

GREEN LABEL/ CERTIFIED QUALITY RECOGNITION FOR CONSERVATION AGRICULTURE PRODUCTS

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Summary

Green labelling programs are based in the consumer's environmental awareness and in the competition among manufacturers to gain advantage of this environmental concern. They are extended worldwide mainly for industrial processes and products. *Organic Agriculture* (OA) and *Integrated Agriculture* (IA) are the two most widely accepted agri- environmental initiatives developed under similar green label schemes. *Conservation agriculture* (CA) currently receive much less attention from the mass media and consumers than OA and IA. Paradoxically, the environmental benefits derived from CA over exceed those obtained from OA and IA, namely in the preservation of the natural resources such as soil, water, biodiversity and air. Therefore, efforts should be put to gain acceptance and support for CA products by administrations, mass media, transformation industry, food distribution and consumers. National associations and trans-national federations for CA can play an important role supporting and co-ordinating these initiatives. To bring together the existing trans-national CA federations into a *World Conservation Agriculture Federation* may strength and enrich worldwide the conservationist movement.

Introduction

Many consumer products in the market, directly or indirectly, through their processes of production, manufacturing, usage or disposal, have a negative impact on our environment. They may cause pollution, or have previously depleted our natural resources. "Green label" recognition is usually granted to products that have a reduced environmental impact. Green labelling, or eco-labelling, refers to a scheme which awards environmental- friendly product with eco-labels. Or alternatively, to products which have a less undesirable effect on our environment. Some eco-labelling schemes applies to products, including or not food and drinks; others applies to services or industrial processes.

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"Green" products should exhibit a "green label" logo, specifying the applicant's identification number and a description of what environmental aspects the product has been awarded for. The consumer, apart from selecting a product based on its price, performance and others attributes, can carefully also weight its impact on the environment. So that, it is not only directly improving the environment through the use of specific products, but also sending a clear message to industries that the market demands such product and ever increasingly products need to be "green" to be competitive. The label should indicate to the consumers the specific environmental improvements of the "green

products”, and manufactures could use it for advertisement purposes. At the end any environmental labelling program aims to assist consumers to make informed choices (Agenda 21).

The reason to set up an green labelling scheme is a marketing strategy. In addition, in this labelling process manufactures should have an economic incentive through all production stages, i.e. the selection of raw material, manufacturing/ production, use and disposal. The so called “life-cycle-approach”

International spread and acceptance of green labelling

The first environmental labelling program developed was the “*Blue Angels*” in Germany, by mid 1970’s, and was based in the idea of using consumer’s environmental awareness and competition among manufacturers to promote the environmental quality of consumers goods and products (Müller, 2002). Then, many diverse eco-labelling schemes has been established throughout world. For example, “*Environmental Choice*” in Canada, “*Ecomark*” in Japan, “*Nordic White Swan*” in the Nordic Council- Sweden, Norway, Iceland and Finland, “*Green Seal*” in United States (www.greenseal.org/), “*Ecolabelling*” in Brazil, “*AENOR- Environment*” in Spain, and “*Ecolabelling Centre*” in China, and “*Green Council*” in Hong Kong (www.greencouncil.org), among others. Today there are approximately 50 different green label schemes worldwide. In some countries the number of green product or process and their recognition by consumers are very high. For example, in Germany, over 4000 green labels has been currently awarded to a wide range of products and 79% of the consumers recognise the “*Blue Angel*” logo as environmental friendly.

In 1994 *Green Seal* and *Environmental Choice* spearheaded the founding of the formal association of third-party ecolabelling organizations, the *Global Ecolabelling Network* (GEN; www.gen.gr.jp/). GEN promote third party ecolabelling and coordinates works of its members to achieve more harmonized standards and certification world-wide. Currently 24 environmental labelling program are members of GEN.

Environmental labelling programs fit very well into a sustainable strategy and have received the support of international organisms. They were recommended by the 1992 Earth Summit in Rio Janeiro and Agenda 21, the United Nation Program of action for sustainable development explicitly provides that government should encourage the expansion in order to change consumption patterns. Further, OCDE underlines the role of eco-labelling as a policy tool to promote environmental preferable products and services (OCDE, 1999).

