FAO GAP WORKING PAPER SERIES 2

Summary analysis of Codes, guidelines, and standards related to Good Agricultural Practices

Background paper for the FAO Expert Consultation on a Good Agricultural Practice approach

Rome, Italy, 10-12 November 2003

FAO GAP WORKING PAPER SERIES 2

Summary analysis of Codes, guidelines, and standards related to Good Agricultural Practices

Background paper for the FAO Expert Consultation on a Good Agricultural Practice approach

Rome, Italy, 10-12 November 2003

Written by
Anne-Sophie Poisot
FAO Agriculture Department

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2007

Cover photo: FAO/22185/O.Thuillier

Copies of FAO publications can be requested from:

SALES AND MARKETING GROUP
Information Division
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome, Italy

E-mail: publications-sales@fao.org
Fax: (+39) 06 57053360
Web site: http://www.fao.org

Table of contents

Acronyms

COLEACP	Europe-Africa-Caribbean-Pacific Liaison Committee
EISA	European Initiative for Sustainable Development in Agriculture
ESCR	Raw Materials, Tropical and Horticultural Products Service
ETI	Ethical Trading Initiative
EurepGAP	Euro-Retailer Produce Good Agricultural Practices
FAO	Food and Agriculture Organization of the United Nations
FLO	Fair Trade Labelling Organization
GAP	Good Agriculture Practice
GATT	General Agreement on Tariffs and Trade
GFP	Good Farming Practice
HACCP	Hazard Analysis and Critical Control Point
IBS	IOFAM Basic Standards
ICFTU	International Confederation of Free Trade Unions
IFOAM	International Federation of Organic Agriculture Movements
ILO	International Labour Organization
IOAS	International Organic Accreditation Service
IPPC	International Plant Protection Convention
ISEAL	International Social and Environmental Accreditation and Labelling
ISO	International Organization for Standardization
MAF	Ministry of Agriculture and Food
NGO	Non Governmental Organization
OECD	Organization for Economic Cooperation and Development
PPMs	Production and Processing Methods
SAI	Social Accountability International
SAN	Sustainable Agriculture Network
SARD	Sustainable Agriculture and Rural Development
SASA	Social Accountability in Sustainable Agriculture
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers to Trade
WHO	World Health Organization
WTO	World Trade Organization

Executive summary

In the past twenty years, a wide array of social, environmental and quality standards, codes of practices and certification programmes have appeared in agriculture and the food sector.[1] Governments and their research and extension branches have traditionally developed production guidelines for specific commodities or systems. In recent years, especially in developed countries, governments have also established regulations on food safety and quality, voluntary standards on organic agriculture, and sustainability assessments schemes. A more novel trend is the accelerated development in the past two decades of codes driven by the agri-food sector and non-governmental (NGOs). Producers organizations have developed organic codes and certification or programmes like the COLEACP Harmonized Framework. Other codes are put in place by the food retail sector, such as the EurepGAP. Many social and environmental standards have been developed by NGOs, such as the fair-trade system, the Social Accountability standard SA8000 and the SAN/Rainforest Alliance 'sustainable agriculture program'.

The multiplication of codes and standards by market and non-profit actors reflects a trend towards privatization of standard-setting in agriculture. Voluntary codes and guidelines are developed when implementation of governmental or intergovernmental standards do not fully meet societal or market needs. Voluntary standards and certification use market incentives in order to encourage management improvements above the minimum level required by law; or to support legislation implementation; or to suggest a framework when formal laws may not exist. Codes and certification programmes often refer to international treaties and conventions, sometimes translating them into verifiable standards for direct implementation by producers or traders, or both. These initiatives play a complementary role alongside (inter)governmental regulatory frameworks or public-funded education and extension schemes. Some certification and labeling programmes have helped secure substantial market shares for farmers, and they sometimes affect areas that are of concern to many governments, such as the environment and labour conditions. But the opportunities, limitations and potential risks generated by these private or non-profit social and environmental codes in agriculture need to be better understood.

Indeed, a key question is the extent to which the multiplication of these standards can help support achievement of objectives of food security and Sustainable Agriculture and Rural Development (SARD) in developing countries.

The terminology "Good Agricultural Practices" (GAP) is explicitly used in some of these codes, though not all. Still, in all these standards the underlying assumption is that the standard codifies some form of good practice. However, there is little common ground as to how a 'good' practice is defined. The term "good agricultural practices' is used to refer to widely

1 Definitions of these terms are recalled in section 2. The broad ISO definition for standards is utilized. On this basis, the words "codes" and "standards" are used interchangeably.

varying elements, from monitoring of pesticides use, to more encompassing aspects of primary production and post production systems, such as environmental impact assessment or labour conditions. Given the variety of existing standards, it is essential to analyze the specific requirements and scope for each standard. It is also important to understand who is setting the standard and conducting certification and verification, and with what objective. Depending on their scope and who establishes them, the standards will have very different implications on whether they can induce more sustainable farming practices, on the nature of the practices which are promoted, and on the incentives farmers may have to adopt them.[2] A rough distinction is that market actors have tended to focus on "food safety and quality GAPs" while public agencies and NGOs have sought to define "food security or sustainability GAPs". There are, however, many qualifications to be made to this.

Most of the codes and standards in agriculture are process standards (criteria for the way the products are made) rather than product standards (specifications and criteria for the final characteristics of products). These process standards might or might not influence the characteristics of the end products. Codes developed to address product safety and quality[3] tend to focus on the impact of production practices on the end-product, rather than on the impact of production practices on the environment, employment or local development. Sustainability indicators and organic or fair trade standards developed by governments, public agencies, or NGOs are likely to be more encompassing towards achieving SARD goals than standards developed by market actors. On the down side, they will often rely on public incentives such as government payments, extension and technical assistance - which makes them a costly option for developing countries. Or, they may also rely on price premiums based on consumers willingness to pay for environmental and social sustainability - which may limit their market share and therefore their potential as a tool to achieve SARD.

In terms of markets for products with quality labels, products labelled "organic" have captured the biggest shares. For tropical products, market shares of labelled products (i.e. organic and fair-trade together) are typically 1 to 2 percent of the total North American and European markets. Annual growth rates of 20 percent or more in market volume have been observed for many consecutive years. For fair-trade labelled products, sales volumes have been growing at 10 to 25 percent a year, albeit from a low base. The markets for certified but non-labelled products, such as for Sustainable Agriculture Network (SAN), SA8000 and EurepGAP certified products, are only differentiated at wholesale and buyer level, not at consumer level. Consequently there are no figures available on market shares, and development of demand for these types of certification is not sufficiently well known, though it is likely to be on the increase.

A key issue to be considered is the potential impact of these standards and certification programmes on farmers, in particular in developing countries. As regards organic farming, traditional low input farmers may expect productivity gains in the long term. But these are frequently accompanied by higher production costs, mainly in the form of higher labour demand. In the case of conversion of high input systems to organic production, initial yield declines are reported and substantial initial investment is generally required. In all of these

2 Aspects of incentives for the adoption of GAPs and GAP standards by farmers and the food sector are discussed in the background Paper to the GAP Expert Consultation "Incentives for the Adoption of Good Agricultural Practices (GAPs)" by Jill E. Hobbs, October 2003

3 "Quality" in this case meaning not adulterated in a manner to deceive the consumer or to substitute or dilute valuable components with less valuable ones

cases, access to premium markets, normally requiring certification, is essential to compensate for yield declines and investments.

As regards farmer cooperatives that are certified by Fair Trade Labelling Organizations International (FLO), the fair-trade price premium appears to be only part, and often a small part, of the benefits derived from the fair-trade system. This is because of the often small part of total fair-trade production that is sold via the fair-trade market. Improved organization, better bargaining positions, credit worthiness and economies of scale seem to be more important. The benefits result from the fair-trade marketing system and the additional support activities by other agencies, which appear to be highly interlinked and mutually supportive. The importance of assistance to institutions and support systems may be an important lesson to draw regarding future FAO activities with respect to GAP.

Both organic and fair-trade certification seem to lead to general quality improvements, which in themselves are also valuable in conventional markets. For the other standards discussed, only a limited number of case studies were available, therefore it is difficult to make generalizations on their impact.

However, developing countries smallholders may face important constraints when trying to take advantage of codes or certification and the increased market access or price premiums they may deliver. Some standards (for instance, EurepGAP, SAN or quality standards set by supermarkets) only operate at wholesale and buyer level but do not lead to labelling on the product for consumer information. Therefore the product are not differentiated from others and so there may not always be a price premium for farmers for meeting the standard, although they have to pay for related investments or certification. Another challenge is that requirements for traceability and quality favour large commercial farms. Also, in some countries a lack of local certification bodies increases certification costs. Some standards, such as SA8000 that focus on the working conditions of hired labourers are not relevant for smallholders who rely on family labour. By contrast, the fair-trade system is especially developed to help small producers in developing countries, but the potential benefits are curtailed by a limited market.

Finally, stricter standards (private or governmental) are often only a part of the new requirements which farmers have to meet in food markets which are increasingly globalized and concentrated. Other challenges for small farmers include: large quantity requirements from modern processors or retailers; and more demanding commercial practices (reliable accounting, logistics, stricter delays). A corollary is that government and international organizations such as FAO may need to design interventions which address GAP adoption *together* with the broader range of management and institutional support which farmers will need to meet changing market requirements.

Governments or intergovernmental agencies may assume various roles in relation to the development of GAP-related standards and schemes. Innovative responses may need to be explored to minimize potential trade-offs or seek synergies between food safety and quality GAPs (mainly driven by market actors) and food security or sustainability GAPs (mainly driven by public agencies and NGOs). First of all, governments provide the legal environment in which voluntary schemes operate. Governments may also legally protect the use of certain terms for product labelling. More actively, government agencies may act directly as standard setting or accreditation bodies. Governments and international institutions may also actively facilitate certification or support farmers to meet new market demands. For instance, they can facilitate establishment of local certification bodies, or support organizations advocating implementation of standards. Some governments advocate also the establishment of subsidies or tax incentives to producers which implement specific standards, although there is no

consensus among countries as to whether these are effective, equitable and acceptable instruments. Finally, government and international agencies may provide capacity building to farmers, producers organizations and extension staff, and help farmers and markets better organize to meet changing demands in food markets. Ultimately, appropriate interventions will be a matter of political choices based on the specific national and local context, the strength and weaknesses and competitiveness of the national agricultural sector and specific commodities.

1. Introduction

Over the past 20 years the number of codes and standards for agricultural production has grown quickly. Producers who want to export face not only a plethora of import regulations, but also additional requirements which have to be fulfilled for different niche markets. On the other hand, their products may already comply with such requirements, and compliance with specific standards may offer opportunities for increased market access or even price premiums.

At the other end of the production chain, consumers are confronted with more and more product labels, which may be confusing or even misleading. For environmental and social labels, they may be barely aware of what the labels actually mean and whether they are credible.

In this paper we have sought to examine the landscape of existing codes, standards, regulations and certification programmes in the food and agriculture sector pertaining to agricultural practices, whether they make explicit mention of "GAP" or not. There is little common ground as to how 'good' agricultural practice are defined in these standards. Given the profusion of existing standards, the paper, far from being exhaustive, rather tries to propose a rough categorization, providing only a few examples for each.

Standards pertaining mainly to food safety and quality (defined as resulting from production and processing methods directly related to end product attributes) are briefly touched upon, but emphasis is put on those codes which seek to include broader environmental and social dimensions to support the achievement of SARD objectives.

