermore, fair trade has focused more on the traditional aspects of social justice and it does therefore not provide all those complementary social aspects with regard to ecological justice that focus on fairness with regard to shared environments. Some of the ideas within fair trade will presumably be elements in a future 'fair organic trade' certification that can more fully promote ecological justice. Major challenges are to secure ecological justice to those outside the trade network as well as those within, and to resolve the potential conflict between the benefits of

fair global trade to low-income areas and the inherent disadvantages of distant trading.

Heterogeneity and transport

More generally, two main challenges to implementing ecological justice in organic standards are heterogeneity in the natural and cultural conditions for agriculture and (long-distance) transport. In a global perspective, the conditions for organic production and processing are extremely varied as the present book illustrates. In the pursuit of fairness and to support the local development of organic practices, there is a need to elaborate different rules for different regions on the basis of the common values and ethical principles of organic agriculture. Since regional rules might be misused to unfairly diminish the demands on organic production, there is a need for investigations of what regional differences in natural and cultural conditions can fairly require regional differences in the organic rules.

If and when the values of organic agriculture, including those of ecological justice, are fully implemented in localized production and processing practices, the only remaining issue is that of the long-distance transport of the products. One and the same product (such as wheat, soya, etc.) can be sold locally or in another part of the world, and there it may compete with a quite similar organic product that is produced locally. In other words, the local product can be substituted with imported products from far away. The challenge is how to handle this. If the total external environmental and social costs connected to the transport could be estimated, then these could be internalized and added to the price. If, as one might suspect, this approach is not feasible, rules of 'substitutability' – whether a similar product can, and should, be produced and traded more locally – could be enforced to promote a principle of localism in such cases. A less rigid, but probably also less efficient, solution could be to leave the choice to the consumer by requiring that importers put information on the origin(s) of the product on the product label. Similar rules could be implemented for information on the origin(s) of feed and other inputs to the organic production. But, as can be imagined, this can quickly become overwhelmingly complex in a non-localized food system. Common to the latter solutions (those that do not include an estimate of the external costs) are that they would treat different means of transport the same, which seems unfair. And adding information on means of transportation would add to the complexity to be communicated. In this respect, transparency and communicational barriers are important aspects. In all cases it would be necessary to balance the issues of transport with the fair access to global markets for farmers in low-income countries.

In general, the different forms of alternative, certified trade put the responsibility for ecological justice on the consumer (the so-called 'political consumer' or 'ethical consumer'). This is good in the sense that it enables any consumer to

participate in decisions that concern commons and ecological justice in relation to agriculture and food. But the question remains to what degree the consumers can bear such responsibility in a situation of cheap conventional goods that are subsidized and do not carry their own environmental and social costs, and under the economic constraints of everyday purchases.

The way of non-certified organic agriculture

In large parts of the low-income countries food production is based on localized systems with low-yielding agriculture, subsistence farming, and local food markets. Here 'non-certified organic agriculture', which accords with the ideas and principles of organic agriculture without being certified, has the potential to give higher and more stable yields than the existing agriculture, based only on local natural resources and inputs of knowledge and extension services. Non-certified organic farming may therefore be promoted as an alternative solution to food security problems that is more ecologically just.

Not all traditional farming systems that do not use artificial pesticides and fertilizers are 'non-certified organic' by default, because they may very well be unsustainable due to for example soil degradation. On the other hand, non-certified organic food systems may be more in line with the organic values and principles than certified systems, because the latter face direct pressures of market competition and globalization that threaten to move organic food systems towards conventional systems, or in ways that are similar to conventional systems, and away from its original values and principles (e.g. Rigby and Bown, 2003).

As documented elsewhere in this book (Chapter 6), agricultural approaches that are based on the values and principles of organic farming, or more generally on the ideas of sustainable low external input agriculture (LEISA), but which are not certified organic, remain valid alternatives to high-input, commercialized, 'green revolution' type developments with respect to food security and sustainability. The low input alternatives show more promise in terms of ecological justice than high-input solutions, since the latter carry new risks of new external environmental costs and new, unfavourable dependencies on sources of finance and large, multinational agricultural corporations (e.g. Scialabba and Hattam, 2002: Chapter 4). And they may even be more in congruence with the organic principles than certified organic agriculture, because they are not in the same way subject to the pressures of globalization (see Box 3.4).

