



Research to support revision of the EU Regulation on organic agriculture

Balancing and integrating basic values in the development of organic regulations and standards: proposal for a procedure using case studies of conflicting areas (D2.3)

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Preface

The project EEC 2092/91 (Organic) Revision was funded by the EU with the aim of supporting revision of the EU Regulation on organic agriculture. One of the objectives of the project is to identify basic ethical values of organic agriculture and to give suggestions for how to integrate them in the development of the Regulation (EEC) 2092/91. This report summarises the findings of the project in this area and aims to present a procedure for balancing and integrating the basic values of organic agriculture in developments of the standards and the EU regulation. To illustrate the values of organic agriculture and their role in relation to the regulation, philosophical case studies are carried out on the interplay and compromises between different basic organic values, public interests, and technical and economic concerns in three contested areas: localness, intensification, and dependency.

A revision of the EU regulations for organic agriculture, in particular the Regulation EEC 2092/91, is currently taking place. According to the first proposal for a new regulation that was published on December 21st 2005, the revision process will happen in two steps of firstly the main regulation and secondly revision of the Annexes with the detailed implementation rules¹. Under of the Finnish Presidency the European Council agreed in December 2006 in principle on a revised text for the main Council Regulation in which several propositions for objectives and principles from the Project (EEC) 2092/91 (Organic) Revision have been considered². This text was formally adopted with some amendments in June 2007³.

The present report aims at giving support to the current and future revision process, particular for the reflection process which is needed for:

- How the new Council Regulation relates to the ethical values and principles of the organic agriculture movement;
- How the values will be implemented in the rules in the process of transferring the Annexes of (EEC) 2092/91 into new implementation rules which will start in 2007; and
- as guidance on how to interpret values and how to handle value conflicts of the Organic Food and Farming sector.

Furthermore the report hopes to stimulate a discussion process in the organic agriculture movement in Europe and world-wide about how the core values of organic agriculture are implemented in the standards that is of importance for the future development of organic agriculture.

This report will is complementary to one about differences in standards related to the Regulation (EEC) 2092/91 and potentials for harmonisation, simplification and regionalisation (see www.organic-revision.org .

¹ Proposal for a Council Regulation on organic production and labelling of organic products (COM (2005) 671 final, 21.12.2005).

² Proposals for Council Regulation on organic production and labeling of organic products. Council of the European Union, Special Committee on Agriculture. No 17085/06 Agrileg 230.

³ Council Regulation (EC) No 8620/1/2007 Rev 1 of June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91.



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Should the publication of corrigenda becomes necessary, there will be posted at the project website **www.organic-revision.org**.



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Abbreviations

AT	Austria
AWU	Agricultural worker unit
BE	Belgium
СН	Switzerland
CZ	Czech Republic
D 2.1	Deliverable 2.1 from the Project EEC/2092/91 (Organic) Revision(see Padel, 2005)
DARCOF	Danish Research Centre for Organic Farming
DE	Germany
DK	Denmark
EAA	European Environment Agency
EE	Estonia
ES	Spain
EU	European Union
FADN	Farm Accountancy Data Network
FASSET	Farm assessment simulation model
FI	Finland
FNVA	Farm Net Value Added
GMO	Genetically modified Organism
GR	Greece
HU	Hungary
IFOAM	International Federation of Organic Agriculture Movements
IRENA	Indicator reporting on the integration of environmental concerns into agricultural
	policy
IT	Italy
LU	Luxembourg
NL	Netherlands
ORGAPET	Organic Action Plan Evaluation Toolbox
PL	Poland
POA	Principles of Organic Agriculture, online at <u>www.organic-revision.org.</u>
PT	Portugal
SCOF	Standing Committee Organic Farming
SE	Sweden
SI	Slowenia
SMART	Specific, measurable, achievable, relevant and time limited
UAA	Utilisable Agricultural Area
UK	United Kingdom
USDA	United States Department of Agriculture



Executive Summary

The basic aim of the report is to develop a procedure for the integration of the ethical value base of organic farming into standards and regulations. For this it is necessary to identify the core ethical value of organic production, consider their coherence and relate them to existing practice of organic food and farming. Ethical values are *per se* in need of interpretation. It is therefore also necessary to consider the process of decision-making, when aiming to achieve a coherent integration of such values in the structure of a standard or regulation.

In line with the European Action Plan for Organic Food and Farming from 2004⁴ the Project EEC/2092/91 (Organic) Revision supports the idea that delegating a larger role to values and basic principles will help to harmonise the rules, provide room for flexibility in implementation and to simplify the European Regulation for organic production.

It is important to include basic values in standards and regulations, because organic farming is value based and all actors/stakeholders have value expectations, including consumers who the regulation wants to protect. Standards and regulations form the basis of a virtual contract between the consumer and the producers. By following the practices set out in the standards, producers give a promise to the consumer to deliver on additional ethical values, beyond the legal minimum standards for conventional agriculture and food.

The growing and globalised organic market and the involvement of large companies have resulted in renewed interest in the values and principles of organic farming. There has been concern that the organic food and farming sector is becoming more conventionalised, and has lost touch with its basic values. Thus it will no longer function effectively as a real alternative to general agriculture for consumers, producers and also for policy makers (e.g. Guthman 2004; Hall and Mogyorody 2001).

The report analyses what core ethical value are associated with organic agriculture and should therefore be considered for inclusion in a regulation. This value base is contrasted with the existing Regulation (EEC) 2092/91⁵ and with examples of current practice of organic agriculture in Europe. The implications of including ethical values in the structure of a regulation for decision-making are considered. Following on from the European Action Plan a process of total revision of the EU regulation on organic production is underway. A new European Regulation for organic production was adopted by the European Council of Ministers in June 2007 and will come into force in Jan 2009⁶. The text of the near final proposal from December 2006 has been considered in several sections of the report. The report finishes with some conclusions and recommendations for the EU Commission and other standard setting bodies regarding the choice and roles of values in organic standard, the rules for decision-making processes in relation to integrating values, and regarding the ongoing revision of the organic regulation in Europe.

⁴Communication from the Commission: COM(2004)415 final.

⁵Regulation (EEC/2092/91) of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs. Official Journal of the European Communities, L198 (22.7.91), 1-15. ⁶ Council Regulation (EC) No 8620/1/2007 Rev 1 of June 2007 on organic production and labelling of organic products

and repealing Regulation (EEC) No 2092/91.



Identifying the core value base of organic agriculture and its representation in regulations

Chapter 2 aims to identify the value base of organic agriculture from a range of sources in which core values are identified, such as definitions of organic farming, empirical research of motives and values of various stakeholders, and publications specifically concerned with the ethical value base of organic agriculture.

Empirical or descriptive research uses a broad understanding of 'values' similar to 'motives' as any basic fairly stable conviction related to emotions, leading to certain behaviour. Studies explore what is of value to particular stakeholders in organic agriculture without the intention to pass judgement (for example Alrøe et al., 2008, Darnhofer et al., 2005, Meeusen et al., 2003).

Since 2000, a number of publications have specifically aimed at identifying ethical values or principles of organic farming that can guide practice and future development of the sector. This approach is comparable to deontological ethics, in which certain principles are formulated to assure respect for a range of fundamental values (or virtues for example respect for others). Ethical values can function both as a source of inspiration, and as a guide to the future, and as an ethical principle which may be used to forbid certain activities. This is very different to legislative principles that govern how certain objectives should be reached and are binding once established.

The IFOAM Principles of Organic Agriculture from 2005⁷ are particularly important, because their formulation involved a process of stakeholder consultation and democratic acceptance by the membership. A comparison of the four ethical principles and the value elements contained in them (see Figure 2-1) with the literature about organic values reveals wide support for the value basis that is expressed in all four ethical principles.

The core value basis of organic agriculture can be described by referring to the core values of health, ecology, fairness, and care and the value contained in each of these core values which encompass the integrative values of sustainability, naturalness and a systems approach.

This value base of organic agriculture was compared with regulatory definitions, with the Codex/FAO/WHO Guidelines⁸ and with the European Regulation. Many regulatory definitions refer to value elements of two of the four Principles of Health and Ecology. The Codex/FAO/WHO Guidelines for organically Produced Food refer to value elements of all four Principles.

The current Regulation EEC/2092/91 (EC 1991) refers to value elements related to the IFOAM ethical principles of Ecology and Health in the preamble, in Article 6 and in Annex I (A&B). By mentioning fair competition, transparency and excluding GMOs, reference is also made to value elements of the Fairness and Care Principles.

⁷ IFOAM (2005) Principles of Organic Agriculture. International Federation of Organic Agriculture Movements: Bonn. Online at <u>www.ifoam.org</u>.

⁸Guidelines for the production, processing, labelling and marketing of organically produced foods. *Codex Alimentarius* Commission and joint FAO/WHO Food Standards Programme. GL32- 1999, Rev. 1-2001, Rev. 1- 2004. Rome.



Figure 2-1: Value elements and relationship between the four principles of organic agriculture

The revised proposal for a new European Regulation for Organic Food from December 2006 refers to value elements of all four of the IFOAM ethical Principles and to the integrative values of sustainability, naturalness and systems thinking. Avoiding pollution is strongly reflected in the Title II of Objectives and Principles. Other value elements of the Health principle are also mentioned, but the reference is less broad. Most value elements of the Principle of Ecology are well represented, with the exception of self regulation. Fairness and transparency are mentioned in the recitals and objectives, whereas risk assessment and GMO prohibition are but are not part of the principles. Like most organic standards the new Council Regulation does not cover other social values.

Current practices of organic farming compared with the value base

Chapter 3 evaluates some controversial developments in the practice of organic farming-focussing on intensification, and dependency on conventional agriculture and contrasts these with the core value basis identified in Chapter 2 as well as a discussion of the value of localness.

Intensification of farms is characterized by higher use of production factors, in particular external inputs and resources (like energy, water) and is influenced by a range of factors. Of particular concern for organic farms is whether these inputs originate from organic or conventional sources, illustrating the close relationship between intensification of organic farming and dependency.

Intensification of organic farms is examined by using some general indicators developed by the European Environment Agency (EEA, 2005) for which organic farming data could be obtained. There is some indicator of structural change similar to general agricultural also for the organic sector, but indirect indicators do not provide direct evidence of a high reliance on external inputs.

Farm size of organic farms in Europe has increased, because the number of organic farms in Europe has stagnated, whereas land area has continued to increase, but the variation between member states is considerable. Decline in the number of mixed farms and increasing specialisation are also seen as indirect indicators of intensification. In a one-off cross national survey the majority of 550 organic farmers in 11 member states classified themselves as being specialised, i.e. derived their income



mainly from one enterprise category (Nieberg et al., 2005). The low proportion of mixed farms (only 16% of respondents) stands in strong contrast to the widespread expectation that all organic farms have a mixed enterprise structure. However, there is considerable variation between countries, and location and personal factors also promote specialisation.

EAA also refers to the concentration of livestock farming as an indicator of intensification. Organic livestock production in the EU is mainly concentrated in Italy, Sweden, Germany, the UK, France, Austria and Spain. The UK and Germany together keep almost half of the organic dairy herd (EC-DG Agriculture 2005). Several countries currently do not produce sufficient concentrate feeds to supply their organic livestock, which indicates that a balance between crop and livestock production is not always achieved.

Within a country livestock and crop production can be located in different regions. For example, organic animal production in Denmark is concentrated on the mainland, crop production on the island. Organic livestock farms rely on non-organic straw and organic arable farms use non-organic manure, because of the distance between the regions (Kyed et al., 2006).

It was not possible to obtain statistical data for direct indicators of input use on organic farms in Europe, but the intensity was further evaluated on the basis of literature. Case descriptions mainly from the Netherlands and Denmark confirm that concerns about intensification appear justified for some particular farm types. Many certified organic pig and poultry producers in the Netherlands rely almost fully on external feed inputs from organic as well as conventional sources (Prins 2005 and de Wit and Verhoog, 2007) and organic concentrate feeds for pigs and poultry are transported over considerable distances (Bos, 2006). Dutch organic arable producers use up to 75% of total Nitrogen (N) from non-organic sources (Prins, 2005). The limit of 170 kg N/ha/year in Regulation 2092/91 applies to N from livestock manures but other fertilisers can be added.

Better statistical data and more research would be needed to assess whether intensification of organic farming across Europe is limited to certain sectors and/or countries or represents a more widespread phenomenon and whether it has increased over time. The existing regulation limits the reliance on *non-organic* inputs, such as feed and to a lesser extend seed, but does not consider the use of *organic* inputs to the same extent.

The case descriptions of intensification and dependency from conventional sources of organic farms were contrasted with the core organic values identified in Chapter 2. This showed conflicts with core values of recycling of nutrients, the systemic approach of self-reference and self regulation, and bio-diversity and environmental protection that are expressed in Principle of Ecology. Practices also conflict with some values expressed in the Principle of Health, such as food quality and animal health. The new Council Regulation from 2007 refers to several value elements that could limit intensification. Further work on other indicators would be needed in order to examine the current realisation of other core organic values, for example social values expressed in the Fairness Principles.

Under current standards it is possible to have specialist organic farming systems that rely to a large extent on external inputs. This conflicts with several of the core organic values represented in the Principles of Ecology, such as the aim of working with and sustaining living ecological systems, of self reliance in relation to input use (i.e. closing the production cycle), of reducing the use of external inputs and non-renewable resources and several value elements of the Principles of Fairness and Care.



There is a general expectation that greater 'localness' in organic food chains would reduce problems of intensification and dependency and counteract other negative aspects of globalisation (Kjeldsen, 2005). Expected benefits include reducing distance, reducing the external costs of transport, strengthening social networks (embeddedness) and the local economy, allowing for a more direct communication between producers and consumers. Furthermore local marketing is also expected to improve economic return through shorter supply chains and to strengthen the role of producers in food production.

The value of 'localness' in relation to organic food production systems is related to the functional integrity of the agro-ecosystem, i.e. spatial distance of input use and it environmental impact, the growing external costs of transport such as greenhouse gas emissions, adding value to raw materials and transparency, awareness and participation in the development of the food system. The three dimensions of local embeddedness have similarities to the dimensions of sustainability of social, economic and environmental sphere (Kjeldsen, 2005).

Organic production and consumption is distributed unevenly across Europe and within countries generating need for transport of organic food. The major markets of organic food (Germany, France, Italy and the UK) are not necessarily the main areas of production. Countries with high proportion of urban areas have a relatively low uptake of organic farming.

Within countries centres of organic production are often located in the rural areas, whereas organic consumption is concentrated in the urban centres (Kjeldsen, 2005). The transport of food, both to the retail outlet and from there to the home, is responsible for a substantial proportion of external costs of all food production including organic food (Pretty et al., 2005). Producers and consumer both associate organic food with localness but both groups balance a range of values in relation to where they sell and buy their organic food (Padel and Foster 2006).

Realising greater 'localness' would strengthen the functional integrity of organic food networks: the principle of working towards nearly closed systems in which inputs and outputs are balanced would reduce the need for external input, for transport energy and would reduce the risk of pollution. There is a question whether local food networks could succeed in relation to economies of scale and would therefore also represent improvement in relation to social values of fairness, social cohesion and systems integration. A number of important questions remain unresolved, in particular at what spatial scale the 'local' or the 'region' should be defined. Because of the complexities involved it is less likely that the issues can be sufficiently addressed by regulation alone, but demands development processes both institutionally as well as through local initiatives.

It can be concluded that realising greater localness would require substantial changes to production and consumption patterns and in the behaviour of all actors. Nevertheless, 'Localness' is an important organic value element and a perspective for future development which deserves further investigation.

The final section of this chapter uses the example of transport and slaughter of animals in organic systems to illustrate how one area of a standard might be governed by several core organic values, in this case environmental values (impact of transport) and animal health and welfare and how the whole food system from production to consumption would need to be considered.

Proposal for a procedure to integrate basic ethical values in standards

Chapter 4 returns to the question of procedure in relation to integrating basic organic values in the regulation. The organic agriculture movement is by tradition value based: values are at the very core and influence both the thinking (theory) and the action (practice).



The integration of core values into standards and regulations is difficult, because there is no single unambiguous interpretation. The organic movement has a tradition of dealing with different value interpretations in a constructive manner and extends to how decisions are taken. Fairness, respect and participation are considered important values.

There is widespread concern that core organic values are not well represented in standards and especially in governmental regulations. Many organic standards (including the current Regulation EEC/2092/91) do not state the value base on which they are based. The production rules in most existing organic standards focus on values that are easy to codify and audit in the inspection process, such as what inputs are permitted or excluded (Lockie et al., 2006). Values that are more difficult to operationalise are not translated into rules. This includes agro-ecological systems values (bio-diversity and nutrient recycling) and results in conflicts between current practices and value elements expressed in the principle of ecology (see above). Most current standard are also silent in relation to core social values of fairness.

The fact that some core values have less frequently been codified in the past does, however, not mean they are less important as values. The comparison of core values with the organic value literature confirmed the importance of all core values.

The European Action Plan for Organic Food and Farming from 2004 demands that rules should be harmonised and simplified and that principles and values should be stated more clearly, which is realised in the proposal for a new council regulation on organic food. This makes it easier to explain why organic producers follow certain practices and will hopefully strengthen consumer trust in organic labels. Clearly stated principles should also assist with implementing flexibility and provide room for greater self-regulation of the organic sector.

This report argues for a harmonisation of the core values behind the rules, as a basis for further harmonisation of the rules and their implementation.

One key feature of harmonising values behind different sets of rules is to increase the knowledge about the values underpinning organic standards and regulations among the various stakeholders and to aim for broad acceptance of the values among organic operators.

The harmonisation of values behind the rules should build on the Principles of Organic Agriculture (IFOAM) with the core organic values of health, ecology, fairness and care the value elements encompassed in them. An explication of basic values and principles in standards and regulations that has its fundament in an organic value perspective is likely to be met with higher acceptance and adherence than a different set of principles.

Values are per se ambiguous and require interpretation. It is therefore necessary to consider procedural issues about how decisions are reached when integrating and explicating values in regulations and standards.

To integrate the ethical value basis of organic agriculture in regulation procedures should be considered in relation to:

- 1. General rules for decision-making;
- 2. A normative reconstruction of the value base in the specific structure of the regulation (or standard);
- 3. Developing the detailed rules and further interpretation of the value base.

All three areas are important in relation to the ongoing process of revising the EU Regulation for



Organic Agriculture and its Annexes, in relation to future interpretation of the regulation, and have relevance to the private sector.

The report recommends that a process of participative and deliberative democracy allowing a representation of relevant stakeholders, considering expert advice and following certain rules of ethical dialogue should be adopted in relation to decision-making about integrating organic values in regulations and their interpretation.

Procedural ethics stresses the importance of the right process (the ideal procedure) to arrive at a 'morally' right answer (Apel 1973, Benhabib 1996; Habermas, 1983 and 1991). A model of deliberative democracy is also consistent with the traditions of many organic agriculture organisations. It can be applied to processes of value harmonisation for the purpose of integration, for the implementation of values through rules and for interpreting the regulation.

There are five important elements of ethical dialogues in participative and deliberative democratic process:

- 1. respect for the discussion partners,
- 2. respect for arguments and emotions,
- 3. context sensitivity,
- 4. a common understanding, and
- 5. relating the theory (values) to practice (Röcklinsberg (2006).

It is necessary to communicate more widely about the shared value base of organic agriculture but also about the differences in practices and conditions of organic farmers across Europe and how they relate to certain core values to realise wider context sensitivity and develop a common understanding. Organic stakeholders' experience of practical situations is necessary to relate value to practice, to evaluate the feasibility of a proposed rule implementing certain values.

The new European Regulation for Organic Food (EC/8620/1/07/REV1) has a hierarchical structure moving from aims, objectives and general principles to specific principles and rules (see Figure 4-1). Once included in the EU regulation, aims, objectives and principles will become legally binding and can only be changed through changes to the regulation itself. This pyramid structure mirrors an 'organic perspective' in so far, as in both cases values and principles are the point of departure for all other decisions on a more detailed level. The value base of organic agriculture is now formulated in the form of ethical principles, containing elements of aims, objectives as well as principles assuring respect for certain values through actions. To 'translate' the core values of organic agriculture into the structure of this regulation a process of further normative reconstruction appears to be desirable to determine at which level a certain value element is important by asking 'how' and 'why' questions .

Some further normative work would improve the coherence of the integration of core values as part of the pyramid structure of the regulation. An ideal process for normative reconstruction of a value base would involve an internal deliberative processes at first among each stakeholder group affected, followed by a process between different stakeholder groups before transforming the value basis to regulative text.

Ethical values will function most effectively in regulations, if they are stated in one place where they can be easily identified. This largely realised in the proposed text for a new regulation (CEU, 2006), where most values are mentioned and incorporated in the text in Titles I & II.



Figure 4-1: The pyramid structure of the proposal for new regulation

Once aims, objectives and principles have been clearly stated the amount of detail in the lower levels has to be determined. A regulation that takes the suggested organic values seriously, and implements them with some room for flexibility would still need clearly formulated common rules. Otherwise, some organic operators will be tempted to find solutions less coherent with the agreed core values especially under economic pressure, resulting in unfair competition.

The current decision-making structure in relation to the Organic Regulation at European Level involves the European Commission, the respective Ministries of the Members States represented in the Council of Ministers and the opinion of the European Parliament has to be heard. National experts of the ministries are members of a regulatory committee (similar to Standing Committee Organic Farming (SCOF)) that is involved in decisions about implementation rules in the Annexes. The commission can seek advice of an Advisory Group on Organic Farming. It is not fully transparent how organic operators, organic sector bodies and other interested stakeholders can make their views known within the current structure.

Protecting the integrity of organic farming as defined by its principles is one of the main intentions in stating principles and objectives in Title II of the proposal for a new council regulation on organic production. It is likely that conflicting interpretations of ethical values explicated in Title II will occur when the detailed implementation rules are developed and decision about what inputs can or cannot be permitted are taken. Hence, there is a need to develop decision-making structures that facilitate a coherent interpretation of the objectives (Article 3) and principles (Article 4) for the development of the implementation rules.

The European Commission could set up the Expert Panel mentioned in the European Action Plan for Organic Food and Farming (EC 2004, Action 11) in the development of proposals for implementation rules to identify potential conflicts before legal drafts are presented to the Regulatory Committee. One of the tasks of the expert panel should be to consider the coherence in the interpretation of the objectives and principles of organic farming as laid down in Title II. The expert panel should adopted rules of discussion and conflict resolution that build on the elements of ethical dialogue. The report includes suggestions on the tasks, the required expertise, the recruitment and some other issues related to the expert panel and how stakeholder consultation and representation could be improved.



Recommendations

Regarding the choice of values and their role in regulations/standards

1. Regulators should consider and recognise the value-based approach of organic agriculture, when formulating governmental standards and stakeholder involvement assisting with the formulation and interpretation of core values facilitated.

2. The four ethical principles of IFOAM of Health, Ecology, Fairness, and Care represent an expression of the shared value base of organic agriculture. These principles act together, contain a range of values elements and encompass the integrative values sustainability, naturalness and systemic approach.

3. The current EU regulation and many private standards do not consider <u>all</u> core values of the organic movement which is one of the reasons of the private sector to aim for 'stricter' rules. European standard setting bodies should aim for harmonisation of the ethical values behind the rules based on the four core values as the basis for further harmonisation of the rules and develop common interpretation of these values. Referring to such an accepted value base is likely to increase the acceptance of governmental regulations, strengthen consumer confidence, assist with implementing flexibility and provide room for self-regulation in the organic sector.

4. There is limited experience in organic standards how to implement some core values, such as ecological systems balance, and social values of fairness and care in the rules. Developing rules to implement these values so that can become part of the guarantee system of inspection and certification is a challenge for all standard setting bodies.

5. A process of harmonising core ethical values requires clear public communication about the values and their interpretation as a basis for further discussion and acceptance by all stakeholders to act as a bridge between principles and implementation rules.

Regarding the rules of decision-making in relation to integrating values

6. Values are *per se* in need of interpretation, and there is no unambiguous interpretation of the core organic values. It is therefore necessary to consider issues of procedure (how decisions about values are reached) as well as content (what values are covered) in relation to integrating basic ethical values in organic standards and regulations.

7. A process of participative and deliberative democracy allowing representation of relevant stakeholders, drawing on expertise and evidence and following certain discussion rules should be adopted as a general procedure for integrating ethical values in organic standards and regulations and in all areas where the interpretation of core values is necessary.

8. Guidelines for decision-making in relation to values in organic regulation and standards should build on five important elements of ethical dialogue:

- respect for the discussion partners and their values,
- respect for arguments and emotions,
- context sensitivity,
- developing a common understanding of the situation, and
- relating theory (values) to practice.
- 9. Because of the ambiguous nature of values and the potential for disagreement, conflict solving



procedures should be developed for which some suggestions were made in this report.

Regarding the ongoing revision of the EU Regulation on organic food and farming

10. All core ethical value referred to in specific principles and implementation rules should be made explicit in one place of the regulation (for example Title II, Art 3 and 4). All further articles could then be read as explication of a specific value in a certain context.

11. The Project EEC/2092/91 (Organic) Revision recommends reconsidering the stated intention to transfer all of the existing Annexes into new implementation rules, because of some apparent contradiction between current practices and the principles laid down in Title II of agreed text. It should be examined carefully where some changes to the current rules could be proposed-in particular in relation to the use of external inputs on farms with the aim to impose some restrictions on input intensification of organic agriculture.

12. A process of participative and deliberative democracy allowing a representation of relevant stakeholders, seeking advice of experts and following certain discussion rules should be considered for finalising the implementation of values in the ongoing revision of the EU regulation (including developing the annexes) and for future revisions of the regulation.

13. The rules for participation of representative stakeholders in the Commission's Organic Farming Advisory Group and the outcome of its meetings should be made more open and transparent. This stakeholder committee should meet more frequently during the process of finalising the implementation rules in the new regulation.

14. The possibility to carry out internet consultations for important issues and to regularly hold an integrative seminar 'Developing Visions and Integrative Strategy for Organic Farming in Europe' should be explored. The Organic Farming Unit in DG Agriculture needs to have sufficient resources to carry out additional task of wider communication with and consultation of stakeholders.

15. The Expert Panel for Organic Farming mentioned in Action 11 of the European Action Plan for Organic Food and Farming should be set up as soon as possible. In addition to the tasks outlined in the European Action Plan (production rules for new areas, evaluation of inputs) the Expert Panel should also advise the Commission on developing a coherent interpretation of objectives and principles (Title II) for the implementation rules and on other relevant issues. The panel should be composed of approximately 15 members (max 20) from a range of research disciplines that have a proven track record in research of organic farming systems or other relevant expertise; some practical experience is highly desirable. The aim should be to recruit a balanced and independent panel that can relate values and principles to practical experience in the organic sector. The panel requires expertise in organic farming systems in relation to animal and crop husbandry, viticulture, horticulture and processing and expertise of organic principles and ethical values, organic marketing, policy, standards, inspection and certification and should be able to draw on specific expertise in certain areas to cover a particular subject. The composition of the panel should be balanced in relation to regions where experts come from and in relation to gender. The expert panel should adopt rules of discussion decision-making building on important elements of ethical dialogue, such as context sensitivity and the need to develop a common understanding of the situation and question and the need to relate principles and current practice and consider existing research evidence. To ensure commitment to the work of the panel, facilitate the participation of experts from small organisation and reduce the risk of financial dependence of specific sponsors it is recommended that the experts should be appropriately remunerated for their time input as well as receiving travel and subsistence costs according to community rules.



1 Introduction

One underlying question of the Project EEC/2092/91 (Organic) Revision is how organic regulations can influence the development of organic agriculture and how the regulations can be developed in light of this. The basic notion is that the basic ethical values and principles of organic agriculture are allowed to play a larger role in the regulation, and that this could counteract the growing complexity of organic regulations and help decisions on derogations, regionalisation, and expansions of the regulations to new areas.

This idea is supported by the European Action Plan on organic food which demands as Action 8 that the regulation for organic food should be made more transparent by defining the basic principles of organic agriculture (EC 2004, full details in the reference list). In particular in the EU commission working document on the "Organic Action Plan" the following is outlined:

"Although the regulation does formulate the limits of what may and may not be labelled as 'organic', the basic principles of organic agriculture itself are not clearly defined. An appropriate definition of objectives and basic principles of organic agriculture would strengthen the regulation as not only defining the labelling of organic products, but also the fundamental principles of the production method. Defining the basic principles is expected to contribute to transparency and consumer confidence and would make its public services explicit. At the same time, by defining the purpose of the measures and not the means by which to achieve these purposes, flexibility is introduced to allow for regional solutions based on the best local practices to achieve these purposes. This would be instrumental in reducing the level of detail in some parts of the regulation. This in turn would contribute to further harmonisation of the standards.

Moreover, a clear definition of the basic principles of organic agriculture would also help in determining equivalency with production standards in third countries which, by nature, need to respect their very different climatic and local farming conditions.

Finally, it would make it easier to understand the system and thereby contribute to increased consumer confidence." (EC 2004, page 18 & 19).

Although the EU Commission does not mention explicitly the word values, an intensive reflection process about the underlying values is needed in order to define what the objectives and basic principles of organic agriculture are, which values are to be considered and which ones are included in the new regulation for organic food and farming objectives and basic and specific principles.

The main aim of this report is to investigate how the ethical value basis of organic agriculture can be considered in the regulatory process and in the implementation of regulations. This is based on the assumption that including basic ethical values of organic agriculture is not just a question of what value should be included but also how decisions about what values should be considered are taken. This is influenced by the thinking of procedural ethics which stresses the importance of the process (the ideal procedure) to arrive at a 'morally' right answer as well as stating certain moral values. Reactions to the first draft (including the very critical stance of the German organic movement) could be seen as an example for the lack of an appropriate procedure for consultation. Considering the '*how*' includes accounting for potential differences in the understanding of what core organic are as well as handling possible conflicts between organic and societal values in developments of the EU regulation.

Since the early 80s the organic food and farming sector in Europe has experienced substantial growth in terms of number of producers, land area and market development. In 1985, certified and



policy-supported organic production accounted for 105.000 ha Europe (EU& Norway and Switzerland), or less than 0.1% of the total agricultural area. By the end of 2004, this had increased to 6.2 million ha, or nearly 4% of Utilized Agricultural Area (UAA). In the same period, the number of organic holdings increased from 6.6 to 164 thousand. The figures hide some great variability: for example in Sweden, Austria and Italy between 6-12% of UAA were organic in 2004, whereas in Belgium and Ireland less than 2% of UAA were organic (Olmos and Lampkin 2005). Also the growth in the market place in Europe has been substantial and has seen growth rates in many years of more than 10% per year although accurate data on the market and global trade with organic products are more difficult to obtain (Rippin *et al.* 2006; Hamm and Gronefeld 2004, Willer and Yusefi 2005).

This growth of the organic sector in Europe can partially be attributed to the growing recognition by policy makers (Dabbert *et al.* 2004, Dimitri and Oberholzer 2005) since the early 90s, but also to growing consumer demand, rising environmental awareness and problems faced by the conventional agriculture. Despite this, organic farms operate in the same economic environment as others farms, and alongside substantial growth the sector has been exposed to a level of rationalisation and professionalisation. In becoming legally regulated organic farming has moved from being solely a grassroots movement representing a radical alternative to the mainstream to becoming part of policy intervention (Dabbert *et al.* 2004).

There is concern in large parts of the organic movement that with these trends the organic sector has lost the grounding in its values and core principles and that the sector has been 'conventionalised' (e.g. Guthman 2004). For example, in response to an announcement by the Soil Association to formally adopt standards for organic salmon farming, Lawrence Woodward, the director of the UK based Elm Farm Organic Research Centre, stated that many producers, consumers and supporters committed to a true organic approach fear that the market has grown on the back of a production basis that is increasingly removed from organic principles⁹. The private sector also frequently claims adherence to organic principles as the basic reason for the need to have 'stricter' rules (sometimes even if they are not fundamentally different from the existing regulation).

This 'conventionalisation' hypothesis argues that if rationalisation continues alongside growth, organic farming will become larger, more specialised and farm more intensively. Thus it will become indistinguishable from mainstream agriculture and will no longer be able to function as a real alternative (Guthman 2004, Hall and Mogyorody 2001). This concern is shared by organic producers who are worried that growing economic pressure in agriculture and in organic agriculture might cause producers to intensify and rationalise (Padel 2005). This has lead to a renewed interest in organic values and basic principles that can guide the future development of organic agriculture. The question that this report aims to address is how these values and principles of organic farming can be reflected in the standards and in particular can be considered in the EU regulation governing the organic food and farming sector.

This report and the work of the Project EEC/2092/91 (Organic) Revision focuses on certified organic agriculture according to the EU Regulation, but it is important to remember that other systems based on alternative, participatory guarantee and market systems and different types of 'non-certified organic farming' exist that produce for subsistence and local markets (e.g. Alcântara and de Alcântara 2004, Halberg *et al.* 2006). In Europe, also a policy supported option of organic farming as an agri-environment scheme exists.

⁹ EFRC Bulletin October 2006



Thus, the organic sector in Europe is heterogeneous both in its structure regarding legislation and in its needs and relation to legislation. These various actors in the organic agriculture movement in Europe hold a broader range of values than those covered currently by standards and by the European regulation. When formulating a new EU regulation for organic food the regulator is faced with the challenge how to take all major perspectives and interests in organic agriculture into account and respect the interests of the various stakeholders that are that consider them selves to be part of the movement and are affected by the regulation. Changing the value base of a regulation about organic food could have a substantial impact on organic agriculture in Europe.

Since its first introduction in 1991 the Regulation (EEC) 2092/91 on organic production has become more and more complex, and now there are difficult decisions to be made on removing derogations, regionalisation, and extending the scope of the regulation into new areas. The stated purpose of the major revision currently under way is to promote transparency and simplification of the regulation by including objectives and principles in the new European organic regulation (EC 2005: 'Whereas', points 4, 5, full details in reference list). If the objectives and principles stated in the regulation are to fulfil these purposes, it is essential they are accepted by the organic actors in the sector as an expression of the shared values and meaning on which organic agriculture is based.

1.1 The basis for the report

The report aims to address the question how the core values organic agriculture can be identified and considered in the development of standards and regulations of this area and make recommendations for a procedure. The basis for this report mainly consists of four elements from the Work package 2 in the Project EEC2092/91 (organic) Revision:

- 2.1 Identifying basic ethical values of organic agriculture. This work was undertaken in cooperation with IFOAM and involved a comprehensive process of gathering of available sources and a 1½ year long stakeholder consultation and resulted in a set of four *'Principles of Organic Agriculture'* (POA) (see Appendix 1) that are evaluated in Chapter 2¹⁰. The work also resulted in the publication of a number of articles, such as Alrøe *et al.* (2006).
- 2.2 An empirical inquiry on current organic values among selected stakeholders in Europe. The work involved 25 focus groups with established and converting organic producers, researchers, staff of organic organisations, policy makers and students in five European countries. The report by Padel (2005) also compares the values of the focus group participants with values of consumers and with the Principles of Organic Agriculture and provided some recommendations in relation to the revision of the EU regulation¹¹.
- 2.3 Philosophical case studies on the interplay and compromises between practice and organic values were made in three contested areas of intensification, and input dependency and localness which form the basis of Chapter 3, supplemented by input from other work packages.
- 2.4 Developing a procedure for balancing and integrating the basic values of organic agriculture in developments of the EU regulation which is presented in the final sections of this report.

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¹⁰ The process of writing the principles is also described in Alrøe, Schmid and Padel (2005) *Ethical principles and the revision of organic rules*, and documented on http://ecowiki.org/IfoamPrinciples. See also Alrøe and Kristensen (2004) *Why have basic principles for organic agriculture? And what kind of principles should they be?* In-depth analyses of key ethical principles is given in Alrøe, Byrne and Glover (2006) *Ecological justice and organic agriculture: ethics and practice.*

¹¹ Padel (2005) *D21: Focus groups of value concepts of organic producers and other stakeholders.* Deliverable 2.1 in the Organic Revision project. www.organic-revision.org



1.2 Overview and reader guidelines

The report is structured in the four main chapters: on the value basis, descriptions of practice contrasted with the value base, a procedure to consider values and conclusions and recommendations (see Table 1-1). Each section covers general issues such as definitions of important terms, explores the specific relevance to organic agriculture and its standards, and relates the discussion to the current revision of the EU regulation for organic food.

Chapter	General	Specific	Revision of the EU regulation
Chapter 2: Organic values	What are ethical values	Core organic values	Which values are represented
Chapter 3: Current practice	Indicators	Controversial developments	Impact on contested areas
Chapter 4: Procedure	Democratic process and procedural ethics	Handling value in organic standards and regulations	Translating ethical values in the pyramid structure
Chapter 5: Conclusionds and Recommendations	Recommendations regarding decision-making process in a value-lade area	Recommendations regarding the role of value in organic standards and regulations	Recommendations regarding the revision of the EU Regulation

Table 1-1: Structure of the report

Following this introduction, the second chapter examines the value basis for organic agriculture. It explores the different understanding of values in empirical research and in the ethical literature. It reviews a selection of empirical studies that consider the values of different organic stakeholders and their perspectives. The main focus, however, are the inherent basic values or principles of organic agriculture itself, especially where they are formulated in normative way to guide future development including the four IFOAM Principles of Organic Agriculture of Health, Ecology, Fairness and Care.

The third section explores controversial developments in the practice of organic agriculture in relation to recent growth and the perceived threat of 'conventionalisation' of the organic sector on the basis of statistical sources and case descriptions in the literature. Three contested areas were chosen: intensification of organic agriculture, dependency from the conventional sector and 'localness' as an alternative to globalisation. This is contrasted with core organic values identified in Section 2, including those represented in Regulation (EEC) 2092/91 and its planned revision.

The fourth section examines the question of procedure, of how the ethical values of organic agriculture can be better considered and taken up in the regulatory process. It explores the role of ethical values in the regulatory structure, considers the importance of procedure in procedural ethics and as part of democratic processes and how this should and could be applied to organic regulations. The proposal for procedure on how to handle values in the regulation could also have some relevance as an example of how alternative values and principles can enter into EU regulations in different way to general environmental regulations, where the principles/objectives result from democratic consensus.