A brief overview is also given in initial sections on government and extension-related standards. However, the paper tries to focus on voluntary standards which respond to some form of market incentives, with a view to better understand the extent to which they can complement public-sector "GAPs", such as extension or public incentive schemes. The emphasis is also put on standards and guidelines relevant to developing countries, although policy experiences in developed countries are touched upon in so far as they may inform options for developing countries. Relevant provisions of World Trade Organization (WTO) agreements are briefly discussed in relation to the existing standards and programmes.

Broadly, efforts to explore the development of food and agriculture standards should be seen in the context of Agenda 21, the global plan of action for sustainable development adopted in 1992 at the United Nations Conference on Environment and Development (UNCED, or the Earth Summit) in Rio de Janeiro. Chapter 14 pertaining to Sustainable Agriculture and Rural Development (SARD) is directly relevant and Chapter 4 of Agenda 21, titled *Changing consumption patterns,* states that:

> *4.20. The recent emergence in many countries of a more environmentally conscious consumer public, combined with increased interest on the part of some industries in providing environmentally sound consumer products, is a significant development that should be encouraged. Governments and international organizations, together with the private sector, should develop criteria and methodologies for the assessment of environmental impacts and resource requirements throughout the full life cycle of products and processes. Results of those assessments should be transformed into clear indicators in order to inform consumers and decision-makers.*

4.21. Governments, in cooperation with industry and other relevant groups, should encourage expansion of environmental labelling and other environmentally related product information programmes designed to assist consumers to make informed choices.

In exploring food and agriculture standards and their impact on farmers in developing countries, FAO's objective is not to support the establishment of more stringent international regulations or define new sets or norms and standards. It is rather to examine possible options to support sustainable agriculture and rural development taking into account those existing standards that have been developed by Governments, NGOs and the private sector. Clarification of the type of existing standards and their scope is seen as a step towards identifying issues for further development and promotion of good agricultural practices.

2. Definitions - The concepts of standards, certification and labelling[4]

Accreditation. The evaluation and formal recognition of a certification programme by an authoritative body.

Audit, auditor, auditing body, see inspection, inspector, inspection body.

Certification. A procedure by which a third party gives written assurance that a product, process or service is in conformity with certain standards.

Certification body. An organization performing certification. Sometimes referred to as the certifier or the certification agency. The certification body may use an existing standard or may set its own standard, perhaps based on an international and/or normative standard.

Certification label. A label or symbol indicating that compliance with standards has been verified. Use of the label is usually controlled by the standard setting body.

Certification programme. A system of rules, procedures and management for carrying out certification. Sometimes referred to as a certification system. One certification body may execute several different certification programmes.

Control, control body. Terms commonly used by the trade when referring to inspection and an inspection body.

Inspection. An on-site visit to verify that the performance of an operation is in accordance with specific standards of a certification programme.

The **inspector** is the person appointed to undertake the inspection. May be an independent operator or an employee of the certifier.

Inspection body. The body performing the inspection part of certification. Where a certification body performs its own inspections, the certification body is also the inspection body.

License. A document issued under the rules of a certification programme, by which a certification body grants a person or body the right to use certificates or certification labels for

4 These definitions are used by Dankers, C. with Liu, P., in "*Environmental and social standards, certification and labelling for cash crops*", Raw Materials, Tropical and Horticultural Products Service (ESCR), Commodity and Trade Division, FAO (2003, to be published)

its products, processes or services in accordance with the rules of the relevant certification programme.

Standards. "Documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines or definitions, to ensure that materials, products, processes and services are fit for their purpose". (International Organization for Standardization, ISO, 1996). From this definition it becomes clear that standards are not only used for standardization, but also as "guidelines", i.e. for the purpose of capacity building.

Environmental standards are standards for materials, products and production processes to ensure that negative impacts on the environment are minimal or kept within certain limits.

Organic standards are standards for production and processing of organic food products.

Labour standards are standards for working conditions to ensure workers rights are respected.

Social standards can be used to mean labour standards but can also include standards for organizations and production processes on other social issues such as relating to neighbouring communities.

Product standards are specifications and criteria for the characteristics of products.

Process standards are criteria for the way the products are made. Social and environmental standards in agriculture are essentially process standards. These process criteria might or might not influence the characteristics of the end products.

Governmental standards. Usually called *regulations*, except when developed and administered by semi-independent institutes. They may themselves be based on *international agreements or guidelines set by intergovernmental bodies*, such as the Codex Alimentarius of FAO and WHO.

Normative standards. Generic (general, non-specific) standards or guidelines to be used as a framework by local standard setting or certification bodies to formulate a specific standard for their certification programme, also referred to as **Standards for Standards**, e.g. the IFOAM Basic Standards and FAO/WHO Codex Alimentarius guidelines

3. Overview of existing codes, guidelines and certification programmes in agriculture

This section very briefly recalls developments in public-funded standards, guidelines and incentives schemes on GAP. It describes with more detail the development of recent social and environmental voluntary standards and certification which seek to generate some form of market benefit to complement (inter) governmental norms and guidelines.

3.1 Types of standard setting organizations

Standards set by **governments** are usually called regulations, except when developed and administered by semi-independent institutes, and are generally mandatory. They may themselves be based on international agreements or guidelines set by intergovernmental bodies, such as the Codex Alimentarius of FAO and WHO. Intergovernmental guidelines are normally generic in nature. This allows for national governments to set more specific standards adapted to the needs and situation of the country. Examples of governmental environmental standards in agriculture are the Codex guidelines for labelling of organically produced food and national organic regulations that may or may not follow these guidelines. National regulations may in turn determine how to arrange the certification system, whether to accredit private certification bodies or to keep the certification in the hands of governmental bodies. In addition to mandatory regulations, governments may develop national product labels, for exclusive use or for use alongside labels of certification bodies. Such standards are voluntary in the sense that one can chose not to certify and not to carry the label. Only when using the certificate and/or label, producers and traders have to comply with the regulation.

Standards set by private and non-governmental groups and organizations are voluntary in that actors in the agriculture sector are not legally bound by them. **Industry**, such as the producers themselves, i.e. the first party, or actors further down the chain, the buyers or retailers, i.e. the second party, may set standards which go beyond government regulations. Per definition, certification involves a third party without any stake in the business being certified. Therefore, this paper mainly discusses those industry standards which use a third party to carry out verification of implementation.

The producers, generally in an association or co-operative, might have an interest to set a standard and invite a third party to verify implementation in order to demonstrate to a wide range of buyers that they fulfill certain requirements generally in demand in the market. Such an assurance programme may save time and money, compared to assuring each buyer individually. An example of such producer-set standards are those standards set by national producer associations under the COLEACP harmonized framework. Another example were the first organic standards set by organic producer associations, which not only served to assure consumers but also functioned as a learning tool for the producers.

At the other end of the chain, if a group of **buyers** recognize they have basically the same requirements for certain products, they may set a standard together. This would convince

producers faster to implement such standards, as it becomes clear a large part of the market requires them. An example of such a buyers' standard is the EurepGAP protocol.

Also with a stake in the industry itself, but from a different perspective, are the **trade unions.** Their main mode of work is through negotiating collective bargaining agreements for individual enterprises. The International Confederation of Free Trade Unions (ICFTU) has set a kind of generic code and trade unions may be involved in multi-party coalitions that are setting standards.

Furthermore, many environmental and social standards are set by **NGOs**. NGOs may be advocacy groups but also broad stakeholder groups. Standard setting NGOs may themselves be an umbrella organization of various smaller NGOs, each with their own constituencies. Whether a standard set by NGOs becomes generally accepted will depend on many factors. Among them, the public recognition of the NGO setting the standard; the standard setting process, especially the stakeholder consultation; the "implementability" of the requirements; and the publicity around the standard. As with governmental standard setting bodies, NGOs may choose to do the verification themselves, or to accredit certification bodies.

Finally, **governments, the private sector and NGOs may form two- or three-party coalitions** to set standards. For example, governments, industry and consumer organizations are all represented in ISO members and the ETI is a tri-partite organization with government, NGO and trade union representatives.

In the rest of this section an overview of the main GAP-related standard setting and certification programmes are presented, with an emphasis on social and environmental standards. Only those standards are included that are implemented internationally. For each programme the organization(s) behind the initiative is/are briefly introduced after which the scope of the standard, the certification system and the labelling system (if any) are discussed. They are grouped according to the type of standard setting organizations, although in the case of multi-party organizations, the choice has been somewhat arbitrary. The overview is not exhaustive, especially for those standards that are not accompanied by a certification programme.

3.2 Relevant International Conventions and Treaties

3.2.1 Conventions of the International Labour Organization (ILO)

The ILO was created in 1919 primarily for the purpose of adopting international standards to cope with the problem of labour conditions involving "injustice, hardship and privation". The ILO's standards take the form of international labour Conventions and Recommendations. Eight ILO Conventions have been identified by the ILO's Governing Body as being fundamental to the rights of human beings at work. They are conventions: No. 87 (1948) and No. 98 (1949) on Freedom of association and collective bargaining; No. 29 (1930) and No. 105 (1957) on the abolition of forced labour; No. 111 (1958) and No. 100 (1951) on Discrimination and equal remuneration; and No. 138 (1973) and No. 182 (1999) on the elimination of child labour. For the agricultural sector other important convention are No. 184 (2001) Safety and Health in Agriculture, No. 129 (1969) Labour inspection (Agriculture) Convention and No. 110 (1958) Plantations Convention. These conventions are ratified by an increasing number of countries. The ILO also gives technical assistance to governments, employers' groups and workers organizations to promote the implementation of its conventions.

3.2.2 Conventions on pesticides and pesticide use

- International Code of Conduct on the Distribution and Use of Pesticides, the revised version of which was adopted by the FAO Council in November 2001.
- Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. FAO/UNEP, Rome/Geneva. 1998. Under the PIC procedure, the secretariat provides all participating countries with detailed information on the risks the chemicals pose, allowing them to decide whether to accept future imports. If any country does choose to ban or restrict substances on the PIC list, which contains presently 31 chemicals, exporting countries are advised and must immediately inform their exporters, industry and customs departments.

3.2.3 Conventions on Biodiversity

- The International Plant Protection Convention (IPPC) of 1952 to which 116 governments currently adhere was last amended in 1997. The purpose of the IPPC is to prevent the spread and introduction of pests of plants and plant products and to promote measures for their control to avert the threat to biodiversity from such alien and invasive species.
- The Convention on Biological Diversity was born out of the Earth Summit in 1992. More than 175 countries have ratified the agreement. The Convention has three main goals: The conservation of biodiversity; Sustainable use of the components of biodiversity; and Sharing the benefits arising from the commercial and other utilisation of genetic resources in a fair and equitable way. Parties must establish rules governing access to biological resources, systems recognizing the rights of local communities, mechanisms ensuring the transfer of appropriate technologies, and procedures for the safe handling, use and transfer of living modified organisms.
- The International Treaty on Plant Genetic Resources was adopted by the FAO Conference on 3 November 2001.

3.3 Codes and standards with government involvement

3.3.1 GAP in the context of food safety and quality[5]

Following are just a few examples where the GAP terminology is used in the context of national food safety and quality regulations.