Procedures and Certifying Organizations

Environmental labelling process is generally channelled within the International Standardization Organization (ISO) guidelines: ISO 14000 “family”/ ISO Standard 14021 which develop specific guidelines and procedures (Müller, 2002). American *Green Seal* developed the Guiding Principles and Procedures for Type I Environmental Labelling adopted by ISO 14024.

Diverse organizations and procedures has been established to supervise and grant the green label certification as recognition of environmental quality. For example, in the European Union (EU) the Directive 880/92 defines a long list of attributes that reduce a product’s negative impact on the environment, without harming the product reliability, function and quality.

Generally, quality and certification procedures and organizations are internationally linked and operated worldwide. As an example EQNet, an International Certification Network, which gather the following entities: AFAQ- France, AV- Belgium, AENOR- Spain, BSI QA UK, DS- Denmark, DQS- Germany, CISQ- Italy, ELOT- Greece, KEMA- Holland, IPQ- Portugal, SQS- Switzerland, among

others. In Israel the green label was introduced in December 1993 based in the Israeli master standard SI 1738, which is itself based on the previously referred EU Directive 880/92.

Initiatives for an environmental friendly agriculture: Organic agriculture and Integrated production

Organic agriculture (OA, in some countries called ecological agriculture) and *Integrated agriculture* (IA, also called *integrated production*) has been the two most widely recognised initiatives in agricultural developed with similar aims and procedures than that of green labels products and services. OA and IA, however, are based in very different agri- technical strategies. However they have similar organization framework, involving/ requiring the support of public administrations, certifying entities, farmers, retailers and consumers associations. In both cases they intend to demonstrate their environmental advantages in comparison with conventional/ traditional agriculture, appealing the consumer environmental concern, and at the same time trying to get economic benefits in all stages of the production chain, from the farmer to the consumer.

Organic agriculture (OA) is a tillage-based agriculture which avoid the use of synthetic pesticides, fertilizers and pharmaceutical drugs (www.ifoam.org). As any tillage-based system, organic agriculture has negative effects over the natural resources. For example, organic agriculture, similarly to conventional agriculture, enhances soil degradation, decreases water quality and biodiversity and produces extra CO₂ emission to the atmosphere. Its potential environmental advantage is to eliminate pesticide residues in some raw agricultural commodities, which is not a real problem in most agricultural ecosystems. In addition, organic agriculture production due to the no use of synthetic pesticides, fertilizers and pharmaceutical drugs often results in consistent technological gaps and decreased quality products.

Organic agriculture is supported by many administrations as an environmental friendly option in some areas of the world. For example, the EU developed the Council Directive 2092/ 91 and many European administration developed complementary regulation to support organic farming (in Spain Real Decree 1852/ 1993, among others). World- wide, the organic agriculture movement has a consolidated framework of norms, guarantee systems, accreditation program, farmers associations, retailers and consumers.

The International Federation of Organic Agriculture Movements IFOAM (www.ifoam.org) was founded in 1972, and co-ordinate world-wide the activities of organic agriculture in about 120 countries. However, overall it account for tiny percentage of the world agriculture surface: as an example, less than 3% in the EU.

Integrated agriculture (IA) production intend to combine a serious of farming practices and industrial transformations, according to previously defined guidelines, to assure that the overall processes provides consistent environmental advantages for the consumers. EU and its national administrations have developed the legislative framework: definition of integrated farming operation, regulating the entities of certification, and the use of a integrated agriculture logo as a attribute of certified environmental quality for consumers ("*Certified Quality*" Logo).

For example, in Spain integrated farming practices has been officially approved by the National and Regional departments of Agriculture for many cropping systems: fruits and vegetables, olive oil, citrus, strawberries and vineyard/ wine production, among others (www.mapya.es/). And the private companies and/ or associations that certify the integrated farming are accredited and supervised by the National Accreditation Entity (ENAC), which verify the fulfilment of the European Regulation EN-45011 (www.agroterra.com). The Food and Agriculture Organization of the United Nations (FAO) recognised integrated agriculture as a set of "good agriculture practices" (www.fao.org).