The final section presents recommendations on how values should be considered in standards and in the regulation. This includes ideas on how value conflicts can be handled, considering the special role of values in organic standards and regulations, a suitable procedure for decision-making in relation to values and in relation to the current revision of the EU regulation on organic food. The details of all references (including official publications) are provided in the reference list.



2 Basic values and ethical principles of organic agriculture

2.1 Definitions and relevance of values

There is an increasing interest in Organic Agriculture in Europe, among consumers as well as among producers, processors and retailers. The number of labels referring to 'organic' or 'eco' is larger than ever before. In some towns or regions organic food is used in public canteens, and some regional governments even set goals for the percentage of organic food in schools and elderly homes. Furthermore some countries have national goals of percentage of land use which should be organic after a certain number of years, because organic agriculture is expected to increase public goods such as animal welfare, quality of the environment and rural development (Stolz and Stolze 2006, Stolze and Lampkin 2006).

Such an increase in the interest in organic farming opens up a wide variety of different definitions of and perspectives on what is understood as organic agriculture. There is not only variation on a cultural, regional and national level, but there also are differences between stakeholders, showing different perspectives on what organic agriculture is. To a certain extent these differences mirror the motives of a person or a group for engaging with organic agriculture. For example a common consumer interest in buying organic is the own health, whereas a retailer's interest might rather be interested in offering alternative product lines. Theses differences are all expressions of certain values and attitudes in relation to organic farming and what it stands for influenced by the own perspective.

Values and attitudes do not always lead to explicit value statements, but may nevertheless underlie a person's or organisation's actions and his/her perception of societal or company aims and goals. This has been shown for instance for consumers, sometimes behaving as consumers, sometimes as citizens. Thus it is of great importance to clarify which values are prevailing in a certain context in order to understand plans, actions and acceptance or rejection of policies. Different degrees of acceptance of a suggested regulation or policy most certainly correlate with the basic values and ideas of what is at stake and what is a core value or an overarching aim. It is important, therefore, that such differences are taken into account, in order to make the regulation applicable and relevant for those concerned.

It first has to be clarified what is meant by the word 'values'. In order to do that a distinction must be made between an empirical and a normative approach to value. In ethical literature the distinction is made between descriptive ethics and normative ethics. Descriptive ethics describes the values held by individuals or groups in society, without making any judgment about these values. Normative ethics tries to reconstruct the values found into a coherent whole. In section 2.1 the emphasis is on the empirical research about values in the organic food and farming sector. In the conclusion it will become clear what the difference is with the normative approach.

2.1.1 Empirical research about organic values

Researchers of various disciplines (political scientists, market researchers, sociologists, philosophers, etc) have turned their attention to the value base of organic agriculture. A typical kind of research is empirical research about the motives or perspectives of various stakeholders within the organic movement, and their underlying values. It is possible to distinguish between two types of studies. The first kind takes values as a very broad concept, almost similar to motives and usually distinguishes between various groups within the organic movement, based on differences in their



motives / values, but without giving a strong normative judgement about the motives of these groups. Several examples of concerned with a range of stakeholders are reviewed below (Meeusen *et al.* 2003, 2005; van Huik and Bock 2006; Alrøe and Noe 2008 and Zanoli *et al.* 2004). The second kind of empirical research aims to establish the core values of organic agriculture, underlying the organic identity and several examples of this are reviewed in the next section (see 2.2).

The report by Meeusen *et al.* (2003) forms the basis for later more detailed research on the organic food chain (Meeusen *et al* 2005; Wijnands *et al.* 2005). It contains an extensive theoretical analysis of the literature on values, value-segmentation and the relation between values and behaviour, mostly based on market-research about consumer values. On the basis of this analysis the authors come to a value-segmentation based on two sets of values: individualist versus collectivist, and materialist versus non-materialist values. This distinction is often made in current research on consumer attitudes and consumer behaviour. Material values are related to the product (taste, nutritional value, health) and the price. Immaterial (or altruistic) values relate to the environment, animal welfare and social justice.

Although values do not fully determine behaviour (the social context, the group to which one belongs and the situation (stimulus) also play a role), the authors have shown that the bipartition between material and individualist values on the one hand, and immaterial and collectivist values on the other hand can account for differences in behaviour of the organic actors with respect to: expectations about organic food (what is 'organic'), reasons for buying organic food, and expectations with respect to other actors (communication and co-operation in the sector).

The combination of individualistic and material values centres around financial motives, whereas in the combination collectivist-immaterial values the emphasis is on non-financial motives. The latter actors usually choose mainly organic options (no production or retailing of non-organic products), have more informal relations among each other (based on trust, not on formal contracts), and there is a greater willingness to give and ask for information about the product and method of production. Individual interests are less important than collective values (public goods), such as the environment, animal welfare or social justice (fair trade).

If these value segments are not combined but it is differentiated between individualist, collectivist, immaterial and material values, four 'world views', or organic 'chains' based on these views can be distinguished:

- The calculating chain: individualist and material-oriented
- The unique chain: individualist and non-materially-oriented
- The traditional chain: collectivist and material-oriented
- The *responsible chain*: collectivist and non-materially-oriented.

Of these the *calculating* and *responsible* chain are almost opposed to each other, whereas the *unique* and *traditional* chain are somewhere in between. The authors emphasize that this is a theoretical distinction between four different world views which do not necessarily exist in this combination in reality. Important is that they are distinctive with respect to each other.

From the empirical research point of view each world view is valuable, there is no hierarchy saying that one is better than the other and they do not exclude each other. All together, the world views must encompass the whole field of attitudes and values represented in on organic agriculture.



The reason for the research by Meeusen *et al.* (2005) is a Dutch public policy that wants to increase the total share of the market of organic products to 10% organic in 2010. The authors do research on the organic sector to identify existing bottlenecks in reaching these aims. They believe that insight in the values, motives and expectations of the actors can help in the establishment of a stable organic sector. In relation to policy the authors recommend to give room to various interpretations of organic, emphasising an underlying common basis, which is shared by all. Although the responsible chain does not quantitatively represent the largest segment of the market, it is the segment which has the best perspectives for the future (emphasis on quality instead of quantity).

Zanoli *et al.* (2004) also try to understand the values of organic consumers aiming to give guidance on how the marketing of organic products can be improved. Based on 60 focus groups and 750 laddering interviews in seven European countries the report summarises important values of European consumers of organic food as follows but does not aim to establish value clusters:

- Own Health, the food contain little or no pesticides and other chemicals (Related to well being, family health, quality of life)
- Food as enjoyment (Tastes good and/or different, Fresh products
- Environmental concerns (Respect for nature, sustainability, responsibility)
- Concern for animal welfare (applied only to the purchase of animal products and is not present in all countries)
- Locally produced (associated with farmed naturally, from small companies)
- Trustworthy

However, even if the value clusters or chains can be differentiated in research, values of more than one value chain or cluster are likely to be present in each person. No person has a coherent set of values, and thus is forced to prioritize between perhaps even equally liked but potentially conflicting values. In the shop, faced with a choice of products, consumers have to go thorough a very quick balancing process of pros and cons relating to different personal values. A person who has a clear life aim or a well developed skill to conceptualise what values are at stake in a certain situation, will be better suited to make well founded balanced decision than someone who combines different value systems or is not used to reflect on these issues. The often referred to gap between attitudes and behaviour may well be reflection of conflicting but not necessarily conscious values and the need to balance them when purchasing a particular product. In addition, it is well known in market research that when it comes to actual choosing between alternatives, other factors such as the stimulus (including product appearance and price) and social factors are involved.

Similar research about values and motives has also been carried out in relation to organic producers. For example, in a Dutch research project about attitudes of organic pig farmers towards animal welfare issues van Huik & Bock (2006) found that different attitudes exist and can be related to different farmer types in organic agriculture. These farmer types differ as to their original motivation to adopt organic farming. The '*ideological*' farmer type has become an organic farmer out of ideological motives; the '*pragmatic*' farmer type is mainly motivated by the continuation of the farm and financial arguments. The latter may have been attracted to convert to organic farming because of financial incentives of the government. The authors think that their research supports the view that such financial incentives support the conventionalisation of organic farming, and thus may lead to a reduction of animal welfare standards in the sector as a whole (blurring ethics),

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through unfair competition. The *pragmatic* farmers are ready to give up organic practices when more financial gain can be accomplished with other ways of pig farming. Also, their views on animal welfare differ. The ideological farmer type focuses on the animal itself and its ability to perform natural behaviour. The attitudes of the pragmatic farmer type are diluted by the focus on performance levels (production efficiency). Similarly, Darnhofer *et al.* (2005) identified clusters of *'pragmatic'* and *'committed'* organic farmers, in seeking to understand decision-making in relation to organic conversion in Austria.

On the basis of their extensive knowledge of the organic food and farming sector, Alrøe & Noe (2008) distinguish three perspectives on organic farming within the sector:

- organic as a *protest movement* against modern industrialised agriculture using artificial fertilisers, pesticides, food additives or genetically modified organisms;
- organic as a *logo-poietic* system or ideology, in which meaning ('logo') is a self-organising principle ('autopoiesis'). Organic agriculture is seen as a system that creates itself and holds itself together by a common meaning, a shared world view, core principles, etc.; and
- organic as a *market niche*: as part of the global market system based on specific regulations and/or organic standards, which define the market niche.

Each perspective entails a certain understanding of organic agriculture, featuring certain concepts and values, and a particular logic or rationality. No perspective is the 'right' one, or better, or fuller, or more balanced than any other. There is a plurality of perspectives, each one offering some insight in organic agriculture, and they cannot be merged into one perspective.

These examples lead to some general conclusions about the empirical approach to organic values:

- The empirical approach is directed at the discovery of differences (value pluralism), in order to be able to distinguish certain groups. Meeusen et al. (2003) concludes that there are various interpretations of organic 'with an underlying common basis', shared by all. However, the report does not state explicitly what this value basis is. The authors only conclude that currently the emphasis of the organic sector is on the social and altruistic dimensions (value related to public and not personal goods such as animal welfare, environmental quality, etc.).
- In contrast, Alrøe & Noe (2008) do not mention an underlying common basis valid for all stakeholders. Also van Huik & Bock (2006) conclude that organic farmers cannot be perceived as a homogenous group, sharing the same beliefs and ethical standards, but they do refer to the existence of a 'general organic philosophy'.
- The empirical research does not aim to discover a hierarchy in the values found. All groups have a similar status, should be treated equally and no one perspective is the right one (Alrøe & Noe 2008). All the authors mentioned give indications what may happen to the organic sector if a certain perspective becomes dominant. For example van Huik & Bock conclude that a dominance of the pragmatic type of farmer may lead to further conventionalisation of organic agriculture and lower standards of animal welfare, but avoid stating that this is bad or should be changed. They refer to 'blurring ethics' in organic agriculture, but more as a descriptive phenomenon rather than in a normative sense. However, the chosen terminology is often value laden and provide some insight into the value perspectives of the authors.
- The empirical approach therefore provides no firm guidance as to how certain developments of



organic agriculture should be judged, for example whether intensification or input dependency of organic agriculture is good or bad. The answer just depends on the particular perspective.

• However, in all examples one group of people is distinguished that are 'motivated by the organic values'. Meeusen *et al.* (2003) call this group the '*responsible chain*': stakeholders who are intensely involved in the organic philosophy and the organic intentions. Van Huik & Bock (2006) speak about the '*ideological*' farmer type and Alrøe & Noe (2008) about the '*logopoietic*' perspective as one perspective among others. This illustrates the importance of distinguishing between the empirical and the normative domain of values.

This question of the organic identity, or the core values or principles of organic agriculture belongs clearly to the normative domain. It does not ask how organic is perceived by stakeholders, or what their motives are, but how organic should be ideally, as a guide towards the future. From the motivation why certain stakeholders choose 'organic' it is not possible to draw any conclusions about the organic identity itself. When Meeusen *et al.* (2003) speak about stakeholders who are intensely involved in the organic philosophy, this presupposes already that there exists something like an organic philosophy, whether people are motivated by it or not. Similarly, van Huik & Bock mention a more 'general organic philosophy', apart from the motivation to become an organic farmer. This leads to the following question which is important in the context of this report: What is this organic philosophy that formulates and argues for a consistent set of organic core values in a normative sense? This question is addressed in the following section.

Choosing a normative approach does not imply that one cannot do any empirical research. However, when doing empirical research in order to get closer to the organic identity, it is important to ask questions that directly focus on the ethical values or principles which are considered to be typical for organic agriculture. Usually the findings of such empirical research need some kind of <u>normative reconstruction</u> which goes beyond the results of empirical research. In the next section, several examples of studies are given in which the normative value basis of organic agriculture is reconstructed. The outcome is a core value basis of organic agriculture that will later be used for the evaluation of some cases.

2.1.2. Definitions of the word 'value' in empirical research and normative ethics

Empirical value research and normative ethical theory refer to slightly different definitions of the word 'value'. In empirical research the word 'value' is usually taken as a very broad concept, encompassing anything which is of value for people (stakeholders) in organic agriculture, as a motive or goal. The value concept is in a broad way related to other concepts such as: ideals, goals, norms, intentions, motives, virtues, needs, attitudes, interests, etc. An example is the definition of 'value' used by Guthman 2004, Hall and Mogyorody 2001):

A value is a basic conviction that:

- does not easily change, but change is not impossible
- is based on knowledge about how to behave
- is based on emotions with whom one can approve or disapprove things
- leads to certain behaviour.



A value also indicates that a certain way of behaving (directed at others or at oneself; moral and competence values respectively) or final, desired state (of society or oneself: end values) is to be preferred above another behaviour or final state.

In the text a difference is made between moral and competence values, where moral values are directed to others (animal and human wellbeing, quality of the environment, social justice, etc.) but not between the empirical and the normative domain of value research.

In the ethical literature the issue of (moral) values is addressed in different ways. Values function and are defined in certain ethical theories. The difference between the function of values in a utilitarian theory and the role of a range of values in deontological theory is relevant in this context.

In short, the utilitarian view argues that there is only one value that is relevant in itself. Although given different dimensions, this value is in some ways related to utility in terms of happiness, as it was in its earliest formulation. Some later utilitarians argue that interests or preferences are the better focus. Each action promoting more of such a state is morally better than any other action. Utilitarian thinking is very common in our society in the form of an analysis of costs (risks) and benefits of certain activities. The action causing least loss is considered the ethically justifiable one, which however is a rather narrow perspective of ethical consideration.

This can be contrasted with deontological perspectives, which on the other hand, argue that the concept of values is a reasonable and important one also for other states and issues. The idea of human worth or dignity implying the concept of human rights is rooted in these perspectives. Also honesty, solidarity and social justice are values often based in a deontological theory of ethics. In such a model, the overarching aim is not to produce as much happiness/preference satisfaction as possible, but rather to assure the respect for these values by following certain principles based in them.

In normative ethics values can have a double role. They can both function as a source of inspiration, as a guide to the future, and as a normative (deontological) principle. In the latter case the principle may be used to forbid certain activities. An example in organic agriculture would be the rejection of genetic engineering, not only because of risks but because it is in conflict with the basic organic values. The deontological approach is often closely related with certain virtues, referring to fundamental attitudes towards nature, towards animals or towards other people. An example would be the virtue of fundamental respect to other living beings and nature. This use of the term 'principle' in the context of ethical literature is rather different to the meaning of principles in the regulatory context. To prevent misunderstanding between the two different meanings in this report principles used in an ethical context are referred to as values instead of referring to ethical principles. In the literature, however, both terms are used with slightly different connotations.

Deontological ethics is sometimes blamed for being 'absolutistic', not able to connect to the situation or context. This criticism may apply to the case where values function as normative principles. It is not the case when values serve as an inspirational guide to the future. And further, many ethicists would agree that in practice a deontological and a utilitarian approach complement each other. Formulating normative ethical principles does not necessarily mean that they should be followed in all situations, rather they can be perceived as aims, visions or setting limits. Exceptions are possible and these may be argued for with utilitarian arguments. It can also happen that in certain situations ethical values conflict with each other (for example the respect for animal welfare and care for the environment in the case of the grazing of cows on pastures under certain conditions). In that case one may come to the conclusion that in a particular situation one principle



should have priority above another. The utilitarian balancing of pros and cons is one way to achieve this, another is to investigate different interpretations of a value.

2.2 Ethical values and principles of Organic Agriculture

2.2.1 Introduction

This section discusses further the role and meaning of ethical values in the context of organic agriculture. The word *ethical* indicates that values are used in a normative sense (in contrast to empirical), as guiding to future developments or as setting limits regarding certain practices or technologies, for example genetic engineering. In some of the documents quoted, no distinction is made between values and principles, which are both to be understood in an ethical perspective. In order to keep the distinction clear, in the text 'ethical' has been added where the authors make reference to an ethical principles in the ethical context. It is nevertheless very important to be aware that the word 'principle' has a very different meaning in the judicial context of regulations (see chapter 4).

The broad range of the underlying value basis of organic agriculture is reflected in its various definitions, illustrated with two examples from a private organisation (Nordic Platform), and from a public regulator (USDA) of organic farming. The definition of the Nordic Platform of Ecological Associations clearly involves a reference to philosophical/ethical concepts, whereas the USDA definition focuses mainly on the use of practices. The difference between these two definitions may be indicative of the sector's own understanding of what are core values are and the perspective of regulators.

Definition of organic agriculture by Nordic Platform of Ecological Associations

Organic farming describes a self-sustaining and persistent agro-ecosystem in good balance. As far as possible the system is based on local and renewable resources. It builds on a holistic view that incorporates the ecological, economical and social aspects of agricultural production in both the local and the global perspectives. In organic farming Nature is considered as a whole with its own innate value and Man has a moral obligation to farm in such a way that cultivated landscape constitutes a positive aspect of nature" (Source: DARCOF 2000)

USDA definition of organic farming

Organic food is produced by farmers who emphasise the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations. Organic meat, poultry, eggs and dairy products come from animals that are given no antibiotics or growth hormones. Organic food is produced without using most conventional pesticides; fertilisers made with synthetic ingredients or sewage sludge, bioengineering; or ionizing radiation. Before a product can be labelled as organic, a Government-approved certifier inspects the farm where the food is grown to make sure that the farmer is following all the rules necessary to meet USDA national standards (Source: Lockie et al. 2006).



2.2.2 Summary of ethical values and principles of organic agriculture in the literature

The organic movement has a variety of roots (Schaumann *et al.* 2002; Vogt 2000). These include bio-dynamic agriculture following the inspiration of Rudolf Steiner, organic-biological as developed by Hans Müller and Hans Peter Rusch, the organic school of Sir Albert Howard, Lady Eve Balfour and J.I. Rodale (USA), the contribution of Schuhpan and Voisin in relation to food quality and the use of mineral fertilisers, the book 'Silent spring' of Rachel Carson, raising the awareness of the long term nature of some pesticide residues, and Schumacher's writings on 'Small is beautiful'. Other sources that have influenced the thinking of actors in the organic movement are the back to the land and environmental movement. These roots were not fully reconciled to start with (Woodward 2006), but since 2000, there have been a number of publications trying to examine and define the main ethical values of organic agriculture. In the following we have summarised a selection which demonstrates the range of ethical values that are nowadays associated with organic farming.

According to Niggli (2000) the pioneers of organic farming analysed and interpreted the main problems of mainstream agriculture in different ways but in doing so were led to more or less the same ethical values of organic farming:

- Respecting and enhancing production processes in closed cycles,
- Stimulating and enhancing self-regulatory processes through system or habitat diversity
- Using strictly naturally derived compounds, renewable resources and physical methods for direct interventions and control (only few and listed exceptions),
- Considering the wider social, ethical and ecological impacts of farming.

Vogt (2000) summarises the main values of the founders of organic agriculture in the German speaking world as follows:

• Biological understanding of soil fertility

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- Intensification and maintenance of the agro-ecosystem with 'biological' tools (with the help of living organisms) and 'ecological' tools (agricultural management of the ecosystem)
- Production of high quality food for a healthy diet
- Visions of alternative living and organising of society

DARCOF (2000) published three main ethical principles of Organic Farming. Assumptions underlying these principles are that man is an integral part of Nature's cycle (functional integrity interpretation of sustainability) and that we do not know the full consequences of our actions on Nature. The principles are:

- *The Cyclical Principle:* collaboration with nature should be promoted through the establishment and build-up of a cyclical principle that ensures versatility, diversity and harmony, and the recycling and use of renewable resources
- The *Precautionary Principle*: as to the use of (risky) technologies it is better to prevent damage



than on our ability to cure the damage

• The *Nearness Principle*: to improve co-operation in food production, by using experience-based knowledge and local interests concerning the development of cultural and social values.

Lund and Röcklinsberg (Lund 2001) published core values of organic agriculture in relation to the organic concept of animal welfare:

- Holistic view (reflected in the definition of the Nordic Platform, see 2.2.1); holistic systems perspective as an alternative perception of reality; emergent properties at higher levels of organisation.
- Sustainability primarily at an agro-ecosystem but also on an animal-environment interaction level;
- Respect for nature: natural living approach to animal welfare; integrity, and dignity.

The Louis Bolk Institute distinguished three different approaches referring to the organic philosophy in a publication about the value 'Naturalness' (Verhoog *et al.* 2003):

- The no-chemical approach: organic agriculture is based on the principles of living (organic) nature. Principle of Life. Nature (natural) is what grows by itself. Autonomy of life. Principle of health.
- The agro-ecological approach: man is part of nature and in agriculture man must take into account the self-organizing capacity of nature in a holistic way (ecosystem approach, cyclical thinking, harmony, balance, etc). Learning from the wisdom of nature. Here 'natural' refers to the self-organisation of the system.
- The integrity approach: All other living entities are seen as partners in the whole which we need to morally respect (intrinsic value, inherent worth). This is the third aspect of 'naturalness', referring to the fact that each living system (from plant, to animals to ecosystem) has a characteristic 'nature' of its own. Respect for the integrity of natural entities is related to their wholeness and relative autonomy.

In this research project 'naturalness' was seen as an important organic value to start with, but it was considered a contested value, because it allows a range of different interpretations and has a dubious philosophical status. The authors reconstructed the concept by looking at the literature, by interviewing stakeholders (including consumers), and by synthesizing the results in the way described above. Whether the distinctions were meaningful and practically applicable or not was finally decided by the stakeholders themselves in a workshop.

Alrøe *et al.* (2006) elaborated specifically on the value of ecological justice and its relevance to organic farming. The value of justice usually only refers to human beings (fair trade for instance). Ecological justice enlarges the idea of justice by including other living organisms besides man. It is about fairness to other living organisms with regard to the environment (use of fossil energy, climate change, pollution and destruction of local environments, use of land and resources). There clear differences between this paper and the empirically based paper by Alroe and Noe (2008) on three perspectives in the organic sector (see 2.1.1). 'Ecological' in the context of justice is introduced as a normative concept against the negative side-effects of current trends such as modernisation and conventionalisation (including intensification) of the organic sector. The explicit goal of introducing this concept is to avoid the negative effects of free global trade. Ecological

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justice is described in this paper a key element of the organic concept of sustainability, dealing with the justice of the relations between humans and the rest of the natural world and between present and future generations.

Padel (2005) used focus groups in six European countries to identify the shared value base among organic producers. The range of values associated with the word 'organic' were collected, it was then established which values were the most important to the participants, and which they believed to be the basic for organic agriculture. The most important values were summarised as: food quality, environmental protection, limiting resource use, health, independence and sustainability. The report concluded that there appears to be much common ground with the values presented in the four ethical Principles of IFOAM, but that some values that were important to the stakeholders appear not to be covered in detail:

- environmental and bio-diversity conservation
- animal welfare and animal health
- local / regional production
- whole systems
- professionalism and
- careful processing.

Also Fomsgaard (2006) used empirical methods to identify the core value base of the organic movement. They carried out a survey of 21 key individuals of the organic movement that attended the 2002 IFOAM congress. The result to the question 'What are the most important three [ethical] principles that differentiate organic farming from conventional?' were grouped into the three areas of farming method, key characteristics focussing on humans and non- humans (see table 2.1)

Table 2-1: Most important three ethical principles of 21 key individuals of the organic movement.

Farming method	Social &Human-centred focus	Non-human centred focus
Ecology/Working with Nature	Self-dependency of farmers/ empowerment of people	Animal welfare
Focus on soil	Healthy food/ food quality	Sustainability
Closed system/Holistic approach	Social justice/fair trade	
Bio diversity.	Conservation of rural environment	
No use of chemicals	Sustainability	
Use of renewable energy and		
recycling		
Sustainability		
Nature conservation		

Source: Formsgaard (2006)

2.2.3 The four ethical principles of IFOAM

IFOAM, the International Federation of Organic Agricultural Movements attempts to unite and represent the interests of the organic movements across the world. The organisation formulated the first seven Principles of Organic Agriculture in 1980 and the key concepts encompassed in these 7 founding ethical principles were important to the founder members. Throughout the 80s organic farming increased and many organisations joined IFOAM, some according to Woodward (2006) without a full understanding of the founding ideas. The 'principles' became 'principle aims' and were amended several times, resulting in a list of 17 principle aims that were published with the



basic standards in 2002. Woodward and Vogtmann (2004) illustrate how particular key principles of organic agriculture changed between 1980 and 2002. For example the first principle of 1980 "*to work as much as possible within a closed system and draw upon local resources*" changed in 1989 to referring only to organic matter and nutrients. This reformulation left out the use of seeds, plants, breeding stock feed materials and the interaction with the local community.

IFOAM initiated a process of reformulating the Principles of Organic Agriculture in 2004, resulting in approval of four ethical principles of organic agriculture by the general Assembly of IFOAM in Australia in 2005. The process of consultation itself is also of interest in developing a procedure for balancing values and integrating them in standards and regulations (see Section 4.3.2).

In the preamble to the four principles of organic agriculture they are described as the roots from which organic agriculture should grow and develop. They are meant to express the contribution that organic agriculture can make to the world, as well as a vision to improve all agriculture in a global context, clearly identifying them as ethical principles. The preamble states:

"Agriculture is one of humankind's most basic activities because all people need to nourish themselves daily. History, culture and community values are embedded in agriculture. The Principles apply to agriculture in the broadest sense, including the way people tend soils, water, plants and animals in order to produce, prepare and distribute food and other goods. They concern the way people interact with living landscapes, relate to one another and shape the legacy of future generations."

According to IFOAM there are four ethical principles on which organic agriculture is based:

Each principle is followed by an explanation of the principle. The full text with explanation in the version approved by IFOAM in September 2005 is included in the Appendix.

2.2.4 Comparing the IFOAM principles with the ethical values in literature

It is the intention of IFOAM that these four principles should be used as guiding principles in a normative sense, i.e. as 'ethical' principles'. It is therefore of importance to see whether these Principles are broad enough reflecting the ethical value basis of organic agriculture that is mentioned in the literature (see Table 2-2). To facilitate this comparison the values covered by each of the four IFOAM Principles are spelled out as taken from the definitions and the explanations added to the statement of the principles. This is somewhat difficult because IFOAM clearly states that the four principles should be used together and there is considerable overlap between the principles in some values areas (see Figure 2-1). The overlap between the principles is further illustrated by a number of important integrative values that are present in several or all of the four principles which are discussed below. However, the systematic separation of the principles into their value elements facilitates a comparison with values discussed in the in the literature. In the following section the following abbreviations have been used: **A** for Alroe *et al.* (2006) on ecological justice¹²; **D** for DARCOF (2000), **LR** for Lund & Röcklinsberg (Lund 2001), **L** for Louis Bolk Institute (Verhoog *et al.* 2003), **V** for Vogt (2000), **N** for Niggli (2000), **F** for Formsgaard (2006), **P** for Padel (2005).

¹² Hugo Alroe was a member of the IFOAM task force and the paper by Alroe et al. (2006) was written during the revision process of the IFOAM principles.



The Principle of Health states that organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible. It includes the following values:

- System health or interconnectedness of all life (mutuality) and its health;
- Including soil health, animal health and plant health;
- Integrity;
- Resilience in the sense of self-regulation, immunity and regeneration;
- Food quality the production of nutritious food with health giving properties; and
- Non-polluting.

P also connects health to <u>food quality</u>, and to a wide access to healthy food which has a social dimension as well; **L** mentions the 'Principle of Life' with health, autonomy and self-organisation as values. **V** refers to production of high quality food for a healthy diet. **F** mention healthy food / food quality. The value of resilience introduces broader definition of health that is not mentioned explicitly by the other authors, but **N** refers to stimulating and enhancing self-regulatory processes.

The Principle of Ecology states that organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them. It covers these values:

- Ecological systems, working within natural systems;
- Closing cycles in the sense of self-sufficiency in terms of resource use, nourishment through the ecology of the local system;
- Site specific in the sense of adaptiveness to the specific locality and production environment;
- Reduce, reuse and recycle inputs and use efficient management of materials and energy;
- Self-regulation: attaining balance through systems management;
- Protection of bio- diversity (agricultural and genetic diversity, habitats);
- Environmental protection.

D: man is an integral part of nature's cycles and should collaborate with nature. The Cyclical Principle should ensure versatility, diversity, harmony and the re-cycling and use of renewable resources. The value of nearness is related to localness, and includes experience-based knowledge, but also transparency and participation (see Principle of Care). Sustainability as 'functional integrity' (including man).

N refers to using naturally derived compounds, but **L** emphasizes naturalness as an important value which cuts through several of the IFOAM Principles. At the ecological level it covers: self-organisation, cyclical thinking, harmony, balance. **LR** focus on the value of holism (holistic systems) and sustainability at the ecological level. The holistic approach is also mentioned by **P**. The value of localness comes back as regional production, professionalism; sustainability is mainly interpreted as limiting the use of resources and the protection of (bio)diversity.

V identified the agro-ecosystem management with biological tools as of the core values of the German speaking founders of organic farming and **N** referred to respecting production in closed cycles; **F**: working with nature, focus on soil, closed system / holistic approach, bio diversity, no use of chemicals, use of renewable energy and recycling, nature conservation,



	Source	Niggli	Vogt	DARCOF	Lund	LBI	Alroe	Forms	Padel
	Year	2000	2000	2000	2001	2002	2006	2006	2005
HEALTH (well-being)									
System health			\checkmark			\checkmark		\checkmark	\checkmark
Soil health			\checkmark			\checkmark	\checkmark		\checkmark
Animal health						\checkmark		\checkmark	\checkmark
Plant health		\checkmark				\checkmark			
Integrity					\checkmark	\checkmark			
Resilience									
Food quality			\checkmark						\checkmark
Non-polluting			\checkmark			\checkmark		\checkmark	
ECOLOGY									
Ecological systems		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Closing cycles		\checkmark	\checkmark	\checkmark	\checkmark				
Site specific		\checkmark		\checkmark	\checkmark				\checkmark
Reduced inputs		\checkmark				\checkmark			\checkmark
Self-regulation		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	
Bio- diversity		\checkmark						\checkmark	\checkmark
Environmental protection							\checkmark		\checkmark
FAIRNESS									
Fairness			\checkmark				\checkmark	\checkmark	
Equity			\checkmark	\checkmark			\checkmark		
Respect		\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	
Justice		\checkmark	\checkmark				\checkmark	\checkmark	
Food sovereignty									
Animal welfare					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Stewardship					\checkmark	\checkmark			
Transparency				\checkmark					
CARE									
Precaution/prevention				\checkmark			\checkmark		✓
Exclude GMO						\checkmark			
Responsibility				\checkmark		\checkmark			
Future generations					\checkmark		\checkmark	\checkmark	✓
Tacid knowledge									
Main integrative values									
Sustainability				\checkmark	\checkmark			✓	\checkmark
Naturalness				\checkmark	\checkmark	\checkmark			\checkmark
System thinking			\checkmark	\checkmark	\checkmark	\checkmark		✓	✓

Table 2-2: Comparison of values in IFOAM principles with literature

The **Principle of Fairness** states that organic agriculture should be built on relationships that ensure fairness with regard to the common environment and life opportunities. It covers the values:

- Equity of live opportunities and quality of life;
- Respect for others (including other organisms;
- Justice (Social sustainability);
- Food sovereignty and alleviating poverty;



- Animal welfare (respect for physiological, natural behaviour and well being);
- Stewardship (Future generations);
- Transparency (accounting for social and environmental costs).

Not explicitly mentioned by **D**. **A** clearly refers to both the <u>social</u> and <u>ecological</u> aspects of the Principle of Fairness. **L** mentions respect for the intrinsic value and / or integrity of living entities. **LR** also refers to respect for nature and the integrity / dignity of animals. **P** speaks about <u>fairness</u> in the food chain, farmers and consumers want a "fair" price for organic food. Environmental protection and bio-diversity conservation can be seen as values related to stewardship. **V** referred to visions of alternative living and organisation of society among the core founders of organic farming. **N: considering the wider social, ecological and ethical impact; F**: social justice, fair trade, animal welfare. The values of food sovereignty are not explicitly mentioned by other authors and likely to be related to the intended global relevance of these principles. The value of transparency was mentioned only by **D** and is well established through standards.

The Principle of Care states that 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. It covers the values:

- Precaution/prevention;
- Exclude GMO;
- Responsibility for current and for
- Future generations;
- Tacid knowledge.

The precautionary principle is one of the basic ethical principles mentioned by **D**. The nearness principle refers to the values transparency and participation. **P** mentions both careful processing (responsibility) and local production, in which there usually is more transparency and participation than in global production. **V**. identified a preference for ecological/biological tools to be used rather than technological ones among the founders. **F**: conservation of rural environment, self-dependency of farmers. Like food sovereignty (Fairness) and tacit knowledge (or practical and indigenous) are likely to be related to the intended global relevance of the IFOAM principles, the exclusion of GM is well established in various organic standards but receives less coverage as a principle in the literature.

There is considerable overlap between the four principles, for example in relation to soils, systems self reliance and regulation between the Principles of Health and Ecology and in relation to care for animals and the food quality for people between the Principles of Health and Fairness (see Figure 2-1). Some organic values that are often mentioned in literature and opinion polls occupy a special position in the sense that they are connecting all or most of the four IFOAM Principles. In the following three of these integrating values are discussed: sustainability, naturalness and systems thinking. The integrating values illustrate what IFOAM itself demands in the preamble to the principles, namely that the principles are to be used as a whole.


Figure 2-1: Value elements and relationship between the four principles of organic agriculture

The integrative function of sustainability is illustrated in the table by Formsgaard (see Tab 2-1) where the term is included three times: in relation to the farm, humans and to other elements of the system. The concept of sustainable development is usually related to the so-called three elements (environmental, social and economic) which can be expressed as three P's: planet, people and profit. Meeusen *et al.* (2005) discussed these three elements in the organic context and summarised the most important organic criteria for sustainability as seen by different stakeholders as follows¹³:

- Planet: emissions to air, water, soil; energy use and use of materials (including waste material). Also mentioned are biodiversity, transport, sustainable production methods.
- People: animal welfare (health and wellbeing), food safety, work conditions, nature and landscape, fair distribution of income throughout the whole chain, awareness of the environment. Also mentioned are transparency, responsibility, localness, social cohesion, consumer demand.
- Profit: income for actors in the chain, market potential and capacity to adapt (innovativity). Also mentioned are costs and efficiency.

2.2.5 Interconnections and integrative values

A basic idea in using concept of sustainability in the context of organic agriculture is that these three areas should be integrated in a balanced way. In practice this means that sustainability is first of all interpreted as 'functional integrity'. Thompson (1997) distinguishes this concept of sustainability from one that defines sustainability as resource sufficiency. Functional integrity refers to the reproducibility of (elements of) the agro-ecosystem as a whole. Human practices, but also norms and values, are components of the agro-ecosystem. Thus all three P's are integrated in this concept of functional integrity. Key element is the capacity of the agro-ecosystem to regenerate itself. The importance of the planet as the basic element of the organic concept of sustainability has

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¹³ The authors looked at criteria which were relevant for the development of organic agriculture according to NGOs, industry, the government (ministries) and research organisations

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been recognized from the beginning of organic (ecological) agriculture and is reflected in the first and second principle of IFOAM: the Principle of Health and the Principle of Ecology. The Principle of Ecology provides the physical (natural) foundation, needed to sustain the health of the whole. These two principles (Health and Ecology) cannot do without each other. The Principle of Ecology says that organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them. This principle even mentions the word 'sustain'. It further sets out that organic production should be based on ecological processes and recycling. It should fit the cycles and ecological balances in nature. This clearly refers to the element of ecological boundaries within many definitions of sustainability. In the explanation of the principle it is said that: 'Organic management must be adapted to local conditions, ecology, culture and scale. Inputs should be reduced through reusing, recycling and efficient management of materials and energy in order to maintain and improve environmental quality and conserve resources'. Again it is possible to see a very clear link to sustainability. The whole way in which this principle is explained implicitly refers to the innovations in management, science and technologies used, which are needed to reach this goal.

In stating that organic agriculture should sustain and enhance the health of soil, plant, human and planet as one and indivisible the Principles of Health connects human health to the health of the total ecosystem. Thus the human beings are seen as clearly being a part of the whole system and the aim is to sustain the health of the whole (ultimately the planet) and of all participants within this whole, those within the agro-ecosystem in particular. In the explanation the Principle of Health also introduces a qualitative element, which goes beyond mere survival: '*Health is the wholeness and integrity of living systems...the maintenance of physical, mental, social and ecological well-being*'. The health of people, other living beings and the planet as a whole are intimately related, because they co-evolve as a whole. The Principle of Health provides a strong impulse in the organic movement not to pollute the environment.

The third Principle of Fairness is related to both the people (social) and profit or economic aspects of sustainability. Within organic values 'profit' often has a negative connotation and is rarely seen as a goal by itself¹⁴. Much more important seems to be the ideal of a fair income for the farmer (and other stakeholders in the chain) and of a 'fair' price for the consumer, which are elements of the Fairness Principle. A fair income is often seen in the organic movement as a necessary condition or a limiting factor for realizing other organic values (such as animal welfare, a clean environment, biodiversity, etc.). It is combined with the view that there is an unfair competition with conventional farming, because the latter treats social and environmental costs as externalities, not included in the price of the products. This shows that it is difficult to look at the organic profit aspect of sustainability in isolation from the other aspects (people and planet). All three are clearly related to each other, thereby showing that people, planet and profit should be integrated. Introducing the element of profit through the Fairness Principle implies that a fair price (or fair income) should be the outcome of a deliberative process between all stakeholders. There is no objective way of establishing what is 'fair' in a particular situation. These ideas almost by necessity lead to some kind of associative economy¹⁵ which is different from the ideal of a competitive free

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¹⁴ Also in ethical literature, economy and ethics are frequently seen as separate categories. The (global) economy follows its own laws and ethical restraints (with respect to labour, safety, pollution, etc.) usually have to be imposed from the outside. But of cause also economic activities can be subject to ethical thinking.