A limited definition of GAP is applied within established codes of practice for food safety, under Codex Alimentarius, to minimize or prevent contamination of food. The Codex Alimentarius Commission develops and adopts standards, guidelines and related texts on all aspects of food safety and quality reflecting consensus at the international level. Codex standards subsequently constitute reference points for developing and harmonizing national standards. Codex defines GAP in the use of pesticides to include "...nationally authorized safe uses of pesticides under actual conditions necessary for effective and reliable pest control".[6]

---

5 "Quality" in this case means not adulterated in a manner to deceive the consumer or to substitute or dilute valuable components with less valuable ones. In this definition, production and processing methods unrelated to final product attributes are not considered a part of "quality"

6 Codex Alimentarius Commission Procedural Manual. Tenth edition, 1997. p. 43

The actual conditions include any stage of the production, storage, transport, distribution and processing of food commodities and animal feed. GAP in this context is used to define maximum residue levels for pesticides.

Also in the International Code of Conduct on the Distribution and Use of Pesticides, Integrated Pest Management is specified as a recommended practice, with the scope of controlling pesticides residue levels.

While the Codex Alimentarius and the International Code specifically define GAP in the context of the use of pesticides, the Codex Code of Practice (General Principles of Food Hygiene) and other more specific codes, address good practices in primary production as well as post-production systems. Some national programmes have extended the use of the term Good Agricultural Practices to refer to practices to minimize microbial food safety hazards in fresh produce.

Hazard Analysis Critical Control Points (HACCP) is widely adopted in the food processing industry as a risk management tool that provides a structured approach the control of hazards in processing and manufacturing. HACCP has been incorporated into The Codex Alimentarius (FAO/WHO) and in the U.S. has become a legal requirement for the fish, poultry and meat industries. The essential feature of the technique is the thorough analysis of production flow charts to identify the critical control points where care is required to maintain specified aspects of product quality and also integrity of the infrastructure. Management monitors these control points and seeks to maintain them within acceptable ranges. The result is the maintenance of product quality. HACCP is now also finding application in environmental management and so is a key technique in both the quality assurance (QA) and environmental management (EM) aspects of Good Farming Practice.

3.3.2 Production guidelines, integrated farming and sustainability indicators

Many national agricultural research systems, extension services and international institutions have developed standards related to sustainable agricultural production practices for specific commodities, or, more recently for mixed production systems. Objectives include maximization of yield, optimizing use of production factor and available resources, limiting negative externalities or maximizing positive externalities on soil and water, and others. Recommendations focus on reducing the use of off-farm, external, non-renewable inputs; improving the match between cropping patterns and productive potential; working to value and conserve biological diversity; and taking full advantage of local knowledge and practices.

A wide array of guidelines and standards have been developed for dissemination by extension services and research or development projects. Examples include integrated nutrient management and conservation agriculture. FAO's Integrated Pest Management programmes have developed guidelines of practices to promote more accurate, reduced pesticide use expanding research-action efforts to a number of commodities including rice, then cotton and horticultural crops. Technical options are disseminated and elaborated through management-intensive extension processes using the farmer field school approaches. The national agricultural research organization of Brazil, EMBRAPA, in collaboration with FAO, is developing a series of specific technical guidelines for melons, mangoes, fruit and vegetables, field crops, dairy, beef, swine and poultry, based on GAP.

Codes are also developed on specific aspects of agricultural production and its effects include EUROPAM Guidelines for good agricultural practice (GAP) of medicinal and aromatic plants (1998), the Code of good agricultural practice for the protection of water or

the Code of good agricultural practice for the protection of soil developed by the Ministry of Agriculture and Fisheries of the United Kingdom.

3.3.2.1 Sustainability indicators and cross-compliance measures

In recent years, considerable efforts have gone into the identification of integrated sustainability indicators, taking into account different dimensions of production systems. Sustainability indicators are relevant, reliable, quantifiable data that are selected as reflecting the sustainability of a system. *Indicators* are measurements tools which reflect *principles* of sustainability and to which correspond specific *practices* for implementation. These benchmarks can be used as monitoring tool for third parties (such as government wishing to assess the sustainability of farms) or as a decision-making tool for the producer himself at various stage in the production process. Often, they are intended to be both.

OECD countries are well advanced with analysis of sustainable agriculture and the application of indicators to assess the national status of agriculture and the environment. These developments are supported by work on indicators undertaken by the OECD.[7] **New Zealand** has prepared a comprehensive statement on the role of on-farm quality assurance and environmental management systems (QA/EMs) in achieving sustainable agriculture and sustainable land management systems.[8]

On May 2, 2001, the parliament of **France** adopted a new legislation giving Integrated Farming a legal basis (Article L-640-3 du Code Rural, Loi du 2/5/2001). An official "Code of Reference for Integrated Farming" was adopted jointly by the French authorities, the major farmers' organisations and consumer and environmentalist groups. French farmers who practice Integrated Farming can apply for "Integrated Farming certification". Certification is granted by officially authorized bodies after an audit carried out on the basis of the Code of Reference. Local requirements will be added to the national Code of Reference by 2004. A national committee for Integrated Farming and farm certification will be created. At a later stage local committees will be given responsibility for local adaptations. Although a description of Integrated Farming has been drawn up in several regions for various productions, this is the first official nationwide definition.

The **EU** has also asked its Member Countries to prepare policy statements of Good Agricultural Practice, and the reform of the Common Agricultural Policy (CAP) makes a move toward implementing cross-compliance as a criteria for subsidies to farmers. Many countries or group of countries have applied diverse policies to support the sustainability of their agriculture. The EU experience with cross-compliance is dealt with in some detail in what follows because it is the object of many debates but this does not necessarily imply a judgement as to the lesser relevance of other approaches.

The concept of cross-compliance originated in the United States in the 1970s to refer to various conditions (environmental and other) which farmers have to meet in order to be eligible for assistance under government support schemes for agriculture, notably the commodity 'programs'. Cross-compliance developed as a policy response to the detrimental impacts of agricultural intensification. Farmers claiming support had to meet the rules for the

7 OECD, 1999 a,b,c
8 Ministry of Agriculture and Food (MAF), 1998

specific programme and certain obligations of other programmes, thus making a link 'across programmes' which gave rise to the term 'cross-compliance'. A discussion about the relevance of cross-compliance to European agriculture emerged during the 1990s and the 'Agenda 2000' reform of the Common Agricutural Policy (CAP) introduced significant further options for the application of cross-compliance to CAP payments.

The term Good Farming Practice (GFP) is used, often rather loosely and interchangeably with Good Agricultural Practice (GAP), to define farm management activities which provide a minimum level of protection for some of the following:

- natural resources (energy, soil, air, water, wild plants and animals);
- cultural resources (landscape, traditional buildings, historic and archaeological
- features and public access);
- farm livestock (health and welfare);
- farm labour (safety); and
- the general public (food safety and public health).

At a minimum, GAP and GFP in the EU include reference to mandatory statutory requirements (although rarely, if ever, for all of the above list in any one instance), and may also include additional actions which the farmer can take beyond the statutory minima. The GFP/GAP requirements may be defined for farms in a particular geographical area (e.g. Member State), for particular sectors (e.g. livestock or fruit and vegetables), for methods of production (Integrated Crop Management) or for specific management activities (e.g. the use of pesticides).

In practice most definitions of GFP appear to rely heavily on compliance with national and local regulations in EU countries, which vary significantly between and within countries. All 15 Member States have a formal obligation to define GFP in their Rural Development Plans, and the acceding countries have also been required to define GFP for their pilot agri-environment programmes under SAPARD. Legal texts allowed Member States considerable freedom of choice over the scope and level of detail of GFP requirements, and this resulted in great variation both in the practices required and the costs to the farmer of implementing them.

Actual implementation has tended to focus on relatively specific farm management activities. In the Netherlands, for example, cross-compliance applies to pesticide use in starch potato crops. In Denmark an explicit link was made between eligibility for certain direct payments and compliance with a pollution control measure requiring appropriate field management along the banks of the streams and rivers. In France farmers claiming premia for irrigated maize are obliged to obtain appropriate permits in relation to water abstraction. It has been argued that France is most advanced on cross-compliance implementation as the French rural development Contrat Territorial d'Exploitation (CTE) may be seen as a form of cross-compliance, because each farm contract has to include both an economic, employment linked element and an environmental, land-based element. With the support of the French Ministry of Agriculture, efforts are also undertaken to develop sustainability indicators, for instance with the IDEA method (Indicateurs de Durabilité des Exploitations Agricoles) based on practices related to three components : agro-ecological, economic and socio-territorial sustainability.

It is difficult to draw conclusions from the EU cross-compliance experience because no analysis is yet available. The demands of administering cross-compliance have acted as a major deterrent to Member States that are considering its implementation or elaboration. In addition to developing appropriate and 'verifiable' GAP and GFP standards, there are considerable demands on the resources of the administration body.

The EC argues that benefits of integrating environmental considerations to agricultural and rural development policy could include direct, positive effects on the environment, and awareness raising and increasing knowledge of environmental issues amongst the farming population and administrating authorities.

However, many contrary views have been expressed regarding these measures: many believe it should be purely short term because they fear that it may become a false rationale for justifying the continued use of direct payments. It is also argued that implementation costs would be too high for developing countries. This relates to debates at the WTO regarding the notion of multifunctional agriculture and legitimate agricultural policy instruments with regard to trade competition. In addition, some farmers oppose to additional 'red-tape' surrounding agricultural production. Others consider cross-compliance a rather blunt instrument considering the complexity and variety of environmental problems in Europe.

Suggestions for improvements to cross-compliance policy include stronger linkage between food production standards and the price paid by the consumer through labelling and farm assurance schemes. The value of products produced on farms being subjected to cross-compliance could thus be increased, and greater awareness of environmental issues could be raised amongst the public. However, consumers' organisations may object to paying a premium for food that has been produced according to mandatory standards.

The CAP Mid Term Review proposals (CEC, 2003) propose that farm audits should become a compulsory form of cross-compliance for farms receiving more than EUR 15,000 of production payments or with a turnover of more than EUR 100,000. Such audits would cover 'material flows and on-farm processes' relating to the environment, food safety and animal health and welfare as well as occupational safety, and provide 'the knowledge that producers are actively managing these processes' as a means of ensuring consumer confidence.

3.3.3 Certification and labelling with government involvement

3.3.3.1 ISO 14001

Although ISO 14001 is not a (inter)governmental standard, governments are involved in or endorse the ISO system as a whole. ISO, founded in 1947, has long be recognized as the major standard setting body for voluntary international harmonized industry standards. ISO declares to be a not-for-profit non-governmental organization. Its member bodies are either governmental, parastatal, tripartite or non-governmental bodies, the latter often consisting of industry representatives. There can only be one ISO member per country. Only recently has ISO started to develop environmental standards and initiated work on social responsibility.

ISO has been mentioned in preceding paragraphs with reference to its guidelines for the standard setting and certification process. The most important ISO standards in this respect are the 'definitions' (Guide 2), guides for standard setting (Guide 7 and 59), for accreditation (Guide 61) and for certification bodies (Guide 62, 65 and 66). The present section deals with the environmental management standard ISO 14001.

Development and scope of standard[9]

The standard in the ISO 14000 series against which companies can be certified is ISO 14001 "Environmental management systems – Specification with guidance for use". Other standards in

9 ISO, 1998a.

the ISO 14000 series are "tools" for implementing an environmental management systems and deal with environmental monitoring and auditing, labelling and product life cycle assessment.

Requirements for certification under ISO 14001 are the development of an environmental policy including an implementation and communication plan, definition of responsibilities, staff training activities, documentation and monitoring. Apart for required compliance with local (environmental) rules and legislation, the standard does not set specific performance targets. Instead ISO 14001 aims at continuous improvement.

