



Biodiversity and the Food Sector

**An initial review of the extent to which biodiversity
is protected through food standards in Europe**

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Table of Contents

	Page No.
Preface	4
1 Introduction	5
2 Methodology	7
3 Results	8
3.1 Netherlands	8
3.2 UK	14
3.3 Hungary	22
3.4 France	26
3.5 Germany	32
3.6 European Organizations	38
4 Conclusions	40
5 Recommendations	42
6 References	43

Preface

Whilst European food standards are well established in ensuring quality and health, it is only recently, probably since the debate on biotechnology and genetically modified foods that biodiversity in food production has received a higher profile. This report is part of an ECNC project that investigates if and how biodiversity receives protection via food standards. It aims to provide an initial review for exploring the concept of biodiversity and food standards in order to assess possibilities for further development in this field. The ultimate aim is to increase the understanding of stakeholders in the food sector of their action on nature and biodiversity by contributing to the integration of nature and biological diversity into food sector policies and programmes.

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1 Introduction

European food standards are well established in ensuring quality and health. They are seen by many people in society, including those involved in the food sector and by consumers, as an important way of ensuring that we can have confidence in what we eat and the way it is produced. Recently, probably since the debate on biotechnology and Genetically Modified (GM) foods, the protection of biodiversity in food production has become an increasing concern. There is also an increasing awareness that global food production can have a harmful impact on the environment and that there is a need to ensure sustainable use of our natural resources, in order to provide for the future generations of our planet.

Food standards provide the ability to ensure that factors other than production are included in food processes. Whilst they were initially targeted at quality and health, the systems set for achieving these standards are relatively easy to adapt to include other standards, such as animal welfare and biodiversity protection requirements.

Two routes can be identified as important for the protection of biodiversity in food production in Europe: organic farming or environmental protection standards in conventional farming systems.

Organic farming is based upon 'organic-biological' farming, which considers the role of soil life (e.g. soil microbiology), in soil fertility for growing food. The main features of organic farming includes the restriction of artificial chemical fertilizers and pesticides, the development of healthy soil, growing a mixture of crops and rearing animals without the routine use of drugs and antibiotics, that are common in intensive livestock farming. Some types of organic farming are influenced by an additional concept of 'bio-dynamic' agriculture. Biodynamic agriculture takes a holistic approach, for example the farm being seen as a living organism, which is also subject to non-material influences, these influences or 'dynamic forces' may be connected to aspects such as planting to coincide with phases of the stars.

Organic farming in Europe represents 2.9% or 3.7 million hectares of the total agricultural area.¹ Therefore it could be argued that ensuring biodiversity protection through environmental protection standards in conventional farming standards would have a greater impact in Europe, as this accounts for the majority of farming system types. Conventional farming food standards have generally been developed for food safety, quality or animal welfare reasons. However increasingly in Europe these standards are being developed further to incorporate environmental protection. This initial review considers both the role of organic farming standards and conventional farming standards in ensuring biodiversity protection in Europe.

In summary, in order to protect biodiversity there is a need to integrate biodiversity policies in Europe with those sectoral policies such as agriculture and food production, that have a significant impact on its' protection.

The aim of this review is to provide some initial data to enable discussion with and amongst stakeholders in the food sector in answering the following questions:

- What food standards exist in Europe?
- To what extent is biodiversity protected through food standards in Europe?
- Are food standards an effective way to protect biodiversity?
- Can food standards be further developed to ensure a greater protection to biodiversity?
- Who are the main actors involved in Food Standards in Europe?

¹ Taken from the Dutch Ministry of Agriculture, Nature and Food Quality International Home Page, <http://www.minlnv.nl>, site visited 13.12.04

2 Methodology

This initial review report is based on a desk study of literature carried out mainly via research on the Internet. The desk study concentrates on how food standards cover biodiversity protection in five European countries:

- The Netherlands
- The United Kingdom
- Hungary
- France
- Germany

The country selection was based upon the varying levels of awareness and existence of the use of food standards in each country. For example, the Netherlands has a large amount of food standards generally connected with quality and some that incorporate the environment. The United Kingdom has a high awareness and increasing focus on environmental standards in food standards. France is in a similar situation to the UK with a variety of quality, environment and organic food marks. Hungary has a less awareness of the environment in food standards, but it is increasing primarily through the use of organic standards. Germany has a high awareness of the environment in food standards, which is focused mainly through the organics sector.

An overview of European organizations involved in food standards and sustainable agricultural farming methods has also been completed. Further research was carried out through discussions with two European organizations involved in certified food standards and integrated farm management. Discussions were also held with an expert involved in food retail health, welfare and environmental standards.

The research provides a basic structure for further consideration and discussion of the inclusion of biodiversity protection in food standards through research and engagement with the relevant stakeholders in the food sector.

Structure of national studies

Each national study was carried out using the following framework:

- A summary of the country providing initial information in respect of what food standards exist, requirements of the food standard, how they are managed and who are the main actors involved in the operation and promotion of the food standard.
- An assessment of the literature in respect of the current situation of food standards in the country and to what extent biodiversity is protected by the standard.

Structure of the European Overview

The European overview of organizations is based upon those organizations that were identified during the desk study as being active in food standards or sustainable agricultural systems. The overview identifies these organizations, describes which countries they involve; how they promote and implement food standards or sustainable agriculture; what their background, history and current agenda entails.

3 Results

The following section provides the results of the desk studies of five European countries:

The Netherlands, the United Kingdom, Hungary, France and Germany.

3.1 The Netherlands

Introduction

In the past decade consumers have become more conscious about their food and health in the Netherlands. This awareness is reflected by changes in policy and government department structure, for example, the Ministry of Agriculture, Nature Management and Fisheries, has recently changed to the Ministry of Agriculture, Nature and Food Quality. This awareness has also led to the introduction of quality marks that can provide assurance that products have been produced according to a certain quality standard. Producers can use these marks as a minimum guarantee of quality for consumers, however they are often

used to reflect a higher, added value of the product. This added value may be the guarantee of one or more aspects that a consumer may be uncertain about such as environmental protection, product quality, animal welfare, safety and hygiene, the absence of additives or preservatives, etc.

In the Netherlands the organization that provides accreditation for the food standard marks can be independent institutes, government, branch-organizations or groups of companies. There has been a steady increase in the number of branch-specific certification brands and marks since 2002. The number of regional initiatives and accreditation institutes is also growing. However, the large number of marks makes it very difficult for consumers to distinguish between them. It is also often difficult for agribusiness and food companies to choose under which marks or quality systems they want to produce, to reflect the added value of their products in the market.

Food Standards in the Netherlands

As reflected above, there are a large number of quality marks and quality systems active in the Dutch food and agribusiness market. Dutch farmers may use national or even international marks to assure the high standards of their product. The following section provides information on conventional food standards that may incorporate environmental protection, organic food standards and specialised, regional food standards.

Conventional Food Standards

Stichting Milieukeur

Stichting Milieukeur is a food standard that has been a popular mark for environmental protection in agricultural products and foodstuffs since 1995. The number of products for which Milieukeur criteria have been formulated is increasing steadily, and includes potatoes, fruit, vegetables, pork and plants. Milieukeur is managed by an independent organization in which consumers, manufacturers, retail, government and environmental experts are involved.

There are numerous other Dutch assurance marks that exist primarily for quality or animal welfare issues, examples are provided below.

IKB

IKB ('Integrale Keten Beheersing') is a quality standard for those involved in the meat and egg industry. Certification is available for many sectors in the meat industry. This includes: 'IKB Rund-PVE' for controlled cattle, 'IKB Vleeskalveren-PVE' for controlled calves, 'IKB Varkens-PVE' for pigs, IKB-Ei PVE for eggs, IKB Kip - PVE for chickens, IKB Kalkoen-PVE for turkeys.