¹⁵ The term 'associative economy' has a special meaning within biodynamic farming, inspired by the so-called threefold social order, with the values of the French revolution (freedom, equality and brotherhood) related to three sectors of social life respectively (freedom to the cultural sector, equality to the legal and political sector, and brotherhood to the economic sector).



market system.

Fairness gets an extra dimension within organic agriculture, because sustainability is not only applied to human beings (living now or future generations), but also to plant and animal species (biodiversity). Because man is seen as an integrated participant of nature with other living beings as partners, the Principle of Fairness is enlarged to include other living beings. That is why Alrøe *et al.* (2006) introduced the concept of ecological justice, which emphasizes the intimate relationships between both social and ecosystems. As one of the main meanings 'justice' refers to the fair distribution of goods (also environmental qualities) among all the partners. This insight is reflected in the increasing attention for the values of fairness or justice within the ecological movement in recent years.

Fairness can thus be called a very essential ethical principle within organic agriculture, showing the interconnectedness of people, planet and profit. The IFOAM Fairness Principle states organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities. 'Life opportunities' does not only refer to human beings, as becomes evident in the explanatory statement that 'Natural and environmental resources that are used for production and consumption should be managed in a way that is socially and ecologically just and should be held in trust for future generations'. To realize this kind of management we need another principle, the Principle of Care.

The fourth IFOAM Principle of Care states that 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. This is again a clear reference to sustainability here encompassing also the meaning of resource sufficiency. It means that there is nothing wrong with increasing efficiency and productivity, but within the ecological boundaries (Principle of Ecology) and without risking the health and wellbeing of people and planet (Principle of Health). Care follows from respect for all living beings, but also relates to our incomplete understanding of ecosystems (precautionary principle). The explanation added to this principle refers to both the innovative capacities of science and of the farmer's own wisdom, based on experience. The Principle of Care is clearly instrumental to the health and wellbeing of people and the other inhabitants of our planet.

A similar kind of normative reconstruction to the organic concept of sustainability, based on the IFOAM principles can be done with the other integrating values. Naturalness, for example, relates to the Principle of Health by focussing on the use of 'natural' substances, rather than synthetic and chemical substances, or anti-biotics. The value of 'naturalness' in the meaning of self-organisation (of the agro-ecosystem) is reflected both in the principles of Health and Ecology. Finally naturalness refers to respect for the characteristic 'nature' of living entities, including humans. This is implied by the Principles of Care and Fairness (see Verhoog *et al.* 2003).

The third important integrating value is systems thinking, because of its very close relation to several of the IFOAM Principles. The basic idea of seeing nature and the interactions of humans with nature holistically rather than reductionist underlies not only the Health Principle (to heal is to make whole again), but also the Ecology Principle. Basic for the Ecology Principle is to consider nature and also the agro-ecosystem as a living whole with a specific identity (balance, equilibrium, integrity). The literature also speaks about 'ecosystem health' illustrating the emphasis on values of self-sufficiency, recycling, and self-organisation through the use of feedback mechanism in managing the agro-ecosystem. And because of this view of ecosystems and the need to protect its functional integrity, it is necessary to be careful with interventions (such as genetic engineering) which might disturb the harmony of the whole (use of the precautionary principle). Finally, respect



for the integrity of animals and plants directly refers to their being wholes with a specific, characteristic nature. A practical implication of this way of thinking is given in WP3 (Sundrum & Padel 2006) where it is argued that derogations with respect to the dependency on inputs should be related to the farm system's objectives.

The discussion of three integrative values are provided as examples of what is meant in this report by normative reconstruction, i.e. with 'increasing the normativity' of the organic value basis. To use these ethical principles in the context of the regulation some further normative reconstruction involving a larger number of researchers from the field of ethics would be desirable.

2.3 Comparing the value base of organic agriculture with regulatory definitions and the EU regulation

IFOAM has used these four principles as a guide to analyse 10 definitions of organic agriculture used in the context of regulations (Luttikholt 2006). On average the definitions used in the legal context cover only value elements of two of the four principle elements, but IFOAM itself does not provide a clear listing of the principal elements that were used for this analysis. Most definitions that were analysed (9/10) refer to elements of the Ecology Principle and to elements of the Health Principle (8/10) including regulating inputs and avoiding pollution. Only a small number refer to elements of the Fairness Principle (3/10) including animal welfare, economic sustainability and elements of the Care Principle (2/10). Only the FAO/Codex definition refers to elements of all four principles. This illustrates that there appears to be difference between the sectors own understanding of what it core values and principles are and the perspectives of the regulators. Whereas values related to the Principles of Health and Ecology are shared, differences exist in particular in relation to the social values represented mainly in the Principle of Fairness and the precautionary values represented in the Care Principle.

2.3.1 Comparison with Regulation (EEC) 2092/91

Based on the list of value elements in each principle used above a similar comparison can be carried out with the Regulation (EEC) 2092/91. In the absence of a clear definition of organic farming in the regulation, aspects of the definition underlying the existing Regulation (EEC) 2092/91 have been taken from a number of different sections:

Preamble (P3 consolidated version):

6th paragraph: 'whereas a framework of Community rules on production, labelling and inspection will enable organic farming to be protected in so far as it will ensure conditions of fair competition between the producers of products bearing such indications and give the market for organic products a more distinctive profile by ensuring transparency at all stages of production and processing, thereby improving the credibility of such products in the eyes of consumers;'

8th paragraph: 'Whereas, in the interests of the producers and purchasers of products bearing indications referring to organic production methods, the minimum principles which must be complied with in order for products to be presented with such indications should be laid down;'

9th paragraph: 'Whereas organic production method in particular the significant restrictions on the use of fertilisers, pesticides which may have detrimental effect on the environment or result in the presence of residues in agricultural products;'



<u>Article 6</u> which in summary states that for a produce to be labelled as organic the rules in Annex I have to be followed and only input listed in the Annexes can be used, GMO must not be used.

<u>Annex I A</u> includes some reference to the maintenance of soil fertility, to a combination of techniques for pest, disease and weed control and in line with the above definition restricts the use of Annex II (input) materials. The later introduced <u>Annex IIB</u> (EU Regulation 1804/1999) states some general principles of organic livestock production, such as integration with crop production, land-base nature, access to range and protection of the environment and preference for stock from organic origins. The more detailed rules in later sections of Annex II indicate some further underling values, such as to consider the adaptability of breeds to the local conditions in 3.1 and the disease prevention principles for animals under 5.1.

The Regulation (EEC) 2092/91 therefore appears to make reference to the following ethical values of organic farming that were identified above:

- Plant and animal health, Reducing the likelihood of residues all referred to in the IFOAM Principle of Health;
- Balance of ecological systems (between crops and livestock), reduced use and recycling of inputs, agricultural diversity (related to bio-diversity), and local adaptation or site specificity, all referred to in the Principle of Ecology;
- Fairness of competition, transparency of labelling and consumer protection (as referred to in the Principle of Fairness), and
- Excluding GM as referred to in the Principle of Care.

It can be concluded that the Regulation (EEC) 2092/91 mainly builds on value elements related to the IFOAM ethical Principles of Ecology and Health and makes some reference to Fairness and Care in relation to competition and to transparency and excluding GMO.

2.3.2 Comparison with the proposal for a new regulation¹⁶

The ethical value base of organic agriculture can also be contrasted with the Finnish presidency text for a new regulation governing organic agriculture of December 2006 (see Table 2-3). The following discussion follows the structure of the four IFOAM principles, using the value elements that were identified and contrasted with the literature in this report.

The overall impression is that compared to earlier versions a much larger number of the value elements represented in the four ethical principles of organic farming have been considered in the final regulation draft. Well represented are values related to the Principles of Ecology, Health and Care. Also the value of Fairness is represent but in a narrower understanding than referred to in the organic literature in relation to social values. However, despite general reference to social values in the principles, most private organic standards in Europe have also not yet taken up this area as part of their rules and there is a general absence of the codification of social values in organic standards (Lockie *et al.* 2006).

¹⁶ As agreed in principle by the Council of Ministers in December 2006 and adopted with some modifications in June 2007



Aims Farming Processing **Principle elements** Objectives Principles principles principles Art 5 Art 6 &6a Art 1&3 Art 4 (√) √ HEALTH 3c System health 3a (i) 4a(iv) 5m 5a Soil health 3a (i) Animal health 3a (i), 3c 5e.k Plant health 5ee 3a (i), 3c Integrity 5h, j, f, l 6(a), 6a(a) 4b(i) Resilience 5k 3b Food quality √ 5f 6(b), 6a(b) Non-polluting 3c 4c ECOLOGY 5d, f **Ecological systems** √ 4a (ii) 3a (i) √ 5a, c Closing cycles 4a (ii) 4d 5d, f Site specific **Reduced inputs** 3a (iii) 4b 5b, c 6(d) (√) 5a, e, ee Self-regulation 3a 4a **Bio- diversity** 3a (ii) 5i Environmental protection 3c FAIRNESS 1 Equity Respect Justice (economi, social, env) 3c Food sovereignty Animal welfare 3a (iii) 5g Stewardship Transparency 3 6(c), 6a(d) CARE √ 6(d), 6a (d) Precaution/prevention 4a (iv) Exclude GMO 4a (iii) Responsibility Future generations 3a Tacid knowledge Integrative values Sustainability 1, 3a **Naturalness** 4a, 4a (i), 4c 3a 3a Systemic thinking 4a

Table 2-3 Comparison of values in IFOAM principles with Finnish Presidency draft from 14/12 2006

The value elements of the Principle of Health are mentioned mainly in the Objectives (Art 3) of the accepted Finnish Presidency draft, but not in all cases is the value covered in the same way as referred in documents about the normative value base of organic agriculture that were analysed as part of this report. In particular, the EU draft regulation refers to human health only in the sense of avoiding harm where as the organic literature and IFOAM clearly refer to the value of human health also in the sense of an obligation to enhance human health. Some values related to health are reflected in the Art 4 Principles mainly in the form of risk assessment, the use of precaution and prevention. The non-pollution value is clearly reflected in the Art 4c- strictly limiting the use of chemically synthesised inputs to exceptional cases.

Differences also occur in relation to the values of systems integrity and resilience. The EU regulation refers to a value of integrity clearly in relation to establishing the principle of a preference for organic inputs (Art 4b), whereas the organic literature also uses this terms in relation to the functional integrity of a system, its resilience and wholeness and in particular the need to



respect the intrinsic value of all elements of a system. The EU principles applicable to farming (Art 5) mention the specific preference for organic over non organic inputs in relation to animals and feed but not in relation to organic seeds and transplants.

In the draft for the EU regulation the concept of systems health is included as an objective (Art 3) which is reflected in Art 4 (overall principles) through reference to risk assessment and prevention. Immunity related to system resilience is directly mentioned in relation to animal health in the farming specific principles in Art 5.

Most value elements identified in the IFOAM Principle of Ecology are well considered both in the Articles 3 and 4 in the legislation draft. The only exception is self-regulation of the system which is implied in the text in Art 3a and in 4a (based on ecological systems, to develop sustainable agriculture based on system design and management). However, the value of bio-diversity appears not so well represented in the general and especially specific principles where there is no mention of habitat protection.

In wanting to establish the basis for the sustainable development of organic production, while ensuring the effective functioning of the internal market, the main aim of the regulation draft refers to values that are related to the IFOAM Principle of Fairness. This is a narrower understanding of Fairness than suggested by IFOAM. In some parts of the organic movement 'fairness' in the food chain and 'free trade' are seen as contradictions. The Principles of Fairness covers both economic/social and ecological aspects of justice, which are both not covered by the new draft. With the aim to guarantee fair competition through the provision of clear labelling laws the regulation covers the value of transparency. In addition, the value of animal welfare is more strongly represented in the new EU draft than in the IFOAM principles.

Several values of the Principle of Care are clearly referred to in the regulation draft, in particular by referring to the aim of establishing sustainable management of agricultural systems in Art 3a, establishing the principle of risk assessment, precaution, prevention in Art 4 a (iv), and stating the GM prohibition in Art 4a (iii). Not explicitly mentioned in the earlier articles are general responsibility of all operators and the respect for tacit knowledge (traditional and non-scientific) and of care, some elements are included in Article 6. In particular the former would be important in establishing a greater emphasis on self-regulation.

2.4 Summary and conclusions

There has been an ongoing philosophical discussion regarding what values are best suited to underpin the ideals and visions of the organic movement. This material can be utilised to identify the underlying ideals and core values of organic farming as the basis for formulating a regulative framework in this field.

The documents examined refer to a variety of ethical values and use them in a number of different arenas or value spheres. In particular the following spheres can be distinguished:

- the sphere of *practice* or everyday usage for example as illustrated in the results of surveys of Formsgaard (2006) and Padel (2005);
- the *literature* on organic values where in particular the empirical literature aiming to identify values and the ethical/philosophical literature aiming to state ethical values need to be distinguished.



- the *regulative* sphere where governmental and private standards (the private label organisations KRAV in Sweden or Soil Association in UK, Bioland in Germany are included) make reference to perceived values and ideals of organic agriculture in setting their rules.

However, irrespective of the sphere, in most documents organic values are formulated or referred to in a normative way. I.e. the chosen values are suggested as normative principles and described in a prescriptive manner, not only describing what values are important in today's organic agriculture but also what values *should* be considered in future regulation and decision-making on organic agriculture.

The ethical Principles of Organic Agriculture formulated by IFOAM deserve special consideration. IFOAM is a membership organisation of organic movements worldwide and has a more than 20-year tradition of formulating the most central principles for the worldwide organic agriculture movement. In the latest revision process it was concluded that Health, Ecology, Fairness and Care represent the fundamental ethical principles of organic farming. These four principles cover a range of value elements that appear well founded in values identified in empirical studies and in the more recent normative publications, although different sources vary in their emphasis and in the use of terms. The integrative value concepts of 'sustainability', of 'naturalness' and of 'systems thinking' that are frequently referred to in other sources appear reflected in the IFOAM principles even though the terms are not used.

It can therefore be concluded that the IFOAM Principles represent the core value basis of organic agriculture and are a first attempt to state normative (or ethical) principles guiding the organic movement into the future.

However, the movement has not completed the process of implementing these ethical principles into standards and further normative work to consolidate the principles of organic agriculture for the regulative framework is needed. Structures should be created where such discussions (dialogue) about the organic values can take place (see Chapter 4)

Comparing the values expressed in governmental regulations with the value elements of the IFOAM principles it becomes clear that regulatory definitions including the Regulation (EEC) 2092/91 mainly refer to elements included in the Principles of Health and Ecology, whereas Fairness and Care are less well represented. Regulations are formulated by governments' rather than organic organisations. They may therefore not be representative for the focus and interest of the organic stakeholders (producers and processors, consumers or other stakeholders) but and represent a compromise between what is valued and what is feasible in a sector dominated by non-organic stakeholders.

There are, however, arguments for considering also these latter principles in the regulatory sphere. If it is the intention of the regulator to provide a basis for development of organic production (as stated in the agreed text for the new EU regulation) it is important to consider the views of this organic production sector. The comparison of values in the literature with those of IFOAM shows that most stakeholders and researchers share the intentions and ideals behind the Fairness and Care Principles, although sometimes another wording is used.

Several values of the Principle of Care are clearly referred to in the regulation draft, in particular by referring to the aim of establishing sustainable management of agricultural systems in Art 3a, establishing the principle of risk assessment, precaution, prevention in Art 4 a (iv), and stating the GM prohibition in Art 4a (iii). Not explicitly mentioned in the earlier articles are general

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responsibility of all operators and the respect for tacit knowledge (traditional and non-scientific) and of care, some elements are included in Article 6. In particular the former would be important in establishing a greater emphasis on self-regulation.

A further reason for considering all the values related to the Fairness and Care Principles is their relationship to the values in the other two principles, such as bio-diversity and environmental sustainability, localness and holism. The latter are less explicitly mentioned in the four IFOAM principles but were nevertheless found to be important to researchers, producers and consumers. Value elements in Fairness and Care are also likely to be important values for ethical consumers, such as social responsibility and awareness of global interconnectedness. Similarly, the value of care and the precautionary principle when developing or improving techniques complies with sustainability and fair handling of resources. Ideals such as carefulness in processing, professionalism and good animal care are aspects not explicitly covered by IFOAM, but nevertheless in the same line of thought. For example the Principle of Care can be interpreted also in a broader sense: Care of people (= Principle of Fairness), care for the product (related to the Principle of Health and to precaution) and care for the environment (= Principle of Ecology), as was shown in an analysis of the underlying principles of organic food processing (Beck *et al.* 2006).

A final argument for considering all values expressed in the four principles including those in the Principles of Fairness and Care is trust in and respect for the process in which the principles were formulated and chosen. The organic movement has a fundamental trust in IFOAM and its decision-making processes which will be discussed further in Chapter 4. Thus member organisations are willing to adhere to decisions taken in IFOAM general assembly, which then is of high relevance for example for certification issues.

The draft for a new council regulation considers values elements of all four ethical principles of organic farming. Of the elements related to the Principles of Health the value of non-polluting is strongly reflected in the principles. Other health related value elements are mentioned in the Objectives and in the Principles, but the reference is less broad than in the IFOAM principles. Most elements of the Principle of Ecology are well represented in the Articles 3 and 4 of the proposed text, with the exception of the reference to strengthening the balance and self regulation of systems as well as the value bio-diversity that are less strong in the regulation... There is some reference to the value of fairness and to transparency, but like most organic standards the draft propels does not cover all social value elements included in the IFOAM principles of Fairness and of Care.

This core value basis of the IFOAM principles is contrasted with descriptions of existing organic practice in relation to intensification and dependency from non-organic inputs in the next chapter of this report.

The main conclusions from this section are:

- A considerable number of sources that aim to identify the underlying ideals and ethical values or principles of organic farming can be identified.
- These sources refer to core organic values mainly in the three different value spheres of daily practice, empirical and philosophical literature and the regulatory framework. Many sources attempt to state values in normative way, as ethical principles guiding future development.
- The ethical values expressed in four IFOAM Principles of organic agriculture (as described above) correspond well with the ethical literature. They have further legitimacy through the



wide stakeholder consultation process that took place in formulating the Principles. They should be taken as an expression of the shared value basis of organic farming in a normative sense when discussing standards and regulation of organic agriculture.

- The principles contain several values in which actors of the organic movement appear to have important expectations, but which regulations (including EC Reg. 2092/91) and standards (including private organic standards in Europe) are silent. This applies in particular to some of the social values as represented in the Principle of Fairness, to systems values represented in the Principles of Ecology and Health.
- The revised proposal for a new European Regulation for Organic Food from December 2006 refers to value elements of all four of the IFOAM ethical Principles of Health, Ecology, Fairness and Care and to the integrative values of sustainability, naturalness and systems thinking. However, several mainly social value elements of the Principles of Fairness and Care are not covered.
- The process to examine how these ethical principles are translated into rules, what practices organic operators would be permitted to use when these principles apply and what impact their application would have on current organic operators and those that might adopt organic food production in the future has not been completed by the movement.



3 Case studies of contested areas

Why is there a need for revising the regulation? And where are changes most needed? These questions can be illuminated by analysing some of the most contested issues in relation to the regulation and the current situation of organic practices and food networks in Europe. The Project EEC/2092/91 (Organic) Revision has identified three overall areas that contain most of the contested issues: intensification of organic agriculture, dependency from conventional agriculture (mainly in relation to inputs) and the suggestion that these problems are related to and can be overcome by greater 'localness' in organic food production. These areas represent issues of highest concern to the organic sector that core values of organic agriculture are not respected.

The main concern in relation to standards is that organic agriculture is undergoing a process of *intensification* as expressed by growing size of operations, increasing specialisation and higher dependency of inputs. For instance, the production of organic pigs and poultry in the Netherlands is dominated by large-scale, specialised farms which import most of their feed from outside the Netherlands and sell a major part of their manure production from the farm. The first of three case studies investigates whether the claim of growing intensification of organic sector is supported by evidence both from statistical sources and from case descriptions in individual countries.

Despite a history of protest against conventional agriculture and aspirations to establish an alternative, organic agriculture remains in many ways *dependent* on conventional agriculture. The growing number of organic operators and greater availability of organic inputs in Europe has allowed removing or reducing derogations to use non-organic inputs in relation to transplants, seeds and feeds. However, the organic rules permit the use of other inputs, for example non-organic straw, fertiliser and soil conditioners (such as manure), products for plant protection, feed material, ingredients and additives for food processing. Organic farms operate in a non-organic environment with the ensuing risks of pollution, contamination, fraud. The second case study investigates the question whether all dependencies from non-organic agriculture stand in conflict with organic values and how this relates to the first question of intensification. Because of the close relationship between the two issues they are jointly compared with the value base of organic agriculture analysed in Section 2.

The third case study focuses on the value of *localness*, or nearness or proximity in organic food networks. The debate about localness as a value for organic food and farming has many aspects. There is no doubt that globalisation, functional differentiation and specialisation work against local trade networks for food both in organic and in mainstream food systems. Also in the organic sector transport distances are growing and global organic trade is on the rise. The problem of localness, however, is not only distance as such, but also the related consequences for ecology, animals and people, in form of external costs of transport, lack of fairness in trade structures, lack of transparency and participation, or loss of food sovereignty (Alrøe and Kjeldsen 2006). On the other hand, localness does not always entail better food quality, social embeddedness and a fair distribution of workloads and economic risks, and the local scale is not necessarily economically viable (Kjeldsen and Alrøe 2006). The third case study investigates whether a stronger emphasis on localness in organic standards is possible and would counteract problematic developments, such as intensification and dependency on non-organic inputs.

It is therefore necessary to look for suitable material that describes the current situation of organic farming in Europe and trends of development and indicators of value problematic trends. This chapter aims to identify suitable indicators as well as examine existing evidence from statistical



sources and from research in each of the contested areas. Analysing how the conflicts and debates in these three areas relate to values within organic agriculture and in relation to other EU policy objectives and public interests can help support strategic developments of the EU regulations that address the problematic trends in current organic agriculture.

3.1 Intensification of the organic sector

In the ongoing debates about threats from globalisation and the 'conventionalisation' of organic agriculture growing intensification of organic farming is seen as one of the main threats to organic values. There is concern that this intensification is not limited by organic production standards and regulations and that this poses a threat to the integrity and well-being of the living systems involved such as ecosystems, animals, and people.

Key concerns that are expressed in connection with intensification are specialisation and functional differentiation resulting in higher use of inputs and therefore lack of efficiency. Intensification in this context is characterized by higher use of production factors, in particular external inputs and resources (like energy). Other terms discussed in this context are the growing scale of operators, increase in yields and growth rates and industrialisation resulting in uniformity of organic products. The main problem in relation to the debate is to find suitable indicators of intensification and then examine the practices of the sector in relation to those.

In relation to general agriculture the European Environment Agency is concerned that the trend towards a more centralised and intensive agriculture has continued with rising productivity whilst the actual number of producers continuous to fall. Key indicators that are used by the EEA in relation to agriculture are trends in relation to the number of holdings and the agricultural area and the gross value added as a measure of agricultural productivity. The former has declined and the latter has risen. Other trends the Agency is concerned about are the decline in the area of permanent pasture, and a growing concentration of livestock production, in particular a growing number of large-scale pig farms, particularly in Belgium, Denmark, Ireland, the Netherlands, and the United Kingdom. These large-scale pig farms imply importing large amounts of animal feed and producing more animal manure than local farms need, leading to significant pollution problems¹⁷.

There is only limited availability of statistical data on organic farms over time (time data trends) allowing only calculating the most basic indicators (such as the growth of the organic sector and number of holdings). This does not cover trends in relation to land use patterns, farm types or input use of the organic sector across Europe. However, the section presents some snapshots from a range of statistical sources in relation to intensification across several EU countries and descriptions of particular trends from research publications from Denmark and the Netherlands.

3.1.1 Evidence for change from statistical sources on some indicators of intensification

In order to be able to judge whether organic agriculture in Europe is intensifying it is firstly necessary to choose suitable indicators and to explore whether trends for these indicators over time can be calculated. The main limitation arises in relation to the availability of time series data on organic farms. In the following section, indicators similar to those used by the European Environment Agency to judge the intensification of agriculture by the EEA would be number of

¹⁷ http://themes.eea.europa.eu/Sectors_and_activities/agriculture/indicators/intensity/index_html



farms and farm size, land use and productivity, farm specialisation, distribution of livestock producing farms and input use (in particular N-inputs). At the beginning of each section trends in general agriculture in relation to this trend are summarised, followed by available trends and information on organic farms in Europe.

Number of farms and farm size

Box 3-1: Number of farms in general agriculture

The number of holdings in the EU12 fell from more than 10 million in 1975 to 6.96 million in 1997. During the same period agricultural production generally increased, with gross value added increasing by about 18%, from a slightly shrinking area. All this resulted in a significant intensification and concentration of production.

Source EAA.

The fact that farms are becoming larger is also expressed in relation to organic farms. The share of organic producers among the total number of agricultural producers has stayed more or less the same since 2000 at 2% of all producers, whereas land area has increased. This indicates that the size of organic holdings is likely to have increased. The average organic farms size in the EU has increased from 16 ha in 1985 to nearly 40 ha in 2004¹⁸. However, there is considerable variation between countries and particular Italy and the UK stand out. Both have a significant organic area but Italy records the highest number of organic producers while the United Kingdom has the largest average size of organic holdings. AT, DK, FI, SE, DE and LU (as well as Norway) have a higher proportion of organic holdings than average. The area cultivated by organic producers in Italy, Austria and Greece is on average much smaller than in other EU Member States (Rohner-Thielen 2005).

Land use and productivity

Box 3-2: Specialised farms and land use in general agriculture

The proportion of specialised farms (i.e. farms with main income from field crops, permanent crops, grazing livestock or grain eaters) increased from 77 to 81 %, while the proportion with mixed farming fell from 23 to 19 %.

The area of permanent pastures in the EEA region fell by 11 % between 1975 and 1998.

Source EAA.

A key concern related to negative developments within organic agriculture perceived as negative is related to growing specialisation of farms, moving away from the ideal of a mixed farm. It is very difficult to get accurate data on the distribution of farm types of organic agriculture at a European level at any particular time, and even more difficult to get any trend data. There is very limited investment in the collection of organic land use and market statistics in many countries (Rippin et al., 2006). Since 2000, all countries are required to identify organic farms in the census, but the 2000 EU wide census has not been evaluated with respect to organic farm typology.

¹⁸ Calculated on the basis of land area and number of farm data from Lampkin Eurodata 2006. *Padel et al. (2007) Balancing and integrating values in organic regulations (D 2.3)*

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Farm type classification for agriculture is normally based on the distribution of income from different enterprises, calculated on the basis of standard enterprise income values, but land use patterns may also provide some insight into farm orientation. A survey of 550 organic farm incomes across 11 EU member states provides a snap-shot of the structure of organic farms across Europe (see Table 3-1).

		All	West	East	AT	DE	DK	IT	UK	СН	CZ	EE	HU	PL	SI
Number of farms	Ν	550	300	250	50	50	50	50	50	50	50	50	50	50	50
Mixed farm	%	16	12	21	2	18	4	28	20	2	4	30	18	42	10
Arable Farms- all	%	21	21	22	28	22	40	12	14	8	14	14	50	20	10
mainly cereal, oilseeds pulses	%	10	9	10	4	4	32	12	2	0	8	6	26	10	2
mainly root crops &	%	4	3	5	6	6	2	0	4	2	2	0	12	6	4
vegetables															
mixed arable	%	7	8	6	18	12	6	0	8	6	4	8	12	4	4
Grazing livestock- all farms	%	50	53	47	56	56	52	24	52	80	80	46	12	24	72
Mainly dairy	%	19	26	11	26	22	34	8	14	54	4	28	4	16	4
Mainly suckler cows	%	14	10	19	12	28	4	0	8	10	48	6	0	0	40
mainly finishing cattle	%	5	7	2	4	0	10	14	6	6	4	0	0	0	8
mainly sheep and goats	%	5	3	8	2	6	2	2	2	6	2	10	4	6	16
mixed grazing livestock	%	7	7	7	12	0	2	0	22	4	22	2	4	2	4
Intensive livestock- all	%	3	4	1	8	2	4	0	10	2	0	4	2	0	0
farms															
mainly pigs	%	0	1	0	2	0	0	0	2	0	0	0	0	0	0
mainly poultry	%	1	2	0	0	2	4	0	6	2	0	0	0	0	0
mixed	%	1	1	1	6	0	0	0	2	0	0	4	2	0	0
Permanent crop- all farms	%	7	8	5	6	0	0	34	2	6	2	0	14	6	4
mainly vineyards	%	2	2	2	4	0	0	6	0	4	2	0	6	0	0
fruit and citrus	%	2	1	2	0	0	0	4	2	0	0	0	8	2	2
other	%	3	5	1	2	0	0	24	0	2	0	0	0	4	2
Horticulture holdings	%	3	1	4	0	2	0	2	2	2	0	6	4	8	4

Table 3-1: Farm types of the farms surveyed in 11 EU members states

Source: Nieberg et al. (2005)

Asked about where to categorise themselves according to total income derived from various enterprises, only 16 % of the respondents categorised their farms as mixed, i.e. deriving important sources of income from several enterprise categories (Nieberg *et al.* 2005)¹⁹. This proportion was higher in the Central and Eastern EU member states (highest with 42 % in Poland) and lower in the Western member states (4 % lowest in Denmark).

The majority of farms in the survey kept grazing livestock: 63% bovine stock (ranging from 22% in IT to 92% in the UK), 23 % kept sheep and 8% keep goats. The number of producers who classified themselves as deriving their main income from grazing livestock is 50%. This proportion was highest in CH and CZ with 80% and lowest in Hungary with only 12%.

Only 7 % of the surveyed farms kept pigs and 29% kept some poultry, and across all surveyed countries only 3 % of farms classified themselves as deriving their main income from intensive livestock ranging from 0 % in Slovenia and Poland to 10% in the UK.

A total of 24% of the surveyed farms is stockless, i.e. does not keep any organic livestock at all, ranging from 66% of stockless farms in Italy to only 6% in Poland. The stockless category includes farms deriving main income from arable production, permanent crops (fruit, vine, olives) and horticulture.

¹⁹ Question asked: What is the main focus of your farm as defined by the main source of income.



Across Europe 21% classified themselves as mainly arable, this proportion was lowest in Switzerland (8%) and highest in Hungary (50%). The highest number of survey respondents classifying themselves as specialised in fruit and vine production was reported from Italy with 34%, on average this category applied to 7% of all farms. 3% classified themselves as in horticultural holdings, ranging from 0% in several countries to 8% in Poland.

Nieberg *et al.* (2005) expressed their surprise about the small proportion that classified themselves as mixed farms. There are two possible explanations for such a relatively high specialisation. One explanation is mentioned frequently in the context of conventionalisation in the organic sector: organic farms have become more specialised over time because they not fully share organic values. The other possible explanation relates to the general trend towards farm specialisation in the agriculture industry. Farms that have converted more recently are therefore more likely to begin their conversion with a more specialised farm. A further interesting question in this context would be to investigate whether these units starting conversion from a specialist basis would have become more diversified as a result of conversion.

Another indication of intensification could be a decline in land used as permanent pasture which is seen as an important habitat for many species. Leys, pastures and meadows are the main organic crop areas as their share exceeded 50 % in most Member States but this category does not differentiate between permanent pasture and rotational leys and is therefore not a suitable indicator. In terms of the importance of forage crops there is some variation between member states. The share is lower in Portugal and Spain amount (39 % and 31 % respectively) which could be a reflection of the dryer climate. Forage crops are particularly important in Ireland (91 %), the United Kingdom (75 %), Austria (68 %), France (64 %), Belgium (65 %) and Greece (62 %). However, these rather general data on organic land use illustrate some important differences between member states but do not provide any conclusive evidence of the intensity or intensification of organic farming.

Concentration of animal production

Box 3-3: Concentration of livestock in European agriculture

In fact, between 1980 and 1997, the number of farms with livestock dropped by 47%, but number of cattle fell only by 5%. And while the number of dairy cows dropped by 20%, milk production remained stable. The number of pigs, however, rose from 88 million in 1980 to 108 million in 1997. The appearance of large-scale pig farming was particularly marked in Belgium, Denmark, Ireland, the Netherlands, and the United Kingdom, where the average piggery has 550 animals – several times the EU average. Small-scale pig farming (under 25 animals per farm) has almost disappeared.

Source: IRENA

According to a statistical publication by DG Agriculture of the organic sector the certified total organic livestock amounted in 2003 amounted to about 3m LU or 2.3% of the total EU-25 livestock (EC DG Agriculture 2005). In the same year 3.9% of UAA were farmed organically. Organic livestock production is not evenly distributed across the EU. Italy, Sweden and Germany have the largest certified herds with more than 0.40m LU each, followed by the United Kingdom (0.33 mil LU), France (0.31 mil LU), Austria (0.26 mil LU) and Spain (0.22 mil LU). In most of the new member states few organic livestock is kept with the exception of the Czech Republic (75 000 LU)

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and Hungary (60 000 LU). This can be used to calculate the overall stocking rate per ha (see Figure 3-1). Such a broad calculation on national basis is of limited value the high stocking density of farms keeping intensive livestock on small area would be averaged out if stockless arable production also exists.

The highest organic stocking rate of nearly 2 LU/ha occurred in Sweden, followed by the Netherlands, Denmark, Austria, France, Germany and the UK. However, Europe wide organic livestock data have been reported in 2003 for the first time. There are number of potential sources for error which included the conversion of actual stock numbers to average data per year and the conversion to livestock units which could affect the source data for certain countries making the comparison less valid. Whilst this appears to be a suitable indicator the actual values should be treated with great care. Furthermore, a high stocking rate of 1.7 LU can be obtained from grazing livestock systems using farm based forages, whereas a lower stocking rate of 1 LU could be found in a region where intensive livestock farming is combined with intensive vegetable production. A more suitable indicator of the intensity of livestock production could be LU per ha of feed production or even better using direct indicators such as nutrient input level per hectare, if the data could be obtained.



Figure 3-1: Organic livestock Unit per ha organic area in the EU 15 in 2003 (EC DG Agriculture 2005 and Lampkin 2006)

Input use

Intensification in this context is characterized by higher use of production factors, in particular external inputs and resources (like energy). The main problem here is to find suitable direct indicators of input use rather than indirect indicators as presented above. The EAA in the IRENA project used the average expenditure on inputs per hectare and categorises farms into high medium and low input use based on this. It is likely that most organic farms would fall under the low input category. No up-to-date evaluation of data of organic farms could be identified. A comparison of input use in FADN data of organic and comparative conventional farms referred to reduced variable costs on organic farms because of lower use of external inputs. However, this could be offset by higher costs for organic inputs. Monetary data of input use are influenced not only by the quantity



of the inputs used but also by price, the later could also include an element of taxation. This indicates that monetary data of organic farms (e.g. FADN) are problematic as sole indicators of input related intensification, apart from general problems in relation to representatives of the samples of organic farms (Rippin et al. 2006).

In the following sections we have therefore presented some data from case descriptions of input use on mainly arable and pig and poultry farms in the Netherlands and in Denmark, as well as referred to some material from the work package 4 of this project.

3.1.2 Structure of and N balances of organic agriculture in Denmark

In Denmark organic farms are not only specialised but crop and livestock production take place in different parts of the country (see Figure X). Most of the organic animal production is concentrated in Jutland on sandy soils, whereas the islands Fuen and Zeeland have mostly clay soils, not much animal production but mainly crop production.

The impact of organic, compared with conventional, farming practices on N leaching loss was studied for Danish mixed dairy and arable farms using an N balance approach based on representative data (Knudsen et al. 2006). On mixed dairy farms, a simple N balance method was used to estimate N surplus and N leaching loss. On arable farms, such a simple N balance method was shown to be unreliable due to changes in the soil N pool. The study used a Farm assessment simulation model (FASSET) to estimate N surplus, N leaching loss and the changes in the soil N pool. The results found a lower N leaching loss from organic than conventional mixed dairy farms, primarily due to lower N inputs. On organic arable farms, the soil N pool increased over time but the N leaching loss was comparable with conventional arable farms. The soil N pool was increased primarily by organic farming practices and incorporation of straw. The highest increase in the soil N pool was seen on soils with a low initial level of organic matter. The N leaching loss was dependent on soil type, the use of catch crops and the level of soil organic matter, whereas incorporation of straw had a minor effect. N leaching was highest on sandy soils with a high level of soil organic matter and no catch crops. The authors highlight the importance of using representative data if comparisons between organic and conventional farming practices are to be carried out.

3.1.3 Organic pig and poultry production in the Netherlands

Early references have been made to organic farms with high animal densities on small free range areas; for example two pig farms excreting on average 300 kg P_2O_5 per ha and one farm with laying hens excreting an estimated 1500 kg P_2O_5 per ha (Anonymous, 1977). But until 1995, organic poultry and pig production in the Netherlands was relatively small: no specialised pig and poultry farms were recorded until 1996 (Anon. 2006b). The animals were mainly kept in small production units, integrated on mixed farms (with dairy and/or arable production). Meat processing took place in small independent slaughter houses, while eggs were sold either directly to the consumer or via small distribution centres to health food shops in the Netherlands or Germany. From 1995 onwards, general veterinary rules have become tighter, particularly hindering the small-scale production of pigs, mainly as a result of administrative requirements and required investments in hygienic measures. Simultaneously, marketing opportunities grew for organic meat and eggs.

In the case of Dutch organic egg production, export opportunities were a major driving force for the expansion of production: in 2003, approximately 70% of the total number of organic eggs was exported mainly to Germany. In the case of Dutch organic pig production, the government was a



major driving force, aiming at increasing domestic organic pig meat consumption and creating an alternative for large-scale conventional pig production. This resulted in an agreement in 1999 to increase organic pig meat sales by a combined effort of meat processing and retail companies, public organisations and organic pig producers. Simultaneously, a large conventional meat processing company (DUMECO) entered the sector. Due to these new market opportunities, several conventional pig farmers converted to organic farming. In 2003, it appeared that the sales projections for organic pig meat were too optimistic, resulting in reorganisation of the sector in which some producers were bought out (Meeusen *et al* 2005).