Accreditation and certification, label and markets

ISO itself does not certify nor does it accredit certification bodies. Certification against ISO 14001 is carried out by either governmental or private certification bodies under their own responsibility. Usually they are required by the country in which they operate to be accredited by national accreditation authorities, typically members of the International Accreditation Federation. More and more farms are being certified against the ISO 14001 standard, but products from these facilities can not be labelled as ISO 14001-certified, because the product itself is not certified. However, an indication on the product that the producing *firm* is ISO 14001 certified, including indication of the certification body, is allowed.

More and more such "ISO 14001 certified firm" claims can be found on products. ISO 14001 is rapidly becoming a default certification for plantations. Managers of such large production units often claim that ISO 14001 has been very useful in structuring their documentation, providing environmental management tools and, in some cases, reducing costs. Because there is no price premium and the certification can be costly and requires extensive documentation, ISO 14001 might be less attractive for smaller agricultural operations.

3.3.3.2 Organic standards and certification

Organic production is a holistic management of the agro-ecosystem, emphasizing biological processes and minimizing the use of non-renewable resources. Although the terms "organic", ecological" or "biological" have developed in Europe and North America to distinguish from conventional agriculture, many low-input traditional agriculture systems in other parts of the world are also *de facto* organic systems. In this respect the term "organic by default" has been introduced and even "organic by neglect". However, these terms do give the false impression that any agriculture systems in which no agrochemicals are used would automatically comply with organic standards, which is not necessarily the case.

Development and scope of organic standards

Inspired by the ideas of Rudolf Steiner (1920s), Sir Albert Howard (1930s) and Lady Eve Balfour (1940s) farmers themselves originally developed organic farming methods on a learning-by-doing basis. As the organic sector developed, organic farmer associations wrote their own standards, more to communicate what they had learned than to codify what constituted organic farming. Farmer associations subsequently developed their own certification systems serving their own members. In time these certification units became more independent to avoid conflicts of interests and to increase confidence from a growing group of consumers.

The International Federation of Organic Agriculture Movements (IFOAM) was founded in 1972. IFOAM formulated the first version of the IFOAM Basic Standards (IBS) in 1980 and has revised them biennially ever since. The IBS serves as a guideline on the basis of which national and private standard setting bodies can develop more specific organic standards.

With the growing market for organic products and supply lagging behind, price premiums provided an incentive to cheat. In reaction, many countries developed national organic regulations to protect reliable organic producers and consumers against misleading organic claims. The first organic regulations were adopted in the US (The States of Oregon, 1974 and California, 1979), France (1985), the EU (regulation 2092/91 of 1991), the JAS organic standards for plant products (2000) from the Japanese Ministry of Agriculture, Forestry and Fisheries, and standards of the US National Organic Program (NOP) developed by the US Department of Agriculture (2002). With a view to harmonization the FAO/WHO Codex Alimentarius Commission formulated guidelines for labelling of organically produced food, adopted in 1999 for vegetal products. The Codex guidelines are voluntary, member countries can choose the extent to which they follow them.

Organic standards cover all crops and mostly all livestock. Standards for fish farming, bee-keeping and harvesting of wild products are increasingly being developed by the various standard setting bodies. Organic standards for plant production typically include criteria for conversion periods; seeds and propagation material; maintenance of soil fertility through the use and recycling of organic materials; and pest, disease and weed control. The use of synthetic fertilizers and pesticides and of genetically engineered organisms is prohibited. There are also criteria for the admission and use of organic fertilizers and natural pesticides.

During the last revision of the IFOAM Basic Standards, the standards for ecosystem management were strengthened, including issues on landscape, contamination control and soil and water conservation. There are ongoing discussions on whether the standards should also include criteria for labour conditions and other social issues, to which currently only a general reference is made. Processing, packaging and traceability standards usually include requirements to prevent mingling of conventional and organically produced products, criteria for additives and processing aids.

In addition to the organic standards and certification systems, an international voluntary Code of Practice for Organic Trade has been developed by the IFOAM traders group and launched in February 2003.

Certification and accreditation

IFOAM/IOAS

The International Organic Accreditation Service (IOAS) accredits certification bodies that have organic certification programmes that comply with the IFOAM Basic Standards and the IFOAM Criteria for Certification Bodies. Because the IBS is a generic standard, the IOAS requires that certification bodies elaborate some standards in more detail. The IFOAM accredited seal may appear on the product only as part of the logo of the certification body and in the bodies own promotional material.

Internal Control Systems

Many organic regulations and the IFOAM/IOAS system allow for group certifications. In that case the farmer group must establish an internal control system that assures all individual members comply with the standard. The role of the certification body is then to control whether the Internal Control System works properly. Continued discussions are being held on the requirements for such systems.

International harmonization of organic standards and certification systems

The current plethora of different standards and different requirements for certification and labelling increases certification costs for producers wishing to export to multiple markets. It

also poses logistic challenges for international organic trade. In an effort to harmonize existing organic guarantee systems, a Taskforce has been formed by IFOAM, FAO and UNCTAD, which started work in 2003.

Market and impact

World retail sales of organic products were estimated by the International Trade Centre (ITC) at US$ 19 billion in 2001, from US$ 10 billion in 1997. In 2003 the European market was expected to reach US$ 10-11 billion in total organic sales, North America US$ 12 billion. Cases documented by Dankers and Liu[10] evidence that traditional low-input farmers may expect productivity gains from organic agriculture methods. However, higher yields are usually accompanied by higher production costs, mainly in the form of increased labour demand. In particular, the introduction of new soil conservation methods, such as terracing and preparation of organic fertilizers, were often mentioned as increasing total labour demand. If soils were depleted under former land use management, these labour requirements can be expected to be higher.

The organic premium received usually covers these higher production costs and certification costs and the result is increased net profit. In former low-input situations, the increase in productivity might in itself compensate for higher production costs, without the need to access premium markets through certification. But in the Dominican Republic, price premiums were apparently not enough to justify the necessary investments to significantly improve the quality of organic bananas grown by small-scale producers, and it is increasingly difficult for them to compete in the more demanding international organic market.

In the few cases cited of conversion from high-input production systems, initial yield declines have been observed. Effects on production costs per hectare have been varied (lower, similar and higher). In these cases, given the initial investment costs and decline in yields, access to premium markets is essential – usually requiring certification.

In all cases, returns on investments in organic agriculture, especially in soil conservation methods and in conversion from high-input situations, occur in the long-term only. Tenants and sharecroppers without a guarantee of continued access to the land are unlikely to make this investment.

Another important element is the use of group certification involving an internal control system to reduce the costs of certification. In many of the cases where certification was reached through farmers organizations, the certification costs were subsidized by donor organizations. The second system is exemplified by Uganda, where it is the exporter who organizes and pays for the certification. In general, the unclear status of group certification with regard to the EU regulation (and possibly also NOP and JAS) is observed as a barrier for further development of organic exports from smallholder producers.

3.4 Standards set by farmers and industry

3.4.1 EurepGAP

EurepGAP is a private certification system driven by 22 large-scale retail chains and large fresh produce suppliers/producers in Europe that form the core members of the Euro-Retailer

10 A dozen cases ranging from El Salvador, Peru, Uganda, the Dominican Republic, Costa Rica, Brazil, Argentina, India, Uganda, Guatemala and Sri Lanka. In "*Environmental and social standards, certification and labeling for cash crops*" by Dankers, C. with Liu, P., FAO 2003 (to be published)

Produce Association (EUREP). There are also associate members (mainly suppliers of agrochemicals, certification bodies and consultancy firms) who may participate in meetings but are not part of the EurepGAP decision-making process. Initially the EHI-EuroHandelsinstitut e.V. acted as international secretariat. In March 2001, EHI founded the independent daughter company FoodPLUS GmbH, a commercial company that serves as legal owner of the normative document and hosts the EUREP Secretariat.

3.4.1.1 Development and scope of standard

The EurepGAP Fruits and Vegetables standard was developed by the EurepGAP Technical Committee Fruits and Vegetables (formerly dominated by retailers but now 50 percent retailers and 50 percent suppliers). Other standards are currently under development. In the rest of this text the term 'EurepGAP' is used to mean 'EurepGAP Fruits and Vegetables'.

EurepGAP has the declared aim of increasing their consumers' confidence in the safety of the food. The main focus of the EUREP Good Agriculture Practices (GAP) norms is on food safety and traceability. They also include mention of environmental (Integrated Pest Management practices) and social (issues on workers health) norms, though these are limited. EurepGAP also aimed harmonization of requirements for food hygiene and of Maximum Residue Limits for pesticides in food. This harmonization effort has only partly been successful, considering that not all European retailers are involved and that the standards refer to existing governmental regulations, which are not the same across Europe.

The EurepGAP system is targeted at large-scale producers (this is at least the experience so far in Latin America), who have the human and financial capacity to implement and monitor the EurepGAP "management system".

3.4.1.2 Certification and accreditation

Certification bodies wishing to certify against EurepGAP need to be accredited by FoodPLUS. In addition to the certification costs, certified producers have to pay an annual fee to FoodPLUS (around 25€ a year). Farmer associations that already have implemented an existing farm assurance scheme with third-party verification can benchmark that scheme against EurepGAP. It is also possible for a so called "Produce Marketing Organisation" (PMO) to get a group certification. A PMO can be a co-operative or other group of growers which have a legal entity that takes over responsibilities of EurepGAP implementation for their associated and contracted growers through an internal control system. Detected non-compliance of one farmer in the group may lead to de-certification of the whole group.

3.4.1.3 Label and market

There is no product label associated with EurepGAP certification and no premium. The market for products from EurepGAP certified produce consists of the 22 EUREP retailers. Certification will not be a guarantee for being "listed" by those supermarkets, but may become a prerequisite. It was said that some retailers would require EurepGAP certification for fresh fruits and vegetables as early as January 2003 but this does not seem to have happened yet. Although there is no product label, EurepGAP is currently preparing the rules and prerequisites for carrying a reference to EurepGAP at individual box level. This might lead to appearance of EurepGAP references in European supermarkets, albeit not on the individual products.

3.4.2 COLEACP Harmonized Framework[11]

The COLEACP is an inter-professional association of exporters, importers and other stakeholders of the EU-ACP horticultural trade. To improve market recognition of ACP produce and respond to market demands for environmentally and socially responsible conditions of production, COLEACP took the initiative to encourage horticultural export associations to move towards harmonization of their Codes of Practice. The COLEACP Harmonized Framework is meant as a minimal set of food safety, environmental and social standards to be incorporated into national codes. As of January 2003 13 fresh produce trade associations were participating, from 9 African and Caribbean countries.

Development and scope of the standard

The standard was developed on the basis of a comparison of existing codes from the participating organizations and a benchmarking analysis against existing codes in Europe. The Framework, reviewed annually, is a "generic standard" or a "standard for standards". It applies to all exported fresh horticultural products: fruits, vegetables, floriculture products and herbs, but does not include processed products. The requirements cover the whole production chain from farm to export i.e. production, harvesting, post-harvest treatments, packaging and storage. National trade associations may set more stringent standards or develop additional requirements.

The Framework contains standards for *food safety* during crop production and during harvesting and post harvest handling and facilities. *Environmental standards* include criteria on the selection, use, storage and transportation of pesticides and fertilizers; use of integrated crop management; occupational health and safety; water, soil and waste management, protection of flora and fauna, energy use and packaging materials; and record keeping. *Labour standards* address contracts, remuneration and working hours; disciplinary and grievance procedures; freedom of association and collective bargaining; no discrimination; protection of interests of children and special conditions for female employees; no forced labour; no harsh or inhumane treatment; occupational health and safety, access to health care services and sanitation; and worker accommodation. Furthermore the framework contains a chapter *on relationships with outgrowers*, including standards on production and purchasing policy; technical advice and support for implementation of the code.