For cattle: 'Biologisch dynamisch vlees' mark a biodynamic agricultural mark, De Groene Weg, a biodynamic agricultural mark, 'Groepskalfvlees – PROduCERT' for calves from group housing, 'Scharrelrundvlees – PROduCERT' for meat from extensive housing,

For pigs: 'Scharrelvarkens- PROduCERT' for pigs from extensive housing, 'Scharrelvleeswaren – PROduCERT' pig meat from extensive housing,

For poultry and eggs: 'Scharreleieren – CPE' for eggs from extensive housing, 'Voliere-eieren – CPE' for eggs and 'Vrije uitloop eieren – CPE' for free range eggs, 'Gras ei - Stichting Gras Keurmerk' for free range eggs on grass and 'Scharrelkippenvlees – PROduCERT' for chicken meats.

Flowers: There are also quality marks related to floriculture these include 'Florimark', 'MPS-GAP', 'Florkeur', 'Groenlabel Kas', 'Gea', 'Keurmerk Bloembollen Holland'.

Organic Food Standards

Organic farming represents 2.1% of the total agricultural area in the Netherlands². It has become increasingly recognized in the last decade as an opportunity for a more sustainable form of agriculture.

Biologica

Biologica is the umbrella organization for organic farming and was founded in 1992. The following organizations are affiliated to it: the FBB: Federation of organic farmers; the VBP: the association of organic producers/manufacturers; the WNR: the association of retail traders in natural food; the CBL: the umbrella organization of supermarkets.

² Taken from the Dutch Ministry of Agriculture, Nature and Food Quality International Home Page, <http://www.minlnv.nl>, site visited 13.12.04

Biologica also co-ordinates a coalition of 26 NGO's and trade bodies working to make the organic sector grow.

SKAL and the EKO quality mark

SKAL was created in 1985 and appointed as the only inspection body in the Netherlands to ensure compliance with the EU regulation on Organics (EEC No. 2092/91). The EKO quality mark can be used to show that produce is certified by SKAL. Organic certifications are provided for the agri-sectors of cattle, pigs, poultry, eggs, and for arable farming.

Demeter

Demeter, or 'Stichting Biologisch Dynamische Landbouw' is a mark that is issued by the Society for Bio-dynamic Agriculture. It is a label for organic products farmed under the biodynamic agricultural method and provides standards that include the requirement of annual audits to ensure compliance from the beginning to the end of the production process. It includes the following sectors: poultry, eggs, vegetable and arable farming.

Regional Standards

There are several regional specialities in the Netherlands that come under the 1992 European Community protection system for geographical indications and traditional specialities. These standards include regional protection for: Opperdoezer Ronde (a potato from the Dutch Friesian region), Boeren Leidse cheese, Kanter cheeses, Noord-Hollandse Edammer cheese and Gouda Cheese.

Actors involved in Food Standards in The Netherlands

The following actors are highlighted as having an important involvement in food standards in the Netherlands.

Government Bodies

Ministry of Agriculture, Nature and Food Quality

Responsibility for food safety is shared between the Ministry of Agriculture, Nature and Food Quality and the Ministry of Health, Welfare and Sport. The former is responsible for aspects of food quality and production, the latter for public health. It is the intention of the Ministry of Agriculture, Nature and Food Quality to establish a consumer platform in 2005 to provide input into the Ministry's policies on food safety and food quality. The platform will be made up of scientists, trend watchers, chefs and consumer experts and will meet

three times per year. The Ministry of Agriculture is an advocate of the expansion of the area under organic management and has committed itself to the aim of 10% of agricultural land under organic management by 2010.

The Food and Consumer Product Safety Authority (VWA)

The VWA was set up to reduce risks to public health, animal health and animal welfare in food and consumer products. This is an independent public body that was established to restore and maintain consumer confidence. The Authority includes the National Inspection Service for Livestock and Meat and the Inspectorate for Health Protection. The Government, through the VWA, places the responsibility of daily checks and inspection of production processes on the food sector itself and focuses on a supervising role, overseeing the sector.

RIVM

The National Institute for Public Health and the Environment (RIVM) is a recognised leading centre of expertise in the fields of health, nutrition and environmental protection, producing work for the Dutch government. The results of their research, monitoring, modelling and risk assessment are used to underpin policy on public health, food, safety and the environment.

Other Actors:

Biologica (detailed above)

The umbrella organization that creates a platform for organic agriculture in the Netherlands.

SKAL/EKO (detailed above)

For certification of organic products of the EKO mark, SKAL is the inspection body.

Stichting Milieukeur (detailed above)

Stichting Milieukeur is the Dutch competent body for the European Ecolabel that has been developed by the European Union.

Raad voor Accreditatie

'Raad voor Accreditatie' (RVA), is the 'Dutch Council for Accreditation'. The RvA is an independent accreditation council for quality marks and systems.

Keurmerkinstituut

The Keurmerkinstituut (Certification Institute) is an independent organization for the testing of quality and safety of products, services and accommodation for consumers. One of the major accreditations is the 'Milieukeur' (environmental mark). The Keurmerkinstituut certifies consumer goods, it is an overall quality mark. The relationship between consumer and product during the whole product lifetime is considered, i.e. during production, distribution, consumption and disposal.

Assessment of biodiversity protection considerations in food standards

There are a large number of different marks and systems available in the Netherlands for guaranteeing the quality for the agricultural and horticultural sectors. There are also a significant number of standards that cover animal welfare issues.

In respect of biodiversity protection consumers are becoming more aware of the concept of 'environmentally friendly' farming and 'organic farming'. The Government has also advocated the expansion of organic farming within the next few years. However it still presently only represents 2.1% of the total agricultural production area.

The most common standard that aims to provide to protect the environment but is not focused upon organic farming is 'Milieukeur'. Products under this mark are said to be considerably less damaging to the environment, through the strict regulation on crop protection agents during crop cultivation, or through its demands set for the use of energy, fertilizers, or waste-disposal. Milieukeur pork mainly distinguishes itself by an operational management in which the farmer tries to limit the harmful discharge of acidifying substances and the use of energy as much as possible. Regional standards also exist in the Netherlands whilst these are aimed at promoting local produce they can often be more environmentally friendly as they may rely on traditional food production processes which may be less intensive than products created through modern farming techniques.

3.2 United Kingdom

Introduction

Over the past ten years, consumer concerns and changes in legislation have encouraged the food industry, including the farming sector, to set up or improve schemes that manage primarily product safety and animal welfare. For British farmers, managing food safety is now seen as not just a legal responsibility but also sound business sense. Farmers are recognizing that a reputation for producing safe food creates customer confidence and allows better access to the marketplace. A diverse range of regulation, including animal welfare and environmental legislation, is already imposed on farm businesses; pressure has also increased from the customers in the supply chain. Because of this need, over recent years "food assurance" schemes have developed for all major sectors of the agri-food industry, setting foundation standards of production that are checked by independent inspectors. Britain has been at the forefront in the development of these assurance schemes. Food Assurance Schemes can include badging of produce through farm assurance scheme logos/marks, this can add value to the food that is produced.

Food Standards in the UK

Most of the food assurance schemes in the UK are voluntary systems for food manufacturers and producers and cover food safety, animal welfare requirements and environmental protection. Members of a particular scheme are eligible to use the scheme's logo on their products, and/or use a specific claim, to advertise that the product has been produced according to the scheme's standard.