During these years of professionalisation, most of the original pig farmers either increased their production size or ceased organic pig production altogether, mainly in reaction to two sets of requirements set by the processing industry. The first concerned the minimum number of pigs produced because the main pork-processors stopped collecting small numbers; the second concerned carcass quality because the payment scheme placed high penalties on low meat and dressing percentages. In poultry production, specialisation and up-scaling are the dominant phenomenon.

Relatively large-scale, specialised farms now dominate production in the Netherlands. The number of specialised organic pig and poultry farms rose from 11 in 1996 to 52 in 2003. The average number of pigs and laying hens per farm, of all organic farms keeping pig and poultry, respectively rose from 160 and 2000 in 1998 to 390 and 4200 in 2003 (Anon. 2006b). Since then, the total number of laying hens has nearly tripled (to 834,000 in March 2006), mainly on farms with more than 3000 hens. Thus, the average number of laying hens per farm rose to 6400, and more than 50% of all laying hens are kept at farms with more than 9000 hens per farm (Anon. 2006a). These farms are mainly owned by recent converters with hardly any land of their own (on average around 7.5 ha per farm). For 2003, it was calculated that these farmers sell a major part of their manure production (which would be equivalent to 540 kg N per ha) on contract to other organic farms (Prins 2005).

This development took place in response to market opportunity took place, because the standards did not contain any requirements in relation to the origin of pig and poultry feed except for a limitation of feed from non-organic sources. This stands in contrast to the standards for organic dairy production, where besides the requirement of organic origin at least 50% of the feed should be home-produced. Consequently, in 2003 most pig and poultry feed was from organic origin (>80%), but only a minor part (<10%) was produced at the pig and poultry farms themselves. Moreover, most of the animal feed concentrates (>70%) originated from abroad, with a growing percentage of concentrate feed coming from distant areas such as Latin America and the Far East. If all animal feed were to be produced within the Netherlands, more than half of the total present area of organic arable production would be required (Prins 2005).

This 'conventionalisation' of intensive livestock production in the Netherlands has negative side effects, such as:

• Environmental problems as a result of inefficient nutrient utilisation by a high concentration of animals kept in free range. Nutrient loads of these yards can be very high, particularly for the parts of the range close to the stable that are intensively used. Aarink *et al.* (2005), for example, estimated that the first 20 meters of the yard belonging to a farm with 3000 organic laying hens could be the equivalent of more than 2800 kg N and 1600 kg P₂O₅ per hectare. Ammonia emission from the yard seemed to be rather limited compared with the emission from the stable (less than 6% of total emission). Rivera-Ferre(2006) concluded that organic pig production in the Netherlands in its current form cannot be considered as land based or sustainable.



- Higher energy consumption for feed production due to transport. Bos (2006) calculated that a pig ration with 100% inland-produced feed requires 25% less energy compared with a current ration with only 15% inland feed.
- Few and highly standardised human-livestock interactions. Although animal health and welfare is a highly multi-factorial issue, high variation does exist in OA (Rymer *et al.* 2006) and situations of poor health and welfare certainly do occur in small farms as well. Farm size is one of the influencing factors. Large animal numbers in one farm limit the possibilities for adequate individual animal care, which is likely to be essential in maintaining a good animal health status (Hemsworth *et al.* 2000). This particularly holds good for organic production, where preventive use of medicines and measures such as (partial) beak trimming to prevent hens from feather picking and cannibalism is not allowed (Source: De Wit and Verhoog 2007).

3.1.4 Intensification of organic arable production in the Netherlands

Until the late 1970's and early 80's, organic arable production in the Netherlands was small and concentrated on a few specialised arable farms, some large mixed farms and many small vegetable farms. Fertilisation levels seemed to be low, although exceptions have been mentioned in horticulture (Anonymous, 1977). In the late 1980's and early 90's, a number of conventional arable farmers, being concerned about environmental issues and global fairness ('critical farmers'), converted to organic arable production. These farmers introduced a higher level of professionalism and technical skills into organic crop production. The products were sold through several small wholesalers, among them one co-operative in Lelystad (Nautilus) supplying mainly specialised organic stores. Growing supply and growing consumer demand combined with export opportunities to Germany and Great Britain strengthened the position of the Nautilus co-operative. In 2002, the cooperative had obtained a market share of more than 50% of sales of fresh produce and 80% of the sales to processors. Expected sales were pooled and co-ordinated to spread the marketing risks of individual crops between members for whom it was possible to engage in forward planning where crop rotations were concerned (Wijnands *et al.* 2005).

A second wave of farmers converted to organic arable production in 1999-2001, triggered by governmental conversion payments and market growth, mainly caused by supermarkets entering the organic market. These farms were better capable of delivering what the market wanted in terms of volume, production per hectare and external quality, but they were no longer willing to engage in the cooperative structure. Organic production grew faster than demand. Overproduction, competition from imports and a weakened bargaining position on the part of the farmers through the collapse of the co-operative structure, all contributed to a reduction in farm-gate prices. Most of the cooperative's former members now either organise the sales of their produce individually or in small regional groups. Still, a major part of the arable products are being exported (65% of the vegetables), while the position of the supermarket chains seems to stabilize at more than 50% of the organic vegetables and potatoes consumed in the Netherlands (Wijnands *et al.* 2005).

To compensate for reduced prices, farmers grew more than 50% of high-value crops such as vegetables and potatoes in rotation (Wijnands *et al.* 2005). Closely related to this and the market specifications, average fertilisation rates increased. Increasing amounts of other permitted fertilizers of conventional origin are also used: for example Vinasse, a by-product of the sugar beet industry which acts as a fast-releasing N source alongside high levels of K.

Even though organic animal production in the Netherlands is relatively large and is selling a major part of their manure (see 3.1.3), in 2003 only 7% of the total N-input of 198 kg N per hectare on



average modern organic arable farms on clay soils originated from organic sources, whereas 150 kg (or 75%) came from non-organic animal manure. If conventional manure is to be banned, manure application rates on organic arable farms will have to diminish by more than 50%. Simultaneously, organic livestock farmers, particularly the dairy farmers, should double the sale of manure (Prins 2005).

The intensive cropping patterns and the high fertilisation rates resulted in high mineral surpluses of approximately 90 kg N (excluding N-fixation), 60 kg P_2O_5 and 175 kg K_2O per hectare on the average modern organic arable farms on clay in 2003 (Prins 2005). These phosphate surpluses are even higher than on comparable integrated conventional farms, although nitrate leaching is often lower (Spruijt-Verkerke *et al.* 2004). Moreover, intensified arable production and high fertilisation is mirrored by the increasing nitrate levels in carrots (see Table 3-2). For a long time, this was an organic product that was hardly fertilised. But presently, nitrate levels are three times higher than in conventional carrots, with a wide range varying from 11 to 864 mg nitrate per kg (Hoogenboom *et al.* 2006).

Table 3-2: Average nitrate concentration in carrots on random farms

Year	NO₃ mg/kg	Number of farms
1996	89	10
1998	117	11
2003	232	20
2004	230	15

Source: Bokhorst and Janmaat (2006)

The potentially negative side effects of this intensification of the arable sector in the Netherlands are related to high input dependency of conventional inputs, high nutrient surpluses that are available for leaching and declining quality of the products. The case illustrates that there appears to be a direct link connection between specialisation and the use of conventional inputs, so both issues will be further analysed and discussed together.

3.2 Dependency of conventional agriculture

Despite aspirations to establish an alternative, organic agriculture remains in many ways dependent on conventional agriculture. Organic farms and food systems are situated in a surrounding, nonorganic world, with its suppliers of inputs and processing and marketing structures. The Regulation (EEC) 2092/91 contains a number of derogations that permit organic producers to use non-organic inputs, such as manure, feed materials, seeds and livestock for breeding. The derogations have been put into place to make farming organically practically possible, particularly in areas where only very few organic farms exist. Dependencies on non-organic inputs are also likely to be greater for farms of greater specialisation or intensification as already illustrated with the example of pig and poultry and arable sector in the Netherlands. Dependencies from the conventional inputs carry the risk of pollution and contamination and therefore loosing the consumer confidence in the integrity of the organic label. Independency, on the other hand, may lead to increased costs of production and where the density of organic farms is low, high transport costs.

The organic food production sector is also dependent on the structures of the conventional food industry in many other ways, such as through the use of the same processing capacities, retail channels. To some extend organic products are also bought by many consumers that buy both from conventional and organic origin, with the exception of a "core" group of organic consumers that account for a small percentage of all consumers but a significant proportion of spending in the



organic sector (OCW &WDA 2004; Torjusen et al. 2004).

In the following sections, the example of using conventional ingredients in feed in the EU and of dependency of the Danish organic sector on using organic straw and manure are described.

3.2.1 Dependency of using conventional feed

Sundrum *et al.* (2005) concluded that from a nutritional point of view there is no need to continue feeding conventional ingredients to organic animals. Many examples of 100% organic diets meeting the nutritional requirements of monogastric animals can be identified. The risks for the occurrence of diseases and welfare problems due to suboptimal nutrient supply are comparably low and primarily restricted to young stock and could be handled by proper management. Organic farmers could use a range of measures to improve the utilisation of and nutritional imbalances in home-grown feedstuffs, such as regular analysis of all home-grown feedstuffs, calculating feed rations according to the requirements in the different growth stages, the use of slow growing strains, increasing the feed intake through reducing the energy content of the diet and optimising feeding and housing conditions. Organic protein sources such as rape cake, soybean cake, or skim milk powder could also be used to replace non-organic feedstuffs.

Padel (2005)²⁰ calculated the balance between supply and demand for organic concentrate feed based on statistical data on organic land use and livestock and estimate for crop yields, diets and the proportion of crops used in livestock diets, using estimates for average crop yields, proportion available for use in animal feed and average intake cereals, pulses and high quality protein feeds in the diets of various stock types. The calculations were carried out for the EU as a whole, assuming free movement of organic concentrate.

The results showed that between 2002 and 2004, in the EU-25 the production of organic cereals would have been sufficient to feed all stock with 100% organic diets, but there would have been insufficient supply of pulses and of high quality protein (see Figure 2).

More than half of the concentrate feed demand arise from ruminant stock, a quarter from organic poultry, and the remainder from organic pigs. This illustrates that changes in the diets for organic ruminants could have direct implications for the availability of feed for organic poultry and pigs.



Figure 3-2: Supply and Demand for organic feed materials in Europe and the UK in 2004

²⁰ The calculation was based on livestock production data derived from Olmos and Lampkin (2006) and Prasnan *et al.* (2004) for 2002 and 2003. Update for 2004 by Padel and Lowman (2005).

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The biggest challenge in feeding all livestock with 100% organic feed arises from the fact that organic livestock is concentrated in different areas than organic crop production (see 3.1.1). The main countries producing cereals and pulses for concentrates are Italy, Germany, Spain, France and Austria, whereas livestock is concentrated in Italy, Sweden, Germany, the United Kingdom, France, Austria and Spain. Supply and demand of concentrate feed is likely to be unevenly balanced across countries and in regions.

For example, a calculation of supply and demand for organic concentrate for the UK on its own shows a deficit in all major categories of feed materials, cereals, pulses and high quality protein (see Figure 2), which is a reflection of the high proportion of the UK as a producer of poultry (second largest after France) and the relatively low share of arable crops grown in the UK. Approximately 50% of the demand for organic concentrate feed in the UK arose from the organic poultry sector, where the UK is the second largest producer in Europe after France.

Also, the case of pig and poultry production in the NL (see 3.1.3) illustrated that the majority of feed ingredients are transported over long distances which makes the recycling of nutrients more challenging. A European project of using grain legumes in pig diets concluded that transport is one of the important factors that have to be considered when assessing the environmental impacts of pig feed formulas, alongside share of soya and of cereals in the rations and the yield levels of the different crops (Nemecek and Baumgartner 2006). This illustrates the importance of spatial distribution in the context of dependency of non-organic e inputs.

3.2.2 Dependency of using conventional manure and straw in Denmark

The organic sector of Demark is specialised with the crop production being concentrated on the Island and most organic livestock production taking place on the mainland (see 3.1). In 2003, the Organic Association in Denmark (Økologisk Landsforening) set itself the target to phase out the use of non-organic manure and straw by 2011. Kyed et al. (2006) carried out study of the consequences of such a ban of conventional inputs from which the following descriptions are taken.

Use of conventional manure in Denmark

On average, organic farms in Denmark apply 88 kg N/ha in the form of manure. 24 kg of this come from conventional manure; the main source is pig slurry. The total amount of conventional manure used on organic farms is similar for the different production systems types and geographical areas (see Table 3-3) and on average much lower than the allowed usage of 170 kg N/ha. However, since the total level of manure used by crop producers is lower than for animal producers, conventional manure constitutes a larger proportion of the N use of organic crop producers.

	Average, DK	Cro	Crop producers			Milk producers			
		All crop	Islands	Jutland	All milk	Islands	Jutland		
		prod.	(clay)	(sand)	prod.	(clay)	(sand)		
Total manure usage	88	65	45	72	116	106	<u>116</u>		
Conventional manure	24	25	20	18	22	17	23		
Sale of organic manure	0	0	0	0	14	10	15		

Table 3-3: Use N (kg/ha) in total and from conventional animal manure in crop and milk production and in different geographical areas (with different soil types).

Source: Kyed et al. (2006.)



Based on yield responses to the reduction of applied N originating from conventional manure the immediate agronomic consequences of a ban of conventional manure without any other changes was estimated to be a yield decrease of 12% on crop producing farms. The calculation does not consider the impact of a ban on potassium balances.

Organic producers in Denmark would have possibilities to adapt to a ban of conventional manure use through improved manure management, or changes to crop rotation and enterprise mix. They could increase the proportion of legumes in crop rotations which could have the added benefit of encouraging more pulses, more grass-clover and more intercrops in crop producers which supply protein feed. Organic crop producers might also consider keeping livestock in response to a ban of using conventional manure or obtaining organic manure from milk producers. The likelihood of this would depend on transport distances and costs, but it is unlikely that organic manure would be transported from the mainland to the islands. It is therefore likely that in those areas with a low density of organic livestock the price for organic livestock production, a transport distance of 40 km would represent a break-even point for both the milk and crop producers, lower distances would allow greater economic benefits to be gained, which again confirms the importance of spatial distribution of the organic farms.

Use of organic and conventional straw in Denmark

The total production of organic straw in Denmark was estimated to be approximately 117.000 tons in 2002, but since the area of organic cereal has fallen, the production is likely to be lower today (Kyed et al. (2006).

The demand for straw for bedding in organic milk production was estimated to be about 100.000t, based on small number of observations on farms. This could be reduced through management and changes to the housing systems. The need for straw in deep litter bedding systems is more than three times as high than in slurry systems, but there is considerable variation among farms. The use of straw for bedding could be reduced by way of management, or by shifting to different housing systems (e.g. cubicles with slatted floors) but this may have negative implications for animal health and welfare.

A further 5.000 tones of straw is used as a soil cover in strawberries and a covering in the winter storage of carrots.

Currently, there is not much trade of organic straw in Denmark. If no organic straw is transported from the islands to the mainland (distance of 100-300 km, including toll bridge), there would be deficit of organic straw of 25.000 tons. If the surplus of organic straw on the islands could be transported to the mainland, the deficit could be reduced to 8.000 tons of straw.

3.2.3 Other issues of dependency

Organic farms operate in the same economic environment as others farms. This is reflected in a comparison of trends of the incomes of organic farms with those of general agriculture, particularly where organic samples have been monitored for many years. Nieberg *et al.* (2005) observed that the average profitability of organic and comparable conventional farming in EU 15 member states followed similar trends, with the exception of Denmark, where profits in conventional farming seem to have been catching up with those of the organic sector in recent years.



Like in any other industry, there is a desire for economic viability in the whole food chain, which can lead to increases in the scale of production. As in conventional farming, there is a clear correlation of Farm Net Value Added (FNVA) per agricultural worker unit (AWU) and farm size, but in the last few years average FNVA/AWU was higher in organic farms than conventional farms in all size classes (Nieberg *et al.* 2005).

Organic producers also rely to some extend on the same processing and marketing facilities although dedicated only organic supply chains exist. Organic food is sold through a variety of outlets from multiple retailers to direct marketing. The proportion of how much is sold through each channel varies considerably between countries. For example, in the UK and Denmark approximately 80% of all organic food is sold in multiple retailers, whereas in Germany less than 50% are sold through this channel. It appears as if the share and importance of multiple retailers appears to increase with growth of the market (Hamm and Gronefeld 2004). Overall, it is likely that more than 50% of all organic food is sold through mainstream food distribution channels (such as multiple retailers).

In total up to 200,000 production, processing, marketing, retailing, consultancy, inspection and certification businesses are engaged with the organic sector (Lampkin 2006). Large parts of these operators in the processing, packaging, trade, distribution and sale of food, as well as those supplying inputs (feed, fertilisers and soil conditioners, seeds and breeding stock) to organic operators are also engaged with other food supply chains. Also the policy support available to organic producers such as Single Payment Scheme and Rural Development Programmes with the exception of organic aid schemes, are part of and cannot be distinguished from general agricultural programmes.

Because of relatively small size the organic sector remains dependent on conventional agriculture in relation to breeds and varieties, although there are attempts to reduce these dependencies. In particular, dependency is high in relation to poultry where breeding activities in Europe are concentrated in a few companies.

3.3 Discussion of intensification and dependency

The use of intensification and dependency from conventional are closely related, because intensification is generally characterized by high use of external inputs. In the case of organic farming there also is the distinction between whether the inputs originate from other organic or non-organic sources, but the material illustrates that high use of inputs can also occur in relation to organic inputs.

The organic movement has accepted that-during the development and growth of organic agriculture-the usage of a limited and controlled amount of in particular non-organic inputs, such as fertiliser, feeds and seeds can be explained and defended. However, in particular where inputs are directly used to produce food (such as in the case of livestock feed, organic transplants or seed) the organic standards and regulations have attempted to gradually restrict their use which in turn are replaced by organic ones.

Standards have focused less on restricting the use of organic inputs and thus underpinning the core organic values of self-reliance and closing production cycles because these values are more difficult to codify, audit and regulate (Lockie *et al.* 2006). The main regulating mechanism that is in place is the input costs as organic inputs are commonly more expensive than non-organic ones, which is often used as an argument to justify higher allowances for non-organic inputs.



All cases of intensification described developed under the conditions of the regulation 2092/91 and were inspected and certified accordingly. The production of organic pig and poultry in the NL on the basis of purchased concentrates complies with the regulation. According to current rules farmers have to have contracts to pass on the organic manure to other units so that the 170- kg N requirement is met and have to provide sufficient access to range (for poultry 4 m² per laying hen, for pigs outdoor access of 2.5 m² per sow, up to 1m² per fattening pig depending on weight).

In the case of feed, dependency of the organic sector from conventional inputs is being reduced. Diets can be formulated without the input of conventional ingredients, and in the EU as a whole could probably produce enough cereals and pulses to feed all organic stock. The use of conventional cereals in the rations will decrease, as availability of organic concentrate increases. There remain problems in relation to EU wide in relation to protein feeds, and in areas where organic crop and livestock production are not balanced.

Because of the uneven distribution of crop and livestock production across Europe organic feed will continue to be transported over considerable distances, highlighting the importance of spatial distribution of organic farms in the context of dependency from non-organic inputs. For example, the certified organic pig and poultry industry in the NL and in the UK in their current size require more concentrate feed than is currently grown on the existing organic arable farms, leading to the experience of shortages of feed grains at times. Increases in the demand for organic feed cereals due to higher uptake of organic farming among livestock producers has not led to significant increases in the amount of crops grown. It is therefore questionable whether the market mechanism alone will be sufficient to achieve a balance between crop and livestock production. The problem is particularly relevant in the case of non herbivores where the regulation only recommends that a proportion of the feed has to come from the unit itself.

Also the use of conventional manure on cropping farms as described for NL and DK is in line with EC Regulation 2092/91, if 170 kg is not exceeded. According to Annex II the need for conventional manure has to be recognised by the inspection body, but no guidance on how inspection bodies should do this is provided. Farm yard manure (fresh or dried) should come from an extensive system²¹. Liquid manure can only be used if it does not originate from factory farming (with the term not being clearly defined but poultry batteries would clearly be considered as factory farming) and if it has been appropriately fermented or diluted. The use of vinnase would fall under products and by-products of plant origin in Annex II.

In the Danish case of manure and straw there is a reliance on conventional manure in the organic sector in its current structure and geographical distributions. There is a strong link between farm type and specialisation on the one hand and geographical distribution on the other hand. It could be argued that this structure of organic farms could develop because the use of conventional manure and straw are permitted under EC Reg 2092/91. If their use would be banned (as is the target of the Danish Organic Farmers Association in 2011) organic farmers might face yield loss and/or increased costs of production. The full consequences of such a ban are difficult to foresee because the farmers are likely to adapt their practices to mitigate the effect. A ban on manure could encourage more producers to grow legumes as pulses and green manures. A ban on conventional straw would possible encourage more cereal production, potentially also by the more specialised livestock producers. A raising demand for organic straw might also encourage the expansion of the

²¹ Extensive husbandry systems as defined in Article 6(5) of Council Regulation 2328/91 as that does not exceed 3 LU/ha per hectare of total forage area.



organic cereal cropping. A ban on using conventional manure, on the other hand, would reduce the options for expanding the organic production are due to Danish livestock balance criteria. The ban on using conventional manure would also have an impact on the conventional animal producers who would need to find an area of about 30.000 ha for spreading the 4.200 ton N that currently is used on organic land (with 140 kg N/ha). Reducing the use of conventional straw as bedding material could have a negative impact on animal health and welfare. A shift away from deep litter bedding in case organic straw would not be available in sufficient quantity may reduce animal welfare.

As the case of the pig and poultry production from the Netherlands illustrates the lack of balance does not only occur because of the use of non-organic inputs. Also if organic inputs (such as feed) are transported over long distances that the closing of nutrient cycles becomes problematic. A similar scenario of the need to close nutrient cycles over a distance would occur if the use of conventional manure and straw would be banned in DK and organic producers would have to transport those inputs from the islands to the mainland and *vice versa*.

All cases clearly illustrate the importance of spatial distribution, distance and transport in this context. The transports of inputs has not only a cost implication (increased price of the inputs) but also requires the use of fossil fuel for transport leading to environmental impact and costs that are not accounted for in the price of the prices of organic products.

3.3.1 Comparing the examples of intensification with organic core values

Intensification of organic farming as a result of globalisation and growing economic pressure is seen as one of the main threats to organic values. The following section therefore compares the description of intensification and their impact with the ore ethical values of organic farming identified in Chapter 2.

The cases described stand in direct conflict with values in the Principles of Health and Ecology (see Table 3-4). The specialised units producing organic pigs and poultry have a high dependency on organic feed inputs that are transported over considerable distance, and currently also use non-organic inputs up to the up to the permitted proportions. The cases of specialised arable farms illustrate a reliance on non-organic manure. This dependency on inputs, irrespective of whether these are organic or non-organic, conflicts with the core value elements of closing the production cycle, and reducing the reliance on external inputs that are included in Principle of Ecology. If inputs are transported over long distances this requires the use of fossil fuels and makes it less likely that the nutrients can be returned which affects the ecological balance. In the case of non-organic inputs there is also a contradiction with the value of avoiding pollution referred to in the Principle of Health.



Value element	Cases conflicting with	Value element	Cases conflicting with
Principle of Health		Principle of Fairness	X
System health		Fauity	
Soil health		Respect	
Animal health	Х	Justice	
Plant health		Food sovereignty	
Integrity	Х	Animal welfare	Х
Resilience		Stewardship	
Food quality	Х	Transparency	Х
Non-polluting	Х		
Principle of Ecology		Principle of Care	
Ecological systems	Х	Precaution/prevention	
Closing cycles	Х	Exclude GMO	
Site specific		Responsibility	Х
Reduced inputs	Х	Future generations	
Self-regulation	Х	Tacid knowledge	
Bio- diversity	Х		
Environmental protection	Х		

Table 3-4: Comparison of case descriptions of intensification and dependency with organic ethical values

However, there appears to be a potential conflict between on the one hand values of closing the production cycle (Principle of Ecology), avoiding pollution, and integrity (Principle of Health) that both would support further restrictions on the use of conventional and external inputs and on the other hand the value of minimising resource use that would support preference for the use of local non-organic inputs rather than organic inputs that have to be transported over distance. This might be resolved by adjusting the production to the locally available inputs/resources (moving animals to the feed base) but this would imply major structural adjustments to the organic sector.

It is also likely that in specialised pig and poultry units the human livestock interactions are reduced, practices that potentially conflict with the aim to maintain good animal health and welfare in the Principles of Health and Fairness.

The case description of arable production in NL with raising NO3 levels in products also highlights a conflict with the value of producing nutritious food of a high quality referred to mainly in the Principles of Health.

The case descriptions say little about the conflicts with the core social values in the Principles of Fairness and Care. One issue in relation to fairness of the competition arises if producers that limit their use of inputs to a stricter level (in line with the core value of closing cycles and reduced input use) have to compete in the market with those that adopt less restrictive practices permitted by the standards (see Sundrum and Padel 2006).

Allocating responsibility for the shared environmental resources as demanded by the Principle of Care seems more difficult. The use of fossil fuel for transporting inputs has an environmental impact causing costs that are not openly accounted for. Feeling responsibility for the environment and the people in the organic chain, as implied by the Principle of Care, implies that there is transparency and involvement of all stakeholders.



3.3.2 Summary and conclusions in relation to intensification and dependency

Intensification is generally characterized by higher use of production factors, in particular external inputs and resources (like energy, water and labour). A number of indicators of intensification have been developed for agriculture, for example by IRENA²². However, the availability of statistical data for the organic sector limits which of those indicators can be calculated across Europe.

A number of indirect indicators show trends towards intensification of the organic sector in Europe. Livestock production is unevenly distributed across the EU. A considerable proportion of organic farmers classify themselves as specialised, deriving their income mainly from one enterprise category, but locality, skills and other factors also promote specialisation. These indirect indicators provide no actual evidence of an increased reliance on external inputs in the organic sector.

No Europe wide data in relation to input use on organic farms could be identified. Case descriptions of pig and poultry farms and arable farms in the Netherlands and in Denmark illustrate that there is a high dependency on external inputs, both non-organic and organic in some sectors of the organic industry in Europe which has developed under the existing standards and the European regulation.

In the case of crop production the reliance on non-organic manure is limited by the 170kg/ha rule but this does not apply to other inputs. In the case of organic arable production in NL approx. 75% of the total N input appears to originate from non-organic manure sources.

Organic livestock production is concentrated in a number of countries, and only some of them are also significant producers of organic cereals and pulses. An imbalance between supply and demand for organic feed exists in some countries (e.g. UK, NL) resulting in organic inputs been transported over considerable distance. This problem appears especially important in the pig and poultry sector where no requirement to use home-grown feeds exists.

More research would be needed to assess whether intensification of organic farming across Europe is limited to certain sectors and/or countries or represents a more widespread phenomenon and whether it has increased over time. However, the practices described contradict several of the core values and principles of organic farming, in particular the core value of closing the production cycles and reducing the reliance on external inputs.

Given the current level of specialisation of organic farms, it appears likely that further restrictions in the use of non-organic inputs (such as straw and manure) would lead to organic inputs being transported over longer distances (as already is the case with organic feed) rather than a redressing of the balance between crop and livestock production. This in turn would also contradict the core value of reducing the use of non-renewable inputs in the form of energy used for transport. In our final case study we have therefore examined the arguments whether localisation of organic food systems would be a suitable tool to guard against problematic developments within the organic sector that contradict core values.

²² IRENA Indicator reporting on the integration of environmental concerns into agricultural policy http://webpubs.eea.europa.eu/content/irena/index.htm



3.3.3 Evaluation of the proposal for a new EU regulation in relation to intensification and input dependency

The proposal for new Council Regulation on organic production and labelling of organic products (CEU 2006) contains several elements which are of importance with respect to the issue of intensification. Intensification of organic animal husbandry can and may soon have consequences for the 'dual societal role' of organic production: providing for a specific market responding to a consumer demand for organic products, and delivering public goods. The protection of consumers' interests and of fair competition between producers are mentioned as aim (Art 1), a high level of protection of the environment and high animal welfare standards are mentioned in Article 3.

It appears that existing intensification of organic animal husbandry would contradict the intentions of the new draft as expressed in the preamble, the objectives and principles of organic production as set out in Articles 4 and 5. The proposed recitals of the new regulation (EC 2005) state in summary:

- Organic farming should primarily rely on renewable resources within locally organised systems (No 10)
- Livestock production [...] should contribute towards [...] the development of sustainable agriculture (No 13)
- Organic production of livestock should in principle provide for a close relationship between such production and the land [...], and the feeding of livestock with products produced on the holding itself or of neighbouring organic holdings (No 14)
- Organic stock farming is a land-related activity (No 15)
- It is important to maintain consumer confidence in organic products. Exceptions from the requirements applicable to organic production should therefore be strictly limited [...].(No 22)

This is reflected in the Objectives (Art 3) that refer to establishing a sustainable management system of agriculture (a) and respecting high animal welfare standards (iv). The principles in Article 4 refer specifically to the practising of land related livestock product (a ii) and to restricting the use of external inputs (b iii). Principles applicable farming (Art. 5) state that the use of off-farm inputs shall be minimised (Art 5b), and that site adapted and land-related livestock production shall be practices (5f). The detailed livestock production rules (Art. 9) state that the number of livestock shall be limited with a view to minimising...pollution (b-iv), that transport of livestock shall be minimised (b-iv) and that feeding shall be based primarily on feed obtained from the holding where the animals are kept or other organic holdings in the same region (d,0).

Similarly, the intensification of arable production on the basis of off-farm non-organic N sources (such as animal manure and other inputs) would appear to be limited by the objectives of establishing a sustainable management system (Article 3). The principles refer to appropriate design and management of biological processes based on ecological systems (Art. 4a) and by restricting the use of external inputs (Art 4b).

From this it can be concluded that the new EU regulation provides the basis for significantly limiting the intensification of organic livestock production, but at this stages it is not clear what the detailed implementation rules will contain.



3.4 How local is local? Effects of distance in organic food systems

3.4.1 Introduction

The debate about localness (or nearness or proximity) centres around transported over longer distances at a time when global trade with organic products is rising. The examples above have also illustrated that functional differentiation and specialisation also exists in the organic sector as a result of similar external pressures in mainstream food systems. Developing or strengthening local networks is often seen as the solution to these trends, the magic wand to counteract negative side effects of globalisation.

Organic production, processing, distribution and sale have grown immensely in size and efficiency in the past two decades, and organic food is recognised and traded at a global scale (e.g. Knudsen *et al.* 2006; Willer and Yussefi 2005; Raynolds 2004). This development has been driven by growing consumer demand for organic products and increased supply of organic products. In Europe, growth has also been stimulated in particular by a response to policy support in recognition of the wider benefits of organic farming in relation to protection of the environment, rural development and animal welfare. Over the past two or three decades the organic food system has been transformed from loosely coordinated local networks of producers and consumers to a globalised system of formally regulated trade (Raynolds 2004). An important pre-condition for this development of trade are internationally recognised standards. The EU regulation on organic production and labelling has been implemented to ensure fair competition and transparency and to improve credibility to the consumer.

However, there is concern that the present growth happens to the disregard of the organic principles and the erosion of organic standards, and will result in an 'Organic Lite' version that is more akin to conventional agriculture (e.g. Guthman 2004). Others raise concerns about ecological justice in the globalisation of mainstream and organic food systems, such as growing externalities in relation to transport, and issues of awareness, participation and commodification in relation to distant trade (Alrøe *et al.* 2006).

Two main driving forces exist that counteract localness in all food systems-organic as well as mainstream. These are globalisation, i.e. the erosion of the barriers of time and space that constrain human activity across the earth (Byrne and Glover 2002), and functional differentiation, the splitting of previously integrated units and systems into specialised units and systems which perform different functions (Luhmann 1995). While the latter does not directly work against the local, it enables spatial differentiation and thereby reinforces globalisation. The two forces are not necessarily negative for organic agriculture. Globalisation not only works for trade and markets, but also for ideas and contacts between people, and thereby enables the global spread of organic ideas and values. Specialisation can potentially increase efficiency and thereby promote the growth of organic production and consumption by increasing the competitiveness of organic products, both in terms of quality and price. However, not all specialisation increases efficiency, in particularly if leads to a higher requirement for external inputs, organic or otherwise. Many organic practices work through increasing the integration of different enterprises, such as growing legumes to increase soil fertility and provide feed, integration of different animal species to reduce parasite burdens (Lampkin, 1990).

One of the common reactions to the globalisation of organic agriculture is a call for localness.



Localness thereby does not only relate to distance as such, but to the functional integrity of a system and consequences for ecology, animals and people, in form of external costs of transport and distribution, commodification of agricultural products, unfair trade, lack of transparency and participation, and the loss of food sovereignty (Alrøe and Kjeldsen 2006). This illustrates that localness relates to a much wider range of values than energy use in transport alone. However, there is no guarantee that localness always entails better food quality, better social embeddedness and a fair distribution of workloads and economic returns as well as risks (Kjeldsen and Alrøe 2006). Our aim in the section is to present the concept of localness and its particular relevance to organic systems, and analyse whether localness could be an efficient way to counterbalance problematic developments.

3.4.2 The values of localness, proximity or nearness

The value of 'localness' or 'nearness' is not explicitly mentioned in the four IFOAM Principles, but it is connected to two fundamental ethical concerns that are also expressed in the newly rewritten Principles of Organic Agriculture (IFOAM 2005), especially in the two principles of Ecology and Fairness (see Appendix 1 for full text). Firstly, organic agriculture aims at sustainability in the sense of functional integrity (Alrøe *et al.* 2006: 83-84). Organic farming is based primarily on ecological systems and cycles, which are always in some sense localized, and not based on technological remedies to counteract depletions and malfunctions of these systems.

Localness was also found to be an important value for many producers participating in the focus groups in this project (Padel 2005). A close proximity between production and consumption was seen as a natural progression from other organic values. Producers associated the following dimensions with the value of proximity or localness: increased farm income through cutting out the middleman, traceability and trust, communication, food miles and product quality. Meeusen *et al.* (2005) also identify a value of localness among some consumers of organic food, which they label as traditionalist. These consumers trust the tradition and craftsmanship, buy regional products and prefer small-scale production. They prefer local products, but not necessarily organic ones.

Some of these values and expectations highlight that consumers and producers see 'localness' mainly related to the core value of fairness. To foster local and regional production and distribution was also one of the 'Principle Aims' of organic agriculture (IFOAM 2002). Localness is also related to the new organic Principle of Ecology relating to the systems approach that organic farming advocates: "*Organic management must be adapted to local conditions, ecology, culture and scale*". Alroe *et al* (2005) say that 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 globalisation. This demonstrates that although 'localness' as such was not considered an ethical principle of organic agriculture by IFOAM (see Chapter 2 and Appendix 1) 'localness' with all its dimensions is an important value for organic farming.

Localness is all about spatial nearness: one way of conceiving of the local is thus as the opposite of global. In this binary distinction the global is connected with markets, corporations and industry models, usually with relatively negative connotations, whereas the local is connected with close relations, community and natural models, and given relative positive connotations (see Table 3-5). This distinction between the global and the local is widespread across a wide range of contributors to 'green' theory and practice (e.g. Hines 2003), and the turn to local solutions on global problems ("act locally, think globally") has been a significant theme within the environmental movement at least since the 1970's.



Table 3-5: Attributes associated with 'local' and 'global'

Local	Global
Moral economy	Market economy
An economic sociology of quality	An economics of price
Independent artisan producers prevailing	Trans-national companies dominating
Community well-being	Corporate profits
Extensification	Intensification
Small-scale production	Large-scale production
"Natural" models	Industrial models
Biodiversity	Monoculture
Resource protection and regeneration	Resource consumption and degradation
Relations of proximity	Relations across distance
Communities in place	Commodities across space
Voluntary actors	Big structures
Democratic participation	Technocratic rules
Regional palates	Homogenisation of foods

Sources: Hinrichs et al. (1998), Kjeldsen (2005)

However, the 'local good - global bad' distinction is far too simplistic to be helpful. First of all, what is considered 'good' and 'bad' depends on the perspective or worldview of the observer. Secondly, there is more to localness than spatial nearness, and the different aspects associated with the local-global distinction are not necessarily connected in this dichotomous way. For example, spatial nearness between the actors within the food system does not necessarily build community. Several studies of local food systems conclude that alternative systems such as Community Supported Agriculture (CSA), farmers markets and others can exhibit exactly the same degree of instrumental rationality among producers and consumers as normally attributed to the capitalist market economy (Hinrichs 2000; DeLind 1999). Spatial integration is also not the same as social integration. Other studies point to the fact that the motives behind buying 'local' can be a chauvinistic, defensive localism, which is not centered on food quality (Winter 2003). Thus, the local can not be attributed with *intrinsic* values of trust and community, since the degree of mutual trust, community and social justice is dependent on the particular type of social context of any given locality constitutes. Community and relations of trust are in principle every bit as likely to be present on more aggregated scales of social organization as on local communities.

A more differentiated understanding must distinguish between different dimensions of localness, such as spatial and social nearness. Daly (1992) refers to three basic system functions in ecological economics: A system for determining just distribution, a system for determining sustainable scale and a system for implementation of effective allocation. Daly emphasizes that while effective allocation can be secured in formal market economies, the two other dimensions must be facilitated by political regulation. Hess (2004) describes different forms of embeddedness of economic activities, distinguishing between three fundamental categories: societal, territorial and network embeddedness. Also Kjeldsen (2005) distinguishes between social integration (building community, social coherence and justice), territorial integration (ecological adaptation, spatial embeddedness) and system integration (coupling to actors and resources in networks, economic viability, see Figure 3-3). The three dimensions of embeddedness have similarities to the dimensions of sustainability of social, economic and environmental sphere.