Label and market

Being a generic standard, the Harmonized Framework does not involve any certification or labelling programme. Due to lack of resources the COLEACP had to cease the activities of the Harmonized Framework Monitoring Group but nevertheless, national producer associations continue to work with the Harmonized Framework. Some of the programmes of associated associations have developed a label that is granted to certified producers. There are quite some variations in levels of recognition obtained by individual schemes in the European markets. Specific market data related to certified produce are lacking.

11 COLEACP, 2001

3.4.3 The European Initiative for Sustainable Development in Agriculture (EISA) and related codes of Integrated Farming

Over the past decade, inter-professional associations have been established in different European countries to develop codes of conducts and/or labels for Integrated Farming. These are in particular: FARRE (Forum de l'Agriculture Raisonnée Respectueuse de l'Environnement or Forum for Environment-Friendly Integrated Farming; France), FNL (Fördergemeinschaft Nachhaltige Landwirtschaft, Association for the Promotion of Sustainable Agriculture, Germany), LEAF (Linking Environment and Farming, United Kingdom), ODLING I BALANS (Sweden), FILL (Luxembourg) et L'Agricoltura che Vogliamo (Italy). In addition to primary producers, their members include farmers organizations, agricultural inputs suppliers, the agro-food industry and major retailers, and environmental groups.

They aim at promoting Integrated Farming in their respective countries. Integrated farming is defined as a competitive form of farming which aims to satisfy three key criteria: the financial objectives of producers; consumer demands and expectations; and care for the environment. Associations run nationwide networks of demonstration farms and publish information material. Most have not developed any type of label but voluntary management guidelines.

For instance, under FARRE all farmer members agree to implement the Environmental Self-diagnosis process. L'agricoltura che vogliamo" has published a "Manuale di gestione agricola integrata" (guidleines if integrated farming pratices) while Odling i Balans has revised in 2003 its Checklist for "Environmental and quality controlled cropping" and has developed Key Environmental Indicators to document progress achieved in pilot farms.

These 6 national associations are grouped under the E.I.S.A. (European Initiative for Sustainable Development in Agriculture). They have published in January 2001, the "Common Codex" for Integrated Farming. It describes farming practices that integrate the contribution of biological processes to production systems while not excluding the use of synthetic chemical inputs.

General Principles of Good Farming in this codex are described as: (1) Producing sufficient high-quality food, fibre and industrial raw materials (2) Meeting the demands of society (3) Maintaining a viable farming business (4) Caring for the environment (5) Sustaining natural resources.

Individual, and often interacting, practices are developed in 10 groups: (1) Organization and management (2) Monitoring and auditing (3) Crop Protection (4) Animal husbandry (5) Soil and water management (6) Crop nutrition (7) Energy management (8) Waste management and pollution prevention (9) Wildlife and landscape management (10) Crop rotation and variety choice.

Demonstration and recording of what is being achieved is provided by measurements of performance and control of whether standards are being maintained or improved based on self-examination, measurement of economic indicators (crop yields and animal performance, quality, prices, energy consumption, machinery and equipment costs), measurement of environmental indicators (water quality, soil condition, biodiversity, effluents and odours, condition of hedgerows, woodland and others) and monitoring of pest populations.

Compliance to the standards is voluntary. A key objective of these groups is to reverse the negative perception public opinion in the countries concerned as to the environmental impact of national agricultural production.

3.5 Standards set by NGOs

Although IFOAM is an NGO, the organic movement and IFOAM basic standards have been dealt with in Section 3.3 together with governmental organic regulations.

3.5.1 Sustainable Agriculture Program of SAN/Rainforest Alliance[12]

The Sustainable Agriculture Network (SAN, formerly Conservation Agriculture Network (CAN)) is a coalition of ten conservationist NGOs in the Americas. The programme initially focussed on the environmental impact of production methods and habitat conservation, but has increasingly incorporated standards for community relations and labour conditions. The Rainforest Alliance is the main force behind the initiative.

3.5.1.1 Development and scope of standards

The product-specific standards have been developed together with producers, mainly from Costa Rica and other Latin American countries. The programme has set standards for five tropical crops: bananas, citrus, coffee, cocoa and ferns/ornamental plants. Currently "whole farm" standards are being developed, for farms that grow additional crops for which no crop-specific standards currently exist.

Environmental standards include the prohibition of clearing of primary forest and requirements for soil and water management and conservation and buffer zones; detailed requirements for the use, storage and transport of agrochemicals; integrated pest management; criteria for waste management and recycling; and requirements for a monitoring system. With respect to the *Social criteria* the certified company should respect all ILO conventions ratified by the country in which they operate. For those issues for which the ILO conventions are not ratified the certification standards apply directly. These include requirements for a social policy and communication to workers; contracts and wages; no discrimination; no child labour below 14 and specific conditions for young and disabled workers and pregnant women; no forced labour; freedom of expression and the right to organize and collective bargaining; occupational health and safety; working hours; training; accommodation; and linkages with local communities.

3.5.1.2 Certification, label and markets

There is no accreditation system. In most cases the certification is done by the local SAN member. The Rainforest Alliance operates the certification system in Costa Rica and Honduras and in countries where there is no SAN member. All auditors, also those from SAN members, are trained by the Sustainable Agriculture Program secretariat i.e. the Rainforest Alliance. The producers pay for the auditing and certification costs depending on service delivered (i.e. actual auditor days and travel etc.) and on top of that a fixed amount per hectare.

The "Better Banana Project" and "ECO-OK" seals are being replaced by a new label "Rainforest Alliance Certified" in 2003. The label is administered by the Rainforest Alliance and they charge a fee for use, although this fee may be waived. The seals are used mostly in public relations activities of certified producers, and in relations between producers and buyers (importers, wholesalers and retailers), but have been used little on the products themselves, except for coffee and orange juice in the Americas and Japan. Companies that consider their own trade mark as a quality mark are hesitant to use an additional label. Furthermore, in

12 Rainforest Alliance, 2003

Europe the ECO-OK label could not be used because the term "eco" is legally reserved for organic claims. Because many products from certified facilities are not labelled there is no clear market segment for Rainforest Alliance certified products.

3.5.2 Fair-trade

The fair-trade initiatives try to provide better market access and better trading conditions to small farmers. This includes a price premium for producers to be invested in social and environmental improvements. For larger production units an additional aim is to improve the conditions for workers.

3.5.2.1 Development and scope of standards

The Fairtrade Labelling Organizations (FLO) International was founded in 1997 as an umbrella organization of 17 national Fairtrade Labelling Initiatives. Now producers and traders also are represented on the board and committees. Since its inception, FLO has established product standards, starting with coffee. In 2002 FLO established a framework of generic standards differentiated for smallholder production and plantations complemented with product-specific criteria where appropriate. The standards encompass: labour standards; standards for farmer associations/co-operatives; and trade standards, including minimum prices, for licensed traders. *Labour standards* to be complied with by plantations and factories include freedom of association; criteria for wages and accommodation; occupational health and safety standards; and no child or forced labour can occur. Standards for *farmers associations* and co-operatives set criteria for a democratic participative organizational structure. *Trading standards* stipulate that traders have to pay the FLO minimum price plus the fair-trade premium, partially pay in advance when producers ask for it and commit themselves to a long-term trade relation. *Environmental* criteria are included in the crop-specific standards.

Currently product-specific standards exist for coffee, tea, cocoa, cane sugar, honey, bananas, other fresh fruit, fruit juices, bananas, rice and sports balls. Standards for wine and cut flowers are being developed. In 2003, FLO will develop generic standards for environmental criteria and for the determination of minimum prices.

3.5.2.2 Accreditation and certification

In 2002 FLO was reorganized to allow for a greater separation between its four functions: promotion of fair-trade, producer support, standard setting and certification. Since January 2003 the certification unit is a legally independent certification body. Inspection is done by local auditors, while the certification decision is taken at its headquarters in Bonn. The national Fairtrade Labelling Initiatives grant license fees to traders of fair-trade labelled products (against a fee) and monitor the trade flow to control the label is used correctly. Part of the license fees are channeled to FLO to cover the certification costs. This makes it possible to certify producer organizations free of charge.

3.5.2.3 Label and markets

Since 2003 the various national Fairtrade labels in Europe are being replaced by the new International Fairtrade Certification Mark. This will greatly reduce logistical costs as products will no longer have to be packaged separately for each destination. In the US and Canada the national labels will continue to be used for the time being.

Year on year growth of fair-trade volumes has been around 20 percent for the last years. The largest fair-trade markets are Switzerland and the UK.

In terms of impact, cases documented by Dankers and Liu[13] involving farmer cooperatives evidenced that the fair-trade price premium is only part, and often only a small part, of the benefits derived from the fair-trade system. The success in self-organization seems to be far more important, resulting in better bargaining positions, better credit worthiness and economies of scale. The fair-trade system contributes to these organizational successes through capacity building, an initial guaranteed market, linkages with the international market and learning-by-doing in exporting. In addition, and similarly to the organic cases, fair-trade contributed to quality improvements.

In the analysis, one would ideally like to separate the contribution from the fair-trade marketing system from the contribution of additional development aid activities. If benefits result mainly from the marketing system, an increase in market share for fair-trade products would be necessary in order to repeat such successes with other farmer groups. In contrast, if benefits result mainly from the additional aid activities, one could also replicate the approach taken by these activities without needing a fair-trade market. However, it seems both have been mutually supportive and highly interlinked.

A concern for the future development of fair-trade is the reported general lack of knowledge about fair-trade among individual members of large cooperatives. One could have doubts regarding the "effective democracy" of large cooperatives. Of key importance also will be the perception by a large numbers of consumers that paying a higher price is directly improving farmer incomes. The supply from FLO-certified producers is much higher than demand and often a low percentage of total production is sold in the fair-trade market, for instance in the case of coffee from Kagera, KNCU and Arusha cooperatives in Tanzania, and of Kuapa Kokoo cocoa in Ghana.

3.5.3 SA8000

The Social Accountability Standard SA 8000 is a workplace standard that has been developed by Social Accountability International (SAI) in 1998. SAI was founded by the Council on Economic Priorities, a corporate social responsibility research institute based in the US that operated from 1969 through 2001. The SAI Advisory Board includes experts from trade unions, businesses and NGOs.

3.5.3.1 Development and scope of standards

The standard promotes the implementation of International Labour Organization (ILO) conventions covering social justice and working conditions. These include prohibition of child or forced labour, enforcement of safe and healthy working environments, rights to freedom of association and to collective bargaining and criteria on working hours, wages, freedom from discrimination and the requirement for a social management system.

---

13 Cases include : Fair-trade bananas from Volta River Estates Ltd., Ghana; Divine cacao from Kuapa Kokoo, Ghana; Fair-trade coffee in Bolivia; Fair-trade coffee from Coocafé, Costa Rica; Smallholder coffee from UCIRI, Mexico; Café Mam high altitude coffee, ISMAM, Mexico; and coffee from cooperatives in Tanzania. In Dankers, C. with Liu, P., "Environmental and social standards, certification and labelling for cash crops", Based on the reports of Collinson, 2001, and Nelson, Ewert and Martin, 2002

3.5.3.2 Certification, label and markets

SAI accredits certification bodies to audit production facilities. The individual auditors performing the inspections must be accredited as well. The standards were initially developed for the manufacturing industry and approved for use in the agriculture sector in 2000. So far 15 agriculture facilities have been certified, covering growing, packing and processing of bananas, pineapples, canned fruit, coffee, tobacco and wine.