Most assurance schemes are administered by Assured Food Standards (AFS), which was set up in 2000 along with the introduction of the 'British Farm Standard' - a logo depicting a little red tractor. Any scheme recognized by Assured Food Standards must operate to the international standard in ISO Guide 65: 1996, which is the European standard BSEN 45011:1998. Other farm assurance schemes, which operate in the UK, include the Lion Scheme (eggs) and organic certification schemes. These assurance schemes are not administered by AFS.

The AFS was established in the spring of 2000. It is owned by sections of the agri-food industry, including several of the farm assurance schemes, the National Farmers' Union and the Meat and Livestock Commission. The AFS is run by an independent chairman and a board of directors. The board includes representatives from the assurance schemes and also representatives who are independent of the schemes, such as, directors from the retail and food processing sectors, and others representing academics, consumers and the environment (e.g. RSPB). The AFS is operated by a small staff and supported by contributions from the various participating schemes. The AFS is determined to promote assurance along the entire food chain, recognizing that the safety of food, the welfare of livestock and the environment can all be affected by activities beyond the farm gate. AFS only gives approval to food that has been produced to the required standards at all critical steps in the food supply chain.

Conventional Food Standards

Listed below are some of the assurance schemes administered by Assured Food Standards and verified independently.

- Assured Combinable Crops Scheme (ACCS)

Any producer of combinable crops in England and Wales is eligible to join ACCS.

"Combinable crops" covers cereals including wheat, barley, oats, oilseeds including oilseed rape, linseed, sunflowers, protein crops including combinable peas and beans.

The scheme was originally set up to avoid a multitude of individual and differing schemes being imposed and in an effort to obtain the traceability and assurance required by customers. An industry wide initiative led to the forming of ACCS, with its Board of twelve Directors, drawn from every sector of the industry, including four farmers and chaired by a farmer.

Assured Combinable Crops Scheme (ACCS) now involves 12,600 members, representing 80% of the marketed crop. By joining the scheme farmers are able to demonstrate to their buyers that they produce crops to good agricultural practice standards, which helps secure their market from the next harvest onwards.

- National Dairy Farm Assured Scheme

The National Dairy Farm Assured Scheme has been developed to address the concerns of all the interested parties in the milk supply chain by the National Farmers' Union, the Federation of Milk Groups, the Dairy Industry Association Ltd and the British Cattle Veterinary Association. Consumers and retailers need to be reassured that standards are being achieved to provide confidence about the production methods and the safety and quality of milk leaving the farm premises. The majority of all the major UK retailers now carry the Little Red Tractor logo on their fresh milk.

- Assured Chicken Production

Assured Chicken Production (ACP) is an industry-wide initiative that addresses a wide variety of the issues concerning the production of chicken. It is an independently assessed assurance scheme designed to deliver confidence to the consumer. Standards have been written to include best practice in food safety, bird health, welfare and traceability. ACP now has 1900 members representing 70% of UK chicken production. Assured Chicken Production is controlled by a Board of Directors responsible for the direction, overall management and administration of the company. A Technical Advisory Committee (TAC) monitors and sets the standards for the Scheme. And both the Board and TAC are independently chaired.

The chicken scheme is fairly unique in terms of livestock schemes as it sets standards from birth to slaughter i.e. breeder farms, hatchery, broiler farms, transport and abattoir. Modules also exist for Poussin production and free-range chicken.

- Assured British Meat

Assured British Meat (ABM) Scheme represents the beef and lamb assurance sector by setting beef and lamb assurance standards at farm, transport, markets and abattoirs. The scheme has yet to develop farm to fork assurance as the requirement currently exists whereby farm assurance livestock are such if they have spent a minimum 90 days residency period on the last holding. Independent audits are in place to audit this scheme. The devolved regions in the United Kingdom have established their own assurance schemes i.e. QMS in Scotland, FAWL (Farm Assured Welsh Lamb) and Bord Bia (Ireland).

Certification and Inspection against the ABM beef and lamb farm standards (or equivalent) is increasingly becoming a vital marketing requirement for producers. It allows them to demonstrate that the management practices on the farm meet nationally recognised standards for food safety, animal welfare and environmental protection.

- The Assured Produce Scheme

APS is designed to maintain consumers' confidence in the safety and integrity of the produce they eat. Growers must follow the best production advice contained in the crop specific protocols that form the basis of the scheme. It is an independently assessed assurance scheme.

APS is an industry wide initiative that addresses all the important issues concerning the production of 'produce' - fruit, salads and vegetables. APS promotes safe and environmentally responsible production of fruit, salads and vegetables through the use of integrated crop management (ICM). This is a philosophy that recognises the need for crop production to be both economically and environmentally sustainable.

The launch of the 'British Farm Standard' or 'Little Red Tractor'

In June 2000, the little red tractor logo was launched. It enabled shoppers to recognize and choose assured food. It "badged" farm assured produce and was created following consumer research and the plethora of retail logos that were, at the time, being introduced to the market. The logo differentiates food produced by farmers and growers prepared to meet British standards. When you see the red tractor logo of the 'British Farm Standard' on food, it means that the food has been produced on a farm that is registered as a member of a specific food assurance scheme (described above) and that is administered by Assured Food Standards organization.

The little red tractor logo may have a major role to play in the future of British food and farming by promoting recognition of assured food, that is food grown according to legislation and good farming practice and handled with care at all stages of the food chain. The UK is a world leader in farm assurance with over 78,000 farmers and growers committed to the scheme supplying between 65% and 90% of output in the main commodity sectors. Today it can be found on produced beef, lamb, pork, chicken, milk, cheese, cream, cereals, vegetables, sugar, fruit and salads.

The little red tractor logo can be found in all of the major UK's supermarkets such as in Aldi, Asda, Co-op, Morrison's, Safeway, Budgens, Sainsbury's, Somerfield, Tesco and Waitrose. Through the "Booker" wholesale distribution chain other smaller independent shops and outlets also use the logo, as do independent butchers.

Organic Food Standards

In the UK organic products must comply with strict conditions set at UK and European levels. EU regulation 2092/91 defines the legal minimum standards of production and processing and the requirements for control and policing. The Advisory Committee for Organic Standards (ACOS) is responsible for implementing this EU regulation through delivery of the DEFRA Compendium of Organic Standards (the EU Regulation implemented into UK law). ACOS license several independent bodies to inspect and certify organic operations and their products.

In the UK 1.2% of agricultural land is organically farmed. The UK suppliers have to import two-thirds of organic produce to cater for UK demand³. Consumer awareness of food safety and environmental issues has increased significantly during the last few years, this has increased consumer awareness in food standards and organic farming. It has been found that the majority of consumers switch to organic for health and food quality needs for themselves and their families, it is after this need is satisfied that their interest may then deepen to include the environmental and animal welfare benefits.⁴

The Government provides support for organic farming through the Organic Farming Scheme (OFS), this provides support for a five-year conversion scheme, however the majority of resources in agriculture are still directed towards the conventional farming approaches.

The Soil Association's Organic symbol in the UK

The Soil Association is the UK's leading campaigning and certification organization for organic food and farming. The Soil Association was founded in 1946 by a group of farmers, scientists and nutritionists who observed a direct connection between farming practice and plant, animal, human and environmental health. In the ensuing years the organization has

³ Taken from www.organic-europe.net/country_reports, site visited 17.12.04

⁴ Taken from www.organic-europe.net/country_reports, site visited 17.12.04

developed organic standards and now works with consumers, farmers, growers, processors, retailers and policy makers.

The Soil Association has a symbol for organic products that meet the standards set up by ACOS. The Soil Association organic symbol is the UK's most recognised trademark for organic products. When used on food packaging, it informs consumers that produce is certified to high organic standards and provides an assurance of organic authenticity. The Soil Association also works actively at a political level to influence organic standards development, providing their view at government level and supporting the growth of the organic market.