Organic farming views agriculture and food systems as vulnerable socio-ecological systems in which the crucial elements (soil, crops, livestock, ecosystems, and humans) can be reproduced over time. The development of modern food systems and markets, by contrast, is based on functional differentiation where inputs and foods are produced wherever it is most profitable, and this leads to



disassociation and lack of embedding of food networks in time and space (see also Kjeldsen and Alrøe 2006). This functional integrity concerns the workings of the system as a whole.



Figure 3-3: Dimensions of embeddedness of food networks (Kjeldsen, 2005)

The second important ethical principles, ecological justice, concerns fairness for individuals and local communities with regard to their common environments (Alrøe *et al.* 2006). The problems of the non-local organic networks are not simply a question of spatial distance, but of the consequences that are often associated with increased distances, such as external costs from transport, commodification of common goods such as soil, water, grazing land and nature areas, and lack of transparency, awareness and participation in the decisions and development of the food system. Interconnectedness can be translated into the economic principle of cooperation, instead of competition.

Furthermore, increased distances as an effect of increased globalisation and functional differentiation are closely connected to specialisation and intensification. Growing engagement of organic production into the global market and growing functional differentiation will, in general, be problematic for the functional integrity of organic food and farming systems. Distance, both in relation to input use and in relation to food marketing networks potentially stands in conflict to the functional integration of the system.

It can be concluded that the value of 'localness' in relation to organic food production systems is related to the functional integrity of the agro-ecosystem, i.e. spatial distance of input use and it environmental impact, the growing external costs of transport such as greenhouse gas emissions, adding value to raw materials and transparency, awareness and participation in the development of the food system. A consequence of thinking in regional terms could further be the conservation and increase of both cultural and biological diversity, including using regional breeds and varieties. Increasing 'localness' is expected to create social, economic and environmental benefits, although these benefits can not be attributed to the local *per se*.



3.4.3 The European market for organic food

The market for certified organic products in Europe is estimated to be worth approximately 15 million €in 2005 compared with under 900 million €in the early 1990s. The share of organic products as part of the total food varies between under 1 and over 5 % for certain product categories in some countries. These are rough estimates as data on consumption and trade in the organic sector are less widely available than data on land area and number of producers (Rippin *et al.* 2006; Hamm and Gronefeld 2004).

The major markets for organic food in terms of value are Germany, Italy, France, and the UK (see Table 3-6) but these countries are not necessarily equally important as producers of organic food. Germany, for example, accounts for more than a quarter of all sales of organic products in Europe but only for 10% of production in terms of land area. Similarly, France and the UK account for 15 or 14% of all sales but only for 7 or 3 of production in terms of land area. In contrast, Spain accounts for 10 % of production but only 2% of all sales. In terms of production organic farming is less widespread in countries that have a high proportion of urban areas, such as NL. BE, LU (DE to a lesser extent) but more widely adopted in countries with a large share of marginal and rural areas, such as AT, CH and UK (IT to a lesser extent) (Bichler et al. 2005).

	Value of organic market in 2004	% Total European Market	Organic sales in multiple retailers (2001)	Organic land area in Europe (2004)	Consumption of organic food (2004)
Unit	million €	%	% of all sales	% of total area	€/head
Germany	3,500	28	35	10	42
Italy	2,400	19	55	22	42
France	1,900	15	55	7	32
U.K.	1,815	14	80	3	30
Switzerland	779	6	75	4	105
Sweden	421	3	90	11	47
Netherlands	419	3	42	1	26
Belgium	300	2	50	0	n/a
Austria	280	2	63	12	35
Denmark	274	2	80	2	51
Spain	250	2	10	10	6

 Table 3-6: Characteristics of the major European markets for certified organic food

Sources: Willer and Yusefi (2006); Lampkin (2006) Eurodata; Hamm and Gronefeld (2004)

This indicates that there is considerable trade within the EU in all major product categories but no accurate and up-to-date data on trade flow exist. Reasonable accurate data for 2001 indicate that the EU was a net importer of organic cereals, potatoes, vegetables and fruit and net exporter of olives and wine. The reliance on imports was lower in relation to animal products but beef and poultry were imported (Hamm and Gronefeld 2004). It is likely that with the reliance on imports will have increased as a result of continued growth in demand compared with slowed growth in land area and number of producers in the last few years.

Organic food is sold through a variety of outlets from multiple retailers to direct marketing. The proportion of how much is sold through each channel varies considerably between countries (see table 1). For example, in the UK and Denmark approximately 80% of all organic food is sold in multiple retailers, whereas this proportion accounts for only 10 in Spain where the domestic market is slow to develop. Domestic markets and multiple retailers as sales outlets for organic food are also

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slow to develop in Spain and in most of the new member states. With the exception of Germany where specialist organic and whole food shops are particularly well developed, the share and importance of multiple retailers appears to increase with growth of the organic market (Hamm and Gronefeld 2004). Across Europe, it is likely that more than 50% of all organic food is sold through mainstream food distribution channels such as multiple retailers. The involvement of supermarkets is often described as problematic for the organic food market. So reported Leitner *et al.* (2006) that there has been a decline in small scale companies dealing with organic grains, especially in milling and in baking in Austria and those prices for producers have declined. Also in the focus group studies many producers expressed a critical attitude to the growing involvement of multiple retailers mainly related to the fear of a downward pressure on prices (Padel 2005). There is a general fear that trading in these structures will reduce organic standards although there is little empirical evidence for these claims.

3.4.4 Organic food networks in Denmark (Kjeldsen 2005)

Denmark can be described as one of the more mature markets of organic food. It has a relatively high market share of about 5% of total food sales, with individual product categories having an even higher share. In the case of Denmark, whilst dedicated food networks were important in the past, the reality has changed. Supermarkets are of growing importance, and now account for more than 80% of all organic sales, whereas only 12% are sold through alternative food networks, such as local box schemes. The most important centres for consumption of organic food are in the urban centres in the East of the country and on the main islands, whereas the most important centres of production are on the mainland (see Figure 3-4).

There are examples of organic food networks that limit themselves to trade in only one locality. Many of these networks are socially and economically unsustainable, because of the lack of economies of scale. They are not able to pay a fair financial return to producers which could be interpreted as exploitation of the workforce. However, many of these local networks refer to associative economic models, work on the basis of contracts between consumers and producers and use volunteers from the community when help is needed. This stands in contrast to other organic food initiatives (for example Aarstiderne) that have widened the geographical area in which they are active and have also been socially more successful. It is important to recognise that the many organic food business have changed over time. Kjedsen highlighted that localness does not always deliver on all expected outcomes and that many problems currently faced cannot be solved through increasing proximity alone.





Figure 3-4: The organic 'food shed' of Denmark (Kjeldsen 2005)

3.4.5 The hidden external cost of food production created by transport in the UK

Pretty *et al.* (2005) analysed the full costs of foods in the average weekly UK food basket by calculating the costs arising at different stages from farms to consumers' plates. In addition to externalities costs related directly to producing agricultural and food produce accounts for 28% of goods transported on UK roads, currently imposing an estimated external costs of £2.35 bn per year. Compared to this the contribution made by sea and air transport is currently trivial owing to low volumes. However, road transport to carry food from the shop to home is estimated to impose a further £1.28 bn per year to total external costs.

Pretty calculated the external cost of the per capita UK weekly food basket that would have to be added to the food products valued £24.79 per capita and per week. Additional external costs are calculated to be £2.91 more per person including all calculable externalities and farm subsidies. Production related externalities account for 27%, domestic road transport for 26%, and transport from shop to home 14% and subsidies for 31% (see Table 3-5).

The study also investigated the impact of several different scenarios. Switching to organic food (with now assumed change in the composition of the weekly shopping basket or transport) would reduce the production related external costs by 62 p per person and week. Switching to completely localised food systems where no food items is produced more than 20km away from the place of consumption would reduce transport related externalities by 68.6 pence per person and week, walking or using the bicycle to transport the food home from the shop would reduce costs by 41 pence per week.


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$I a n \rho \gamma - / \cdot A v \alpha \rho \rho \gamma \rho r n \alpha r c \alpha s t$	΄ ότ τηρ ωρρκίν επόπηση	ραςκρτ μηαργ αιπργρητ τγαης	nort scenarios (nence ner week)
<i>i dole 5 7. Illolded external costs</i>	of the weekly shopping a	busiler under utgrerent trans	por secharios (pence per week)

Scenario	Per capita external costs
Total cost of externalities, current scenario	291
Farm externalities	81
All farms organic	19.5
Transport to retail outlet	76
All within 20 km	7.4
All national with rail	27.2
All continental Europe	108.8
Transport from shopping to home	41
All walk/ bicycle	0
Car shopping replaced by bus	4.1
Car shopping replaced by bus and home delivery	17.7

Source: Pretty et al. (2005)

Pretty concluded that actions reducing farm and food mile externalities and shifting consumers' shopping preferences and transport choices would have a substantial impact on the environmental impact of food production. However, localisation of food systems would require changes in the behaviour of actors and businesses across the whole supply chain, with localised geographic areas needing different patterns of land use to supply local markets and consumers. Some of these changes could lead to trade-offs and losses in overall system sustainability. In addition, distance alone may not be a good measure of sustainability, as the mode of transport (by road, by rail, on waterways) influences the environmental impact considerable. Trends to globalisation in food systems are likely to continue and will present obstacles to achieving greater localisation, despite the net economic benefits and reductions to environmental impact.

3.4.6 Attitudes to 'localness' in organic food networks of producers and consumers in the UK

Padel and Foster (2006) explored the meaning of organic and local food and how closely they are related in the mind of consumers and producers of organic food, drawing on focus group discussions and in-depth laddering interviews with 181 consumers of organic food and 33 producers. The UK is one of the leading markets for organic food in Europe and worldwide with an estimated value of £1.6 billion in 2005, an increase of 30% compared with the previous year (Williamson *et al.* 2006). In previous years growth had been particularly strong in the area of direct sales from producers to consumers which are mainly but not exclusively dealing with local produce. However, in 2005 sales in these outlets grew only by 11% compared with 31% in multiple retailers which remain with 76 % clearly the most important place of purchase of organic food in the UK. Also alternative food chains such as box schemes are becoming more complex, involving trade between several different farms, and supplementation of product range from wholesalers (Geen *et al.* 2006).

Both producers and consumers associate organic food with local trade and see this as an important value. They are concerned about the food miles, about the distances that food travels before it reaches the plate and about the negative environmental consequences and express the expectation that local food network could change this. However, the results show clearly that in the complex organic food networks both stakeholder groups balance 'localness' with other values and constraints when making decisions about where to buy or where to sell their organic products.

Unprompted, organic producers associate 'organic' with a wide range of values and include

localness alongside conservation, sustainability, closed production cycles, quality, and health, integrity, working in balance with nature, diversity, and independence. However, many produce only a limited range of raw materials, such as cereals, meat, dairy etc. that would need further processing before they can be directly supplied to the consumer. Producers see direct contact with consumers as important to build trust, but recognise the need for some external verification. Their choice of a marketing outlet is a commercial decision of being able to sell what they have produced and getting a good price for it. Current prices of supplying supermarkets were seen as too low to cover costs of production for several products. Multiple retailers were discussed as a 'necessary evil', which should be supplemented by other outlets. On the other hand, producers clearly saw the limitations of regionalised trade, including the need to supply a wide range of products for a local market. They saw this as an opportunity for some but not an obligation for all. Organic producers were also worried about growing competition from increasing number of regional product labels from conventional agriculture.

In the mind of the consumer there is a strong association of organic food with vegetables and with 'locally grown' which is often confused and intertwined. They also associate organic with health, with freshness and taste, and with seasonality. Both occasional and regular consumers give an impression of being unclear about the definition of the term 'organic'. For many regular consumers, origin appears to be more important if the product is organic than otherwise, which seems to be related to a mistrust of organic standards elsewhere. Some consumers express a stronger preference for local non-organic products that could represent direct competition for organic label products (Padel and Foster, 2006).

The choice of marketing channels appears to be a balancing act between different values, contrasting ethical or political values with the ease and convenience of shopping in the supermarket. Local shops create a sense of belonging and specialist organic shops convey knowledge, personal relationships and trust in an otherwise complex food system. However, most consumers buy in multiple retailers. Rural interviews reveal greater emphasis on support for community and personal relations, and understanding of links between retail channels and environmental values than urban areas. As one respondent put it: *"by shopping at local shops, I feel I am doing my rural duty"*. However, many consumers admit to not paying much attention to the origin of products when they shop (Padel and Foster, 2006).

3.4.7 Could 'localness' reduce the intensity of pig and poultry production in NL?

In Section 3.1 it was illustrated that organic pigs and poultry in the Netherlands are fed with concentrate feeds that have to be transported over long distances. It was concluded that this specialisation or intensification conflicts with environmental and social sustainability. The question here is whether 'regionalisation' or 'localness' of organic production in NL could provide answers to the observed problems. As far as environmental impact is concerned, the principle of working towards nearly closed systems in which inputs and outputs are balanced would reduce the need for external resources and would reduce the need to use energy for transport. Regarding social sustainability implementing 'localness' would imply that the economic system should be organised in a more associative way which includes sharing responsibility and transparency and a closer link between production and consumption, and an increase in cultural and biological diversity.

To regionalise or localise pig and poultry production two main questions arise, whether the feed could be produced locally. Local production of concentrate feed would help to further close the systems in relation to nutrient cycles and therefore sustainability and reduce the energy use for transport, thereby incorporating externalities. 100% locally produced feed rations would be possible



difficult and costly and possibly at the cost of reduced production (Vermeij, 2005). The production would require more than the total current area of organic arable production of the Netherlands (Prins 2005). It is further unlikely that it would be easily possible to sell all the products at local markets.

It can be concluded that the value of 'localness' with its various dimensions would help to reduce some of the problems identified, but a considerable amount of structural change to the production and consumption patterns would be required and much inventiveness at the technical and regulatory level would be required.

3.4.8 Options for measuring and regulating localness

The simplest measures of 'localness' are the distance of trade (between production and consumption place) and transport (the actual transport path). However, these are not very simple measures in modern organic food systems, which are complex networks of sub-production, processing and distribution systems. And such measures work best for substitutable foods - bananas don't grow well in the UK. Besides, distance measures do not directly address the other problematic consequences that are more or less connected with distance. Still, it can be argued that a distance limit, even a quite arbitrary one, may counteract the negative consequences in the same way as the ban on synthetic nitrogen fertilizers forces organic farms to rely on their own resources and ecological processes and thus counteracts a range of problematic consequences of high-input farming. A limit on the distance of trade would entail some form of protection of local or regional food systems. This may be beneficial for e.g. small farmers in developing countries and mountain farms in the Alps, but it stands also in direct conflict with the goals of free trade in WTO and in the EU internal market.

The inadequacy of simple distance measures may be remedied by more sophisticated ones that address regional differences in production context and consider the problematic consequences of increased distances more directly. For example "food miles" refers only to transport whereas "life cycle analysis" may include the form of transport, sub-productions, number of elements in the chains. However, such measures may be quite difficult to implement. Furthermore, there are limits to what can be known and measured and precaution is an important principle to consider in increasingly complex food systems. The question of how to measure localness can therefore not be determined independently of the question of how to regulate it.

One way to include some element of 'localness' in would be to require that the chosen measure be labelled on the product, assisted by pictograms if possible, in addition to the organic label. This would give consumers the option to choose 'localness' based on their preferences and to act precautionary with regard to distance and complexity. This concept relies entirely on the choice of the consumer and would thereby not address all problematic consequences of distance.

Another option would be to include rules on 'localness' in the organic certification standards, and thereby firmly integrating the value of 'localness' within the overall shared organic concept. However, the case study material presented here implies that implementing 'localness' would have dramatic consequences for the current structure of organic production and organic food markets in Europe (Alroe and Kjeldsen 2006).

3.4.9 Discussion and conclusions of localness as a new value

It has been shown that bi-polar conceptualisations like 'Local=good – Global=bad' are not helpful

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and should be replaced with a revised understanding that considers the various dimensions of localness. It seems most proper to use the term 'localness' as an analogue to the notion of functional integrity. From that follows the assumption that localness should be conceptualised as a measure for spatial proximity. Localness is thus not conceptualised as social proximity. Social values like trust, social justice and community can be established on a wider range of spatial scales than only the local. One example are labour market regulations, which typically are formulated on national as well as EU scale, but which have quite important implications on the local level in terms of securing certain distributions of wages and workloads.

Localness can best be conceptualised by applying the tri-polar integration model presented in Figure 3-3. The question therefore is not whether 'the local' can be attributed with inherent social values like trust, justice and community, but *how these social virtues can be established on a local or regional scale*. Reaching a balance between all the three dimensions considered in the model requires social- and system integration as well as.

If the overall goal is to balance the three 'goal functions' of the model without emphasizing one dimension as being more important than others, than it is not possible to determine *a priori* which spatial scale will ensure a viable balance between the various dimensions. The main reason for this is that interactions between the various dimensions of embeddedness must be considered. For example, it a sufficient level of system integration cannot be met on the local or regional scale, the spatial scale might have to be extended in order to sustain the given food network. Also, a high degree of social integration coupled with a low degree of system integration might be a problem for extending the spatial scale, if a given network is challenged in terms of economies of scale. This interaction between social- and system integration is well known from studies in economic sociology (e.g Woolcock 1998). There is a question whether local food networks will ever succeed in relation to economies of scale, but economic factors can also change. For example a raise in fuel prices could have a dramatic effect on the costs of transport. Also, the point can be made that the degree of importance of economies of scale is of course smaller in community-based economies, based on a high degree of social integration, but they can still not be ignored completely, since even community-based economies depend on the proper use of limited resources.

Also the actual market context within which a given organic food network is exists has to be considered. Relying on multiple retailer systems might not facilitate developments that further social integration, since social integration might not be valued as a goal by retailers whose prime goal function is optimal system integration. However, there are also examples of multiple retailers with a social agenda. The influence of technology and the question of which 'means of consumption' are available for organic consumers is thus of crucial importance for assessing the potential for furthering social integration in existing food networks. There are some promising developments in this regard, for example the ongoing growth of the market for fair trade products (Raynolds 2003), even though that some critics have pointed to the fact that most 'fair trade' is also 'far trade' which can be attributed with a low degree of spatial integration (Jaffee et al. 2004)

If localness is emphasized as a value in terms of shortening food chains and aiming at harnessing the full seasonal potential of a given region it has important implications in regard to the embeddedness model (see 3.4.2). A number of important issues have to be resolved:

- (1) At which spatial scale should 'the local' or 'the region' be defined?
- (2) How can social virtues of trust, justice and community be realised on this scale?
- (3) How can a sufficient level of system integration be identified and reached?

This is clearly a formidable and very complex task to accomplish. The complexity involved is well underlined by numerous other studies. The available market statistics state that the production and consumption of organic food is distributed unevenly across Europe. For example Spain is a net exporter of organic food, and the UK is a net importer. Even in those countries where there appears to a greater balance between supply and demand consumption is concentrate in urban areas whereas production is concentrated in the mainly rural and in many cases lagging regions. The uneven spatial distribution of organic consumption and production is also observed in other studies of the organic markets in Europe (Miele 2002). Trends towards globalisation in food systems are likely to continue, making localisation harder and less likely to occur, despite the calculated net economic and potential environmental benefits. The case study from the Netherlands illustrates that under current rules in intensive pig and poultry production the connection to the land is minimised, leading to a lack of functional integrity in these systems (see 3.1.3). They require more cereals than are produced locally, and would generate externalities in terms of transport (also of manure) if ecological consequences for the land were to be reduced.

Localisation, or a higher degree of spatial integration of organic food networks would help strengthening the functional integrity of food production system in terms of ecological balance (for example to improve the balance between crop and animal production), and would help to reduce the otherwise hidden external costs related to transporting organic food. However, it is not given a priori that 'localness' would also achieve benefits in relation to the social coherence of food networks, nor in relation to business performance, since smaller and more local food changes are likely to have clear disadvantages in relation to economies of sales. These benefits can not be achieved through realising localness per se, but must be actively created or facilitated. Localisation of organic food systems would require substantial changes to the patterns of land use on organic farms to be able to supply local markets and consumers and changes in the behaviour of all actors. It would also require institutional support and facilitation, given that all relevant issues cannot be addressed on the local scale alone. However, localness, as a value and as a perspective for future standards and regulations deserves further investigation. Because of the complexities involved it is less likely that the issues can be sufficiently addressed by regulation alone, but demands development processes both institutionally as well as through local initiatives. One possible option for further inquiry into the matter could be in the form of coercive research efforts in developing future scenarios based on the perspective of localness as a value.

3.5 Considering core organic values using the example of transport and slaughter of organic livestock

The following section uses the example of transport and slaughter of animal in organic systems to illustrate how several of the core values are interrelated. The issue of transport and slaughter relates to several of the areas that were discussed in this chapter, such livestock production (see 3.1 and 3.4.4), the distribution of organic demand and consumption (see 3.4.4 and 3.4.4), the environmental impact of transport (see 3.4.5). The example illustrates that very few issues that have to be regulated are governed only by one core value. Transport and slaughter cannot be taken as one isolated item to be solved according to a few rules, ideals or principles related only to an animal welfare perspective. Animal welfare is of cause important, but it is one among several other organic values having impact on transport and slaughter. Important other values are the systems perspective and the ideal of aiming for greater closeness of food systems. To investigate the issue of livestock transport and slaughter in the context of organic farming it is necessary to consider the whole systems from production and consumption.



Transport has so far not been regulated in detail in the EU regulation on organic livestock production. According to the EU regulation 1804/1999 transport of livestock must be carried out so as to limit the stress suffered by the animals in accordance with the relevant national or Community legislation in force. Loading and unloading must be carried out with caution and without the use of any type of electrical stimulation to coerce the animals. The use of any allopathic tranquilliser, prior to and during transport, is prohibited. The EU regulation sets the minimal slaughter age for poultry. Livestock must be handled in such a way that stress to the animals is reduced to a minimum; no further restrictions concerning slaughter of animals are given in the regulation.

By and large the same regulatory framework for transport and slaughter procedure applies to all animals, irrespective of the method of production. Transport has so far not been regulated in detail in the EU regulation on organic livestock production. According to the EU regulation 1804/1999 transport of livestock must be carried out so as to limit the stress suffered by the animals in accordance with the relevant national or Community legislation in force, and restricted to eight hours. There are however exceptions accepted, meant to be compensated through stricter rules on handling. For example loading and unloading must be carried out with caution and without the use of any type of electrical stimulation to coerce the animals. The use of any allopathic tranquilliser, prior to and during transport, is prohibited. The EU regulation sets the minimal slaughter age for poultry. Livestock must be handled in such a way that stress to the animals is reduced to a minimum; no further restrictions concerning slaughter of animals are given in the regulation.

Because there is very limited slaughter without transports in today's agriculture it makes sense to consider these two issues together. If the potential threat to animal health and welfare during transport, and the stress during slaughter are taken into account, there is a clear need for stricter regulation on handling of animals whose meat will be labelled as organic. Consumer confidence depends on animal welfare friendly routines in all steps of the production.

Thus it is not sufficient for organic farming, with its high animal welfare expectations, to be dependent on regulation for conventional animals. Some international and some private standards have set additional requirements. Most limit the duration of transport in the frame of 4 to 8 hours or to a maximum distance of 200 kilometres, some have more detailed requirements how animals should be handled before slaughter²³.

The question of transport and use of fossil fuel have relevance to many areas of organic farming, such as transport of inputs (e.g. feed, manure and straw (see also 3.1) as well as transport of organic products (see 3.3). However, in the case of livestock transport is not only important because of the distance, resource use and environmental impact, but also because of the health and welfare of the transported 'items' themselves, the animals, that are worthy of individual moral consideration. The issue of transporting live animals therefore also relates to the values of animal health, welfare and an overall ideal of compassion that is present in organic thinking, above ecological and economical concerns in relation to transport.

²³ The Organic Rules data base (<u>www.organicrules.org</u>).of the organic revision project provides the following information: International IFOAM, International DEMETER, AT Bio Austria, CH Swiss Ordinance, DE Bioland, DE Naturland, FR Nature et Progrès, UK Soil Association). Bioland further more requires the separate transport of male and female animals, milking before transport and transporting in the dark.

SE KRAV and UK Soil Association standards have detailed requirements on how animals should be handled adequately for slaughtering: Groups of animals not known to each other shall not be mixed, access to water (if waiting longer than 4 hours also access to roughage) must be provided as well as bedded laying areas. At not time electric pods are allowed. All animals must be stunned before bleeding to death. UK Soil Association Standards as well as DE Bioland standard express details on carbon dioxide stunning.



There is no slaughter without animal husbandry (see 3.1.1 for distribution of organic animals across Europe), and no animal husbandry without demand for its products. Demand for animal based products comes both from consumers (see 3.4.3-3.4.4) and also from the farm itself (such as manure, fibre, power). So, the questions have to be asked whether there is a balance between what is produced (including the resources of the production process) and what is consumed (of animal origin) and whether self- sufficiency is a valid goal.

Not striving for a balance between input and outcome implies an acceptance of surplus and of lacking resources which has to be dealt with 'outside' the system. There has to be another system that is able to handle leftovers and that offers resources. On a global market this is often the case, but equally often remains viable and possible only to the extent that values of fairness and care are considered less important than growing market share and economic profit.

Striving for balance is part of the core organic values-within a defined system-a balance between animal production and consumption is desirable. Considering the whole production process implies to extend this view to the slaughter capacities. Applying this strictly would mean restricting animal production to areas where animal can be slaughtered. The value of balanced ecological systems and closing production cycles, on the other hand, would require keeping animals where their feed grows and where there manure is used. So which one should be given priority?

Aiming for a balance between crop and animal production is an aim in itself for an organic farm. If this cannot be reached at farm level due to specialisation (see 3.1.1), the balance could be achieved on a regional level, where resources such as feed, manure and also labour can be exchanged. This perspective of aiming for regional balance of livestock production (where feed and manure can be exchanged) should be extended to the capacity for slaughter and even consumption. Following this slaughter capacity should be provided in the same region where animals are kept. A small-scale slaughter, perhaps even at farm level, could also reduce some key stress moments for the animals, and at the same time reduce negative environmental impact caused by long distance transports. Smaller slaughter plants have been shown to better respect special animal welfare concerns (Odén and Löthegård, 2002).

Applying core organic values to slaughter would imply to consider not only the value of animal welfare, but also the balance of ecological systems between crop and livestock production and could result in the aim to facilitating small-scale, regional slaughter close to areas of animal husbandry. If transport and slaughter were to be covered in the new regulation KRAV could serve as a good example of implemented and certified regulation, especially on handling of animals during transport and loading, housing and handling conditions at the slaughter plant, stunning and control that the animal is dead after bleeding (KRAV 2007, Chapter 10).



Value element	Relevance to animal transport and slaughter	Value element	Relevance to animal transport and slaughter
Principles of Health		Principle of Fairness	Х
System health		Equity	
Soil health		Respect	
Animal health	Х	Justice	
Plant health		Food sovereignty	
Integrity		Animal welfare	Х
Resilience		Stewardship	
Food quality	Х	Transparency	Х
Non-polluting			
Principle of Ecology		Principles of Care	
Ecological systems	Х	Precaution/prevention	
Closing cycles	Х	Exclude GMO	
Site specific		Responsibility	
Reduced inputs	Х	Future generations	
Self-regulation	Х	Tacid/idigineous knowledge	
Bio- diversity			
Environmental protection	Х		

Table 3-8: Values elements relevant to addressing the issue of transport and slaughter of organic livestock

3.6 Summary and conclusions from the case studies

The case studies were carried out to investigate controversial development in the practice of organic farming in Europe and relate them to the core value basis of organic farming. In particular it focussed on some aspects of the 'conventionalisation' hypothesis that argues that in becoming larger, more specialised and intensified organic production will no longer be a real alternative to conventional agriculture and will loose touch with its value basis. Three areas containing most of the contested issues were identified and investigated in a case study approach: intensification, dependency from conventional inputs and the role that localness can play in counteracting problematic developments.

Intensification is generally understood to occur when an increasing amount of production factors is used, i.e. external inputs and resources (like energy, water and labour). The descriptions presented focus mainly on the use of external inputs, in particular concentrate feed for pigs and poultry, the use of manure and of straw. The differentiation between organic and non-organic input that is used in the organic industry and organic standards distinguish, is reflected in the case study of dependency from conventional system. However, all external inputs, both organic and non-organic are external to the system in question which implies that they have to be transported. This highlights the importance of spatial distribution and distance, and avoiding distance (and therefore the negative environmental impact of transport) is one important expectation in relation localness. Because all three areas are very closely related the conclusions are presented together.

In the case study of intensification it was evaluated whether statistical data can provide evidence of intensification of organic farming in Europe, using general indicators of intensification of agriculture. Some indicators seem to show such a trend: In one cross national survey the majority of organic farmers classified themselves as deriving their income mainly from one enterprise category, i.e. could be categorised as specialised. This stands in stark contrast to the widespread expectation that all organic farms are mixed. However, it provides no actual evidence that such specialisation would increase the reliance on external inputs, given that locality and other factors also promote specialisation.



Also organic livestock production is distributed quite unevenly across the EU, concentrating mainly in the 15 old member states. Among those, several countries currently do not produce sufficient concentrate feeds to supply the national certified herd, indicating that a balance between crop and livestock production is not always achieved.

The case descriptions in relation to input use from mainly two countries confirm that concerns in relation to intensification appear justified for some particular farm types. Organic pig and poultry production appears highly dependent on external inputs (up to 90 % of feed ingredients). Under existing standards most feed has to come from organic sources, and the farms have to have agreements with other farms to use the manure, but the majority of feed inputs are external to the farms. In the case of some cropping systems approximately 75% of the total N-input appears to originate from external and non-organic sources. Better statistical data and further research would be needed to assess how widespread these practices are in Europe, but all cases described were following organic standards as laid down by Regulation (EEC) 2092/91 and were inspected and certified accordingly. In the case of use of N-inputs there is some indication that clearer formulation of existing implementation rules, for example through more uniform guidelines on how certification bodies assess the need for external manure in a farming system, could reduce the reliance on external inputs.

A comparison of these case descriptions with core ethical values of organic agriculture (as summarised in Section 2) shows that strong conflicts exist, in particular in relation to values represented in the Principle of Ecology (see Table 3-8) and in relation aspects of the core values of health and fairness. Several of the core values of organic agriculture are not addressed in the current European organic standards and are therefore not part of the inspection and certification system, in particular the core values of self reliance in relation to input use (i.e. closing the production cycle), reducing the use of external inputs and non-renewable resources and aspects of the values of fairness and care.

Organic standards have aimed to reduce the level of dependency from non-organic inputs (for example by reducing the permitted proportion of non-organic feed and seed). Doing so reduces some conflicts identified with elements of the core values of health (in particular in relation to reducing the risk of pollution), fairness (avoiding unfair competition between producers that use different types of inputs) and increases the responsibility of the operators in relation to the integrity of organic products. It does, however, not reduce the potential conflict of intensification in relation the core values of working with and sustaining living ecological systems. Given current levels of specialisation of organic farms imposing restrictions in the use of non-organic inputs (such as straw and manure) could even increase contradiction in relation to some value elements, for example by generating a greater need to reduce the use of non-renewable inputs in the form of energy used for transport.



1 - 5	Conflicting with	Mitigated through	Mitigated through
Value element	intensification	100% organic inputs	greater 'localness'
Principle of Health			greater localiteee
System health			
Soil health			
Animal health	Х		
Plant health			
Integrity	Х	(✓)	\checkmark
Resilience			
Food quality	Х	(✓)	
Non-polluting	Х	\checkmark	
Principle of Ecology			
Ecological systems	Х		\checkmark
Closing cycles	Х		\checkmark
Site specific	Х		\checkmark
Reduced inputs	Х	Х	
Self-regulation	Х		(✓)
Bio- diversity			
Environmental protection	Х		\checkmark
Principle of Fairness	Х	(*)	
Equity			
Respect			
Justice			
Food sovereignty			
Animal welfare	Х		
Stewardship			
Transparency	Х		✓
Principle of Care			
Precaution/prevention			
Exclude GMO		\checkmark	
Responsibility	Х	\checkmark	
Future generations			
Tacid knowledge			

Table 3-9: Comparison of core organic values elements with case studies

The final case study therefore examined the arguments whether localisation of organic food systems would be a suitable tool to guard against problematic developments within the organic sector that contradict core values. Expectations in relation to localness relate three dimensions of embeddeness of food systems of spatial integration, systems integration and social integration. If the overall aim is to reach a balance between these three dimensions without emphasizing one as being particularly important than others it is not possible to determine beforehand at which spatial scale such a balance can be reached, because the interactions between the dimensions must be considered.

Overall the following conclusions can be drawn:

• Under current standards and inspection routines in Europe it is possible to establish specialist farming systems that rely to a large extend on external inputs, some of which have to be organic. It is not possible to establish how widespread these practices are. There is some indication that some problematic developments could be avoided through clearer formulation of existing implementation rules, for example through more uniform guidelines on how certification bodies assess the need for external manure in a farming system.



- These systems contradict several of the core values of organic agriculture, especially the objective of working with and sustaining living ecological systems represented in the core value of ecology.
- Decreasing the reliance on non-organic inputs by removing existing derogations reduces the risk of pollution and increase the integrity of organic products. However, replacing non-organic with organic inputs does not address the fact that these inputs remain external to the system and therefore does not address a lack of balance in the ecological systems. Given existing levels of specialisation among organic farms reducing permitted inputs could even have the negative effect that organic inputs would have to be transported over larger distance. In considering whether or not such provisions should be included in the standards it would be helpful to determine a hierarchy of the core values that are affected.
- Greater spatial integration of organic food networks could reduce some contradiction in relation to the value of working with and sustaining ecological systems, including the reducing the use of non-renewable resources, but would not necessarily mitigate contradictions in relation to values of health unless combined with other measures (e.g. higher reliance on organic inputs (see above).
- However, there are expectations that greater localness would also reduce contradictions in relation to the social value of fairness and would bring social cohesion and systems integration. These benefits can not be achieved through realising localness *per se*, but must be actively created or facilitated.
- Despite clear advantages of greater localness in terms of environmental impact of food systems, localisation of organic food systems would require changes to the patterns of land use on organic farms and changes in the behaviour of all actors.
- However, localness is an important organic value and as a perspective for future development deserves further investigation. Because f the complexities involved it is less likely that the issues can be sufficiently addressed by regulation alone, but demands development processes both institutionally as well as through local initiatives.





4 How to integrate values and perspectives in the EU regulation

4.1 Introduction

With its numerous amendments, the Regulation (EEC) 2092/91 for organic agriculture has grown more and more complex. In revising this regulation quite difficult decision have to be made, for example whether all derogations for non-organic input should be removed, whether organic farming can be regionalised, whether the scope of the regulation can be extended into new areas. Therefore, a further aim of the current total revision is to make the regulation more transparent by stating clearly objectives and principles in the regulation as a basis for harmonisation (EC 2004; EC 2005, CEU 2006).

In Chapter 2 the value basis of organic agriculture was examined. It was concluded that the values expressed in the four IFOAM Principles of organic agriculture of health, ecology, fairness and care encompass the integrative values of sustainability, naturalness and systems approach and represent a broad consensus of the ethical core value base of organic agriculture (see Figure 4-1). These four principles were formulated in a participatory process. They are an expression of the shared values and meaning on which organic agriculture is based and do therefore represent a starting point to formulate regulatory aims, objectives and principles for the regulation.

Expressing this core value basis in the regulatory context requires ensuring coherence in the structure of the new Council regulation in terms of aims, objectives and regulator principles. There further is a need for interpretation of the values if they are to act as a guide for decision-making at various levels, including the development of implementation rules of the EU Commission starting in 2007, and for the self-regulation within the organic movement. Any process wanting to achieve these aims needs to include guidance as to how conflicts in the interpretation and practices between core values can be handled.

Integrating core organic values in the regulation rules is not a task limited to the question of content (i.e. what value should be considered, see Chapter 2) but also to the procedure (how the decisions at various levels are reached). In relation to the integration and also interpretation of the value basis content and procedure are closely related, i.e. the scope of values and principles of organic agriculture is not restricted to a specific content, but also refers to a certain understanding not only of the regulation itself but also on the procedure in decision-making. This is reflected in the fact that participation is a value element related to fairness. For the organic agriculture movements its understanding of the *content* and function of the regulation, as well as of the best possible *process* for formulating standards or legislation are important perspectives. If the principles stated in the regulation, it is essential they are accepted by the organic actors as an expression of the shared values and meaning on which organic agriculture is based.



	Content (What values?; Chapter 2)	Procedure (How to integrate values?; Chapter 4)
GENERAL	What are ethical values?	Democratic processes & procedural ethics
SPECIFIC	Core organic values	Handling values in the organic standards and regulation

Table 4-1 A matrix with four areas relevant to the question on how to handle values in the regulation.

The reminder of the chapter following this introduction is divided into three parts. The section 4.2 contrasts the function of organic standards leading to a regulation with the understanding and functioning of other regulations, highlighting the special importance of ethical values in the context of an organic regulation and how they relate to the proposed structure of aims, objectives and principles. The section 4.3 relates to the importance of three different kinds of procedures for integrating ethical values in the regulation: the basic decision-making structure (I), a normative procedure in relation to what value base should be considered (II) and a procedure for the interpretation of the shared value base which is important for the development of the more detailed implementation rules as well as self-regulation of the organic sector (III). The final section 4.4 draws some recommendations for the current process of finalising the new regulation for organic food and farming.

4.2 The role of ethical values, objectives and principles

4.2.1 The evolving of organic standards

Organic standards have developed over time as an alternative approach to modern agriculture and in response to concerns about certain developments affecting agriculture whilst a certain core value basis has been maintained. The practices that are described in today's organic standards have evolved. For example in relation to livestock standards the concern about the widespread presence of residues of DDT and other organo-chlorides in the 70s led to introducing limits on the proportion of conventional feeds in feed rations. A debate about the industrialisation of pig and poultry farming in the 80s led to the prohibition of battery cages for organic chickens (Padel *et al.* 2004). These changes were implemented by private standard bodies after some form of a consultation process of its members.