There is therefore a separate line of development open to organic agriculture with the promise of promoting ecological justice, the development of 'ecological communities' in the form of non-certified, community-based organic agriculture. There are a number of possible localized food system models, such as self-sufficient family or community farms, local community networks, local markets, and local participatory guarantee systems (as described by Alcântara and Alcân-

tara, 2004). The realization of this promise in form of a variety of local practices requires support for the development of participatory research and extension services that incorporate the goals of sustainability and ecological justice. The involvement of the global organic movement is needed to guide such a development. But the main challenge will be to gain understanding and support for this development strategy within development organizations and connected research institutions for the value of sustainable low external input agriculture, such as organic agriculture. Where the path of non-certified organic agriculture is chosen instead of high external input options, there is, in addition, an option for later entering into the organic market by certifying some of the organic production practices.

Box 3.4. Organics and vulnerability: the case of Uganda.
*Michael Hauser**

The concept of organic agriculture receives particular attention in low-income countries where it is hoped to sustainably improve poor people's livelihoods. Given the increasingly globalizing nature of organic agriculture and organic businesses, a core question is to what extent these developments impact on poor people's vulnerability. Uganda, one of the sub-Saharan African countries with the most rapidly expanding organic sectors, is used to illustrate this. Given the risky environment poor people live in, this case outline explores the linkages between different organic strategies (non-certified and certified organics) and their outcomes in terms of vulnerability.

Organic agriculture in Uganda
Despite recent economic growth and an average rise of per capita income of about 6% per annum, Uganda is among the poorest countries in the world. Between 80 and 90% of the population live in rural areas and seek their livelihood in agriculture. Uganda is home to 3 million farm households with an average land size of 2 ha.

Non-certified, but IFOAM compliant organic agriculture has its roots in sustainable agriculture. Its formal promotion started in the year 1987, after years of political unrest. Certified organic agriculture is rooted in private sector initiatives. It is important to note that non-certified and certified organic initiatives have distinct characteristics (Table 1).

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* BOKU – University of Natural Resources and Applied Life Sciences, Vienna, Dept. of Sustainable Agricultural Systems, Division of Organic Farming, Austria, E-mail: Michael.Hauser@boku.ac.at

This case outline is based on a paper by Michael Hauser: What 'rich organics' might mean for 'poor organics' – research and trade, presented at the international workshop 'Organic farming in a global perspective – globalisation, sustainable development and ecological justice', 22–23 April 2004, Palace Hotel, Copenhagen.

In 1995 about 40,000 farms were certified and inspected by internationally accredited certifiers and grow organic food and fibre for export. Arabica coffee, cotton, sesame, fresh fruits and dry fruits are important cash crops. By the end of 2003, 16 projects supported certified organic agricultural production. Estimating the number of non-certified, but IFOAM compliant organic farms is difficult, but probably exceeds three to four times the one for certified organic farm households.

Many of Uganda's organic advocates are organized in the National Organic Agriculture Movement of Uganda (NOGAMU). As a membership organization, NOGAMU supports information sharing, lobbying and advocacy as well as market development. In some ways, NOGAMU also protects the integrity of organic principles and values. UGOCERT, a local organic certification and inspection company, has been registered and has published national organic standards. Once accredited, this will greatly reduce certification and inspection cost in Uganda. As a result of NOGAMU's lobbying and advocacy work, pro-organic government policies are underway.

Table 1. Comparing (extreme ends of) non-certified and certified organic agriculture.

	Non-certified organics	**Certified organics**
Principal thrust and orientation	Increasing well-being through sustainable natural resource and community development	Increasing income through commodity development and niche marketing
Legal basis	Neither certified, nor inspected, no contracts between 'buyers' of organics and farmers	Certified and inspected, contracts between 'owner' of the certificate and farmers
Technology change	Complex and comprehensive change in farm management, including the introduction of new agronomic practices for ensuring ecological sustainability	Complex and comprehensive change in organizational and logistical arrangements, introduction of new agronomic practices for ensuring product quality
Type of extension services	Participatory extension and technology adaptation by farmers	TandV like extension and technology adoption/rejection by farmers
Potential for scaling-out	Spontaneous diffusion of technologies and concepts possible, socio-economic barriers	Some diffusion of technologies, but not of the entire concept, market access regulates participation
Public and policy perception	Low-input system for increasing food security	Compliance with liberal agendas and plans for the modernization of agriculture
Research support	Indirectly through research on sustainable agriculture	No research devoted to certified organics
Incentives and likely benefits	Non-monetary incentives, little re-investable income, direct livelihood benefits (through deliberate interventions)	Monetary incentives, re-investable income and thus indirect livelihood benefits

Organics, assets, and vulnerability

Given the expanding organic sector and the enormous 'hype' about organics especially in Uganda, the following observations can be made with respect to the likely vulnerability-reducing effects of organic agriculture. These effects are different for certified and non-certified organics.