Sustainable Agricultural Systems

Linking Environment And Farming (LEAF)

The LEAF Marque is not the same type of food standard such as those described above under Assured Food Standards. LEAF is a charity that helps farmers improve their environmental and business performance through creating a nationwide network of demonstration farms that are based on Integrated Farm Management (IFM). This is a system that integrates beneficial natural processes into modern farming practices using advanced technology. There are forty LEAF demonstration farms in the UK which help to create a public understanding of farming, helps farmers to adopt IFM and helps to influence policy. LEAF is one of the six national associations under the European Initiative for Sustainable Development in Agriculture (EISA). LEAF has recently created the 'LEAF Marque', which is used on produce to demonstrate environmental criteria.

Actors involved in Food Standards in the UK

Government Bodies

DEFRA

Defra (the Department for Environment, Food and Rural Affairs) promotes itself as working for the essentials of life - food, air, land, water, people, animals and plants. Defra's remit therefore brings all aspects of the environment, rural matters, farming and food production together and is a focal point for all rural policy, relating to people, the economy and the environment. It is also the government department that represents the UK in these issues at a European and an international level.

The Food Standards Agency

The Food Standards Agency (FSA) in the UK is a Government Initiative and represents the UK Government on food safety and standard issues in the European Union. Although the FSA is a Government agency, it is free to publish any advice it would like. FSA is accountable to Parliament through Health Ministers, and to the devolved administrations in Scotland, Wales and Northern Ireland for its activities within their areas. The FSA provides advice and information to the public and Government on food safety from farm to fork, nutrition and diet.

Other bodies:

National Farmers' Union

NFU was founded in 1908 and is financed by members' subscriptions. It is the largest farming organization in the UK, representing around three quarters of the full time commercial farmers of England and Wales. It has over 300 branch offices, seven regional offices, an office in Wales and a headquarters in London. The National Farmers' Union represents the farmers and growers of England and Wales. Its central objective is to promote successful and socially responsible agriculture and horticulture, while ensuring the long-term viability of rural communities. The NFU played a key role in the establishment of the 'Little Red Tractor' and continues to promote this scheme.

Little Red Tractor

The Assured Food Standards Schemes as promoted by the logo the "Little Red Tractor", is operated by a small staff and supported by contributions from the various participating schemes.

Soil Association (detailed above)

The Soil Association is the UK's leading organic campaigning and certification body.

LEAF – Sustainable Agriculture Organization (detailed above)

LEAF is a charity that promotes integrated farm management through a network of demonstration farms in the UK and is a member of the European Initiative for Sustainable Development in Agriculture.

Assessment of biodiversity protection considerations in food standards

Awareness of food safety, quality and environmental impact of food production is increasing amongst UK consumers. Popular media such as television has numerous reports and programmes that cover food, environment and the use of organic farming methods. Organic food is also becoming increasingly popular, however a large amount of organic food is imported into the UK and only 1.2% of UK agricultural land is organically farmed. Due to increasing consumer awareness supermarkets, farmers and other actors in the food supply chain are increasingly using assured food standards in order to guarantee products or to market products with 'added value'.

The Government supports schemes such as Assured Food Standards and Organic Farming, however in the case of organics, it is not a mainstream activity and therefore does not attract large resources.

Farmers have the option of turning to organic farming, complying with an Assured Food Standard or becoming involved with sustainable agricultural initiatives such as LEAF. For more conventional farming Assured Food Standards with the Little Red Tractor logo, can be an attractive option to farmers. In recent years, an issue has arisen over the fact that there was no coordinated approach to environmental standards within the British Farm Standard schemes (those administered by AFS). AFS commissioned a piece of work by a consultant, to align all the environmental standards in the schemes. There was considerable protest from the farming community, as they saw this as NGOs gaining access to their production standards and forcing costs and time burdens onto farm businesses. This has resulted in five environmental standards being agreed for adoption in the farm assurance schemes – three of which were based on existing environmental legislation and two that were based on good farming practice.

3.3 Hungary

Introduction

Hungary is a country that has been in an economic transition since 1989 and joined the European Union in 2004. Therefore the education of consumers in environmental awareness when selecting food in a shop or in a market still has room for improvement compared to older EU member states. Producers, grocers and distributors have also still to be urged to introduce “Environmentally Friendly” products and processes into the food sector.

Food Standards in Hungary

The legislative background of official food control in Hungary is based on domestic directives on food such as the Hungarian Food Codex (HFC), which incorporates mandatory provisions and the guidelines for food. The third volume of the HFC contains regulations on Official Food Testing Methods. These methodologies may be adopted from EU rules, Hungarian inspection regulations, recommended standards or they may be independently drafted, as is the case of the standards set up for Hungarian organic food. Organic food standards are incorporated into the HFC and mainly follow FAO/WHO Codex Alimentarius rules that are applicable to the EU regulations on organic food.

Other quality assurance systems such as the International Organization for Standardisation (ISO) ISO9000 quality schemes and the Hazard Analysis Critical Control Point System (HACCP) may be applied to agricultural products and processes. Entry into any food quality system or food assurance scheme is voluntary for food producers and distributors in Hungary.

Conventional Food Standards

Food Standards set up by the Ministry of Agriculture and Rural Development

There are four types of ministerial branded food standards available for farmers and food producers. In order to obtain certification farmers have to apply to the Ministry of Agriculture and Rural Development. These four types of official brands of the Ministry ensure the quality of Hungarian food products.

Geographic brands

The Geographic brands confirm the origin/geographic area of the produced and/or processed food. Two types of these marks exist in Hungary that are slightly differing in meaning. Both marks fit into the system of food standards of the European Union.

- 'Protected Designation of Origin' brand (Hungarian equivalent: 'Eredetmegjelölés')

This standard indicates the origin of special quality products that gained their special quality due to the features of a given geographic region. Each step of the production process has to take place in the given region.

- 'Protected Geographical Indication' brand (Hungarian equivalent: 'Földrajzi jelzés')

This mark refers to products that gained their special quality due to the features of a given geographic region, at least one of the steps of the production has to take place in the given region.

'Traditional Speciality Guaranteed' Brand

This brand refers to special quality products that gained this special quality with the aid of using traditional ingredients and traditional production methods in the production process. The aim of the Hungarian Ministry of Agriculture and Rural Development in the introduction of this marker was to assist farmers in applying traditional, less intensive, therefore more environmentally friendly farming methods.

'Taste-Tradition-Region' Brand

The Hungarian 'Taste-Tradition-Region' brand includes special quality products characteristic to given regions, produced by multi-generation farmers or producers and using traditional extensive farming methods. Therefore the Hungarian Ministry of Agriculture and Rural Development created this equivalent marker ('Hagyományok-Ízek-Régiók Program és Védjegy) for Hungarian farmers to assist less developed regions of the country. Hungarian products with this label (about 300) are incorporated in the European system of geographically recognised foods.

'Quality Food From Hungary' brand

This brand (Kiváló Magyar Termék) ensures the top quality of a given Hungarian product. This label means that the whole process, from the production of a product to putting it on the market, is controlled according to the rules of the brand. By introducing this brand the

Ministry aimed to enhance the number of small and medium sized entrepreneurs to act on the market. HACCP safety and food quality regulations have to be complied with to gain the certification. This is only a 'quality assurance' brand and does not involve any environmental considerations.