The first European regulation on organic agriculture (EC Regulation 2092/91) introduced in 1991 evolved from the private and governmental standards in some countries as well as the IFOAM Basic Standards at the time. Due to the variety in background between the different countries the content could not be identical with the preceding standards in each case. The Regulation (EEC) 2092/91 also had a different function compared to the private sector body standards. With becoming legally regulated (the subject of a regulation) organic farming moved from being solely a grassroots movement to becoming part of policy intervention. For some in the organic movement this formal political recognition was a landmark in the development in terms of being recognised by the agricultural establishment (Dabbert *et al.* 2004). For the first time there was EU wide a legal guarantee to consumer on what practices a producer had followed who labelled product as organic and how this was inspected.

In general, the introduction of an EU regulation in 1991 did not reduce the importance of private and governmental standards and regulations. Many of them play a large role for organic agriculture in many European countries, often operated by private certification bodies or organic producer



associations.

At the same time the private standard setting bodies were partly concerned about loosing the ability to define what organic farming stands for. There is concern that minimal governmental standards do not consider the true value base of the movement and that organic standards are watered down. The analysis in the case studies in Chapter 3 has shown that some core values of organic farming are not well respected by current practice of certified organic farming in Europe, in particular values related to ecological systems, such as the closing of production cycles, i.e. aiming for greater self-reliance if not self-sufficiency in terms of input and resource use.

An important question in this context however is, whether private standards better reflect the totalities of these values. In terms of content some private standards, some differ from the EU regulation only in structure and wording, for example give the producer more guidance on how the rules should be followed under the specific condition of a country or region. Others standards strive for being different to the EU regulation, by stricter rules on conventional inputs or higher animal welfare standards than the minimal requirements laid down in the EU regulation (Schmid *et al.* 2006).

Standards have focussed on those areas that are easy to codify and audit through the process of inspection. Values for which this is more difficult, such as agro-ecological values (bio-diversity and nutrient recycling) that are frequently built into definitions of organic farming have not been considered in the same way (Lockie *et al* 2006, van der Grijp 2006). This would apply equally to private standard organisation and to regulators. Lockie *et al*. further comment on the paucity of social considerations in most organic standards, again because social values are more difficult to reflect in standards. In future the private sector could differentiate itself by including the currently non regulated areas.

Practitioners and the literature document a range of principles, definitions and values, which are reflected in the value base underlying the four overarching principles of organic agriculture agreed by IFOAM in 2005 (see Section 2.2). The process that was adopted illustrates an understanding of participative democracy that is widespread in the organic movement. Similar processes are needed in relation to how values should/could be explicated at various levels, especially in the more detailed implementation rules.

In the EU draft for total revision of the EU regulation from December 2005 and the proposal for a Council Regulation approved by the Agricultural Council on the 19-20 December 2006 the ethically motivated principles are part of the legislative text (CEU 2006). This gives the Title II objectives and principles a very high importance for all organic operators in the EU and makes it even more important that they are based on a shared value base. These principles in the regulation were proposed by the commission and debated in the working group of the council of ministers in a 'top-down' rather than bottom-up process, without a formal and full consultation of the organic sector itself. It is to the credit of the commission and the presidencies that throughout the negotiations the views of the IFOAM EU group have been frequently consulted and that most values expressed in the IFOAM principle are considered in the text accepted subject to some minor revisions by the Council of Ministers. Nevertheless, it can be concluded that there are difference in relation the procedure of how the organic movement and the regulator formulate organic values. In this section these different expectations in relation to the process of determining organic values are explored.

4.2.2 The function of values in organic standards and regulations

The purpose of most public regulations, such as environmental regulations and animal welfare



regulations is to formulate a minimal level of necessary rules in a certain area in order to implement ethical or moral norms on human activities in that area. Organic agriculture standards and regulations have a rather different function by defining the term 'organic' for food products and production in order to protect its use for the benefit of both the consumer and the producer. They do not attempt to implement any existing regulation or rules into the activities of all actors involved in food production. Instead their aim is to set out as clearly as possible the practices that producers, but also the other actors like processors, agree upon and follow. Hereby organic food and farming standards clarify what consumers can expect from an organic product.

One could describe the organic standards and regulations on farming and food production as the base of a contract, setting out an agreement between the producers - who undertakes to follow the rules laid down, and the consumer - who receives a guarantee that these rules have been followed. This process between these stakeholders is mediated by a certification body, ideally with both a consultative function towards the farmer/producer/retailer and a guarantee function towards the consumer. This is an important difference (to other regulations) with regard to the question of what roles values play in this regulation and how legislation can influence the development of organic agriculture. Furthermore, the values of the actors in the organic movement were and still are therefore partly different from mainstream agriculture and may stand in conflict with some often hold perspectives of our society, while not always ranking monetary profit higher than for example concerns for environmental sustainability (Padel 2005).

In many organic standards and in the regulation the value base on which they are built is not clearly expressed. The EU Organic Action Plan (EC 2004) argues that in revising the regulation for organic farming principles and values should be stated more clearly which is reflected in the proposal for a new council regulation. The stated purpose is to promote transparency and simplification and coherence of the regulation encouraging the harmonisation of standards and where possible reduce the level of detail (EC 2005: 'Whereas', point 4). The Proposal for a new Council Regulation on Organic Food Production and Labelling as accepted in principle by the Council of Ministers in December 2006 clearly states the underlying objectives and principles and follows a hierarchical structure in which objectives and main principles form the basis for more detailed production rules. This will help to promote the potential for harmonisation and simplification of the regulations.

4.2.3 Potential levels of harmonisation

Several different levels for potential harmonisation can be distinguished. The *first* level refers to harmonisation as the development of a common national/governmental regulation within EU. Such a common standard is as an important means for the EU to avoid unfair competition between operators and facilitate free trade with organic products in the common market but also make more explicit the contribution to public goods and services that organic farming can make. On the other hand, an EU-wide regulation decreases flexibility and adjustment to certain conditions, which causes problems adapting the practices of organic farming to local conditions. Organic farming is based primarily on cooperation with living ecological systems and therefore needs to adapt to local and regional conditions. Producer preconditions and situations vary to a large extent, mainly due to climatic or geographic or structural constraints. Ideas of how to adjust to an aim of free trade and a common regulation will vary to the same extent. Defining the basic principles is expected to contribute to introducing some level of regional flexibility that allows for the practices to be adapted to local situations.

The *second* level of harmonisation refers to how separate private organic standards relate to each other and to the EU-regulation on organic agriculture. Private actors regarding themselves as having a stricter standard than the EU regulation are concerned about how the goal of free trade can be

-70- Padel et al. (2007) Balancing and integrating values in organic regulations (D 2.3)

reached without watering down their own standards. The proposal to ask private operators to accept each others standards (previously Art 20 of the EC 2005) caused much controversy and has been deleted in the finally agree text. One main reason for private sector bodies to aim for stricter standards in certain areas is the concern that certain core values or basic organic principles are not well enough reflected in the legislation, for example by requiring 100 % organically produced feed (Schmid *et al.* 2006). This level of harmonisation is closely related to the third level.

The *third* potential level of harmonisation refers to the ethical values or principles behind the rules, instead of the rules themselves and ensuring that the value base is clearly explicated in the regulation. There can be no doubt that organic agriculture is value driven, a fact that was also substantiated in a series of focus groups that were undertaken as part of this project (Padel 2005). Harmonising the value base could assist with the task of harmonisation at the two other levels. It could assist with regionalisation of the organic production rules as far as the natural and cultural conditions demand whilst maintaining fair competition and secure a space in the regulations for local and regional interpretations and adaptations of the ethical values and principles. Harmonising the value base could further support consumer confidence in organic products that are traded across regional and national borders and it could reduce the concerns of private standards setting bodies that core values are violated and stricter rules are therefore needed.

A possible criticism towards the idea of including values in the regulation is that the organic movement does not stand on a coherent value basis. In Chapter 2 several arguments were elaborated in support of the view that the values encapsulated in the four IFOAM principles are representative enough to provide a starting point for stating common values of organic farming in the regulation.

A first step to harmonise the organic value base between different sets of rules is increasing the knowledge of the values behind the organic standards and regulations among the various stakeholders including operators, regulators and policy makers. This report aims to make some contribution to discuss the value basis of organic agriculture by identifying elements of the four value areas expressed in the Principles of Health, Ecology, Fairness and Care. These value elements have been contrasted with existing standards, current practice and with the values explicated in the current draft for a new regulation (see Chapters 2 and 3).

The second step necessary in harmonising the values behind the rules is to aim for a broad acceptance of the value base that is used. Principles in the new regulation that have their fundament in the basic organic perspective are likely to be met with higher acceptance and adherence than a set of rules not conforming to such fundamental principles. It is important that the core values are widely accepted by the movement as a reflection of its own value base. Making a clear statement of overall objectives and principles in the regulation that is closely related to those values that the organic movement has chosen as its core principles would not only contribute to transparency and consumer confidence, but also provides governance for the organic sector in support of self-regulation (e.g. Michelsen 2001 a). This highlights that the need for acceptance relates not only to the content but also the process of decision-making.

Including an accepted value basis in the regulation will thus provide the basis to give more responsibility to organic operators to demonstrate how these basic ethical principles are translated into practice.

4.2.4 How ethical values relate to aims, objectives and principles in the regulation

The proposal for a total revision of the regulation on organic food envisages that in future the regulation will be implemented like a pyramid (Figure 4-1). At the top are aims, objectives and general principles of organic agriculture. Once formally adopted these will be binding for the whole



organic sector and can only be changed in future revisions of the main regulation. These are followed by specific principles for certain sectors (e.g. primary production, processing), followed by rules (in the main regulation) including criteria for the acceptance of certain inputs. The detailed implementation rules and guidelines for operators will mainly be covered in the Annexes, negotiations on the detail are due to start early in 2007. In this pyramid structure aims, objectives and principles are very important to communicate clearly what organic farming wants to achieve and how, as well as for the development and later interpretation of the specific principles, rules and the implementation guidelines that are to be included as Annexes to the regulation. The pyramid introduces a number of other terms that should briefly be explained referring to policy evaluation and project management literature²⁴.

Perspective **aims** (or goals) are at the top level, like general (over-arching) objectives. For the organic sector these could include for example food quality (arguably), health (from soil to environment/society) and sustainability (from environmental to social and economic).

Objectives are more specific but contribute to the overall aims. These could include conservation of natural resources, minimisation of pollution, maintenance and enhancement of biodiversity, promotion of animal welfare.

Project management literature tries to differentiate between aims and objectives in the following way. An aim or goal is usually a general statement setting out the desired state that the project is meant to realise. An objective is a specific attainment or target that the project sets out to achieve and whose accomplishment will contribute to realising the overall aim of the project. A project is likely to have several objectives. Following this definition it would appear that the objectives stated in the EU regulation draft from December 2006 lie somewhere in between overarching aims and general objectives.



Figure 4-1: The pyramid structure of the proposal for new regulation

In relation to objectives Management theory used also in policy evaluation argues that objectives

²⁴ see for example Section C1 of ORGAPET by Lampkin and Nicholas (2006)



should be specific, measurable, achievable, relevant, and time bound, i.e. should be SMART²⁵. These objectives should also be well communicable in the sense that they need to be clearly understood by all of the stakeholders and unambiguous so that there is no possibility of misinterpretation. Each objective should also have related to it one or more performance indicators which would allow stakeholders to assess whether or not the objective had been met. It would be necessary to develop such performance indicators for the objectives as stated in the EU regulation from Dec 2006.

Principles (such as the precautionary principle) are not objectives in themselves and have their value only in conjunction with the aims or objectives. What, for example, is good about being precautious on its own, unless it contributes to achieving a particular objective? They do however provide some **guidance on how** objectives should be achieved and make it possible to determine criteria for approving or rejecting specific **practices** or technologies.

Furthermore, it is necessary to reflect on whether principles are meant as ethical principles related to the value system, or regulative (legal, constitutional) principles related to the regulation system. DARCOF, the Danish research platform for organic agriculture research, initiated a discussion about the principles of organic farming with the aim to overcome the situation where the organic sector is characterized by rules rather than clarity on the subject (DARCOF 2000). The main purpose in identifying and communicating the basic ethical principles of organic agriculture is to determine what organic agriculture is and to guide its future development (Alroe and Kristensen 2004). They set out how to act organically in a responsible way, i.e. state one possible way in which organic agriculture should be done now and in the future. The organic movement as represented by IFOAM has defined ethical principles, which contain elements of all the above levels of aims, objectives and principles. The European Commission, on the other hand, uses the term 'principles' as meaning regulative or judicial principles. Once established and agreed they are binding for all operators rather than guiding future action. To be able to use these principles in the structure of the regulation it becomes necessary to identify which elements relate to prospective aims, to achievable objectives and which ones express guidance on how the aims and objectives should be achieved. Therefore further work is needed in how to translate this value base into regulatory principles that are part of the pyramid structure.

The pyramid structure mirrors an 'organic perspective' in so far, as in both cases values and principles are the point of departure for all other decisions on a more detailed level. The relationship between each level (practices, principles, objectives, aims) could be clarified by asking the question why a certain rule is included as illustrated in the following simple example.

- Q: Why is synthetic nitrogen prohibited (rule governing practice/technology)?
- A: Because it contradicts the Principle of Ecology.
- Q: Why is this principle relevant or important?
- A: Because we want to minimise pollution and protect biodiversity (objectives).
- Q: Why do we want to do this?

²⁵ **SMART**:

Specific - deal as precisely as possible with one particular aspect of the project's aim;

Measurable - contain clearly defined criteria (either quantitative or qualitative) by which their achievement can be measured;

Achievable - be realistic in terms of the time and resources available ;

Relevant - relate directly to the overall aim of the project ;

Time-limited - provide a clear time frame within which the objective will be realized



A: Because we want a healthy and sustainable environment and society (aims)

The alternative question going downward to elaborate the specific principles, and rules would be to ask 'how' a certain objective can be achieved.

Ethical values will function most effectively in this structure, if they are stated in one place where they can be easily identified. The Project EEC/2092/91 (Organic) Revision therefore suggests that all relevant organic values that are referred to in the regulation should be mentioned in one place, in the form of overall aims, objectives and general principles. All further articles could then be read as explication of the values in a certain context. These explications could then be kept to a minimum, stating a minimum standard that mirrors high claims of sustainable and healthy agriculture that is characterised by fairness and care for all living beings involves, accepting differences in preconditions as climate, geography and structure.

This is largely achieved in the proposed draft of regulation (December 2006) where most values are mentioned and incorporated in the text in Titles I (Aim, Scope and Definition) and II (Objectives and principles of organic production) (see 2.3.2.) However, some values and principles are mentioned for the first time in the more detailed Articles 5. For example the reference to enhancing the immunity of livestock (Art 5k) refers to a wider understanding of animal health than avoiding harm to animal health expressed in Art 3c. The value of care is referred to in Art 6d (as principles of processing of food) but it not referred to in earlier articles. Title III (Articles 7a and 7aa) expresses some prohibitions (GMO and ionising radiation).

Some other values are referred to as aims or objectives but there does not appear to be a more detailed reference. For example, avoiding harm to the environment is mentioned in Art 3, but there does not appear to be further detailed reference for example to the value of bio-diversity in the general (Art 4) and especially specific principles (Art 5) where there is no mention of habitat protection.

4.3 The importance of procedure to determine organic ethical values and value based rules

Once included in the EU regulation, aims, objectives and principles will become a 'fait accompli' that can only be changed through a new council regulation. There is therefore a need for broad agreement of the value base that is to be included in the EU regulation. In the negotiation structure of a commission regulation through an expert working group, followed by deliberations at the level of the council of ministers there is currently limited room for formal consultation of organic stakeholders. This is very different to the organic sector's own approach to debating its standards and its principles that can rather be described as a 'bottom-up' approach. This illustrates that not only content (what are the values) but also procedure matters (how are aims and objectives and principles decided).

The pyramid structure of the regulation in which all values are clearly stated in one place simplifies explaining the relationship between aims, values (or principles) and rules. However, such a structure also implies a discussion of procedural issues at a range of levels before such as regulation can be finalised and implemented. In the following the relevance of three kinds of procedures is related to decision-making:

- I. General procedures of decision-making
- II. Normative process determining the value base and finally
- III. Interpretation of the value base.



All three are considered important in relation to the ongoing process of revising the EU-regulation for Organic Agriculture and its Annexes as well as in relation to future interpretation of the regulation. To some extent they build on each other, the first being a formal structure for a procedure, and as such a precondition for the realisation of the second and third procedures, which return to content rather than form (or process).

(I) The first kind of procedure regards the formal character of a procedure, i.e. defines a suitable and progressive structure for decision-making on how the various stakeholders meet and remain involved. This is a question of defining a fundamental procedure that will influence further methods of decision-making. In discussing such a procedure different traditions of decision-making structures need to be taken into account. When a common agreement is reached on how to come to a decision, a solid basis for further development of the content of a common regulation is achieved. This kind of procedure is thus solely formal, and a further kind of process is needed to ensure that content of the regulation remains coherent. This is intended to be achieved with the second and third kind of procedure (see 4.3.1. and 4.3.3)

(II) The second kind is a procedure of normative character with regard to values. Ideally, this procedure would take place at three levels. Firstly, a range of internal processes would take place in which each stakeholder group decides which values regarding organic agriculture are relevant for themselves (as a regulator, a producer, processor, consumers and other stakeholders). Secondly, when each stakeholder has formulated their core values, they have to be brought together into a common process in order to come to a normative agreement regarding which ones represent the common core of minimal expectations that should be covered in the regulation. On both these levels the formal decision-making process decided upon in the first place will be used. An alternative procedure could be to reconstruct at first a certain normative value on the basis of both literature and interviews and discuss the reconstruction with stakeholders (see for example Verhoog *et al.* 2003).

The regulative work of transforming the agreed content into a regulative framework would start after this second level. The decision-making structure described above is also relevant at this stage, since there will be different interpretations of best possible formulation, scope and structure of the core content (see 4.3.2 and 4.3.3).

(III) The need for the third kind of procedure arises from the special situation of regulating organic agriculture and refers both to further development of the implementation rules and to self-regulating within the organic agriculture. The organic sector evolved from a tradition of self-regulation, setting itself standards that the producers agree to follow, which over time has been formalised by producer organisations, certification bodies and finally governmental regulations. This tradition is strongly value driven, i.e. values have a strong position in organic farmers' and consumer's awareness and function as action guiding. This is one central reason behind the values of self-reliance, care and fairness as action guiding rather than monetary profit and the striving for minimal regulation (self-governing and localness). Thanks to this awareness and discussion of values and ideals among organic producers there has been a parallel development of practices and values. This is more outspoken and vivid than in any other commercial area regulated by the EU, and as such requires openness to a special procedure and handling of formulating and implementing regulation.

The tradition of the organic sector can be acknowledge and used by facilitating a procedure for self-regulation of this sector. A clear and developed mechanism of self-regulation within the movement and among the practitioner could be important for regulators at various levels and for a wide range of issues. For example, self-regulating mechanisms are relevant where different interpretations of a value are possible, where two different values could imply different measures, where the minimum



standard of regulation clashes with a certain situation as regards climate or geography, or where new situations arise as result of changes of for example consumer patterns or trade regulations. Self-regulation could also strengthen adherence to new regulation by giving responsibility and power the lowest possible level in the process, i.e. to farmers, retailer and processors.

In the following decision-making in relation to integrating values will be considered in general, in relation to normative procedure to further develop the core ethical value basis. The final section of looks especially at questions of interpreting the value basis, because of its importance both for the sector itself and in finalising the ongoing revision of the European regulation for organic food and farming, explicating the relevance of such openness, but also as a combination of the first two procedures (see 4.4.)

4.3.1 Realising democracy (I)

The fundamental procedure of formulating a structure for decision-making needs to be capable of dealing with discrepancies and heterogeneity. There are some relevant differences regarding decision-making, pre-understanding or perspectives and interests between the regulatory process of the EU, the organic movement and a wide range of stakeholders It is therefore necessary to find a 'neutral tool' for this process of decision-making. One fundamental point of reference for such a tool is of course democracy, but this can also be understood in many ways. One common way of is to refer to three different models of democratic processes (Gilljam and Hermansson 2003):

- 1. Election/voting by majority;
- 2. Participation by involvement in choosing representatives and by large group meetings among citizens/members;
- 3. Democracy by deliberation/communication following certain discussion rules.

This last model of democracy is connected to engaging all relevant stakeholders in an ethical dialogue. It is also closely related to procedural ethics, such as contractarianism (ethical decisions based on a community among citizens) and communicative ethics (ethical decisions based on communication between involved partners). These kinds of ethics should be kept apart from ethics built on content, often formulated as a principle or an inherent value, such as utility (utilitarianism), duties and rights (deontological ethics) or virtues (virtue ethics) that justifies its moral worth in relation to certain content (see 2.1.2). Procedural ethics stresses the ideal of procedure as a moral justification. Thus no content for 'the morally right answer' is given in advance in procedural ethics (Apel 1973, Benhabib 1996; Habermas, 1983 and 1991). Rather the right decision or moral justification of an action or a value is developed among those involved. This openness could make it serve as a good model for a 'neutral tool' for discussions between organic stakeholders regarding both agreement on values and implementation of those values agreed upon (second procedure) but also in discussions among stakeholders in situations where self-regulation is practiced (third procedure).

Such broad stakeholder involvement raises the question of who is regarded as a 'relevant' stakeholder. A choice has to be made, and someone has to take this responsibility. Section A1 on methods for involving stakeholders of the ORGAPET toolbox ²⁶(Michelsen *et al.* 2006) relates the

²⁶ Of the Organic Action Plan Project (ORGAP)

⁻⁷⁶⁻ Padel et al. (2007) Balancing and integrating values in organic regulations (D 2.3)

decision of which stakeholders are relevant to the threefold perspectives of organic farming as developed by Alrøe and Noe: organic value perspective, market perspective and public goods perspective (see Chapter 2.1.1). Michelsen *et al.*, (2006, p. 4) distinguish between purely organic stakeholders and stakeholders that are involved in mixed or purely non-organic activities in relation to how these groupings consider involvement in a policy process. Further there is a distinction made in relation to the 'centrality to the policy process'' (p.6). A central stakeholder is relevant both because of the expertise on the policy issue and as carrier of legitimacy vis-à-vis a certain target group. This leads to a possibility to distinguish between stakeholders with essential and peripheral disposing of policy relevant resources (p.6). The authors elaborate on a range of possible combinations between these three groupings (and also non-organic stakeholders) and will provide further guidance on selection of relevant stakeholders after the ORGAPET toolbox has been tested.

The stakeholder section of ORGAPET identifies three further challenges. The first concerns the availability of information and the available consultation time; access to information about the topic under discussion is a necessary pre-condition, lack of it might exclude some stakeholders; short time response times for a consultation process might exclude those that obtain guidance from their core group before being able to respond; short-term focus may lead to only those being listened to that can respond quickly and can create biases regarding which stakeholder is seen as relevant. The second challenge concerns the actual process once stakeholders are chosen; decision-making processes are slowed down and grow in complexity in relation to growing number of involved partners; listening more to strong voices arguing for short term, i.e. visible solutions and perspectives. The third kind of challenge relates to how the stakeholder input is used; weighing and balancing different perspectives and opinions, finding solutions meeting diverse interests by a wide range of stakeholders; difficulties regarding to what extent the input provided shall be taken into account.

These challenges have to be considered in a regulative process: how they are handled depends to some degree on the understanding of the democratic process. The following section aims at pointing to some possible solutions of these challenges specially focussing on the second and third, i.e. decision-making process and usage of stakeholder input, and i.e. how to handle differences in interpretation of values and objectives.

Taking these challenges seriously it is argued that a deliberative decision making model connects well to the often chosen procedure of the organic movement. As Chapter 2 has shown, some normative decisions have already been taken, in particular in the process that IFOAM implemented to formulate the four principles. This serves as a relevant and good example in order to explicate the idea of a normative procedure, i.e. formulation and agreement of values and content as built on a special democratic procedure regarding the form for decision-making.

4.3.2 A normative procedure as illustrated by the process of formulating the IFOAM principles (II)

The IFOAM World Board formed a Task Force and Consultative Group to lead the review of the Principles, i.e. for the process of formulating core values of the member organisations in the form of the Principles of Organic Agriculture. The IFOAM Task Force and consultative included representatives of producers associations, i.e. those bodies that set standards, of consumers, retailers, processors and researchers in order to formulate and suggest principles for organic agriculture. This process was to a very large extent participatory, which implies that the IFOAM membership supports the result. In order to see its characteristics, and thereby see the differences to the regulatory process in EU, it is described here in some more detail.



A number of procedural steps were involved: A first questionnaire concerning the purpose, function and form of 'Principles of Organic Agriculture' was sent out to a Consultative Group and summarised by the task force. The respondents wanted principles to be the foundation and framework of Organic Agriculture, to lead and unite the organic movement, to give guidance for the development of standards and policies, and to be an inspiration for the organic movement and for wider processes of change. They thought that the principles should bridge gaps: be universal but regionally applicable and able to provide organic identity; they should be simple and ethically normative.

A second questionnaire asked the members of the Consultative Group for input on 'thematic areas' on which principles needed to be developed. The thematic areas identified were: Holistic health, Livelihood – equity, Biodiversity, Soil, Cyclical systems, Animals, Local markets / accessibility and Precaution.

The third consultation round sought feedback on a first rough draft of six principles that reflected all these thematic areas with the exception of 'Local markets/accessibility' and 'Biodiversity'. These were not allocated as separate principles but were included as subsets of other principles. In reviewing the responses to this third questionnaire, the Task Force reduced the number of principles to four. These were sent for a fourth round to the Consultative Group, and at the same time, for open consultation to all members of the organic movement.

In their final deliberations, the Task Force studied the comments and took due consideration of all the suggestions, resulting in their final recommendation of four new principles to the IFOAM World Board. This recommendation was accompanied by information on the consultation feedback and explained with the rationale of the Task Force for its proposal. At its June 2005 meeting, the World Board decided on the wording of the Principles of Organic Agriculture that was to be put forward in a motion to the IFOAM General Assembly at Adelaide, Australia in September 2005. During a further interactive session at the General Assembly further amendments to the World Board's wording were suggested. The General Assembly approved the final version of the Principles of Organic Agriculture (see Annex I) with a large majority²⁷.

The IFOAM Task Force has worked closely to ideals of democracy of participation, deliberation and consensus. Since this above described thorough process is a recent agreement it would be unwise and unrealistic, to claim for total openness regarding content and end result in a new process. Even though the general idea of procedural ethics is to start from scratch, that would not be applicable to value shaping in organic agriculture at the moment as the IFOAM process has just happened. In addition, the organic movement has always been value based, and this base has to be taken into consideration, preferably by involving relevant organic stakeholders. What happens if the value base is not considered can be illustrated by the public intervention in the process of standards setting in the US, where the attempt to permit the use of GMO had to be aborted because of the intervention of organic consumers (Lockie *et al.* 2006).

Thus, even though the content is to some extend already agreed on, a deliberative democracy model (based on communication and discussion rather than only voting) would be the most fruitful one for decision-making among relevant stakeholders in relation to the issues of interpretation and implementation of the existing normative value basis of organic agriculture. This model would also be consistent with the traditional way of discussions in organic agriculture organisations, and is the most open one that at the same time creates a basis for adherence when values are to be

²⁷ For further information see http://www.ifoam.org/about_ifoam/principles/history_of_principles.html



implemented.

4.3.3 Combining deliberative ethics and a normative procedure of organic values (I+II)

How procedural ethics could be used is illustrated in some detail, directly in relation to decisionmaking in organic agriculture and the regulation. Since some core values are stated, it is of no relevance to discuss such deliberative ethics that strives for being 'empty' of content and values (Habermas, 1991). Rather the core values set some limits for conclusions concerning content (Parallel to the reasoning by Gutmann and Thompson, 1996). The key issue is the interpretation of the principles for the purpose of the regulation. Hereby it is *unavoidable to take both content and procedure-i.e. the discussion form-into consideration from the very beginning*. This means that the form of ethical dialogue regarding the EU regulation has to be chosen so that it could include all relevant partners and at the same time is allowed to have a bottom-line, i.e. respects the core organic values.

Formulating regulation in a heterogeneous setting is a challenge for all partners involved, not least if the aim is to reach broad acceptance and adherence. Hierarchies are unavoidable amongst such a variety of stakeholders as regulators and farmers, but there are methods for handling them. A decision-making model thus has to be able to solve situations influenced by hierarchies. One important element is equal respect for all partners, irrespective of power in terms of position, education, economic situation, culture and religion. These will all influence who is giving consent to what, and who is formulating suggestions for decision. Röcklinsberg (2006) has suggested five elements important in such deliberative decision-making:

- respect for each discussion partner,
- respect for arguments including emotions,
- context sensitivity,
- a shared picture (or understanding) of the situation,
- relating theory and practice.

In a deliberative model aiming at consensus these five core elements offer a useful tool and could contribute substantially to making the regulative procedure successful and to some extent improving the decision. The two first elements are of interest in relation to the structure of the discussion. When striving for an agreement on a contested issue it is most relevant that all *partners respect each other* as competent discussion partners in their own right. Unless this is the case, hierarchical structures will be mirrored in the discussion, for example by unequal possibilities to actively contribute. The same is true regarding the second point, *respect for argument and emotions*. Aiming at an open discussion where the best, most solid, well underpinned and not counterintuitive argument can be formulated as a basis for a decision not only a very limited understanding of rational arguments is enough, but also moral intuitions and emotions have a place in discussion (Nussbaum 2003). Emotions are not only the more efficient incentive to action, as compared with theoretical arguments, but also a source for engagement and insights in different situations and other perspectives.

The last three elements are specifically important in relation to regulating organic agriculture. *Context sensitivity* means awareness both of the different circumstances representatives come from, and of the preconditions for the organic agriculture. It could thus be seen as a theoretical parallel to the practical aim of flexibility.



By striving for a *shared picture*, a common understanding of what is at stake can be gained. This requires that all discussion partners are transparent about their values and preferences but also have a common understanding of the existing practices including its problematic developments. This is of central value in a deliberative process between regulators and representatives of the organic movement, since hidden agendas would decrease the confidence in discussion and agreement. Chapter 3 has illustrated that there is a substantial difference between the organic sector in various member states and members of a committee are likely to refer in the judgement to a known example in their home country. To develop shared understanding of the organic sector in Europe would imply that more work should be done to evaluate how the sector conforms to its own values.

The last element, *relating theory and practice* is important when it comes to the judgement of a suggested regulation. Theory (value as well as agreed structure) and practice (implementing value and structure respectively) have to be continuously related to each other in order to prove the importance of the values. Organic stakeholders' experience of practical situations can contribute to evaluate the feasibility of a rule, which is historically how organic standards have evolved. Various representatives of the organic movement also contribute by explicating their interpretation of a translation of a certain ethical value to practice, which can then be the basis for a discussion on how to formulate this as a rule. Regulators on their side are invited to clarify their regulation into practical consequences.

The relationship between theory and practice could also be strengthened by defining area related principles and decision-criteria, and finding indicators with which the fulfilment of such principles can evaluated. Furthermore it gives a direction, which instruments could be used if value conflicts occur. Such instruments do not necessarily mean more rules on the EU level. Potential non regulatory instruments could be supportive projects, dialogue platforms between researchers and practitioners, specific training and education of farmers, and documents setting out a code of practices or a common Code of Conducts of the private sector.

If these non-regulatory instruments show not to be efficient, regulatory measures might be necessary. A range of potential instruments to regulate for the negative effects of intensification could be identified, such as further restrictions on concentrate inputs, extending the requirement for a proportion of feed to be home-grown to all species, introduce a need to carry out nutrient and feed budgeting and place limits on highly positive balances, introduce energy balance and require a minimum percentage of soil fertility building crops in all rotations.

4.4 Interpreting the value base (III)

4.4.1 From values in aims, objectives and principles to detailed rules and self regulation

Once aims, objectives and principles have been clearly stated the amount of detail in the lower levels has to be determined. A regulation that takes the suggested organic values seriously, and implements them with some room for flexibility would still need clearly formulated common rules at the appropriate implementation level. In order to mirror the ideals of organic farming as contributing to a more sustainable, healthier and fairer world that cares for its inhabitants, this level would need to take other values and considerations than solely market orientation into account. However, some core organic values (e.g. ecological systems approach, social values) are more difficult to codify for the purpose of standards and audit through the process of inspection rules than others (Lockie *et al.* 2006) but this does not mean that they are less important to the organic



movement. Since external economic pressure through declining terms of trade and pressure for increasing economies of scale are equally affecting organic and conventional producers (Lockie *et al.* 2006, Smith and Marsden 2004), organic operators might be tempted to find solutions less coherent with agreed core values, if these are not part of the standards and certification procedures, resulting in unfair competition between those that do and don't implement core values. This is particularly relevant to intensification and input substitution (see Chapter 3) but also to animal welfare.

Accepting the value of animal welfare implies that it has to be considered on all stages of the animal production process, including transport and slaughter (see example 0). However, this implementation is also an example of the difference between the proposed regulation and the current rules on which the Annexes are to be based. In the current rules the aim of 'good animal welfare' is not considered in relation to transport and slaughter. Respecting fully the value of animal welfare would imply that there is a need to do so, which implies that some changes to the implementation rules will need to be agreed. It would not be enough to stress the value of Fairness to animals without minimum standards of animal welfare. Including values in regulation is an important step in order to simplify and make use of flexible solutions, but cannot entirely replace the rules as it does not give enough guidelines and limits in competition on a free market.

A further argument for clearly stating the rules as well as the value basis is that it might prevent the organic movement from excluding some new stakeholders on the basis of some home-made ethical credentials. It is important for the organic movement to regenerate and survive in a market-oriented world. And to satisfy the current growth in demand new operators need to be recruited. If clear and explicit rules and thresholds are set, anyone fulfilling them can be accepted as a full and equal member of an organic society and the principles and values of the organic movement can be promoted to new participants.

The alternative to implementing the core values as part of rules would be that the organic movement would attempt to judge new entrants on the basis of their values and motives rather than practices. The bi-furication of organic farming that can currently be observed would continue, whereby one fraction claims to adhere to higher ideals than other operators. These higher ideals, however, are not part of the rules or certification process, so that the verification of any such claims remains very difficult. Also the question arises what implications such as direct questioning of morals and values would have for future diversity of perspectives (Lockie *et al.* 2006) and for the potential for innovation in the organic sector.

In situations where organic farmers or producers are challenged by conflicting values in their practice, as for example between animal welfare and environmental sustainability, they will be in need of some guidelines or policies for decision-making. Since the IFOAM principles are constructed as a whole, the relevance of each value and its relation to other values has to be decided in each situation. Under such circumstances procedural ethics is at best combined with some kind of situational ethics, or strong context correlation. The following section discusses some procedural suggestions for such situations, but also considers differences on a more abstract level. The following ideas of handling differences in approach, interpretation and interests regarding organic agriculture also are of relevance involving stakeholders in discussions regarding formulation and interpretation of regulations.

4.4.2 Respect for different levels of objectives and for different perspectives

Within the organic sector a range of different perspectives or driving forces can be distinguished.



Alroe and Noe (2005) refer to a protest movement or public goods perspective and organic value perspetive and the market perspective (see 2.1.1). Another way of describing differences between involved stakeholders is to relate to evaluation of objectives for policies. This is done in developing a toolbox for the evaluation of organic Action Plans in the ORGAP project. The Organic Action Plan Evaluation Toolbox (ORGAPET) distinguishes two levels in a hierarchy of objectives²⁸:

- 1) Organic sector-level, which focus on the development of the sector (p. 9 and 12-13)
- 2) Societal-level objectives which focus on broader policy goals and the contribution organic agriculture can make to achieve these, for example in relation to environment and health (p. 5).

In the context of the EU regulation for organic food and farming it would be relevant to add a third level:

3) EU-regulative level, which has the objective of harmonising regulation across all member states.

Using the systematic of ORGAPET the sector level objectives can be divided into two groups, one concerning production and the other concerning values. Objectives related to the value base of organic sector could be 'improved transparency of organic farming principles in the regulation and reducing bureaucracy', which reflect the aims of the European Action Plan. Other objectives would be: 'maintaining and enhancing the integrity of organic principles and organic food', and 'promoting the understanding of the concept and potential of organic farming in society'. All these objectives are important in the current revision of regulation and mirror the self image of organic agriculture. They could also be read as a plea to strengthen the self-regulation of the sector, i.e. allowance to make context related decisions on a clear and common value basis.

Also some of the societal level objectives have value character, and some are of more economic or viability character. For example, 'promoting sustainable use of natural resources' as well as 'maintaining and enhancing the environment' are clearly linked to the core values of organic agriculture of sustainability and care. There is however not one single unambiguous interpretation of these values, which makes their evaluation, as well as implementation difficult.

Before going into possible ways of handling such different interpretations, one other field of discrepancies shall be mentioned. Section C1 of ORGAPET (Lampkin and Nicholas 2006, p. 6) highlights a potential area of conflicting interests between the organic market place and public good delivery. Organic farming aims to market organic food to consumers, i.e. meeting consumer interests. On the other hand its aim is to deliver 'public goods' in terms of healthy environment and by performing sustainable agriculture, which in turn includes for example, improved animal welfare. The driving forces for these two aims are different. Whereas the first one is market driven, the second is driven by society (see also Section A4 ORGAPET by Michelsen *et al.* 2006). This corresponds with the ideas of Alrøe and Noe (2008, see 2.1.1), who identified three main perspectives and driving forces in organic agriculture: the protest movement developing an alternative to conventional agriculture, the logo-poetic movement building on a common organic ideology, and the market niche perspective. Or in other words, it is possible to differentiate between a public goods perspective, an organic value perspective and a market perspective, which of course are interlinked with each other. It is important that the regulator treats all these perspectives as important, but nevertheless respects a base line of common (or core) organic values.

ORGAPET includes a list of suggestions how such different aims or visions can be made more explicit, one of which is 'making the regulation more transparent by defining basic principles of

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²⁸ Section C1 the toolbox (ORGAPET) on 'Identifying action plan and policy objectives'



organic agriculture' Another is 'complete and further harmonise the standards for organic agriculture' (p. 7). The latter confirms the importance of developing shared pictures or common understanding of the current situation, and need for communication. The focus in this report is not on differences between and harmonisations of private standards (For this, see the Organic Rules database and WP3 report). However, the problem of making aims and visions explicit and a need for clear communication structures is the same for the revision of the EU-regulation as for reconstruction of core organic values. The question thus is how to deal with inconsistencies and differences between organic values and aims on the one hand and regulation on the other in their existing form. Further it is an issue of handling differences in decision-making process, since the organic movement has the tradition and conviction that content and procedure are strongly linked and considers participation one of the value elements of Fairness.