Both certified and non-certified farm households are exposed to similar or the same threats (trends and shocks), such as increasing population pressure, natural resource degradation, pest and disease outbreaks, health threats, market dynamics or political instability. At the same time, there are threats (trends and shocks) that are only relevant for one of the two groups.

Threats that are specific to non-certified organics include falling farm gate prices for cash crops, late payment of the buyers or information cut-offs. Threats that are more specific to certified organics include unforeseeable market breakdown (due to new fraud cases) as well as resource degradation(!). The latter is a risk where organic agriculture becomes 'conventionalized' (i.e. narrowest possible interpretation of organic standards).

Through organic initiatives (and their interventions) farmers are able to build assets that help to buffer non-specific threats. However, certified organic initiatives tend to build monetary buffers (through the organic premiums) and non-certified initiatives tend to build non-monetary buffers (due to triggered community development processes).

From an agro-ecological point of view, susceptibility (i.e. defencelessness of the system) is lower and resilience (i.e. the ability of the system to return to its initial state) is higher in some of the non-certified initiatives. There, risk management is more one of 'ex ante' (i.e. a kind of precautionary principle). Non-certified organic initiatives may have a higher ability for risk management that is 'ex post'. Measured in terms of 'functional integrity', the extreme end of non-certified organics may come off better than the narrowly interpreted end of certified organics. It is not clear if higher income (through premiums) provides sufficient input into farmers' livelihood systems to 'purchase' assets that have a buffering effect.

Following the planned start of UGOCERT and the growing domestic markets for organic produce, the following may happen. First, increasing number of organic producers. Second, falling prices for organic products (especially falling organic premiums). It is important to note that organic standards do not encompass compulsory premiums (as it is in fair trade). Rising demand for organic food in the north may change the configuration of farming and livelihood systems in the south. Overdependence on single commodities and experts, unresolved conflicts over trade-offs (more of the one may mean less of the other), falling commodity prices when organics are being mainstreamed are all potential threats.

Understanding livelihood dynamics before and after 'conversion' to non-certified or certified organic strategies is essential to fully assess the benefits of organics to sustainable livelihoods and thus sustainable development. Our findings in Uganda indicate that organics can reduce vulnerability, but it also exposes farmers to new vulnerabilities.

Challenges

The growing organic movement faces all sorts of challenges. One of the prime issues is to endogenously develop and build an organic identity that is distinct from those

overseas. Some of these can and must be addressed in alliance with partners around the world. The following list is an overview:

- Strengthening human and social capital – to reduce the overdependence on external ('international') experts and expertise.
- Improving organic technologies – to reduce bio-physical risks and increase the buffering capacity in connection with natural shocks and trends (such as weather or climate change).
- Localizing food systems – to decrease the overdependence on export markets overseas through local and domestic organic markets.
- Maximizing benefits from organic trade – to keep the value added in-country and make it available for re-investments into the sector.
- Developing pro-organic research systems – to actively respond to 'burning' issues in the area of production, processing, transport as well as broader livelihoods aspects.
- Creating enabling policy environments. Examples include explicit organic policies and organic standards that are relevant to the local agro-ecologies of low-income countries.
- Ensuring ownership – to develop to reduce the dependency on external players, rebalance power relations and stakes.

Conclusion

- In Uganda and elsewhere, certified organics receives most of the attention. However, appraised in connection with vulnerability reducing aspects of organic agriculture this is not always justified. There is some scope for learning from both approaches.
- It is undisputed that the Ugandan organic sector has benefited from globalizing markets. Without the pull effects of growing organic markets in developed countries, certified organic production systems would be inexistent in developing countries.
- There is danger of 'conventionalizing' certified organics that may lead to a loss in 'functional integrity' of these organic systems.