The SAI-SA8000 label is not used on products. Certified facilities and signatories may use the label in their communications. Consequently there is no differentiated market for SA8000 certified products. The 'market' could be understood to be those large buyers, e.g. retailers that are signatory members and consequently try to move their suppliers towards SA8000 certification.

3.6 Standards without certification programmes

3.6.1 ICFTU/ITS Basic Code of Labour Practice

The International Confederation of Free Trade Unions (ICFTU), was set up in 1949 and has 231 affiliated organisations in 150 countries, with a membership of 158 million. It is a Confederation of national trade union centres. It also maintains close links with Global Union Federations, which gathers national unions from a particular trade or industry at international level, such as the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF).

3.6.1.1 Development and scope of standard

The text of the code was developed by the ICFTU/ITS Working Party on Multinational Companies, with consultations with various trade union organizations and other interested individuals and organizations. The Basic Code aims to establish a minimum list of standards that ought to be included in all codes of conduct covering labour practices. These could be company codes of conduct, especially codes that are meant to apply to the international operations of a multinational company. The purpose of the basic code is to promote the primacy of international labour standards and to incorporate freedom of association and the right to collective bargaining. It is not meant that collective bargaining agreements should be limited to the provisions of the code.

The content of the code follows the same ILO conventions as the SA8000 standard. Because the ICFTU Basic Code is a generic code and is not meant for certification purposes it is not as detailed with respect to verifiable indicators, But it can be used as a benchmark for evaluating any unilaterally adopted codes of labour practice.

3.6.2 Ethical Trading Initiative

The Ethical Trading Initiative (ETI) is a multi-stakeholder alliance in the United Kingdom. It has a tripartite structure in which NGOs, unions and the private sector are represented with support from Government. The ETI focuses on ethical sourcing by companies, in particular retail chains.

3.6.2.1 Development and scope of standards

ETI has developed a Base Code of 9 principles, based on ILO conventions. The Base Code was first published in 1998 and is similar to the SA8000 standard. The ETI conducts various pilot

projects including, as far as agriculture is concerned, a horticulture pilot in Zimbabwe and a pilot in the wine industry in South Africa. A pilot project on bananas in Costa Rica has been stopped half way due to the inability to find agreement between the three parties of the Costa Rican tripartite steering committee. The horticulture pilot project in Zimbabwe resulted in the formation of the Agricultural Ethics Assurance Association of Zimbabwe (AEAAZ), a tri-partite association of local business, trade union and development organizations. AEAAZ plans to implement a system of monitoring and verification of its own code, which is currently in draft form.

3.6.2.2 Certification, label and market

Companies involved in the ETI execute internal business evaluation programmes to assess compliance with the ETI Base Code and subsequently try to address non-conformities. There is no certification system and consequently also no label or specific market.

From experiences in South Africa on Ethical wine production[14], it is clear that cost of compliance to the SA8000 and ETI standards depends very much on the starting situation and on the exact interpretation of the standard. Costs of compliance change dramatically if the living wage or housing conditions are specified differently. Code requirements only partly matched workers priorities in South Africa. The codes are international and priorities of workers may differ from place to place.

3.6.3 Sustainable Agriculture Initiative Platform

SAI Platform aims for recognition and implementation of sustainable practices for mainstream agriculture (not niche markets) on a worldwide scale. The SAI Platform held its first General Assembly in April 2003 and created three working groups to develop guidelines for cereals, coffee and palm oil.

For tropical and horticultural crops, the work by Unilever on sustainability indicators is relevant. In pilot projects good agricultural practices are developed and parameters are defined to evaluate performance on each indicator. The indicators are: soil fertility/health, soil loss, nutrients, pest management, biodiversity, product value, energy, water, social/human capital and local economy. Guidelines for best practices have been developed for tea (plantations and smallholders), palm oil, peas and spinach and are being developed for tomatoes, rapeseed and sunflower. The guidelines are specific for the country in which the pilot project that developed them operates/did operate, but follow always the ten sustainability indicators.[15]

SAI Platform members are free to decide whether or not to participate in assessment processes and take any specific action with respect to implementation.[16] There is no certification system or label connected to the Sustainable Agriculture Initiative Platform. However, its members form a large part of the total world market for food products. In the future, suppliers may be asked to participate in pilot projects or in general to implement guidelines that are developed by the platform or by one of its members.

---

14 Based on the reports of Collinson, 2001, and Nelson, Ewert and Martin, 2002

15 Unilever, 2003

16 SAI-Platform, 2003

3.7 Collaboration in environmental and social certification

Certification bodies seek increasingly multiple accreditations, so that they may offer more certification schemes to their clients. This may potentially lessen the burden for multiple certification for farmers. However, certification programmes have different reporting requirements, and sometimes even contradicting demands on farmers. It is therefore encouraging that some of the labelling and accreditation programmes are increasingly collaborating.

3.7.1 ISEAL Alliance[17]

The International Social and Environmental Accreditation and Labelling (ISEAL) Alliance is a coordination effort by leading international standard-setting, accreditation and labelling organizations that are concerned with social and environmental standards. These include SAN, FLO, IFOAM, IOAS and SAI.

ISEAL members have their origins in civil society and claim a diverse range of stakeholders in their decision-making structures. In addition, their standards and accreditation programs are truly international in nature and focus on non-product related process and production method certification. These characteristics combine to make ISEAL member organizations unusual within the fields of conformity assessment and voluntary labelling instruments. As such, members have prioritized the need to monitor and input into policy development to ensure that interpretations of regulatory issues and voluntary frameworks are favorable to member programmes.

A program of peer review will be implemented for both standard-setting and accreditation. For accreditation, participating organizations will be assessed against specific criteria. For standard-setting, a Code of Good Practice for Voluntary Standard-setting Procedures is being developed through a multi-stakeholder discussion process, to complement Annex 3 of the Technical Barriers to Trade Agreement of the WTO and relevant ISO Guide 59. Their approach is to start with those internationally-recognized standard-setting procedures, and adapt them to be more appropriate to voluntary process and production method (PPM) standards.

A long-term objective for ISEAL is to act as a broker in the harmonization of members' systems. This begins with the harmonization of procedures for setting standards and carrying out accreditation, and will move to the harmonization and elimination of duplication in areas where members' standards overlap.

3.7.2 SASA project

Four ISEAL members, FLO, IFOAM, SAI and SAN also undertake the Social Accountability in Sustainable Agriculture (SASA) project. The objectives of the project are to enhance co-operation among the organizations and develop guidelines and tools for social auditing for a wide range of agricultural production systems and product chains. Additional sub-objectives are to examine supply chain actors' impacts and responsibilities, to address the particular needs of smallholder producers and to explore the possibilities for integrated audits for multiple certification programmes.

---

17 ISEAL, 2003a.

In order to achieve these objectives the four organizations are conducting a series of pilot exercises in different crops around the world, in both developing and industrialized countries. Around each pilot audit a consultative e-mail discussion and a local stakeholder meeting are organized to ensure broad input into the project. The joint pilots help to develop best practice recommendations for verifying safe and decent workplace conditions in diverse agricultural settings. Examples of critical social issues that have been recognized to pose challenges for social auditing are working hours in seasonal production systems and freedom of association and right to collective bargaining.

Apart from the pilot audits, workshops are organized to focus on specific standards or certification procedures, e.g. on smallholder group certification for social audits.

4. Selected issues related to the development of standards, codes and guidelines on good agricultural practices

This section reflects on some issues around GAP codes and standards. Discussions seek to focus on aspects relevant to standards and certification for cash crop products in developing countries, but most of the argument is relevant for any product. The section is not exhaustive and tries to give an overview of the most important issues, rather than going into excessive detail.

4.1 Related WTO provisions

WTO, established in 1995, and currently with more than 130 members, is the successor of the General Agreement on Tariffs and Trade (GATT). The GATT Agreement of 1994 is now the principal WTO Agreement for trade in goods. The system encourages countries to settle their differences through consultation. Failing that, they can follow a stage-by-stage procedure that includes the possibility of a ruling by a panel of experts, and the chance to appeal against the ruling.

Articles I and III of GATT are the basic principles of WTO and advocate non-discrimination in trade. The Most-Favoured-Nation (MFN) principle (article I) means that WTO members are bound to treat the products of one country no less favourably than the *like products* of any other country. The National-Treatment (NT) principle (article III) means that once goods have entered a market, they must be treated no less favourably than *like products* of national origin.

The term *like products* has been defined in past dispute panel decisions to mean products with the same or similar physical characteristics or end uses. This has resulted in a debate on Production and Processing Methods (PPMs) which is directly relevant for GAP-related standards. WTO allows countries to adopt trade measures regulating *product characteristics or their related processes and production methods*, but does not allow trade restrictions on the basis of *unrelated* PPMs (i.e. PPMs not related to product characteristics like the quality or safety of a product).

According to the 1991 report of the GATT dispute settlement panel in the "Dolphin-Tuna" case, whose decision remains largely unchallenged, *labelling* on the basis of unrelated PPMs (for instance, labelling related to labour conditions or environmental impact of production) is however allowed under GATT, as long as the labelling is voluntary, because it does not restrict trade. The right to use an environmental label is not considered an advantage granted from the government – any advantage would depend on the free choice of consumers.

Social and labour standards concern PPMs that do not affect the end characteristics of a product, and environmental standards also generally considered the same. Some countries believe that this is not clear and in practice it can be difficult to decide whether a label gives information on related or unrelated PPMs. It is not clear whether organic labelling regulations are considered to be about related or unrelated PPMs.

As for standard-setting bodies (at least governmental bodies) they should comply with the Code of Practice for the Preparation, Adoption and Application of Standards. The standards they develop should be non-discriminatory and not restrict trade; be based on international standards where appropriate; efforts should be made for international harmonization; and interested parties should be offered the possibility to comment before adoption of the standard.

National regulations for organic agriculture and the labelling of organically produced products are also likely to comply with the Technical Barriers to Trade (TBT) and GATT because products can be sold freely with and without the organic label, and the labels could be considered to prevent deceptive practices, which is recognized as a legitimate objective for which exceptions to GATT article I and III are allowed.

The following case illustrates government options with regard to establishing national standards on unrelated PPMs (in this case, labour standards). In January 2001, Belgium notified the TBT Committee of a draft law aiming to promote socially responsible production by creating a label that companies could (voluntarily) affix to their products if these products met core labour standards recognized by the ILO. following complaints of ASEAN countries, the draft law had to be amended to allow also Belgian companies to request the label (so as not to violate the National Treatment principle) and to ensure that the label purely voluntary. The amended law could then be adopted and was published in March 2002.

As for NGO and private sector regulations, due to the voluntary nature of these initiatives, they are not trade restrictive. They also do not grant an advantage, as any advantage resulting from the label would be the result of the free choice of consumers. Therefore they are likely to comply with Article I of GATT, and with Article III, should the latter be considered applicable.

4.1.1 Outstanding issues

According to Dankers and Liu[19], considering past opinions expressed in the TBT Committee, future discussions regarding social and environmental standards and certification will probably concentrate on labelling, and might include the following topics:

- Whether labelling systems *always* fall under conformity assessment procedures and therefore have to comply with TBT Articles 5 and 6 or not. If the answer is "yes", NGO-administered voluntary labelling schemes should also comply with TBT articles.