4.4.3 Handling conflicting vales

A number of different objectives in organic agriculture are connected to a range of values, but some inconsistencies between different organic aims exist that have to be addressed in the context of the regulation. By asking some central and analytic questions, differences in perspectives and aims can be made explicit, and the nature of the conflict can be identified. In the EU-project, 'the Development of Ethical Bio-Technology Assessment Tools for Agriculture and Food Production²⁹', several tools for ethical assessment have been analysed and elaborated. One of the most well known tools is the idea of the 'ethical matrix' that aims to 'help decision-makers (individuals or working in groups) reach sound judgements or decisions about the ethical acceptability and/or optimal regulatory controls for existing or prospective technologies in the field of food and agriculture' (Mepham *et al.* 2006, p.10). In short, the method consists of each person or stakeholder declaring its stand in three areas:

- Wellbeing,
- Autonomy, and
- Fairness.

These are seen as representing the three ethical positions: utilitarian concern, deontological concern and respect for justice with respect to groups involved (such as producers, consumers, treated organisms and *Biota* or other living entities in the issue at stake). This reveals different positions, which are then evaluated in through scoring on a scale from -2 to +2 (high respect/increase to disrespect/decrease). Such a mapping could be of relevance in contexts where different groups meet and have difficulties understanding the perspective and pre-understanding of the other.

This potential application of this method is restricted to ethical technology assessment; it could also be used for different kinds of agricultural issues. However, to a large extent it aims at clarifying diverging views and perspectives rather than finding a common answer or overcoming the differences. As such it could have been used in the IFOAM-process of developing the core values. However, such an ethical matrix is probably less useful in handling conflicts between organic values, since this is an issue of interpreting values already agreed upon and more seldom a question of deciding on whether to accept a technology or method or not. The question in the interpretation of organic values is one of finding and agreeing the limits and thresholds in the implementation of accepted values.

Thus a method is needed that can guide not only to distinguish whether different interpretations and values actually conflict with each other, but also how to decide which is of highest importance in

²⁹ Ethical Bio-TA Tools, QLG6-CT-2002-02594; http://www.ethicaltools.info/

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each special situation. In the above-mentioned project on ethical assessment tools a further method is developed in what is called a Corporate-Morality-Responsibility-Kit (Brom *et al.* 2006). The structure suggested is to use the picture of a value-tree, a kind of analysis developed in order to distinguish higher ranked values from lower ranked ones, and to enable actors to choose between alternative options $(p.36)^{30}$. In the Corporate-Morality-Responsibility-Kit the structuring of alternatives is split into two parts. In order to help implementation of the actions needed to realise agreed values the authors divide between two aims:

a) Imaging and developing suitable initiatives for realising the value-tree, andb) Assigning or negotiate the responsibilities of various actors.

Value assessment is thus an important element introduced to guide balancing after the mapping has been performed in an ethical matrix, and after that, a responsibility assessment is introduced before the last step of evaluation (p. 35-42).

The process of value assessments consist of asking the stakeholder to develop a hierarchy of important corporate/stakeholder values, which are then ranked based on further dialogue (see Part II above). Unfortunately the manual does not provide any further guidance on how this dialogue could be performed. Nevertheless, based on their ideas questions can be posed which are relevant for the evaluation and ranking of organic values already agreed upon. The value elements on which the four core values of organic agriculture are built could be an important tool for further value assessment and interpretation. These ideas connect well with the suggestions of ORGAPET regarding evaluation of objectives of a certain undertaking. For example, both toolboxes suggest that the set of objectives should be as short as possible but nevertheless cover all relevant aspects. This implies that there should be no redundant objectives, and that objective at the lowest level needs to be operational (Brom *et al* 2006, p.36). Evidently the objectives have to be clarified in the first place, as a basis for building a hierarchy of values for each situation and issue at stake. In this context the IFOAM principles function as objectives too by stating the overall aims of organic agriculture.

The following questions are suggested as a help in structuring the evaluation of differences when stakeholders, representing a range of interests aim at clarification of perspectives and interpretation of values and provisions in the regulation. This is seen as taking place in the form of a dialogue between stakeholders on how to interpret the values in the main regulation including the development of the more detailed implementation rules as wells for interpretation where there is some room for self-regulation.

1) Which value is affected in which way?

Answering this question what value is affected requires definition of values at stake followed by an open discussion aiming at a shared interpretation of the issue. Following from this positive influences and interferences in each particular situation can be made explicit and discussed. This question therefore asks for a detailed description of the values at stake based on a common understanding of the value as well as the situation.

In order to evaluate what value is affected, and in which way, a further evaluation and interpretation of the four core values (Health, Ecology, Fairness, Care) is needed. A number of value elements can be identified in each of the four core values (or ethical principles) in a general way and there some further values (sustainability, naturalness and systems approach) that integrate them (see Chapter 2). However, at this stage it is necessary to reduce each value to a specific statement at the relevant level of the regulative situation (See Figure 4-2). This has to be done first as an issue of definition,

³⁰ http://www.ethicaltools.info/

and then interpreting it in the context of concrete cases. A necessary point of departure is that each stakeholder formulates its interpretation of the value affected. Each representative also has to spell out his/her pre-understanding as well as visions. If these starting positions are very different the consequences of a certain interpretation will vary to the same extent. This implies the need to define not only the core values at stake, but also value elements included in them.

For example the core values of Health and Fairness have implications for animal welfare, but animal welfare as such can be defined in various ways (Fraser *et al*, 1997). Lund and Röcklinsberg (2001) argue that a definition of animal welfare as natural living approach is closest to the ideals of organic farming. But most veterinarians argue that animal welfare is better understood and described as physical (and mental) health. In a situation of choice between free range pigs and environmental impact, someone holding a natural behaviour view of animal welfare would argue that the welfare, and thus in a broad sense health, of the pig is impaired when kept on concrete floors (even if outdoors). Whereas someone arguing that health in a physical sense matters could argue that the pig's welfare and thus health is fine, if (for example) resting area is soft and clean. This shows that there could be differences to sort out regarding animal welfare before a common agreement can be reached regarding how the values of fairness (in this example in relation to animals) and health are affected in a certain situation or suggested regulation.

Relating these differences in interpretation of animal welfare to the above-discussed elements in deliberative decision-making it is evident that a shared understanding of the situation is a necessary precondition. Similarly it shows the need to be context sensitive. This would be a help also regarding the next step in the procedure of sorting and interpreting values in a given context.

2) Is there a conflict between two or more values?

The previous stage has helped formulating a common interpretation of each value, sensitive to the particular context aiming also to make implicit conflicts more explicit. After this it should be possible to develop a shared understanding of the conflict, based on the shared picture of the situation that can serve as a point of departure for a constructive discussion on how to handle a conflict between values. Ideally this step should be conducted according to the procedural steps how to solve the conflicting perspectives described above (see 4.4.3) and needs to consider the strong linkages between some of the core values.

At this stage the idea of the value tree from the Corporate-Responsibility-Kit (Brom *et al.* 2006) becomes relevant. To handle conflicting values it is important to determine whether there is a factual conflict between two or more values.

In the example of outdoor access of farm animals, a conflict appears to arise between farm animal welfare and environmental protection in terms of the leaking of nutrients and damaged swards through pouching farm land by grazing animals. However, keeping to the definition mentioned above of animal welfare as related mainly to species-specific behaviour, but also to health (physical and mental) and subjective experience on the one hand, and environmental protection for instance as 'protecting non-human nature from irreparable changes' on the other, no real conflict occurs by letting live stock or pigs graze. Their potential damage of to the land and the sward is not irreparable if the stocking density is low and the soil quality good (not to mention the positive effects of letting cattle and chicken graze together in terms of biodiversity). In practice the issue is thus related to the intensity of use (i.e. economic factors) rather than a conflict between values. It is of high importance that such differences are understood and recognised.

Relating values to each other it is of some help if in the end a hierarchy of values could be stated, or a value tree could be developed. However, although a values tree would be valuable, the issues to



be considered in relation to organic farming in a globalised market economy are complex. One has to be cautious not to make the creation of a values hierarchy for each issue at stake to an aim in itself. This could lead to a range of value hierarchies for different farming situations without ever being able to fully describe all possible options, and would thus be without relevance in decision-making. Rather it is important to have some tools to distinguish what is relevant, in order to decide what values are challenged and how the challenge is formulated. Unless the nature of the conflict, what values are at stake and their consequences are clearly agreed, stakeholders will focus on their own (interpretation of) values instead of a shared and thereby risk not evaluating the same challenge.

Based on the shared description of the case (Question 1) explicit and implicit conflicts can be stated. A shared understanding of the conflict should serve as a point of departure for a constructive discussion. This should lead to a clear statement, whether the initial conflict is one of core value interpretation, or whether the case represents a true value conflict. If true value conflict exists, further discussions among involved participants require context sensitivity and have to take into account that many core values of organic agriculture are interlinked.

3) Which aspects are relevant?

One way to determine which aspects are of relevance is to pose questions that clarify what kinds of effects values have. This has to build on the interpretations of a certain value-or rather the combination of values since the core organic values are to be understood in relation to each other and as a whole. For the sake of clarity it should be mentioned that looking for consequences does not reduce the 'value' (importance and relevance) of values. The very reason for talking about core values in the deontological approach-described as more or less inherent in organic farming in Chapter 2)-is so that they are respected and taken into consideration. Even from a perspective of values being important in them selves, and/or as a base for formulating principles, the actual adherence to them in practice is the way to show such respect. Hence, it is most central to sort out disagreements about the consequences or effects the implementation of a value, above possible disagreements in interpretations.

Fundamental questions to sort out the relevance of values regarding the *consequences* of implication of a value are:

- What *explicit* consequences follow from a certain implementation of interpretation X of value Y?
- What *implicit* consequences follow from a certain implementation of interpretation X of value Y?

In order to explicate such consequences different approaches can be taken. One is to sketch a set of possible scenarios, to which all stakeholders contribute. The aim is to investigate all kinds of possible consequences that could follow from respecting a given set of values by listening to different participants. The next step would be judging the probability of each scenario, i.e. trying to figure out how different factors might influence according to previous knowledge in the field as well as statistics and opinion polls. This could help creating a shared view of what consequences are probable and therefore worth discussing. This goes both for the explicit or obvious consequences and for the more implicit ones, although the latter are more difficult to reveal, and a deeper discussion will be required to reach a shared view. The sketching of scenarios involves balancing of theory and practice-another element of the five important elements of decision-making in the deliberative democracy model. Looking for consequences of values is to a large degree the core of such a balancing process. Theoretical statements leading to an unrealistic practice or without

any impact of actions taken could be identified using practice as one measure for evaluating theoretical value statements (Röcklinsberg 2001). If consequences are regarded as counterintuitive, or a spontaneous consensus is achieved against it, argumentation is still required to motivate why this alternative is not chosen. However the effort has to be put on clarifying consequences that seem arguably acceptable to involved participants, and then the probability can be evaluated.

This could at best be done in a discussion open to all stakeholders following the rules of respect for person and arguments given above. Taken such an open process as both method and aim, trusting participants' good intentions and the agreed foundation in core organic values, no details can be stated in advance where to land, what to agree on.

A further tool for action guiding in a conflict between values, aiming at balance or a sustainable compromise is to look for correspondence and analogy between one situation for which a good solution has been found and another one for which a solution is needed and to look for how others have solved a similar problem.

If there is an analogy between relevant and significant traits and characteristics of the situations, one can argue that the first situation could serve as a model for solving the situation at stake. This could be called the argument by analogy, but also has similarities with what is called an 'argument by cause', which is an often-used method in medical and social sciences (Weston 2000). Much sharing of practical farming experience to improve practice refers to similar or 'corresponding' situations from which lessons can be learned. However, the context sensitivity of organic farming limits where solutions from corresponding systems are transferable, there is hence an 'ideological' reason not to use this tool at all times. Looking for corresponding solutions is probably mainly relevant for farmers and other practitioners, less for stakeholders from the administrative side.

4) How can the conflict be evaluated and what action should follow?

The final question refers to the need to come to an overall decision. An agreed evaluation of the issue and values at stake in the conflict provides the basis for a decision to guide future action. Again a deliberative process is recommended in order to open for all relevant stakeholders to participate and influence the decision.

4.5 Consultation and decision-making structure and process for the revision of the European Council Regulation on organic food and farming

This section sets out the consultation and decision-making structure for the revision of the European Regulation (EEC Regulation 2092/91) on organic food and on the implementation rules and discusses how this relates to the task of integrating and interpreting basic ethical values in organic regulations and standards that are presented in this Chapter.

4.5.1 Decision-making structure for the new Council regulation on organic production

In the European Union, the Council of Ministers has the principle power to make changes to the core regulation concerning organic production, based on drafts elaborated by the Commission and after hearing the opinion of the European Parliament. This procedure applies to the ongoing total revision of the Regulation for organic food and farming which resulted from the European Action Plan for Organic Farming from 2004.



A proposal for a new regulation was drafted by the European Commission and published in December 2005. This draft proposal was negotiated first by a 'Working Group on Foodstuff Quality (Organic Farming)' of the Council of Ministers under the Chair of the EU Presidency. The working party held several meetings during 2006, at first under the Austrian followed by the Finnish Presidency of the European Union; at the beginning of 2007 Germany took over. This working group proposed a revised draft for the text of the new Council Regulation. Under the Finnish Presidency, from October onwards the negotiations moved away from the technical level to the political level of discussions in the Special Committee on Agriculture (SCA)³¹. On the 19-20 December 2006 the Agriculture/Fisheries Council agreed on a consolidated text of the general approach on the draft regulation (16577/06 ADD1, ADD2and ADD3), pending the European Parliament's opinion. The upcoming German Presidency expressed its intention to reach an agreement on this file after the opinion of the European Parliament is made available which is expected by the end of March 2007.



Figure 4-2: Decision-making structure for a European Council Regulation on organic food

In summary, decisions in relation to the European organic farming regulation are influenced by three bodies:

- 1) The European Commission: represented by the Commissioner for Agriculture assisted by the Organic Farming Unit (proposed a draft for a new council regulation).
- 2) The European Parliament has to be consulted (a first statement was made in the spring 2006; further discussions are expected to take place in two committees followed by a general vote at the end of March).

³¹ The Special Committee on Agriculture (SCA) is a committee of senior agricultural civil servants of the Member States. A Council Decision on 12 May 1960 established the SCA, to prepare the work of the Agriculture Council. Senior civil servants of the Member States, the Commission and the Council Secretariat attend meetings. The meetings are chaired by the Member State currently holding the Presidency. The Committee usually meets 3 times a month to review proposals sent to it by the Council. The Committee carries out the technical examination of proposals presented by the Commission to the Council. Some of the proposals may be referred initially for detailed examination by expert Working Groups of Member State officials. When the proposals have been examined they are forwarded to the Council for further discussion and adoption (EU communication 2004 under Irish Presidency: http://www.eu2004.ie/templates/meeting.asp?sNavlocator=5,13&list_id=436)



3) Council of Agricultural Ministers agrees the new regulation. This has representation of the relevant Ministries of the Member States in the Special Committee of Agriculture assisted by a Working Group on Foodstuff Quality (Organic Farming). (A decision on a general approach was reached in December 2006).

Prior to the drafting of a new text the Organic Farming Unit in DG Agriculture of the European Commission consulted widely on the situation of organic farming in relation to the European Action Plan on organic food and farming that was adopted in 2004. During preparation of the new draft the European Commission consulted in autumn 2005 member states and interested parties, such as the IFOAM EU group, on a number of questions with a relatively short response period.

During the negotiations of the proposed draft in 2006, the European Commission (with the Deputy General of DG AGRI) met several times with representatives of the IFOAM EU group and other interested parties, and considered advice from experts, such as from the Organic Revision Project. During these discussions DG Agriculture proposed to involve in the future more strongly its Advisory Group on Organic Farming.

Like other agricultural advisory groups, the Commission's Advisory Group on Organic Farming brings together representatives of the various social and economic interests on the Commission's invitation³². The representatives are nominated for membership by organisations established at Community level. The group enables the Commission to be aware of the range of views these organisations hold on individual agricultural production sectors, such as organic farming. With agreement of the commission a group can form a sub-group. The Commission can consult the Advisory Groups on any matter relating to the common agriculture and rural development policies or the chairperson of any group may propose that the Commission consult it on a particular matter. The Commission is not bound by advisory group opinions but takes them very seriously and notifies the Group membership of its action in response to them and has to notify other institutions if a group unanimously adopts a position.

The group on organic farming was established in 1998, and following changes in the Commission Decision forming the legal basis for the advisory groups (2004/391/EC) the structure of the Organic Farming Advisory Group was recast in 2004 (see Table 4-2). The group meets twice a year on a regular schedule, and is as such not in a position to respond quickly to issues under discussion. The membership consists of a mixture of organic and non-organic operators; representatives as nominated by the relevant lobby groups, such as COPA/COGEGA. This Commission Decision does not make any specific reference to the organic sector as a stakeholder but the IFOAM EU group is represented in the committee.

Stakeholder type	No of Seats
Farmers and Agricultural Cooperatives	9
Traders	3
Industry	3
Workers	1
Consumers	3
Environmentalists	1
Others (incl.IFOAM-EU)	7

Table 4-2: Composition of the Advisory Group on Organic Farming

Source: Commission Decision (2004/391/EC) on Advisory Panels for Common Agricultural Policy The second important route of consultation of the views of the organic sector is via the National

³² Decision 2004/391/EC (OJ L-120 of 24 April 2004)

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Ministries. The standard procedures to consult with the organic industry vary considerable between Member States, and ministries are not obliged to adopt a certain view. The Ministries were represented in negotiations about the first draft of a new council regulation on organic food in the Working Party of the Council of Ministers (see above) and in the Special Committee on Agriculture.

The third route of consultation of stakeholders in relation to the main regulation is through the European Parliament. Jointly with the IFOAM EU group the European Parliament held a stakeholder conference in 2006. Over 90 stakeholders from eleven different EU countries participated at the public conference 'Organic farming: Ready for the next Decade?' on March 27 in the European Parliament. The delegates discussed the Commission's proposal on the Revision of the Organic Regulation with the Austrian Presidency, the European Commission and the European Parliament. The conference was organised by the IFOAM EU Group together with the responsible rapporteurs from the Agricultural Committee of the European Parliament.

In summary, in these decision-making structure organic operators, organic sector bodies and other interested stakeholders could approach either a European lobby organisation represented in the advisory group, a national ministry that is represented in the Council of Ministers or contact a Member of the European Parliament to express their views on the new draft. Certification bodies and other members of IFOAM could also contact the IFOAM EU group.

The current structure relates to the democratic model of elections and voting by a majority in so far as the Council of Ministers consists of political representatives of the respective governments of the member states (see **4.3.1**). To a lesser extend it relates to the alternative models of participation of representatives of affected stakeholders in so far as the European Action Plan was widely consulted and a limited and brief consultation was also carried out in preparation of the draft legislation. However, it has been pointed out that the process was not in accordance with the 'Principles of Good Governance' that the EU itself aims for (Eichert et al., 2006). In particular, the process could have been improved in relation to two of the five principles of good governance: *openness and opportunity for participation*. Openness could have been improved by more widely publicising the structure of the negotiation process and publishing regular updates on progress. Also the opportunities for participation of the affected stakeholders could have been improved through consultation of stakeholders at an earlier stage.

In the meantime, however, a general approach for the main regulation was agreed in December 2006 by the Council of Ministers subject to Parliament approval and final adoption which is expected under the German Presidency of the European Union.

4.5.2 Decision-making structure for the implementation rules (Annexes)

Once the Council Regulation is adopted a different decision-making structure applies to decisions in relation to implementing and interpreting the values in the implementation rules (Annexes). Under the existing Regulation (EEC 2092/91) decision about the Annexes are taken by the Commission assisted by the Standing Committee (SCOF) composed of experts from Member States' authorities (see Art 14 of EEC 2092/91). Under the current rules in Regulation (EEC) 2092/91 (Art 13 and 14) the power to make changes to the Annexes to the regulation is delegated to the EU commission assisted by as Standing committee for Organic Farming (SCOF, previously known as the Art 14 Committee) which consists of representatives of the Ministries in all member states. Once the commission has prepared draft for changes, this is discussed by the SCOF. According to Article 5


and 7 of underlying Council Decision 1999/468/EC³³ there are two potential outcomes for such regulatory committees:

1) The Regulatory Committee (in this case SCOF) agrees with the Commission proposal. In this case the Commission can act and the draft is adopted.

2) The regulatory committee opposes a proposal or has no clear opinion. In this case the Commission has to submit to the Council of Ministers a proposal relating to the measures proposed and the European Parliament has to be notified.

The decision-making structure for the implementation rules in the new Annexes is set out in Art 31of the draft text agreed as the general approach where it says that the Commission shall be assisted by a Regulatory Committee on Organic Farming also with reference to Art 5and 7 of Council Decision 1999/468/EC. The new regulatory Committee should therefore be of the same structure as the current SCOF (See Fig 4-3).



Figure 4-3: Decision-making for Annexes/ implementation rules in new council regulation for organic food

The new regulation envisages implementation rules to be developed before the regulation comes into force in Jan 2009. These detailed implementation rules should be subject to the objectives and principles laid down in Title II which contains aims, objectives and basic principles of organic farming, i.e. the elements in which reference to ethical values has been made. The areas for which rules are envisaged are outlined in Art 32 of the general approach text as follows:

- Production (outline in Title III) setting out specific requirements and conditions to be respected by the operators;
- Labelling (outlined in Title IV)
- Control system (outlined in Title V) setting out minimum control requirements, supervision and audit, the specific criteria for delegation of tasks to private control bodies and the criteria for approval and withdrawal of such bodies;
- Imports from third countries (outlined in Title VI)
- Free movement of organic products (laid down in Article 28) and
- Transmission of information to the Commission (outline in Article 29 in Title VII).

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³³ COUNCIL DECISION of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1999/468/EC). Official Journal of the European Communities L 184/23, 17.7.1999.



The decision-making structure as set out in Art 31 of the text agreed as the general approach will depend on the full adoption of the regulation by the Council after Consultation of the European Parliament.

This report from the Project EEC/2092/91 (Organic) Revision showed that some contradictions exist between the current organic farming practice in Europe as permitted under Regulation 2092/91 and the principles laid down in Title II (see Conclusions from Chapter 3). Also from a 'good governance' perspective this system has some strong disadvantages. Negotiations in a regulatory committee like the current SCOF are often dominated by the national interests of member states. In the past, that has been one of the reasons for long and time-consuming decision-making processes on amendments to EEC 2092/91 (e.g. decision on Regulation 1804/1999 Organic Livestock production and on the new Annex VI for processing (AGRI/2005/60270_ex 2004/64100 Rev 2, voted in the SCOF the 23 of March 2006)). The Project EEC/2092/91 (Organic) Revision recommends re-considering the general intention to transfer all of the existing Annexes without change into new implementation rules, because of because of the contradiction between current practices and some of the principles laid down in Title II of the general approach, It would be better to examine carefully where some changes to the current rules could be proposed - in particular in relation to the use of external inputs on farms and to impose some restrictions on input intensification of organic agriculture.

4.5.3 Suggestions for improvement in relation to Council Regulation and Implementation rules

The current decision-making structures both the main regulation and for the implementation rule has some short comings in relation to open and transparent mechanism of stakeholder consultation and participation. In the existing structure it is also not clear how and by whom the important task of interpreting the ethical values expressed as objectives and principles in Title II for the implementation rules will be carried out.

There are some possibilities how this situation could be improved. The task of considering the interpretation of Title II for the implementation rules could be given to the independent Expert Panel mentioned in the European Action Plan for Organic food of 2004 which is discussed further in this section. Some other suggestions are to improve stakeholder consultation are also discussed.





Figure 4-4: Suggestions for involvement of the stakeholder committee and expert panel in the development of implementation rules

Establishing the Expert Panel on Organic Food and Farming

In Action 11 the European Action plan refers to the establishment of an Expert Panel for delivering independent, excellent and transparent advice to the Commission Directorates and the Standing Committee. In the Action Plan this panel is considered to be a way to rationalise this work. Advice from the experts will be sought on the evaluation of new substances and the development of rules for new production areas because they are considered complex and time-consuming and require a high degree of special expertise. New criteria for the evaluation of inputs have been proposed in Art. 11 of the text agreed as the general approach. Like the development of new rules they refer to Title II (Objectives and Principles) and hence would require the interpretation of the ethical values referred in this title. Given that this expert panel would need to be familiar with the objectives and principle of Title II for these two tasks it appears sensible to seek advice from these experts also in the development of proposals for transferring the Annexes of 2092/91 to new implementation rules (so called non-papers) before legal drafts are presented to the Regulatory Committee. The following section sets out the list of tasks that could be given to the expert panel, the expertise required in the composition of the panel and some other important issues.

Tasks: One important tasks of the Organic Farming Expert Panel should therefore be to consider from different perspectives whether proposals for new rules adopt a consistent and coherent interpretation of Title II (Objectives and principles) that have now, for the first time, been stated in the in EU regulation on organic production.. It appears especially important to ensure coherence between the different areas of production and implementation rules and to evaluate the possible consequences of changes to the rules before they are implemented in practice. This requires an independent expert group of researchers that are familiar with a system oriented approach and with the field of meta-analysis.

This implies that the tasks of this expert panel mentioned in the Action Plan should be extended to cover not only new production rules and evaluation of inputs but also the development of proposal for the transfer of the existing Annexes into the new implementation rules in light of the objective and principles (Title II).

In summary the Expert Panel would advise both the European Commission and the Regulatory Committee on the interpretation of objective and principles of organic farming stated in Title II of the new Council Regulation in proposals for the transfer of existing rules to the new regulation, on proposals for new production rules, and on the evaluation of inputs.

Composition and expertise: The Commission Staff working Document related to the European Action Plan for Organic Food and Farming suggests that the expert panel should be composed of scientists and other experts and that the panel should submit its advice taking into account existing Community policy objectives as well as organic farming principles and consumer expectations (EC 2004). The EU funded concerted action project 'Evaluation of Organic Inputs' made some recommendations on the tasks and composition of the panel (www.organicinputs.org). In the final project report Speiser et al. (2005) highlighted that the evaluation of inputs for organic farming needs to take the public perception and consumer acceptance into account. The process of input evaluation therefore requires a broader range of expertise than that needed for example for the registration of pesticides. The composition of the expert panel should therefore on the one hand cover expertise with organic farming systems in relation to animal and crop husbandry, viticulture, horticulture and on the other hand research experience in relation to organic marketing and

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consumer research, policy, standards, inspection and certification, soil science, chemistry, ecotoxicology, ecology, human health, plant protection and plant nutrition. The area of organic processing would need to add to these recommendations of the Organic Input project.

For the task of the coherent interpretation of basic organic values of Title II the panel should needs to also have expertise in working with organic principles in relation to the core ethical values of health of soils, animal, plants and human, the sustainability of agro-ecological systems, to social systems and to prevention and precaution.

In summary, the Organic Farming Expert Panel should be composed of 10-20 individuals from a range of research disciplines and other experts. The Panel should further be able to draw on specific expertise in certain areas to cover a particular subject (for example toxicology in relation to certain inputs). It is important that all experts have a proven track record of working with organic food and farming systems, so that the deliberations of the panel can relate to current practice as well as being evidence based wherever possible. The panel should include expertise in the following areas:

- Organic food and farming systems in relation to animal and crop husbandry, viticulture and horticulture and food processing;
- Working with organic principles and ethical values in a systems based approach;
- Organic marketing, policy, standards, inspection and certification;
- Soil science, chemistry, eco-toxicology, ecology, plant protection and plant nutrition, animal nutrition and animal health and food technology and human health.

Recruitment: The experts should have a proven track record in working with organic farming systems and should be familiar with a systems oriented research approach or have other relevant expertise; some practicable knowledge of organic farming or processing would be highly desirable. The aim of should be to recruit a balanced and independent panel that has sufficient expertise and can relate values and principles to practices of the organic sector. The panel should be balanced in relation to the regions where the experts come from, in relation to gender and in relation to natural and social science disciplines. Individuals should be recruited from public and private research organisations that have worked on organic farming issues. Individual members should not have a direct stake in any organic businesses or certification bodies and should be as independent as possible. Any existing involvement that could represent a conflict of interest should be declared. In the last few years a number of organisations have been working on several policy-oriented research projects at European and national level which has helped develop their expertise in this field.

Remunerations: The work of the expert on the panel should be remunerated for the time spend in attendance and appropriate time for preparation, as well as reimbursing expenses for travel and subsistence according to community rules. Remuneration of the experts is important to assure commitment to the work of the panel, in particular for the important task ahead of translating/transferring existing Annexes into the new implementation rules. Many private and public research organisations that are involved in research on organic farming and from where potential candidates for the expert panel could be recruited would not necessarily be willing to regularly sponsor the attendance of one of their staff to work on such an expert panel. Remuneration would also reduce the risk that an expert becomes financially dependent of a particular sponsor.

From an economic point of view this might seem costly to remunerate also the work time of experts (where absolutely needed). But if such a system allows to reduce value conflicts in an early stage before the official consultation on Member state level starts or to elaborate much better and broadly acceptable solutions and strategies this would help to make the decision process more efficient and less time-consuming, and would hence improve the overall cost-efficiency of such a system.



Rules of discussion and decision-making: Within the given legislative framework of the European Commission, the Organic Farming Expert Panel should adopt rules of discussion and decision-making for itself that refer to the five important aspects of ethical dialogue (see **4.3.3**). In particular three of the five aspects should be addressed:

- context sensitivity,

- the need to develop a common understanding of the situation in question in relation to particular production rules or inputs across all the member states, and

- to the need to relate the principles and objectives of Title II to the practice for which new rules have to be developed. The panel also has to consider implications for consumer trust, the ability of organic farming to deliver public goods and trade in all member states.

Suggestions related to a Stakeholder Committee on Organic Farming

Currently, the function of the Commission's Advisory Group on organic farming is not widely known in the European organic sector and the group does not appear to have a public profile. Building on the model of representation from European stakeholder organisations that is used in all Agricultural Advisory Groups, representatives sent by the organisations do not necessarily have any direct involvement with the organic sector. This model of representation does not correspond well with representing a grassroots organic movement that developed largely in opposition to mainstream agriculture. The legislative basis (Commission Decision 391/2004) does not name any organic stakeholder organisation.

It is clearly important that organic and agricultural stakeholders should be consulted on proposals for new implementation rules and should have an opportunity to express their view. The role of the existing group in stakeholder consultation and participation could be strengthened in a number of ways. The role of the Advisory Group on Organic Farming as one route for stakeholders to express their view through their representatives could be more clearly communicated. This could be supported by renaming the Group to *Organic Stakeholder Committee*. The process could be made more open and transparent by publishing names of the members and the organisations that they represent and by publishing the agenda for and minutes of the meetings. More frequently meetings, and the setting up of subgroups for particular topics, could also strengthen the stakeholder involvement through this committee in the process of finalising the new regulation.

Open internet consolations on important new proposals

Organic farmers, processors and other operators have criticised that they felt not sufficiently represented by their organisations in the past and that they have no opportunity to express their opinion directly addressed to the relevant bodies on EU level. Therefore another complementary tool to consider is internet consultations on important new proposals. This tool has been used in a number of European Research Projects, for example, in the EU funded Research project ORWINE in which it allowed to approach and involve a relatively high number of organic wine producers (www.orwine.org). Similar experiences were made in the EU QLIF project (Quality of low input Food), where food processing experts were consulted in a European wide Delphi Expert survey. The experiences showed that such Internet-based surveys can function well, if highly relevant issues are addressed and the questions are translated in the relevant EU languages. As such, internet surveys can be a valuable and relatively cheap tool to consult stakeholder views but they nevertheless need sufficient resources and the integration in policy-oriented research projects should be considered.

Integrative Strategy Seminar



Furthermore, the Project (EEC) 2092/91 (Organic) Revision recommends that a regular (for example once a year or every other year) an Integrative Strategy Seminar should be organised in to which members of the Regulatory Committee, Expert Panel and Stakeholder Representatives are invited. This seminar 'Developing Visions and Integrative Strategy for Organic Farming in Europe' would allow an intensive exchange of views between the three main bodies involved in decision-making (Regulatory Committee, Advisory Group with improved stakeholder representation, Expert Panel) with the European Commission and with the private sector. The idea for such a seminar was first suggested in 2006 by the former Deputy Director of DG AGRI (Dirk Ahner) in discussions with the European private sector umbrella organisation (IFOAM EU). It would have the clear advantage to allow exchange of views and a debate about controversial areas between the different bodies and thus develop strategies for further thinking.

4.6 Conclusions

- The organic sector is value based which needs to be respected in regulating it at governmental level. Harmonising the values basis behind the rules provides the basis for harmonising the rules, for implementing flexibility and to strengthen self-regulation and responsibility within the organic sector.
- A first step in further harmonising the values behind the rules is to communicate the values widely as a basis for a wider discussion and finally agreement of the value basis.
- The new regulation has a hierarchical structure moving from aims, objectives and general principles to specific principles and rules. Further normative work is needed to determine how the value base of organic farming can be integrated and implemented within the structure of the regulation in a coherent way.
- Including core values of organic farming in a regulation should respect the value base of organic actors as far as possible as expressed in the core values of Health, Ecology, Fairness and Care. ?
- All values should be included in the regulation as an expression of the shared value basis of organic production.
- Each core value includes a number of value elements. To implement these in the regulation it appears helpful to aim for an accepted definition of each value element and a statement of interpretation at different levels of the regulation (as aims, objectives, principles and rules).
- There is limited experience within the organic sector in setting standards for some of the core values, i.e. balance of ecological systems and social values related to the principle of fairness. The private sector could have an important role as a forerunner in developing standards on how these values can be codified and audited before they are taken up by the regulator.
- For many of the core values no single unambiguous interpretation exists, which makes their implementation at various levels more difficult and requires a procedure. The greatest possible openness should therefore be adopted when handling values, i.e. interpretation of values, in the transition from theoretical statements to agreements of kind of practical action.
- In such processes of interpretation of values a participatory process for formulating standards based on practical experience is important.



- The model of participative and deliberative democracy shows many similarities to decisionmaking procedures used within the organic movement by taking both content and discussion form into consideration from the very beginning. It could be applied to the question how to integrate core values in the regulation.
- Five elements are important for participative and deliberative democracy:
 - o respect for the discussion partners,
 - o respect for arguments and emotions,
 - o context sensitivity,
 - o a common understanding, and
 - o relating the theory (values) to practice.
- To achieve *context sensitivity* and *develop a common understanding* it is necessary to communicate more widely about the shared value base of organic agriculture but also about the differences in practices of organic farmers across Europe and how they relate to certain core values.
- The model of participative and deliberative democracy can be applied to processes of value harmonisation and integration in the regulation, including implementation at the level of rules, as well as for interpreting the regulation. The model could also be applied for self-regulation among organic stakeholders and operators.
- The model is particular relevant in handling potential conflicts between core values, for example between animal welfare and the environment, allowing regional flexibility and determining the details of the rules. Relating *theory* (*core values*) *to practice* appears particularly important when it comes to the judgement of a suggested regulation, i.e. in the interpretation of the values and rules in a certain situation.
- One important part of interpretation of the value base is how to deal with conflicts. To resolve this it is necessary to determine at what level conflicts occur, how many and which value(s) are affected and what would be the explicit and implicit consequences of implementing a certain interpretation of a value.
- There is a need to develop decision-making structure that ensures coherence in the interpretation of ethical values in developing rules for the practice of operators, for example by given this task to an Expert Panel on organic farming.
- There is a need to strengthen the consultation and participation of representative stakeholders.





5 Conclusions and recommendations

5.1 Regarding the role of values in the regulation

The organic agriculture movement is by tradition value based. Certain values and perspectives are at the very core of organic agriculture, both in terms of the thinking (theory) and the actions (practice). A considerable amount of material about the values of the organic movement exists and can be used to identify the underlying ideals.

Organic standards and regulations implement these values. They act as the basis of a contract between producer and consumer. The producer promises to deliver on certain ethical values by following the practices set out in the standards, and consumer receive a guarantee what they can expect from an organic product. The process is mediated by the certification bodies, many of them are private organisations.

The roles values play in regulating organic farming is therefore different to other regulations (e.g. animal welfare or environmental ones) where minimal rules are laid down for all to follow.

The fact that values are included in regulations can in turn significantly influence the development of organic agriculture and has impact on the operators. There is a tradition of dealing with different value interpretations in a constructive manner in the organic movement, since fairness and respect are important values.

1. Regulators should recognise the value-based approach of organic agriculture. When formulating governmental standards, the core organic value perspectives should be considered, and stakeholder involvement assisting with the formulation and interpretation of core values facilitated.

The International Federation of Organic Agricultural Movements (IFOAM) has formulated four ethical principles of organic agriculture, based on a wide stakeholder consultation process and a democratic vote amongst its members.

A comparison of the values in the literature with those expressed in the IFOAM principles shows that most stakeholders and researchers share the intentions and ideals behind all the values in these principles, including the social values expressed in the principcle of fairness and care.

2. The four ethical principles of IFOAM of health, ecology, fairness, and care represent an expression of the shared value base of organic agriculture. These principles act together, contain a range of values elements and encompass the integrative values sustainability, naturalness and systemic approach.

There is concern that minimal EU- or national/governmental standards do not consider the true value base of the organic movement. This is likely to be one important reason for the private sector certification bodies to aim for stricter standards in certain areas. A comparison of regulatory definitions (including the Regulation (EEC) 2092/91) with core values shows that many refer to elements of the IFOAM Principles of Health and Ecology, whereas Fairness and Care are less well represented. Examples current practices of organic farming of some farm types' show that under current rules an input intensive organic agriculture is possible that conflicts with a range of these core organic values.

3. European standard setting bodies should aim for harmonisation of the ethical values behind the rules on the basis of the four core values of health, ecology, fairness and

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care as the basis for further harmonisation of rules and develop a common interpretation of the core value basis. Referring to such an accepted value base is likely to increase the acceptance of governmental regulations, strengthen consumer confidence, assist with the implementation of flexibility and provide room for selfregulation in the organic sector.