Organic agriculture as an alternative example for agriculture, research and society

As indicated in previous sections, there are other, more political ways to promote ecological justice in agriculture. The organic movement may seek to influence governmental regulations of markets and the development of supranational institutions to consider the issues of ecological limits and ecological justice, but these developments depend on the general political understanding and motivation in different societies. Organic agriculture cannot decide the implementation of ecological justice at the national and supranational level. But if and when organic agriculture has more fully incorporated the principles of ecological justice, these

efforts may serve as an alternative example for mainstream agriculture, for research, and for the broader implementation of ecological justice in other areas of society. This has been expressed in a distinctive way by Laura Raynolds:

> The fact that the international organic and fair trade movements have successfully created new niche markets for alternative products is no small feat. Yet I suggest that their true significance lies not in their market share (which will presumably always be relatively small), but in the challenge they raise to the abstract capitalist relations that fuel exploitation in the agrofood system. Both initiatives critique the subordination of agriculture and food to capitalist market principles that devalue, and thus encourage the degradation of, environmental and human resources, particularly in countries of the South.
>
> (Raynolds, 2000: 298)

The existence of alternative practices and products is not only important from the consumer point of view, but also for agriculture, research and society. Many of the solutions to environmental problems that are offered by the organic practices have been picked up by mainstream agriculture so that it can meet societal demands. The same process of adaptation may work with regard to the broader issues of ecological justice. From the perspective of research, organic agriculture offers established alternative practices and networks that can be utilized to gain a better understanding of agricultural systems and alternative forms of trade. Organic agriculture also poses new problems and issues for inquiry that are not noticeable in conventional agriculture. With regard to ecological justice new research and new measures are needed. Studies of food mileages, energy costs and nutrient flows will have a role to play as will more elaborate notions and methods such as ecological footprints (or rucksacks) and life cycle analyses. But these measures and calculations must be developed in interaction with the comprehensive, integrated approaches of organic agriculture.

Existing sustainability indicator frameworks may be modified or supplemented to capture the issues of ecological justice. If the goals of sustainability and ecological justice can be realized in the organic practices, and if this can be shown with widely accepted indicators, this can inflict on the market preferences being exerted for organic products and thus lead to the promotion of these goals. The challenges to the realization of these promises are, however, many and varied. First of all, indicators are measures and therefore do not include areas of ignorance. With regard to ecological justice there are many such areas, connected to e.g. long-term impacts that are not known at present and impacts that are different to different communities, ecologies and geographical areas. Targeted and participatory research efforts can go some way towards augmenting sustainability indicators as tool for awareness. But in general, the use of indicators will have to be supplemented with more general means of raising the awareness of ecological justice issues, in line with reflexivity, precaution, moral consideration, responsibility and participation.

More generally, the implementation and institutionalization of ecological justice in an alternative food system such as organic agriculture may function as an example for the broader implementation of ecological justice in other areas of society. The existence of such alternatives may work to broaden the discourse of sustainability and raise the general awareness of the issues of ecological justice. Moreover, it may contribute to the education of responsible citizens and function as a model for political visions.

Conclusions

In the present chapter we have investigated the role that ecological justice may have in relation to the present challenges for the global development of organic agriculture, starting from four questions: What is the meaning and context of ecological justice? How can these ideas help resist the pressures of globalization? How can ecological justice be implemented in relation to organic production and trade? And how can organic agriculture contribute to ecological justice in a global perspective? We analysed three key challenges: the commodification of hitherto commons, the externalization of environmental and social costs, and the growing distances of trade and ownership due to globalization. Finally, three ways of putting the idea of ecological justice into organic practice were identified: certified organic agriculture, non-certified organic agriculture, and organic agriculture as an alternative example for agriculture, research and society.

Broadly, we conclude with the following points:

- Ecological justice is a more comprehensive form of the well-known liberal idea of justice – extended to incorporate, first of all, the ideas that human communities and individuals have claims on their environments and that we share environments; and, second, the idea that justice and fairness concern not only humans, but animals and other living organisms as well.
- Certified organic agriculture is a proven form of institution to implement environmental ideals (and thereby elements of ecological justice) in globalised food systems, but the current standards have yet to fully meet the challenges of commodification, externalities and distant trade.
- Incorporating a measure of ‘nearness’ into the system, based on the ideas of transparency, substitutability, regional rules based on common principles, comprehensive tools to assess external costs, and participation could help organic agriculture to counter the ill effects of globalization.
- An alliance of organic and fair trade certification can go some way towards meeting the aims of ecological justice by incorporating the broader context of production, processing and transport into the market, though a simple combination of the two will not be adequate for the development of a fair organic trade.

- But leaving the aims of ecological justice to alternatives such as organic and fair trade within the market put great demands on the awareness and responsibility of the consumers.
- In addition to implementing ecological justice more fully into the organic certification standards, we suggest an alternative path towards implementing ecological justice through the promotion of 'non-certified organic agriculture' to develop local sustainable communities and food security based on the principles of organic agriculture.
- If and when the aims of ecological justice are well implemented into organic practices, the role as an alternative example for agriculture, research and society may be more important than the actual benefits to ecological justice due to these practices in themselves.

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