Organic Food Standards

Organic farming takes place on an area of 120 000 ha, which means 2,4 % of the area used for agriculture in Hungary. In the framework of the National Agri-Environmental Programme for the year of 2006, 300 000 ha of land used for eco-farming is scheduled in Hungary. There is a very minor demand for organic produce in Hungary, 95% of organic products made are exported to other countries. There is no great consumer interest in organic products. Results of consumer surveys have shown that personal health is far more important than environmental concern, therefore if a Hungarian consumer were to consider buying organic products this would most likely be the primary motivation.

The products of organic farms are controlled and labelled as organic by the Biokontroll Hungary Kht. Company, supported by the MARD. This company also assist farmers producing food with the organic label to spread their products on the domestic market as well to facilitate the export of these products.

Biokultura Standards

The 'Biokultúra Egyesület' - 'Bioculture Organization' was founded in 1983 with the aim of enhancing the public awareness on organic farming and the distribution of information amongst the public on the advantages of organic farming methods. The Biokultura standards were developed in 1987 and are based on International Federation of Organic Agricultural Movements (IFOAM) standards and the British Soil Association standards. In 1996 Biokultúra Egyesület formed the Biokontroll Hungária Kht. for the inspection and certifications of organic farming processes and products. It carries out control over more than 110 000 ha of organic farms.

In 2002 a few experts from the Biokontroll Hungary Kht. initiated a new control agency beside the Biokontroll Hungária Kht. The conclusion was that the 'Hungária Öko Garancia', (Hungarian Eco Guarantee) also received legal support from the Ministry to issue certifications. Farmers and grocers switching to organic farming have to register at one of these agencies. Organic farming is on a voluntary basis however EU standards are

compulsory and must be complied with. Farmers can become organic farmers after two or three years from when they were first received the official "bio- or ecological product" standard and they are allowed to use the HU-ÖKO-01 or the HU-ÖKO-02 code numbers of 'bio' certifications.

Actors involved in Food Standards in Hungary

Hungarian Ministry of Agriculture and Rural Development (MARD)

The Government controls the quality of the food chain through the Hungarian Ministry of Agriculture and Rural Development (MARD), but certain tasks are shared with other Ministries such as Ministry of Health, Social and Family Affairs, or the Ministry of Industry and Trade. The Government controls the food labels and marks and the responsibility for these lies with the MARD, these are described above.

The Government supports organic agriculture mainly due to the export potential, as development of the domestic market is not supported by the State, due to the lack of consumer interest in organic products.

'Biokultúra Egyesület' - 'Bioculture Organization' (detailed above)

This organization aims to enhance the public awareness of organic farming. Biokultúra Egyesület formed the Biokontroll Hungária Kht certification body.

Biokontroll Kht (detailed above)

This is an independent certification body for organic produce, it is supervised by the Ministry of Agriculture and Rural Development.

Assessment of biodiversity protection considerations in food standards

The four types of official brands belonging to the MARD ensure the quality of Hungarian food products. However it is only 'Traditional Speciality Guaranteed' brand and 'Traditional-Taste-Region' brand that provide any form of protection of biodiversity and nature through the use of more extensive or traditional methods of farming. However the protection of nature is not specifically targeted in the aims of any of the branding types.

Organic production represents 2,4 % of total agricultural area, which means that more stringent requirements to protect nature and environment are carried out in these agricultural production areas. However awareness by Hungarian consumers within the

country in respect of environmentally friendly or organic farming is low due to a perception by consumers that agriculture is not a major polluter of the environment. A further challenge is the fact that a high export rate means that the home market will be slow to develop as export markets usually mean significantly higher prices, this increases the domestic price, which can then develop a further negative attitude about organics or environmentally produce, amongst Hungarian consumers.

3.4 France

Introduction

French farmers have a variety of options to choose from in order to provide consumers with a guarantee of the quality of their products. Meeting the requirements of quality labels can be demanding for farmers, who may have to comply with very rigorous specifications. However this special effort can be seen to add value to their produce. As food standards are useful for both the consumer and the farmer, it is not surprising that the number of quality marks have multiplied in France in the past few decades.

Food Standards in France

There are four major food-labelling programs guaranteeing the quality and the traceability of products. These include the Appellation d'Origine Contrôlée (AOC) (Controlled Origin Appellation), Label Rouge (Red Label), Agriculture Biologique (Organic Mark) and Certificat de Conformité Produit (CCP) a product compliance certificate.

The European Union recognizes two types of geographic protection of agricultural products: Protected Designation of Origin (PDO), and Protected Geographic Indication (PGI). The PDO is applied to the French AOC label while the PGI, which is less strict, is applied to the Label Rouge. These two French standards have been in existence since 1992.

The PGI requires an inspection. In France, the production must have obtained either a Label Rouge, or a Certificat de Conformité Produit (a certificate that confirms the product adheres to the PGI standard). For example the Foie Gras du Sud Ouest (south western France) is protected by a PGI.

The AOC, 'Label Rouge', 'Certificat de Conformité Produit' and the 'Agriculture Biologique' (logo of organic products) quality signs are managed by the French Ministry of Agriculture.

The 'Label Rouge' and the 'Certificat de Conformité Produit' are awarded by the "Commission Nationale des labels et des Certifications (CNLC)", the National Commission for Labels and Certification.

Conventional Food Standards

Food standards controlled by the Ministry of Agriculture

- Appellation d'Origine Contrôlée (AOC) - Controlled Origin Mark

The AOC, "Appellation d'Origine Contrôlée" is the oldest form of quality guarantee. Created in 1935, it identifies a typical product associated with a specific geographic origin. The AOC is confirmation of a product's compliance with specific requirements in terms of quality, origin or manufacture. To a certain extent it is the guarantee that the product has been grown on a certain type of soil and produced in accordance with specific processes.

Initially, the AOC applied to wine. In the 1960's it was extended to dairy products and, since 1990, to other agricultural and food products. Currently, about 520 products benefit from an AOC, including numerous wines and cheese, as well as a variety of products such as new potatoes from the Ile de Ré. The AOC production areas are inspected each year by the 'Institut National des Appellations d'Origine', National Institute of Origin Appellations.

According to the 'Institut National des Appellations d'Origine', obtaining an Appellation d'Origine Contrôlée (AOC) enables a product to increase its average value by a third. It has also shown that when a food chain is struck by a crisis, the products with a quality label have tended to withstand the fall in consumption much better than standard products. For instance the cheese AOC's have enabled a whole population of farmers to survive in the French mountains, particularly in the Alps where Reblochon is produced. The Bordelais region also represents a considerable number of producers: no fewer than 10,000 vineyards covering almost 120,000 ha of AOC vines.

- The Certification de Conformité Produit (CCP)

The Certification de Conformité Produit (CCP) is much more recent and is the youngest of the official quality standard indications. The system was set up in 1990 and provides for products possessing special qualities or complying with special production rules and

subject to stringent inspections. This certificate, already awarded to about 250 products, represents a guarantee for the consumer of buying distinctive products with a constant quality.

In cereals, the Coopérative de Sens, to the south of Paris, has achieved Certification de Conformité Produit for its cereals that follow guidelines and inspection methods. Grannysud apples, "Fifth Season" salads and prepared "Fifth Season" Doucette-mâche corn salads are other examples of CCP products. The Coopérative de Chécý has also acquired a Certificat de Conformité Produit for its entire range of vegetables and potatoes.

- 'Label Rouge'-Red Label

The Label Rouge movement began at a local level in the Southwest of France, in the forested Landes region in 1965. Label Rouge represents a guarantee of a product's superior quality. It is a "taste" quality and is a result of demanding requirements and regular inspections at each step in the production, preparation and marketing processes. This program aims to provide premium products to consumers.