- Whether "consumer information" is covered by the legitimate objective of preventing deceptive practices which is recognized as an exception under GATT. If the answer was "yes", and "the consumer" wanted to be informed about unrelated PPMs used in the production process of the product (for instance, on the labour conditions or environmental impact of production), "consumer information" could then be considered a permitted exception to the implementation of Most Favoured Nation and National Treatment principles, and hence allow governments to adopt mandatory requirements for labelling on unrelated-PPM product characteristics.

19 Dankers C. with Liu, P., cited above, 2003

- The involvement of developing countries in international standard-setting requires considerable resources, both financial and intellectual, to participate effectively in standard-setting bodies like the ISO system and Codex Alimentarius. The danger exists that standards reflect the interests of richer countries that can afford to send delegations to the negotiations. In relation to this subject, further discussion can also be expected on what constitutes an international standard and who sets those standards.

- The de facto mandatory nature of some voluntary labelling schemes raises doubts. Voluntary labelling schemes are considered not to be trade restrictive, as imports of non-labelled products are not hampered. However, as several delegations have noted in TBT and the Committee on Trade and Environment (CTE), some voluntary schemes do have an impact on market access. With the growing market for organic products, the differences in organic regulations between countries may develop into de facto trade barriers.

So far, no discussion has taken place on what is required of Members with regard to compliance for NGOs involved in standard-setting. However, the EU noted this issue briefly in its paper on labelling submitted in June 2002.

4.2 Local specificity versus global credibility

Farmers operate in a variety of circumstances, in different climates and on different soils, in different socio-economic situations, with different levels of support services and infrastructure. On the other side are the consumers, who are not an homogenous group, with varying perceptions and priorities regarding environmentally and socially responsible production and trade. Yet the standards and certification programmes discussed here aim to be applicable and credible worldwide.

It is not surprising, then, that it has been and remains a continuing challenge to take into account local specificity in international standard-setting and in globally-operating verification systems. Standards should not be too detailed, in order to retain sufficient flexibility for more specific interpretations relevant to each local context. However, standards that remain too general and vague are difficult to explain to consumers. Likewise, the inspection and certification procedures might need to be adapted to the local situation, but too much flexibility could run counter to the need for strong credibility.

This has some implications for both standard-setting and the verification system.

4.2.1 Standard-setting

Standards developed in one particular country or geographical area may discriminate against producers of other countries or areas if they do not take into account different local conditions. Involvement of a variety of stakeholders in standard-setting is important to ensure that the standard does not unintentionally discriminate against some category of producers or processors. However, there is a trade-off between efficiency and participation in the standard-setting process. Standard-setting bodies could make their work programmes and draft standards public and actively seek participation from stakeholder groups that could be affected by the standard.

In general, the more prescriptive a standard is, the more likely that it discriminates against certain producers. In contrast, standards formulated in terms of performance towards its objectives are more likely to leave the "how" to the producers. Another possibility for

incorporating flexibility into standards is the development of generic standards at the international level, on the basis of which national, sectoral or certification-body-specific standards could be developed. The disadvantage of such a system is the existence of different specific standards addressing the same issue, which may hamper trade.

A different approach to ensure adequate flexibility is division between minimum and progress standards. The minimum standards would be the same wherever the standard is implemented, and would form the basis of the credibility of the label towards the consumer. The progress criteria would also be the same, but they may be implemented on a time scale that takes into account specific local circumstances and priorities. An example of this approach is the fair-trade system. A potential disadvantage of this approach is that it is difficult to sanction producers or facilities who have met the minimum standards but who are not committed to implement the progress criteria.

4.2.2 The verification system

Some differences in verification systems may be needed to address local circumstances. For example, for smallholders whose holdings are too small to justify certification costs, internal control systems have been developed by organic and fair-trade certification systems. In this case, a group of smallholders sets up an internal monitoring system to make sure all group members adhere to the standard. The certification system then controls whether the internal system works well and re-inspects a certain percentage of the farms.

More generally, certification bodies have been calling for an inspection system that is based on risk assessment, rather than following the same procedures regardless of circumstances.

4.3 Accountability of standard-setting NGOs and accreditation bodies

Standards and certification programmes can be seen as part of wider developments in the agri-food sector. Standard-setting NGOs represent a "consumer movement" demanding better corporate environmental and social performance. Bendell[19] recognizes four types of NGO activity to bring about change: forcing (campaigns); promoting (research and advice); facilitating; and producing. The standard-setting and labelling programmes are facilitating or producing change, through offering market incentives for change or providing an alternative business model (fair-trade).

However, civil society control through NGO activity has its limitations in counterbalancing global business force. First, consumer regulation through certification and labelling is only open to those consumers who have the economic means to choose more expensive "ethical" products. Therefore, this type of regulation would tend to favour their specific interests.

Second, NGOs also lack accountability. Understandably, trade unions are not always enthusiastic about social accountability standards and certification programmes. They view themselves as representatives of the workers, whereas workers may not be directly represented in the membership of the standard-setting NGOs. Only when those certification programmes deliver more space to worker organizations and collective bargaining will they be able to recognize the complementary role those NGOs could play.

---

19 Bendell, 2000.

Accountability to stakeholders could be – but does not necessarily have to be – assured through NGO membership structures or advisory boards. In any case, it is important to involve actors who will directly be affected in the standard-setting process, as discussed above. Accountability to consumers can be improved through transparency, disclosing information on standard content, verification methods and the organization, and, in the case of labelling, through meaningful labels.

Related to the question of accountability of standard-setting bodies is the accountability of certification and accreditation bodies. It is generally accepted that certification by the standard-setting body itself does create problems of conflict of interest. Therefore, most standard-setting bodies discussed in this paper, with the exception of SAN/Rainforest Alliance, have separated those functions, mainly through an accreditation programme.

Standard-setting bodies may feel not to be in the position to judge the competence of a certification body per se. Therefore they may require the certification body to be accredited by another accreditation body (usually a member of the International Accreditation Federation). In the ISO system, even accreditation is completely separated from the standard-setting process, and as a result ISO has no control over the use of its standards (e.g. ISO 14001). Although conflicts of interest are avoided, this has the disadvantage that when verification is not thorough, the standard may become meaningless in practice and the standard-setting body has no means to improve the situation.

4.4 The "certification industry"

Agriculture is not the only sector facing an increasing number of standards. Economic activities are increasingly "codified" and adherence to codes is increasingly controlled through third-party certification. This has led to the growth of audit, testing and certification companies, which now form a profit making sector in their own right.

Although this third-party certification model does provide for greater independence in certification decisions, the model is not completely free from conflicts of interests. First of all, if the certification body is a commercial company, it will have interests in performing as many inspections and issuing as many certificates as possible, while keeping costs down. This might compromise the quality of the inspections. Second, if more certification bodies offer the same certification service, being too strict may encourage clients to go to the competition. At the same time, competition may also provide incentives to increase the quality of the service to preserve the "good name".

Another frequent complaint about the "certification industry" – standard-setting bodies included – is the focus on details. The very act of describing a more-or-less ideal situation in the form of a standard, and performing inspections, leads to "implementation to the letter" at the cost of "the spirit". Instead of commitment to reach the ideal through continuous improvement, it encourages viewing the certificate itself as the goal.

Not matter how good the system, the quality of the verification system will greatly depend on the capacity and motivation of the inspector. The inspector should not only have knowledge about the standard and certification requirements, but also sufficient knowledge about the crop and production system, the local socio-economic situation, and preferably speak the local language. At the same time, there are also limits to what can be required of inspectors, who have to cover a multitude of production systems, countries and standards. The use of local or regional inspectors is to be preferred but they will have to be able to report in

a language understood at the certification body's office, and conflicts of interest must be avoided.

Auditing of social and labour criteria pose specific challenges. Boundaries between compliance and non-compliance with certain standards are often more vague than with environmental criteria. Participatory workplace assessments have been proposed as a possible tool in monitoring social standards. However, such methods are time consuming and increase inspection costs considerably.

4.5 Who pays?

The costs associated with social and environmental certification are, first, the costs of implementing the standard (compliance costs), and, second, the certification fees.

In most cases, both compliance and certification costs are in first instance born by the producer or facility being certified. Where these costs have a notable impact on total production costs, they will probably be passed on through a higher farmgate price, if market conditions allow. For some programmes, the possibility of obtaining a price premium, as with organic and fair-trade certification, may be the main reason to pursue certification. In the case of fair-trade, the certification costs are borne by the trade, through the payments of licence fees to the national fair trade initiatives. Still, the costs of compliance are the responsibility of fair-trade producer groups.

The discussion on who should pay for more environmentally friendly and socially just production is more debated when a label and price premium are absent, in particular when a buyer is trying to convince suppliers to implement a certain standard, as with EurepGAP, the SA8000 corporate involvement programme, ETI or stricter quality standards required by supermarkets. If a buyer in Europe or in the United States requests its suppliers to conform to these norms, should they not also pay for it? And may these buyers then pass on the costs to the consumers? How would you persuade consumers to pay more without a label to demonstrate compliance? Or would shareholders be prepared to receive less dividend, and would retailers be content with a lower margin?

A first question to ask is why buyers ask suppliers to implement these standards. Somehow, they value products from complying sources more than from non-complying sources. This may be a genuine interest in the environment and the welfare of workers, or more an issue of corporate image or gaining market shares. In all cases, it could be argued that their appreciation of compliance should be expressed also in the trade relation. This could be in the form of a higher farmgate price, or in other, more favourable, terms of trade, such as longer-term contracts, better pre-finance arrangements, etc. However, in an oversupplied market, buyers, especially supermarkets, can impose requirements without providing compensation.

If the costs of compliance and certification are not passed on along the supply chain, it may well be that only the larger and wealthier producers will be able to implement such standards. This in turn will lower the impact of the standards on the environment or working conditions. Or, if a standard becomes the rule rather than the exception, it may exclude small-scale and poor producers from the market altogether. Recent studies by Reardon, Berdegue, Weatherspoon et al. provide indications of the impact of stricter standards on local small-scale farmers in Latin America, Asia and Africa. A cooperative supplying tomatoes to McDonalds in Guatemala experienced a decline in membership from 330 in 2000 to 6 in 2002 as members were unable to meet standards. During the 1990s, the 12 largest milk processors in Brazil de-

listed 60,000 dairy farmers. The number of vegetable suppliers to Tops supermarkets in Thailand fell from 250 to 60 in just one year (2001).

4.6 Potential and constraints for developing countries and smallholders

As it has become clear in previous sections, private standards, guidelines and certification present potential benefits but also many challenges for producers in developing countries in general and smallholders in particular. They are summarized as follows:

Lack of a local certification body, or a local office of an internationally operating body can be a constraint. Only when the "certification market" is big enough can certification bodies benefit from opening local offices. This means that local producers or processors have to turns towards foreign certification bodies, although the use local inspectors is generally preferable (see section 4.4).

Some standards require laboratory tests for soil analysis, water quality assessment or pesticide residue analysis. This, for instance, is the case with EurepGAP, or for some sustainability indicators developed in OECD countries. Some developing countries do not have a laboratory with enough capacity at all, or the laboratory is not officially accredited. In other cases they are too far away, too expensive or otherwise not accessible for operators who wish to be certified. Because comparable tests are increasingly needed for other purposes (for example to meet SPS Agreement requirements of the WTO), the laboratory capacity in developing countries has steadily improved over the years. Still, in some countries producers may find it impossible to comply.

The potential which voluntary social and environmental standards offer in general are greater access to markets, but these may disappear over time. These may be in the form of "preferred supplier" status for some large buyers, a better image in the market place in general or access to a specific niche markets with price premiums. However, such potential is not a static fact, as market requirements develop rapidly, and what may be a valued certification today may loose importance in the future. For example, the ISO 14001 certificate initially did make a difference in negotiations with buyers, but after almost all large and middle-size companies obtained certification, it lost this advantage.