Some core organic values (in particular the ecological systems approach and social values) are more difficult to codify than others and have therefore been less widely implemented through standards and certification. The current EU regulation and many private standards do not consider all core values of the organic movement. This does, however, not imply that they are less important to the organic sector. In particular, social values such as fairness are central to self-understanding and mirror the ideals of organic farming as contributing to a more sustainable, healthier and fairer world that cares for its inhabitants, but there is less experience how to audit them on which the provision in a regulation could be based.

- 4. There is limited experience in organic standards how to implement some core values, such as ecological systems balance, and social values of fairness and care in the rules. Developing rules to implement these values so that can become part of the guarantee system of inspection and certification is a challenge for all standard setting bodies.
- 5. A process of harmonising core ethical values requires clear public communication about the values and their interpretation as a basis for further discussion and acceptance by all stakeholders, and to act as a bridge between principles and implementation rules.

5.2 Regarding rules for decision-making about values in organic standards and regulations

Values are per se in need of interpretation, and there is no unambiguous interpretation of the core organic values. This makes value evaluation and implementation difficult and requires procedures on how to reach common decisions. Within organic agriculture, values interact with the understanding of content and function of standards and regulations, but also with expectations about the process of formulating them. This corresponds with procedural ethics stressing the importance of the process (the ideal procedure) to arrive at a 'morally' right answer as well as moral values. Clarifying procedures of how stakeholders can be involved could improve the acceptance of a harmonised value basis. This involves providing information and seeking feedback at certain key stages. Acceptance is also likely to be improved if the standard setting bodies or regulators are able to demonstrate how such feedback has been considered.

6. Values are per se in need of interpretation, and there is no unambiguous interpretation of many core organic values. It is therefore necessary to consider issues of procedure (how decisions are reached) and of content (what values are covered) in relation to integrating basic ethical values in organic standards and regulations.

There is a need for awareness regarding the procedure how decisions are taken, when core values and principles are considered in standards or regulations, in particular when 'soft' values that are difficult to operationalise are to be considered. The process of decision-making should give equal consideration to different voices and stakeholders and ensure coherence in the interpretation of values.

A process of deliberative democracy is desirable for decision-making among stakeholders in all issues of organic values, relating to which values should be considered, as well as interpretation and



implementation of values, including regional flexibility. It can be supplement by drawing on the expertise in aspects of the sector in certain areas. Such as model is consistent with the traditional way of developing standarsd in organic agriculture organisations, and is the most open one that at the same time creates a basis for adherence when values are to be implemented.

A deliberative decision-making model is particularly suited in handling potential conflicts between core values, for example between animal welfare and the environment, to allow regional flexibility, and to determine the details of the rules. To resolve conflicts it is necessary to determine at what level conflicts occur, whether on value level as regards interpretations or definitions, formulated aims, objectives and principles, on the implementation level, or on disagreement with a certain part of regulation.

7. A process of participative and deliberative democracy allowing representation of relevant stakeholders and following certain discussion rules should be adopted as a general procedure for integrating and interpreting ethical values in organic standards and regulations and in al areas where the interpretation of core values is necessary.

Adopting such a process of participative and deliberative democracy requires to consider both content and discussion form (process) from the very beginning.

8. Guidelines for decision-making processes in the context of the organic regulation should be further developed building on five important elements of ethical dialogue:

- respect for the discussion partners,
- respect for arguments and emotions,
- context sensitivity,
- a common understanding, and
- relating theory (values) to practice.

In this all stakeholders should be given equal opportunity to state their value basis separately. Arguments and emotions should be respected equally as a base line in deliberative communication. To achieve context sensitivity and develop a common understanding, it is necessary to communicate about the shared value base of organic agriculture and how differences in organic farming practices across Europe relate to certain core values. Theory and practice should be related to each other in a judgement of a suggested regulation, i.e. in the interpretation of the values and rules in a certain situation.

In situations of conflict in relation to the interpretation of core values raising a number of specific questions can help resolve disagreements:

- a) Which value is affected in what way?
- b) Is there a conflict between two or more values?
- c) What consequences follow from a certain interpretation of a value?
- d) How can the conflict be evaluated and what actions should follow?

Ad a): Answering this question requires agreement on what values is at stake. The outcome should be a detailed description based on a common understanding of the value as well as situation rather than evaluation of the conflict.

Ad b): This shared description of a case serves as a point of departure for debate on whether the conflict arises in the interpretation of a core value, or because of a 'true' value conflict. The debate of a 'true' value conflicts requires context sensitivity for constructive discussion.

Ad c): The question should distinguish between explicit and implicit consequences. One approach



is to sketch a set of possible scenarios and judge their probability. The aim is to create a shared view of what consequences are probable and thus worthy of further discussion.

Ad d): Finally an overall evaluation of the consequences will have to be made, based on the shared view of the issue, and values at stake. This should provide the basis for decisions on further action in this area. Since this evaluation process is recommended to follow the presented model of deliberative democracy, no specific answers can be given regarding the result, i.e. content of decision.

9. Because of the ambiguous nature of values and the potential for disagreement, conflict solving procedures should be developed.

5.3 Regarding the ongoing revision of the EU regulation on organic food and farming

The report identified three spheres of finalising the current revision where procedural thinking is necessary: (I) general procedure for decision-making, (II) a normative process to determine a value base, and (III) the interpretation and transition of values to regulation text and to practical action.

The core values of organic agriculture have been formulated by the movement as ethical principles providing inspiration, aims and guidance. This is different to the legislative structure of the regulation it self. Further normative work is needed to determine how the core value base of organic farming can be integrated into regulatory principles as parts of the pyramid structure of the regulation in a coherent way. To achieve the goal of harmonisation of values in Europe, the EU commission should consider all core organic values of organic farming, most of which are already mentioned in the proposal for a revised council regulation.

The hierarchical structure of the proposed regulation moves from aims, objectives and general principles to specific principles and rules. This pyramid structure mirrors an 'organic perspective' in so far, as in both cases values and principles are the point of departure for all other decisions on a more detailed level, i.e. in making broad values operational for relevant sections of the rules.

10. All core ethical value referred to in specific principles and implementation rules should be made explicit in one place of the regulation (for example Title II, Art 3 and 4). All further articles could then be read as explication of a specific value in a certain context.

11. The Project EEC/2092/91 (Organic) Revision recommends reconsidering the stated intention to transfer all of the existing Annexes into new implementation rules, because of some apparent contradiction between current practices and the principles laid down in Title II of the general approach. It should be examined carefully where some changes to the current rules could be proposed-in particular in relation to the use of external inputs on farms with the aim to impose some restrictions on input intensification of organic agriculture.

Organic farming in its current form has developed through the involvement of private operators at various levels. Regulating organic agriculture therefore requires the involvement of a range of different stakeholders from a number of different levels in order to reach best possible solutions. The process should be democratic and transparent to any relevant stakeholders.

12. A process of participative and deliberative democracy allowing a representation of all relevant stakeholders and considering the advice of experts following certain discussion rules should be adopted for finalising the implementation of values in the ongoing revision of the EU regulation (including developing the annexes) and future revision of the



regulation.

13. The rules for participation of stakeholders in the advisory group and the outcome of the meetings should be communicated clearly. This stakeholder committee should meet more frequently during the process of finalising the implementation rules in the new regulation.

14. The possibility to carry out internet consultations for important issues and to regularly hold an integrative seminar 'Developing Visions and Integrative Strategy for Organic Farming in Europe' should be explored. The Organic Farming Unit in DG Agriculture needs to have sufficient resources to carry out additional task of wider communication with and consultation of stakeholders.

To translate and interpret the ethical value base of organic agriculture as part of the pyramid structure of the new regulation in a coherent way into regulatory principles it is necessary to develop interpretation for each of the core values and value elements at the specific levels of objectives, principles and rules and to develop decision-making structures that safeguard such a coherent interpretation. The current revision of the organic regulation has the aim of improved transparency by including organic farming principles in the regulation, to reduce bureaucracy, to maintain and to enhance the integrity of organic food. There is a need to develop decision-making structures that facilitates a coherent interpretation of the core ethical values of organic farming expressed in the objectives and principles in developing the implementation rules.

15. The Expert Panel for Organic Farming mentioned in Action 11 of the European Action Plan for Organic Food and Farming should be set up as soon as possible. In addition to the tasks outlined in the European Action Plan (production rules for new areas, evaluation of inputs) the Expert Panel should also advise the Commission on developing a coherent interpretation of objectives and principles (Title II) for the implementation rules and on any other relevant issues. The panel should be composed of approximately 15 members (max 20) from a range of research disciplines that have a proven track record in research of organic farming systems or other relevant expertise; some practical experience is highly desirable. The aim should be to recruit a balanced and independent panel that can relate values and principles to practices of the organic sector. The panel requires expertise in organic farming systems in relation to animal and crop husbandry, viticulture, horticulture and processing and expertise of organic principles and ethical values, organic marketing, policy, standards, inspection and certification and should be able to draw on specific expertise in certain areas to cover a particular subject. The composition of the panel should be balanced in relation to regions where experts come from and in relation to gender. The expert panel should adopt rules of discussion decision-making building on important elements of ethical dialogue, such as context sensitivity and the need to develop a common understanding of the situation and question and the need to relate principles and current practice, and consider existing research evidence. To ensure commitment to the work of the panel, facilitate the participation of experts from small organisation and reduce the risk of financial dependence of specific sponsors it is recommended that the experts should be appropriately remunerated for their time input as well as receiving travel and subsistence costs according to community rules.





References

- Aarink, A.J.A., J.M.G. Hol, A.G.C. Beurkens & M.J.M. Wagemans (2005) Ammoniakemissie en mineralenbelasting op de uitloop van leghennen. Report 337, Agrotechnology and Food Innovations – WUR. Wageningen, 28 pp.
- Alcântara, T & Pedro de Alcântara, D (2004). Development of local organic markets: The final letter, International workshop on alternative certification. Ecology & Farming No. 37. Online at <u>http://www.ifoam.org/about_ifoam/standards/pgs.html</u>.
- Alrøe, H F, Byrne, J and Glover, L (2006) Ecological justice and organic agriculture: ethics and practice.
 Pp. 75-112 in Halberg, N., H.F. Alrøe, M.T. Knudsen and E.S. Kristensen (eds.) *Global* Development of Organic Agriculture: Challenges and Prospects. CABI Publishers, 75-112.
- Alrøe, H F and Kjeldsen, C. (2006) How to measure and regulate localness? *Paper presented at the Joint Organic Congress*, Odense, Denmark, 30-31 May 2006. Online at <u>http://orgprints.org/8318</u>.
- Alrøe, H F and Kristensen, E S (2004) Why have basic principles for organic agriculture? And what kind of principles should they be? *Ecology & Farming* No. 36: 27–30. Online at <u>http://orgprints.org/2538</u>.
- Alrøe, H F and Noe, E (2008 in press) What makes organic agriculture move protest, meaning or market? A polyocular approach to the dynamics and governance of organic agriculture. *International Journal of Agricultural Resources, Governance and Ecology* 7 (1). Postprint online at http://orgprints.org/8084.
- Alrøe, H F, Schmid, O and Padel, S (2005) Ethical principles and the revision of organic rules. *The Organic Standard* 51: 8-11. Online at <u>http://orgprints.org/7846</u>.
- Anonymous (1977) Alternatieve landbouwmethoden; inventarisatie, evaluatie en aanbevelingen voor onderzoek. Commissie Onderzoek Biologische Landbouwmethoden. Pudoc, Wageningen, The Netherlands.
- Anonymous (2006a). Groei pluimveesector. Ekoland 26: 6.
- Anonymous (2006b). Organic farming data. Central Bureau of Statistics, Voorburg/Heerlen, the Netherlands. Online at <u>http://statline.cbs.nl/StatWeb/table.asp?TT=2&LA=nl&DM=SLNL&PA=7332llb&D1=a</u>,
- Apel, K O (1973) Das Apriori der Kommunikationsgemeinschaft und die Grundlagen der Ethik. In: *Transformation der Philosophie*, Bd. 2, Frankfurt a. M.: Suhrkamp (stw 165): 358-435
- Beck, A, Kretzschmar, U and Schmid, O (Eds) (2006) Organic Food Processing Principles, Concepts and Recommendations for the Future. Results of a European research project on the quality of low input foods. FiBL-Report. Research Institute of Organic Agriculture FiBL, Frick, Switzerland. Online at <u>http://orgprints.org/8914/</u>
- Benhabib, S (1996) Toward a Deliberative Model of Democratic Legitimacy, In: Benhabib (ed). *Democracy and Difference. Contesting the Boundaries of the Political.* Princeton University Press, Princeton.
- Bichler, B, Bteich, M-R, Dabbert, S, Häring, A M, Gambelli, D, Paladini, M E, Vitulano, S and Zanoli, R.
 (2005) Final updated report outlining special and temporal dimensions of the effects of OFP implementation for each EU state and Switzerland for the whole period investigated (1997-2003).
 EU-CEE-OFP Deliverable D14. University of Hohenheim, Stuttgart.
- Bokhorst, J and L Janmaat (2006) Kwaliteit biologische peen loopt achteruit. Ekoland 26: 24-25.
- Bos, J F F P (2006) Intersectorale samenwerking in de biologische landbouw; Mengvoergrondstoffen met binnen- of buitenlandse oorsprong: effect op energieverbruik van mengvoerproductie. Wageningen UR/Louis Bolk Instituut, Wageningen/Driebergen.
- Brom, F et al (2006): Corporate Moral Responsibility. Manual, LEI, The Hague.
- Byrne, J and Glover, L (2002) A common future or towards a future commons: Globalization and sustainable development since UNCED. *International Review for Environmental Strategies* 3 (1): 5-25.
- CEU (2006) Proposals for Council Regulation on organic production and labeling of organic products. Consolidated text of the general approach agreed by the Agriculture/Fisheries Council on 19-20



December 2006. Council of the European Union, Special Committee on Agriculture. No 17085/06 Agrileg 230. European Commission, Brussels.

- Codex/FAO/WHO (2004). Guidelines for the production, processing, labelling and marketing of organically produced foods. *Codex Alimentarius* Commission and joint FAO/WHO Food Standards Programme. GL32- 1999, Rev. 1-2001, Rev. 1- 2004. Rome.
- DARCOF (2000) Principles of Organic Farming: Discussion document prepared for the DARCOF Users Committee. Danish Research Centre for Organic Farming, Tjele.
- Darnhofer, I., Schneeberger, W. & Freyer, B. (2005) 'Converting or not converting to organic farming in Austria: Farmer types and their rationale'. *Agriculture and Human Values* 22: 39–52.
- de Lind, L. B. (1999) Close encounters with a CSA: The reflections of a bruised and somewhat wiser anthropologist. *Agriculture and Human Values* 16 (1): 3-9.
- de Wit, J and Verhoog, H (2007 in press) Organic values and the conventionalisation of organic agriculture. *NJAS Wageningen Journal of Life Sciences.* 54 (4): 449-462.
- Dimitri, C. and Oberholzer, L. (2005) Market-Led Versus Government-Facilitated Growth: Development of the U.S. and EU Organic Agricultural Sectors. USDA- United States Department of Agriculture, Washington.
- EC (1991) Regulation (EEC) 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs. *Official Journal of the European Communities*, L198 (22.7.91), 1-15.
- EC (2004) European Action Plan for Organic Food and Farming. Communication from the Commission of the European Communities: COM (2004)415 final, Brussels.
- EC (2005) Proposal for a Council Regulation on organic production and labelling of organic products (COM (2005) 671 final, 21.12.2005). Online at <u>http://europa.eu.int/comm/agriculture/qual/organic/</u>.
- EC (2007) Council Regulation (EC) No 8620/1/2007 Rev 1 of June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. Public version 20/06/2007.
- EC-DG-Agriculture (2005) Organic Farming in the European Union: Facts and Figures. *Analyses économiques et évaluation G.2. Analyses quantitatives, prévisions, statistiques.* Brussels, European Commision, DG Agriculture and Rural Development.
- EEA (2005) Agriculture and Environment in EU-15 the IRENA Indicator Report. Brussels, European Environment Agency.
- Eichert, C, Zorn, A, and Dabbert, S (2006) Commission to practice what it preaches [Commission to practice what it preaches]. *The Organic Standard* 63: 3-5. Online at <u>http://orgprints.org/9166/</u>
- Fomsgaard, Saki Ichihara (2006) The Evolution and Status of Organic Principles in an International Perspective. OASE Working Paper no. 2006:5, Economics, Politics and Public Administration, Aalborg University, Aalborg. Online <u>http://orgprints.org/8463/</u>
- Fraser, D, Weary, DM, Pajor, EA and Milligan ,B N (1997): A Scientific Conception of Animal Welfare that reflects Ethical Concerns, *Animal Welfare* 6: 187-205
- Geen, N., Firth, C., Maye, D. and Ilbery, B. (2006) Diverse characteristics of organic direct marketing chains. In: Atkinson, C. *et al.* (Eds). *What will organic farming deliver? COR 2006*. Wellesbourne: Association of Applied Biologists. 75-79.
- Gilljam, M & Hermansson, J (2003) Demokratins mekanismer, Liber: Lund.
- Guthman, J (2004) The Trouble with 'Organic Lite' in California: a Rejoinder to the 'Conventionalisation' Debate. *Sociologia Ruralis* 44 (3): 301-316.
- Gutmann, A & D Thompson (1996) *Democracy and Disagreement: Why Moral Conflict Cannot Be Avoided in Politics, and What Should be Done About It.* Belknap Press of Harvard university Press, Cambridge, 1996.

Habermas, J (1983) *Moralbewußtsein und kommunikatives Handeln*. Suhrkamp: Frankfurt am Main. Habermas, J (1991) *Erläuterungen zur Diskursethik*. Suhrkamp: Frankfurt am Main.



- Halberg, N., Alrøe, H.F. and Kristensen, E.S. (2006) Synthesis: prospects for organic agriculture in a global context. In Halberg, N., Knudsen, M.T., Alrøe, H.F. and Kristensen, E.S. (eds.) *Global Development of Organic Agriculture: Challenges and Prospects.* CABI Publishing: Wallingford, pp 343-367.
- Hall, A and Mogyorody, V (2001). Organic farmers in Ontario: An examination of the conventionalization argument. *Sociologia Ruralis* 41 (4): 399-422.
- Hess, M 2004. Spatial' relationships? Towards a reconceptualization of embeddedness. *Progress in Human Geography* 28 (2): 165-186.
- Hemsworth, P H, Coleman, G J, Barnett J L and Borg, S (2000) Relations between human-animal interactions and productivity of commercially dairy cows. *Journal of Dairy Science* 18: 2821-2831.
- Hines, C (2003) Time to Replace Globalization with Localization. *Global Environmental Politics* 3 (3): 1-7.
- Hinrichs, C C (2000) Embeddedness and local food systems: notes on two types of direct agricultural market. *Journal of Rural Studies* 16 (3): 295-303.
- Hinrichs, C C, Kloppenburg, J R J, Stevenson, S, Lezberg, S, Hendrickson, J and DeMaster, K (1998) Moving beyond 'global' and 'local'. USDA Multi-State Project NE-185. Working Paper. Available online at <u>http://www.ces.ncsu.edu/depts/sociology/ne185/global.html</u>.
- Hoogenboom, L A P, Bokhorst, J G, Northolt, M D, Broex, N J G, Mevius, N.J.G. Meijs, JAC and van der Roest, J (2006) Contaminanten en micro-organismen in biologische produkten Vergelijking met gangbare produkten. Rikilt report 2006.002, 52 pp plus annexes.
- IFOAM (2002) Basic Standards of Organic Agriculture. International Federation of Organic Agriculture Movements: Bonn.
- IFOAM (2005) Principles of Organic Agriculture. International Federation of Organic Agriculture Movements: Bonn. Online at www.ecowiki.org/IfoamPrinciples or <u>www.ifoam.org</u>.
- Jaffee, D., Kloppenburg, J. R. & Monroy, M. B. (2004): Bringing the "Moral Charge" Home: Fair Trade within the North and within the South. *Rural Sociology* 69(2): 169-196.
- Kjeldsen, C. (2005): Modernitet, tid, rum og økologiske fødevarenetværk [Modernity, time, space and organic food networks]. Ph.D. thesis. Department of Economics, Politics and Public Administration, Aalborg University, Aalborg.
- Kjeldsen, C and Alrøe, H F (2006) Localness as the new orthodoxy? Critical reflections on localisation of food systems. Paper presented at the Joint Organic Congress, Odense, Denmark, 30-31 May 2006. Online at <u>http://orgprints.org/7658</u>.
- Knudsen, M T, Halberg, N, Olesen, J E, Byrne, J, Iyer, V and Toly, N (2006) Global trends in agriculture and food systems. In: "Global Development of Organic Agriculture: Challenges and Prospects", eds. N. Halberg, H.F. Alrøe, M.T. Knudsen and E.S. Kristensen. CABI Publishing: Wallingford, UK. pp 1–48.
- KRAV (2007) Regler för KRAV-certifierad production. Januari 2007. Uppsala.
- Kyed, S., Kristensen, I. B. and Tvedegaard, N. (2006.) Gødning og halm i økologisk jordbrug [Manure and straw in organic agriculture]. . Økologisk Landsforening; Danmarks JordbrugsForskning; Fødevareøkonomisk Institut, KVL Copenhagen.
- Lampkin, N. H. (1990) Organic farming. Ipswich: Farming Press.
- Lampkin, N (2006) EISFOM: Project Review and Recommendations for SCOF. Institute of Rural Sciences, University of Wales.
- Lampkin, N. (2006). Eurodata for Organic Farming. Aberystwyth, Organic Centre Wales, Institute of Rural Sciences, University of Wales.
- Lampkin, N and Nicholas, P K (2006) ORGAPET Section C1: Identifying action plan and policy objectives (Version 4). University of Wales, Aberystwyth.
- Leitner, H, Bartel-Kratochvil, R, Axmann, P (2006) Regional Players in between conventionalisation and regional development: Are supermarkets the wolves in sheep's clothing? Paper presented at Joint Organic Congress, Odense, Denmark, May 30-31, 2006. Online at <u>http://orgprints.org/7211/</u>
- Padel et al. (2007) Balancing and integrating values in organic regulations (D 2.3) -107-



- Lockie, S., K. Lyons, et al. (2006). *Going Organic. Mobilizing Networks for Environmentally Responsible Food Production.* Wallingford, CABI Publishing.
- Luhmann, N (1995) Social Systems, Stanford University Press, Stanford (California).
- Lund, V. & Röcklinsberg, H. (2001) Outlining a conception of animal welfare for organic farming systems. *Journal of Agricultural and Environmental Ethics*, 14, 391-424.
- Luttikholt, L (2006) Definitions of organic farming: Report to the task force. International Federation of Organic Agriculture Movements: Bonn.
- Meeusen, M J G, Beekman, V, de Graaff R P M and Kroon, S M A (2003). Biologische waarden in tweevoud. Waarden als determinanten van communicatie en samenwerking in biologische voedselketens. Report 5.03.05 (Project code 63652), Landbouw Economisch Instituut (LEI), Den Haag.
- Meeusen, M.J. Wijnands, J, Kijlstra, A and Boekhoff. M (2005). Zicht op dierlijke biologische ketens (with English summary). Report 2.05.01 LEI/ Wageningen UR. Wageningen.
- Mepham, B, Kaiser, M, Thorstensen, E, Tomkins, S, and Millar, K (2006) *Ethical Matrix*. Manual. LEI, The Hague.
- Michelsen, J, Schmid, O and Gonzalvez, V (2006) ORGAPET Section A4: Methods for involving stakeholders in programme design, implementation and evaluation (Version 4) Esbjerg and Frick, University of Southern Denmark and Research Institute of Organic Agriculture.
- Michelsen, J (2001a) Recent development and political acceptance of organic farming in Europe. *Sociologia Ruralis* 41(1): 3-20.
- Michelsen, J (2001b) Organic farming in a regulatory perspective. Sociologia Ruralis 41(1): 68-69.
- Miele, M. (2002): Creating sustainability The social construction of the market for organic products. PhD thesis. Department of Social Sciences, Rural Sociology Group, Wageningen University, Wageningen.
- Nemecek, T and Baumgartner, D (2006) Environmental Impacts of Introducing Grain Legumes into European Crop Rotations and Pig Feed Formulas. GL-pro "European Extension Network for the Development of Grain Legume Production in the EU" (QLK5-CT-2002-02418).
- Nieberg, H., Offermann, F., Zander, K. & Jägersberg, P. (2005) Further Development of Organic Farming Policy in Europe, with Particular Emphasis on EU Enlargement D12: Report on the farm level economic impacts of OFP and Agenda 2000 implementation. EU CEE OFP European Organic Farming Policy QLK5-2002-00917.
- Niggli, U (2000) Ethical values and historical dogmas of organic farming: promise or peril for its future development? In: Paul Robinson (Ed.) Two systems one world. Preprints 2nd. Eursafe Congress, 24-26 August, Copenhagen. Centre for Bioethics and Risk Assessment, Copenhagen, pp23-27.
- Nussbaum, M.C. (2003) "Emotions as judgments of value and importance", in: R.C. Solomon (ed.) *What is an emotion? Classic and contemporary readings* (sec.ed.) Oxford, Oxford University Press, pp. 271-283.
- OCW (2004) Organic Food: Understanding the consumer and increasing sales. Aberystwyth, OCW, Soil Association, Agri-food partnership, WDA, Welsh Assembly Government.
- Odén, K, Löthegård, I. Utredning om förhållandena vid slakt av KRAV-godkända djur. Report to the KRAV board, June 5th, 2002.
- Olmos, S. and Lampkin, N. H. (2005) Statistical report on the development of OF in EU member states and Switzerland for the period 1997-2002 with update for 2003. Aberystwyth, , University of Wales, Aberystwyth.
- Padel, S (2005) D21: Focus groups of value concepts of organic producers and other stakeholders. Univ. of Wales, Aberystwyth. Deliverable 2.1 from the EEC 2092/91 (Organic) Revision Project, available online at <u>http://www.organic-revision.org/values/D21.html</u>.

- Padel, S. and Foster, C. (2006) Local and/or organic: A balancing of values for producers and consumers. In: Atkinson, C., Ball, B., Davies, D. H. K., Rees, R., Russel, G., Stockdale, E. A., Watson, C. A., Walker, R. and Younie, D. eds. *What will organic farming deliver? COR 2006*. Wellesbourne: Association of Applied Biologists.
- Padel, S, Schmid, O and Lund, V (2004) Organic livestock standards. IN Vaarst, M., Roderick, S., Lund, V. & Lockeretz, W. (Eds.) Animal Health and Welfare in Organic Agriculture. Wellingford, CAB International, pp57-72.
- Praznan, J & Koutna, K (2004) Development of Organic Farming and the Policy Environment in Central and Eastern European Accession States 1997-2002. Aberystwyth., University of Wales, Aberystwyth.
- Pretty, J. N., Ball, A. S., Lang, T. and Morison, J. I. L. (2005) Farm costs and food miles: An assessment of the full cost of the UK weekly food basket. *Food Policy*, 30 (1), 1-19.
- Prins, U (2005). Verzelfstandiging van de biologische landbouw op het gebied van mest, voer en stro. Louis Bolk Institute, Driebergen.
- Raynolds, L. T. (2003). Forging new global/local links through fair trade agro-food networks. In: *Globalization, localization and sustainable livelihoods*. Almås, R and Lawrence, G (eds) Aldershot, Ashgate, p. 57-68.
- Raynolds, L T (2004). The globalization of the organic agro-food networks. *World development* 32 (5): 725-743.
- Rippin, M, Vitulano, S, Zanoli, R and Lampkin, N (2006) Synthesis and final recommendations on the development of a European Information System for Organic Markets *Eisfom - A European Information Systems for Organic Markets - QLK5-2002-02400*. Bonn, Ancona and Aberystwyth, Zentrale Markt- und Preisberichtstelle, Polytechnic University of Marche, University of Wales, Aberystwyth.
- Rivera-Ferre, M. (2006) How environmentally (un)sustainable is organic production? The Dutch case. *International Journal of Agricultural Sustainability*, **4:** 15-21.
- Rohner-Thielen, E (2005) Organic Farming in Europe: Statistik in Focus 28/2005. EUROSTAT, European Communities, Brussels.
- Röcklinsberg, H (2001) Das seufzende Schwein. Zur Theorie und Praxis in deutschen Modellen zur Tierethik. Harald Fischer Verlag, Erlangen.
- Röcklinsberg, H (2006) Consent and Consensus in Policies Related to Food Five Core Values. *Journal of Agricultural and Environmental Ethics* 19(3): 285-299.
- Rymer, C., M. Vaarst & S.Padel, 2006. Future perspectives for animal health on organic farms: main findings, conclusions and recommendations from SAFO Network. Proceedings of the 5th SAFO workshop, 1st June 2006, Odense, Denmark, 145 pp. online at <u>www.safonetwork.org</u>.
- Schaumann, W., Siebeneicher, G. E., Lünzer, I. (2002): *Geschichte des ökologischen Landbaus*, SÖL-Sonderausgabe Nr. 65, Stiftung Ökologie & Landbau, Bad Dürkheim.
- Schmid, O, Huber, B, Ziegler, K (2006): Analysis of Regulation EEC/2092/91 in relation to other national or international organic standards. Draft report Organic-Revision project. Final report to be published during 2007 online at <u>www.organic-revision.org</u>.
- Smith, E. and Marsden, T. (2004) Exploring he 'limits to growth in UK organics: beyond statistical image. *Journal of Rural Studies*, 20: 345-357.
- Speiser, B, Blake, F, Micheloni, C, Stopes, C, Andersen, M, Baker, B, Bywater, S, Canali, S, Eriksen, R Ø, Gonzalvez, V, Hozzank, A, Jespersen, L M, Jørgensen, L N, Kelderer, M, Kleeberg, H, Koopmans, C, Kromp, B, Manstretta, M, Maurer da Costa, A, Monnier, MC, Pauler, A, Schmid, O, Schreyer, A, Slabe, A, Tamm, L, Trapman, M, von Fragstein, P (2005) Evaluating inputs for organic farming a new system. Proposals of the ORGANIC INPUTS EVALUATION project. Final Report, Forschungsinstitut für biologischen Landbau (FiBL) CH-Frick. Online at http://orgprints.org/8551/



- Spruijt-Verkerke, J, Schoorlemmer, H, van Woerden, S. Peppelman, G, de Visser. M and Vermey, I. (2004). Duurzaamheid van de biologische landbouw (with English summary). Report 328, PPO/Wageningen UR, Wageningen.
- Stolz, H and Stolze, M (2006) Comparison of action plans for organic agriculture in the European Union. Paper presented at Joint Organic Congress, Odense, Denmark, May 30-31, 2006. Online at <u>http://orgprints.org/6336/</u>
- Stolze, Matthias and Lampkin, Nic (2006) European organic farming policies: an overview . Paper presented at Joint Organic Congress, Odense, Denmark, May 30-31, 2006. Online at <u>http://orgprints.org/6337</u>
- Sundrum, A. & Padel, S. (2006) Evaluation criteria for including feed materials in Annex II C and dietary supplements in Annex II D of the EC-Regulation 2092/91. University of Kassel and University of Wales, Aberystwyth.
- Sundrum, A., Schneider, K. & Richter, U. (2005) Possibilities and limitations of protein supply in organic poultry and pig production. Report D 41 (part 1) of Organic Revision: Research to support revision of the EU Regulation on organic agriculture. Witzenhausen, University of Kassel.
- Thompson, P B (1997). The varieties of sustainability in livestock farming. More than food production (Ed. Jan Tind Sørensen). EAAP publication No.89: 5-15.
- Torjusen, H, Sangstad, L; O'Doherty Jensen, K and Kjaernes, U (2004) European Consumers' conception of organic food: A review of available research. National Institute for Consumer Research Norway (SIF). Professional report No 4. Oslo.
- van der Grijp, N (2006) Private regulatory approaches and the challenge of pesticide use. In: Kaiser and Lien (eds). *Ethics and the politics of food*, Eursafe, Oslo, pp85.
- van Huik, M. & Bock, B. (2006). Attitudes of organic pig farmers towards animal welfare. In: M. Kaiser & M. Lien (Eds.) Ethics and the politics of food. Proceedings 6th. Congress
- Verhoog, H, Matze, M, Lammerts van Bueren, E and Baars, T (2003) The Role of the Concept of the Natural (Naturalness) in Organic Farming, *Journal of Agricultural and Environmental Ethics* 16(1): 29 -49.
- Vermeij, I.,(2005). Intersectorale samenwerking in de biologische landbouw; teelt van voedergewassen en rantsoenen voor varkens en leghennen. Wageningen UR / Louis Bolk Instituut, Wageningen / Driebergen, 33 pp.
- Vogt, G. (2000) Entstehung und Entwicklung des oekologischen Landbaus im deutschsprachigen Raum, Bad Duerkheim, Stiftung Oekologie und Landbau.
- Weston, A (2000) A Rulebook for Arguments. Third Edition, Hackett, Indianapolis, p.32 ff.)
- Wijnands, J HM, Meeusen, M J G, Hoorweg, M, Kik, C, Rossing, W A H and Scholten, OM (2005) Zicht op plantaardige biologische productieketens. Report 2.05.06, LEI-WUR, Den Haag, 142 pp.
- Willer, H and Yussefi, M (2005). The world of organic agriculture statistics and emerging trends 2005. Bonn, Germany: International Federation of Organic Agriculture Movements (IFOAM), 7th revised edition. Available online at <u>http://www.soel.de/oekolandbau/weltweit.html</u>
- Willer, H and Yussefi, M (2006). The world of organic agriculture statistics and emerging trends 2006. International Federation of Organic Agriculture Movements (IFOAM)
- Williamson, S, Cleeton, J, Nettleship, T (2006). Organic market report 2006. Bristol. Soil Association.
- Winter, M (2003) Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies* 19 (1): 23-32.

Woodward, L (2006): personal communication

- Woodward, L. & Vogtmann, H. (2004) IFOAM's Organic Principles. Ecology and Farming, 2004, 24-26.
- Woolcock, M. (1998): Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society* 27(2): 151-208.
- Zanoli, R (Ed.) (2004) *The European Consumer and Organic Food*, School of Management and Business, University of Wales, Aberystwyth.



Appendix 1: IFOAM's Principles of Organic Agriculture

Preamble

These Principles are the roots from which organic agriculture grows and develops. They express the contribution that organic agriculture can make to the world, and a vision to improve all agriculture in a global context.

Agriculture is one of humankind's most basic activities because all people need to nourish themselves daily. History, culture and community values are embedded in agriculture. The Principles apply to agriculture in the broadest sense, including the way people tend soils, water, plants and animals in order to produce, prepare and distribute food and other goods. They concern the way people interact with living landscapes, relate to one another and shape the legacy of future generations.

The Principles of Organic Agriculture serve to inspire the organic movement in its full diversity. They guide IFOAM's development of positions, programs and standards. Furthermore, they are presented with a vision of their world-wide adoption.

Organic agriculture is based on:

The principle of health

The principle of ecology

The principle of fairness

The principle of care

Each principle is articulated through a statement followed by an explanation. The principles are to be used as a whole. They are composed as ethical principles to inspire action.

Principle of health

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

This principle points out that the health of individuals and communities cannot be separated from the health of ecosystems - healthy soils produce healthy crops that foster the health of animals and people.

Health is the wholeness and integrity of living systems. It is not simply the absence of illness, but the maintenance of physical, mental, social and ecological well-being. Immunity, resilience and regeneration are key characteristics of health.

The role of organic agriculture, whether in farming, processing, distribution, or consumption, is to sustain and enhance the health of ecosystems and organisms from the



smallest in the soil to human beings. In particular, organic agriculture is intended to produce high quality, nutritious food, that contributes to preventive health care and well being. In view of this it should avoid the use of fertilizers, pesticides, animal drugs and food additives that may have adverse health effects.

Principle of ecology

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

This principle roots organic agriculture within living ecological systems. It states that production is to be based on ecological processes, and recycling. Nourishment and wellbeing are achieved through the ecology of the specific production environment. For example, in the case of crops this is the living soil; for animals it is the farm ecosystem; for fish and marine organisms, the aquatic environment.

Organic farming, pastoral and wild harvest systems should fit the cycles and ecological balances in nature. These cycles are universal but their operation is site-specific. Organic management must be adapted to local conditions, ecology, culture and scale. Inputs should be reduced by reuse, recycling and efficient management of materials and energy in order to maintain and improve environmental quality and conserve resources.

Organic agriculture should attain ecological balance through the design of farming systems, establishment of habitats and maintenance of genetic and agricultural diversity. Those who produce, process, trade, or consume organic products should protect and benefit the common environment including landscapes, climate, habitats, biodiversity, air and water.

Principle of fairness

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

Fairness is characterized by equity, respect, justice and stewardship of the shared world, both among people and in their relations to other living beings.

This principle emphasizes that those involved in organic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties – farmers, workers, processors, distributors, traders and consumers. Organic agriculture should provide everyone involved with a good quality of life, and contribute to food sovereignty and reduction of poverty. It aims to produce a sufficient supply of good quality food and other products.

This principle insists that animals should be provided with the conditions and opportunities of life that accord with their physiology, natural behavior and well-being.

Natural and environmental resources that are used for production and consumption should be managed in a way that is socially and ecologically just and should be held in trust for future generations. Fairness requires systems of production, distribution and trade that are open and equitable and account for real environmental and social costs.



Principle of care

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

Organic agriculture is a living and dynamic system that responds to internal and external demands and conditions. Practitioners of organic agriculture can enhance efficiency and increase productivity, but this should not be at the risk of jeopardizing health and wellbeing. Consequently, new technologies need to be assessed and existing methods reviewed. Given the incomplete understanding of ecosystems and agriculture, care must be taken.

This principle states that precaution and responsibility are the key concerns in management, development and technology choices in organic agriculture. Science is necessary to ensure that organic agriculture is healthy, safe and ecologically sound. However, scientific knowledge alone is not sufficient. Practical experience, accumulated wisdom and traditional knowledge offer valid solutions, tested by time. Organic agriculture should prevent significant risks by adopting appropriate technologies and rejecting unpredictable ones, such as genetic engineering. Decisions should reflect the values and needs of all who might be affected, through transparent and participatory processes.