The Label Rouge program consists of many regional producer-oriented alliances, so-called 'Filières', which produce and market their own branded products under this common label. 'Filière' is a French term for a supply chain that is centred around a group of producers with upstream affiliates, for example, in the case of poultry this would include the breeding company, hatchery and feed mill. It also applies to downstream affiliates: processors, distributors, and retailers. It is a highly coordinated alliance, but not necessarily vertically integrated. The 'Filière' is centred on a group of producers and associates called the 'quality group', which holds managerial responsibility for the 'Filière'. This body, as opposed to the processor, input supplier or distributor, retains control of the brand, sets prices, and makes marketing and advertising decisions. An independent third-party certification program ensures that strict standards are being followed.

The Label Rouge system has strong organizational support from both the government and the private sector. Government agencies are responsible for setting and maintaining certification standards (CNLC), accrediting the certifiers (COFRAC) and protecting against label infringement (CERQUA). The Label Rouge system is complex but has built a good working relationship among producers, consumers, and government. It is also a farmer-created, consumer-driven and government-supported mark.

The coordinated supply chain of Label Rouge also provides an excellent opportunity for addressing food safety through the HACCP system, which is applied throughout the entire supply chain.

The Label Rouge products are strongly tied to regional areas and have their own image. Certain regions are associated with certain tastes. In fact most of the Label Rouge brands are names from French cities or regions. Label Rouge also offers organic products.

Currently, in France, over 400 production chains have already obtained the Label Rouge, covering products as varied as grass seed, garlic from Lautrec, Lingots du Nord beans, wheat flour or Belle de Fontenay potatoes from the Coopérative de Chécy in the central region of France. But the chain where the Label Rouge is most prevalent is in poultry farming, particularly for Label Rouge chickens and turkeys.

Le Label Regional

In some cases, for certain products from the Ardennes, Franche-Comte, de Lorraine, du Nord Pas-de-Calais, de Midi-Pyrenees and de Savoie, the Label Rouge is replaced or complemented with the 'regional label logo'. The regional label logo is in accordance with the same level and quality of 'Label Rouge' but carries another characteristic that is specific to the region e.g. traditional or representative of the region.

The Label Rouge trace back system is so detailed that coding on the package indicates the farm, the origin of the product, the processing plant and so on.

Label Rouge provides information to consumers on product attributes such as taste, health benefits, nutrition; they can also provide information on ecologically sound production practices and other factors related to sustainability.

Organic Food Standards

Organic agriculture in France developed furthest in the nineteen-eighties. Then in the mid nineteen-nineties the number of organic farms stagnated and the area of land organically farmed grew slowly. This was largely due to the introduction of the EU Organic standard (2092/91) and other major changes in the organization of the sector. However since 1996

development has started to increase again. French organic production represents 1.3% of the total agricultural land area⁵.

In 1980 France had implemented a set of rules to define and protect organic farming, this was updated by the European Union standard in 1991. Producers have to declare their activity as organic farmers to the Farming Authorities and have to accept inspection by an approved organization. Organic products are recognizable by the label of "Agriculture Biologique"(AB) and by the AB logo.

The AB logo label guarantees that food has been produced by an organic production method, prohibiting the use of any synthetic chemical products. The French Ministry of Agriculture and Fisheries handles the logo. There are six independent organizations licensed by the Ministry that can carry out certification processes for organic farmers, namely ECOCERT, Quality France, ULASE, AGROCERT, ACLAVE and CERTIPAQ. These organizations receive the license if they meet the requirements of the EU based EN 45011 standard that allows organizations to issue certifications on food products.

Organics is still a niche market in France although it is increasing, therefore growing demand and Government support is expected to boost organic food sales. Consumers are generally those who are health conscious or those concerned about the environment or animal welfare. In the nineteen-nineties sales were generally focused upon specialized natural food and health shops however today supermarkets are gaining more and more importance.

Sustainable Agricultural Systems

FARRE

Forum de l'Agriculture Raisonnee Respectueuse de l'Environnement (FARRE), this is the forum for environment-friendly integrated farming systems in France. It is not strictly a food standard however it is a not-for-profit association that was founded in 1993 to promote the concept of integrated farming systems and to increase public awareness of this concept. Integrated farming systems are those that integrate beneficial natural processes into modern farming practices using advanced technology. There are 402 farm members in the FARRE Farm Exchange Network. Members have to be selected and approved by local committees and National Executive Committees. All of the farmers in

⁵ Taken from <http://www.organic-europe.net/countryreports> , site visited 15.12.04

the network agree to implement the Integrated System process, which is drawn up by the Scientific Advisory Board of FARRE.

FARRE is one of the six national associations under the European Initiative for Sustainable Development in Agriculture (EISA), it is comparable to the UK Equivalent LEAF.

Actors involved in Food Standards in France

French Ministry of Agriculture

The French Ministry of Agriculture controls the quality assurance and geographical marks described above and also controls the organic mark. Government agencies are responsible for Label Rouge in respect of setting and maintaining certification standards (CNLC), accrediting the certifiers (COFRAC) and protecting against label infringement (CERQUA).

The Government supports organic farming and aims to convert one million hectares of farmland and increase the number of organic producers to 25,000 by the year 2005. Support includes financial support during farm conversion, support for marketing initiatives, as well as training and research.

L'Agence Bio

This is a public interest group set up to manage the development and promotion of organic agriculture in France.

FNAB and Setrab

The Federation National de l' Agriculture Biologique (FNAB) is the national federation for the regional producer organizations and represents the organic sector on a political level. The Syndicat Europeen des Transformateurs de Produits de l'agriculture Biologique (Setrab) represents the processors of organic products on the political level.

FARRE (described above)

Forum de l'Agriculture Raisonnee Respecteuse de l'Environnement (FARRE), this is the forum for environment-friendly integrated farming systems in France and is described above.

Assessment of biodiversity protection considerations in food standards

In some of the conventional food standards e.g. Label Rouge in France the concepts of environmental protection and sustainable use of soil concepts can be found, however information on the level of protection provided is unclear. The organic standard AB conforms to the EU organic regulations. The Government is supporting the development of organic farming. Sustainable farming initiatives such as FARRE also exist.

Awareness amongst consumers of health and environmental aspects of food can be seen to be increasing and the consumer has a choice of organics, conventional food standards with some environmental requirement or buying produce from sustainable agriculture farms, such as those listed under FARRE. With the predicted increase in organics and the availability of food from farms using more sustainable methods, there can be optimism that the level of protection for biodiversity on farms will improve in France in the future.

3.5 Germany

Introduction

Germany is often at the forefront in the implementation of nature conservation considerations into sectoral policies. In Germany, the Federal Ministry of Consumer Protection, Food and Agriculture actively promotes the protection of natural biodiversity and also agricultural diversity, in order to promote general awareness on biodiversity amongst the actors of agriculture and food industry. The protection of nature, biodiversity and agricultural diversity is seen to give an added value to food products increasing the quality of the food. Products with this added value need a high level of awareness, service, and competency to advise and to promote them to the consumer. This promotion has been practised in Germany for many decades.

Food Standards in Germany

In the past four decades companies and farmers in Germany have created a huge number of food standards and labels. Nearly all of the assurance schemes providing environmental protection concerns are under organic farming approaches. Food standards named as 'eco-farming products' are under EU organic regulations, they may also comply with the Association of Organic Agriculture in Germany (AGÖL) regulations (mostly milk and animal

related products). The term for ecological, biological, biodynamic or organic farming is 'Ökologischer Landbau'.