As far as organic agriculture is concerned, whether it is worth going through a certification process depends greatly on the market for certified organic products and whether price premiums may compensate for costs. Organic methods may improve traditional farming systems and increase yields. But for farming systems that make intensive use of external inputs adopting organic practices may (initially) reduce yields. Effects on cost of production will depend highly on individual circumstances such as local wages for unskilled labour. Certification may be essential to obtain a premium to compensate for lower yields. Especially for export markets care should be given to the choice of certification programme, and multiple certification may be necessary. Furthermore, the organic market is developing rapidly and both oversupply and undersupply situations may appear and disappear rapidly. It is difficult to judge what will be the market after the necessary conversion period.

As for the fair-trade system, it is especially developed to offer access to export markets to producers defined as "disadvantaged" in developing countries in order to improve their livelihoods. However, even fair-trade may pose challenges in the form of organizational requirements of farmer associations. Furthermore the fair-trade market is quite limited which in turns limits the number of producers that may benefit from it.

Some standards have been widely criticized for imposing more requirements onto producers without remunerating them for the extra costs involved. For example, concerns have been expressed that producers in developing countries, especially smallholders, would find it impossible to comply with EurepGAP standards and would loose their market. Indeed, the number of smallholder farmers that are EurepGAP certified is very limited and they are mostly outgrowers for which the certification costs and part of the documentation required are taken care of by the exporter. However, retailers seem to realize that suppliers in developing countries may need more time. Some observers noted that retailers were in certain cases satisfied if commitment was demonstrated and improvements made, even if certification was not yet obtained. EurepGAP is also frequently misunderstood to be a mandatory European Union certification without which producers would loose access to European markets, although it is in fact a private certification applying to 22 retailers.

Finally, meeting stricter quality and safety standards (for domestic markets or export) is often only a part of the new requirements which farmers have to meet in food markets. Food and agriculture markets are increasingly globalized and concentrated. In addition to more stringent standards, other challenges for small farmers include: large quantity requirements from modern processors or retailers, and more demanding commercial practices (reliable accounting, logistics, stricter delays). In particular, recent studies by Reardon, Berdegue, Weatherspoon et al. have evidenced that supermarkets now represents on average 60 percent of the retail sector in South America. For fresh fruit and vegetables, the domestic supermarket market in Latin America is 2 to3 times the size of the exports, and supermarket market shares are also growing in Asia and Africa. For farmers, related requirements for safety and quality, larger volumes and new procurement practices (purchase consolidation, shift to specialized wholesalers) imply not only new production practices, but also new investments and new management skills. This points at broad implications for policies and development programs. Governments and international organizations such as FAO may need to design strategies to address GAP adoption in the context of the broader management and institutional support needed by farmers to meet changing market requirements.

4.7 The potential role of governments

Providing the legal environment in which implementation of voluntary standards takes place. Almost all standards require that companies/producers adhere to national (environmental or social) legislation. Often certification programmes provide an alternative mechanism of enforcement of national laws where governments lack the (financial) means to exercise effective enforcement . Problems may arise when requirements of voluntary standards conflict with national regulation. In any case, voluntary certification programmes can not require that stakeholders act against the national legislation.

Protection of terms. In the case of organic agriculture, many governments have decided to legally protect the terms "organic" "biological" and/or "ecological" and have restricted the use of those terms to those production systems and products that comply with organic standards. The organic movement in the past has actively sought this legal protection. But opinions are now divided in the organic movement as some feel that they may have lost control. For terms like fair-trade, ethical trade, integrated agriculture, integrated pest management etc. such legal protection do not exist.

Government agencies as standard setting body and/or accreditation body, or certification body. The legal protection of the organic terms has resulted in governments developing their own organic regulation and becoming *de facto* standard setting bodies. This is however not necessary, as governments may also choose to recognize standards set by others. For ISO and organic standards government agencies do often take the role of accreditation bodies through which they can exercise control on the quality of certification services. Sometimes this role is delegated to a tripartite institute in which industry, consumers and government are represented. If governments feel a certain standard or verification system is discriminating against certain producers or processors within its territory, it might wish to signal this to the relevant body.

Provide infrastructure and laboratory services accessible for producers at reasonable cost. They may also stimulate the setting up of local certification offices providing one or multiple certification services. For example, Costa Rica required all organic certification bodies operating in Costa Rica to open an office in the country. Other measures in this respect could be to ease administrative procedures or to provide tax incentives. International bodies may have a role to play in organizing inspector training in the country for those certification programmes they consider most important.

Stimulate the adoption of certain standards through information provision or incentives. Governments could pay for certification costs during conversion periods or pre-audits in preparation of certification. Tax incentives for producers complying with the standard may be another option. This has been justified by arguing that those producers would be less costly to society by reducing the negative externalities of production (environmental pollution costs or health care for occupational health problems of workers for example). When certain standards are in line with government policy, some governments advocate stimulating their adoption by providing funds to the organizations advocating those standards, or subsidizing farmers to implement beneficial standards. This is already done in the case of direct payments and cross-compliance mechanisms in the European Union. But the use of these measures is very controversial. Many countries claim that they are neither effective nor acceptable with respect to trade competition and this has lead to very complex policy debates about the various possible instruments and their implications.

Capacity building. Governments or international agencies may provide further training to extension officers or give consideration to alternative capacity building mechanisms. They may also incorporate standards in teaching programmes in agricultural schools and universities. Finally they may develop public information campaign for producers or for consumers.

References

Berdegué, J.A., F. Balsevich, L. Flores, and T. Reardon. 2003. The Rise of Supermarkets in Central America: Implications for private standards for quality and safety of fresh fruits and vegetables. Final Report, USAID-RIASE/SPS project on Private Standards of Supermarkets in Central America.

Bendell, J. 2000. (Contributing editor) *Terms of Endearment. Business, NGOs and sustainable development*. Sheffield, UK: Greenleaf Publishing.

Codex Alimentarius Commission Procedural Manual. Tenth edition, 1997. p. 43

COLEACP [Association of stakeholders in EU-ACP horticultural trade]. 2001, *The COLEACP Harmonized Framework for ACP Codes of Practice*. See: http://www.coleacp.org

Collinson, C. 2001. *The Business Costs of Ethical Supply Chain Management: South African Wine Industry Case Study*. Chatham, UK: NRI/NRET.

Consumers Union. 2002. *Eco-labels, The Consumers Union Guide to Environmental Labels*. See: http://www.eco-labels.org

Dankers, C. with P. Liu. 2003. *Environmental and social standards certification and labeling for cash crops*. ESCR service, Commodity and Trade Division, FAO, Rome (to be published)

EEC [European Economic Community]. 1991. Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs. *Official Journal L 198, 22/07/1991* P. 0001-0015.

EC [European Commission]. 2000. Indicators for the integration of environmental concerns into the Common Agricultural Policy. Communication from the Commission to the Council and the European Parliament.

ETI [Ethical Trade Initiative]. 2003. *Ethical Trading Initiative web site*. See: http://www.ethicaltrade.org

EUREPGAP. 2001. EUREPGAP Protocol for Fresh Fruits and Vegetables. EUREPGAP. www.eurep.org/home/seiten/gb-eurep-start.html.

Ewert, J., Hamman, J., Tregurtha, N., Vink, N., Visser, C., & Williams, G. 1998. *State and market, labour and land – the South African wine industry in transition*. Research report. Department of Sociology and Department of Agricultural Economics, University of Stellenbosch, Republic of South Africa.

FoodPLUS. 2003. EurepGAP web site. See: http://www.eurep.org/sites/index_e.html

GATT [General Agreement on Tariffs and Trade]. 1991. *United States – restrictions on imports of tuna*. GATT-Document DS21/R. Geneva (unadopted).

GATT. 1994. *Ministerial Decision on Trade and Environment*. LT/UR/D-6/2

Hobbs, J. E. 2003. Incentives for the Adoption of Good Agricultural Practices (GAPs) FAO Working Paper for Expert Consultation on Good Agriculture Practice.

IEEP. 2003. The development and scope of cross-compliance. Background Paper under Work Pacakage 1, Cross-Compliance Concerted Action, Steering Group Meeting 1, London

IFOAM. 2003. *IFOAM Code of Conduct for Organic Trade: Guidance Document.* See: www.ifoam.org/coc/guidance_coc.html

ISEAL Alliance. 2003a. *ISEAL Alliance* Web site. See: http://www.isealalliance.org/

ISO [International Organization for Standardization]. 1996. *ISO Guide 2*. Geneva.

ISO. 1998b. *Publicizing your ISO 9000 or ISO 14000 certification.* Geneva. See: http://www.iso.ch/

Kidd, A.D., Tulip, A. & Walaga, C. 2001. Benefits of globalisation for poor farmers; A story of organic produce exports from Uganda. *BeraterInnen News,* 2/2001: 25–31 .

MAF. 1998. The role of on-farm quality assurance and environmental management systems (QA/EM) in achieving sustainable agriculture and sustainable land management, Ministry of Agriculture and Food, New Zealand, MAF Policy Technical Paper 98/2

OECD 1999a. Environmental indicators for agriculture. Volume 1. Concepts and framework.OECD, Paris. see: http://www.oecd.org

OECD 1999b. Environmental indicators for agriculture. Volume 2. Issues and design "The York Workshop". OECD, Paris, France. see: http://www.oecd.org

OECD 1999c. Environmental indicators for agriculture. Volume 3. Methods and results. OECD, Paris. see: http://www.oecd.org

Rainforest Alliance. 2002. *Conservation Agriculture Program*. See: http://www.rainforest-alliance.org/

SAI [Social Accountability International]. 2003. SAI Web site. See: http://www.sa-intl.org/index.htm

SAI-Platform [Sustainable Agriculture Initiative-Platform]**.** 2003. SAI-Platform Web site. See: http://www.saiplatform.org

Weatherspoon, D. and Reardon, T. The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor. *Development Policy Review*, 2003, May, 21 (3)

Summary analysis of Codes, guidelines, and standards related to Good Agricultural Practices

Background paper for the FAO Expert Consultation on a Good Agricultural Practice approach

Rome, Italy, 10-12 November 2003

The Food and Agriculture Organization of the United Nations (FAO) has being working on Good Agricultural Practices (GAP) for many years. The FAO GAP Working Paper Series presents a selection of papers to illustrate this initiative.

This paper was prepared for the FAO Expert Consultation on a Good Agricultural Practice Approach, which took place in Rome, Italy, 10-12 November 2003.

Over the past 10 years a multiplicity of Good Agricultural Practices (GAP) codes, standards and regulations have appeared from the food industry, producers organizations, governments and NGOs at national and international level, with the aim to codify, implement or apply "good" agricultural practice. The purposes of these GAP standards, along with other standards in the agri-food sector, vary from fulfilment of commercial and government requirements, in particular with regards to food safety and quality, to more specific requirements of specialty markets.

This paper seeks to examine the landscape of existing codes, standards, regulations and certification programmes in the food and agriculture sector pertaining to agricultural practices, whether or not they make explicit mention of Good Agricultural Practices. It investigates selected issues related to the development of these standards, codes and guidelines on GAP with discussion ranging from the accountability of standard setting industry, the 'who pays' question, potential and constraints for developing countries and smallholders and the potential role of governments.

Given the diversity of existing standards and the rapid evolutions in this field, the paper does not claim to be exhaustive, but to propose a rough categorization, and to provide examples and an overview of the 'standards landscape' at this point in time.