Organic farming represents 3.7% of the total agricultural land area⁶, this figure exceeds the European average of 2% and 3% respectively. Organic farming existed towards the end of the nineteen-sixties, it saw a growth later on in the nineteen-eighties and then again following the EU Organics Regulation in 1992. Organic farming in East Germany spread very quickly after reunification. Organic farming was not allowed in the days of the former German Democratic Republic, although a smaller number of eastern German farms had practised organic farming methods. In recent times the German Federal Government has set a goal of 20 per cent of land to be organically farmed by 2010. This has meant an increase in Government support for organic farming, a federal programme for organic agriculture and a national organic seal (described below).

Organic food is sold mainly in the supermarkets and at natural food shops, however it is also available from health food shops, through direct marketing, butchers and bakers.

Organic Food Standards in Germany

In Germany most organic farms have joined an association. Bioland and Demeter are the largest and oldest organic associations however others include Naturland, Biokreis, Bundesverband Ökologischer Weinbau (Federation for Organic Viticulture, ECOVIN), Gäa, Ökosiegel and Biopark.

Representatives from organic farming associations, organic food processors and organic trade founded the "Bund Ökologischer Lebensmittelwirtschaft" (BÖLW, Organic Food Industry Federation) in June 2002 as the central association of the entire organic sector.

German organic farmers have received support since 1989, because of Germany's federal structure, it is up to each state to develop its own programme to support organic farming. However to further improve the overall conditions for organic farming, a Federal Organic Farming Scheme (Bundesprogramm Ökolandbau) was drawn up for 2002 and 2003. The Federal Scheme launches a medium to long-term Action Program on Organic Farming that is to be developed within a social discourse and is to encompass all relevant policy fields and actors.

⁶ Taken from <http://www.organic-europe.net/countryreports> , site visited 15.12.04

The Federal Office for Agriculture and Food was charged with the implementation and execution of the Scheme. The Agency for the Federal Organic Farming Scheme has been set up for this purpose.

Inspection of standards

The standards of the organic producer organizations are in several respects stricter than the EU Regulation on Organic Standards (2092/91), for example, they require the conversion of the whole farm.

Each federal state has to implement their own inspection regimes for food standards. The inspection bodies co-ordinate their interests in two working groups: Konferenz der Kontrollstellen (Conference of Inspection Bodies) and Arbeitsgemeinschaft der Kontrollstellen (Working Group of Inspection Bodies).

Description of Food Standards

With the aim of presenting a short overview, here we present some of the large number of organic food standards available in the German agriculture sector. There are eight organic producer organizations that are familiar to the German consumer and who have their own protected seals with certified farms and certified processes. These are Naturland, Bioland, Demeter, Biopark, Ecovin, Gaea, Okosiegel and Bio Kreis e.V. Some of these organizations are described below.

- Naturland

The Association for Organic Agriculture was established in 1982. It has grown to become one of the most important organizations in the field of organic agriculture in Germany. The objective and mission of Naturland is the conservation of the environment and the maintenance of the natural basis of life by means of organic farming in all fields of agriculture. Naturland manages 36,000 farmers or co-operative groups. Naturland not only concentrates on organic farming, another important concern of the association is the impact of agriculture on the environment. Naturland is active in the realm of environmental politics, exerts pressure where needed when new legislation is being discussed and makes its voice heard on problems of the day. In the case of particularly important topics, Naturland has entered into co-operation with other major environmental associations.

- Bioland

Founded in 1971 for agriculture in West-Germany with associations in 8 federal states, it has members of 3.500 farmers (one of the biggest of German associations for ecological agriculture).

- Demeter

The Demeter Symbol was introduced in 1928, along with the first standards for Demeter quality control. Demeter was the first organic body to produce standards for food processing. Demeter is the brand for products from Biodynamic Agriculture. A comprehensive verification process ensures strict compliance with the International Demeter Production and Processing Standards, from agricultural production to processing and final product packaging.

A common Eco-label: Bio-Siegel

In 2001 the food trade, the Farmers' Union, Bioland, Demeter and politicians agreed the specifications of a common Eco-label for food in line with the standard in the EU regulation for organic agriculture and food. They designed an effective logo for the label and decided to make it known as the 'Bio-Siegel'. At first the label was used on a voluntary basis, but the Ministry of Consumer Protection, Food and Agriculture has prepared a legal basis for the Eco-label. On 15 December 2001, an Eco-labelling Act took effect to legally protect the Eco-label. The Eco-labelling Ordinance is based upon the Eco-labelling Act and came into effect on 16 February 2002, it lays down detailed rules regarding the design and use of the Eco-label.

As the Eco-label is based on the EU Organic Farming Regulation, it is subject to inspection provisions. The existing approved inspection bodies continue to carry out controls under the various schemes. The implementation of the inspections falls within the competence of the Lander.

The Eco-label marks an important step in the development of the organic market and has been a success. This may be due to the fact that no costs are associated to use the label. In addition there are penalties set out in German legislation should the seal be abused.

The label can be used to mark any unprocessed and processed agricultural products subject to the EU Organic Farming Regulation providing that requirements under the

Regulation for organic production methods have been met and that at least 95% of the ingredients of agricultural origin come from organic farming. This common Eco-label provides assurance that food is produced according to criteria of organic farming without interfering in the competitiveness of differing brand names such as Demeter and Bioland.

An Eco-label Information Center has been set up for interested market operators at the Öko-Prüfzeichen GmbH (Organic Verification Mark LLC). The Eco-label is popular amongst businesses from the processing and trading sectors. It establishes transparency and reliable guidance for consumers in an organic sector that has a large number of trademarks to choose from.

Regional food standards

Germany is also involved in the labelling of food subject to the geographical area in which it was produced. This regional marking can provide assurance that the product is a local, high quality product and may also provide assurance that it has been grown in an environmentally sustainable way. For example, from Flusslandschaft Elbe, Middle Elbe in Brandenburg, the logo of BR with the additional information 'regional product of BR' exists. In Schorfheide-Chorin a regional label exists for sustainable and regional production of rural products. In Spreewald a regional label exists for vegetables and preserved vegetables produced in the Spree forest area.

Sustainable Agricultural Systems

ENL

The Fordergemeinschaft Nachhaltige Landwirtschaft e.V. is an organization that promotes the concept of integrated farm management, this can be defined as integrating beneficial natural processes into modern farming practices using advanced technology. Therefore it promotes the concept of sustainable agriculture, which does not necessarily mean that which is organic. The organization aims to inform the public about the importance of agriculture to society and promotes support for rural areas. The organization encourages the application of best practice through integrated farm management to ensure sustainable development and good animal husbandry. It also aims to improve the image of agricultural production. It is comparable to LEAF in the UK and FARRE in France and is also a member of the European Initiative for Sustainable Agriculture (EISA).

Actors involved in Food Standards in Germany

Government bodies

The Federal Office for Agriculture and Food is charged with the implementation and execution of the Organic Scheme. The Agency for the Federal Organic Farming Scheme has been set up there for this purpose. A project under the federal programme for organic farming includes the main Internet portal for organic farming at www.oekolandbau.de.

BöLW

Bund Ökologische Lebensmittelwirtschaft (BOELW) was created as an umbrella organization in June 2002 by representatives from the organic farmers groups, processors and traders. The aim was to create a union of the organic food industry. The union aims to promote organic food production in respect of food security, quality, environmental protection and animal welfare benefits. Initiators include Bioland, Demeter, Gaea, Naturland. From the food processing, it includes the Bundesverband Naturkost Naturwaren Hersteller und Handel (BNN). Representatives from the organic food industry include Alnatura und Frosta AG and the Association Oekologischer Lebensmittelverarbeiter (AOEL).

FIBL Berlin e.V

This is the Forschungsinstitut für biologischen Landbau Berlin e.V, set up in 2000 for promotion of organic agriculture including platforms for nature conservation and organic agriculture.

SOL

Stiftung Ökologie und Landbau, is the foundation of ecology and agriculture, it was setup in 1961 and mainly provides information on organic farming including regular articles on organic farming research.

Assessment of biodiversity protection considerations in food standards

As can be seen above the organic farming industry is the main focus for protecting biodiversity in farming through food standards in Germany. It is a strong movement with support by Government and industry organizations to ensure that it increases significantly to 20% in 2010. Organic food is commonplace in supermarkets. Alternatives to organic farming such as food standards for conventional production can include regional food

standards that promote regional quality but can also include environmentally sustainable farming methods. FNL is an organization that promotes integrated farm management, which is not necessarily organic farming but a systems approach to managing a farm. It aims to ensure that farming is done in a sustainable, integrated way, to minimise harmful impacts on the environment. With the strong support for organic farming it can be assumed that protection for biodiversity will increase in the future. However the information for conventional farming, (except that provided by FNL), which still represents the majority of farming type in Germany, remains unclear in the extent to which this farming method goes towards protection of the environment.

3.6 European Organizations

The following section provides a summary of European organizations including environmental protection in European food standards or involved in the promotion of integrated farm management in agriculture at the European level.

EUREGAP

EUREGAP is an initiative that provides a certified food standard for food safety, environment and welfare protection along the food supply chain.

EUREGAP started in 1997 as an initiative of retailers who belong to the Euro-Retailer Produce Working Group (EUREP). The aim was to agree on standards and procedures for the development of good agricultural practice. This in turn revolves around techniques such as integrated crop management (ICM) or integrated pest management (IPM). EUREGAP provides a set of documents on good agricultural practice suitable to be accredited to international certification laws. The standard documentation and certification system is approved by a Technical Committee. EUREGAP has a steering committee and is chaired by an independent person.

The organization initially consisted of retailers, however it is now more democratic boosting a supply chain partnership. Members include retailers, suppliers, growers and associate members from the input and service side of agriculture.

The initial driver for EUREGAP was to reassure consumers about food safety issues and recognised the need for a common internationally recognised standard. Whilst food safety is the initial driver the standard's protocol includes consideration of environment, worker safety and welfare issues. Environmental protection includes the requirement to have an Environmental Management Plan.

EUREGAP also provides support in respect of training and conferences on EUREGAP issues and standards.

EUREGAP is currently a business-to-business logo since it is an industry initiative rather than a consumer initiative, therefore it must not appear to the final consumer, although it can be displayed on a pallet label. Some of the national food standards in the different countries, such as the UK Assured Food Standards may be benchmarked against EUREGAP.

EISA

The European Initiative for Sustainable development in Agriculture (EISA) aims to develop and promote sustainable farming systems through integrated farm management systems. It was founded in May 2001 by an alliance of national organizations from six European Countries:

- France - (Forum de l'Agriculture Raisonnee Respectueuse de l'Environment - FARRE)
- Germany - (Forderungsgemeinschaft Nachhaltige Landwirtschaft e.V. - FNL)
- Italy - (Agricolutra che vogliamo)
- Luxembourg - (Forderungsgemeinschaft Integrierte Landbewirtschaftung Luxemburg - FILL)
- Sweden - (Odling I Balans)
- United Kingdom – (Linking the Environment And Farming - LEAF)

The members are committed to systems of agriculture that are economically viable, environmentally responsible and socially acceptable. At the European level EISA works towards contributing to the development of European agricultural and environmental policies.

The main objectives of EISA are to:

- Promote Integrated Farm Management throughout Europe
- Develop common messages of integrated farming
- Facilitate the exchange of scientific study results
- Organise and participate in European panel discussions
- Establish a network of demonstration farms throughout Europe

Whilst EISA does not promote itself as providing certified standards in agriculture, the UK partner, LEAF, has recently moved in the direction of food labelling. It has set up the LEAF Marque, which can be displayed by products adhering to the LEAF integrated farming protocol.

4 Conclusions

The overview has shown that activity in organic farming is growing in all countries, the strongest commitment can be seen in Germany. The Hungarian organic farming sector is growing quickly although this is primarily due to the export potential. The United Kingdom, the Netherlands and France are increasing organic production due to the consumer demand in their own countries. However the main reason for buying organic products in these countries is initially due to food safety concerns. Whilst the Governments in the respective countries have set targets for organics (10% by 2010 and 20% in Germany), it does still not appear to be considered as a mainstream farming production method.

With regards to environmental protection in conventional farming systems, food standards that may have been initially set up for food safety reasons are increasingly changing to incorporate environmental protection, this can be seen by the Little Red Tractor in the UK, Milieukeur in the Netherlands and Label Rouge in France.

Another initiative that promotes environmental protection is the EISA concept of integrated farm management for sustainable agricultural systems. The members of EISA include the following countries: France, UK, Germany, Luxembourg, Sweden, and Italy. The UK partner, LEAF, has followed in the footsteps of the food standards organizations by creating a label that can be used by farmers who follow the LEAF protocol of integrated farm management. The ability to use a label can help the farmer in giving added value, and hence a higher premium, for their produce.

Regional standards are growing in all of the five countries this could be due to the increasing awareness in agriculture of the added value and higher premium potential of branded local or regional products. The advantage to the environment is that some regional branded products may be more environmentally friendly if there is a traditional, less extensive method of farming that is used.

In all countries the main actors include the relevant Ministry of Agriculture, some of these can have considerable input in food standards such as in Hungary and France where branded labels are owned or controlled by the Government. Most countries will have representation from a Food Standards Agency, which may be supported by the Government but is independent. All countries have organizations for certification in conventional and organic standards, all countries have associations representing organic farming and countries with a conventional standard will generally have an association to represent and promote the standard. Other organizations are those promoting various initiatives such as the EISA members. At a European level EUREGAP is an organization that provides and promotes a European Food Standard among retailers. Organic farming has numerous ways of being represented this may be through national organic associations working at the European level or a variety of organizations representing certain aspects of organic farming and organic research in Europe.

Whilst it is known that the large supermarkets in some of the countries researched have their own contracts with farmers that require certain conditions and standards involving welfare, safety and environmental protection, the work and representation of the supermarket sector has not been considered in this report (this is a recommendation for the future). It may be that supermarkets welcome assured food standards that cover various types of safety, welfare and environmental conditions. In theory such standards would lessen the supermarket responsibility in audits and inspections of producers, as they could rely on the assured food standard for this, which may ultimately also reduce the supermarket operating costs, and therefore would be an attractive option for them.

From the initial review there is a clear indication that the use of food standards for protecting biodiversity through conventional farming or organic farming is set to receive a great deal more attention in the future.

5 Recommendations

If it is accepted as a good idea to promote biodiversity protection in conventional farming and therefore conventional food standards and systems, the following recommendations would apply for enabling a discussion between actors in these areas to determine how biodiversity protection could be further developed in such conventional food standards and systems:

- Using the contacts made from the initial review to carry out more in-depth discussion with these actors, including the supermarkets, to establish their position and the possibility of motivations for considering biodiversity protection in food standards.
- Analysis to establish how to mobilise these motivations to enable further cover for biodiversity protection, (e.g. Identify advantages for actors in becoming involved in increasing the scope of standards)
- Further discussions with biodiversity monitoring experts to establish how greater incorporation of biodiversity protection in food standards could work on a practical level.
- Provide capacity building opportunities by creating a European forum to allow the variety of actors involved in food standards and systems in agricultural production to share knowledge and consider how biodiversity is currently protected in different countries and how it may be developed further.

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