Integrating farming practices vary with cropping systems, permit or intend the "best" use of synthetic pesticides and fertilizers, and often include some conservationist practices (direct drilling, reduced tillage and cover crop under certain conditions), often without recognising their environmental excellency.

Green labelling or similar recognition for Conservation Agriculture products

Conservation agriculture (CA) can be defined as the set of techniques which alter the soil profile as little as possible, and so preserving its natural structure, fertility and biodiversity. Direct drilling/ seeding in annual crops and permanent cover crop, or crop residues over the soil, in tree plantations are the best environmental expression of CA, and of agriculture in the widest acceptance.

CA provides obvious environmental benefits since efficiently preserve natural resources such as soil, water quality, biodiversity and atmosphere/ global warming, among others. Therefore, it is obvious that products/ commodities obtained through conservationist techniques clearly deserve the consumer's environmental recognition and are susceptible to green labelling. Furthermore, CA is much more efficient in the preservation of the mentioned natural resources compared to others agriculture modalities such as OA and IA, which, as previously referred, receive green labelling or similar recognition for decades in many countries.

Regarding the potential green labelling of conservation agricultures several matters/ specifications should be discussed and clarified, as following.

a) Which CA modalities should be included in a green labelling scheme?. In our view, the excellency of CA techniques: direct seeding/ drilling in annual crops and permanent cover crops/ crop residues cover in fruit tree plantations/ globes, should only receive such recognition. In some countries, in a transition period, others CA modalities such as minimum tillage, although also provide clear environmental advantage over conventional tillage agriculture, could be considered.

b) Which agriculture commodities and manufactured food products are entitled for a green labelling scheme?. All agriculture commodities and derived manufactured food products can be subjected to a green labelling scheme if: 1) the agriculture commodities were grown under the excellency of the CA techniques previously mentioned; and 2) processing/ manufacturing and marketing of the obtained food product also follows the best environmental procedure. Necessarily, a "joint venture" in between farmers/ farmers associations, manufacturing industry and retailers are needed to set up a green labelling scheme for agricultural commodities.

c) An environmental labelling process is needed for CA. Similarly to others green labelling schemes, a labelling process is needed to be established for each agricultural commodity or manufactured product.

The follow-up or auditing of the agriculture side/ part of this process should not encounter special difficulty similar since CA techniques are easy to witness in certain period of the agriculture year, for example by ground visit or through aerial or satellite images. The subsequent labelling steps will be similar (manufacturing, retailing, merchandizing) than for many other products or processed.

Specific guidelines and labelling schemes for environmental friendly agricultural commodities have to be developed, tentatively under the supervision of independent organizations (so called “ISO family companies”) and with the approval of the administration/ government at a national and/ or international level

d) The role of National Associations and International Federations for Conservation agriculture. Generally, they can play an important role to enhance CA recognition and as link in between farmers cooperatives/ associations, manufacturers and the organizations/ companies which supervise the labelling process.

At this time, it is important to remind that the recognition/ level of awareness of conservation agriculture products by consumers is still very weak even in the most advanced conservationist countries (USA; Brazil and Argentina). Generally, CA has been accepted/ implemented very recently, throughout the 1990's, in some areas of the world: USA, Brazil, Argentina, to mention a few countries. The acceptance and development of CA is expected to take place in this and next decade in other areas (Europe). Main reasons for this acceptance/ implementation of CA have been cost saving in Brazil and Argentina and environmental subsidies from the public administration in other areas (USA). Green labelling of CA products can be an additional value for the worldwide acceptance of CA.

A World Conservation Agriculture Federation is needed

Generally speaking, CA currently receives much less attention from the mass media and consumers than others environmental friendly agricultural movements, such as OA and IA. Paradoxically, we can state based on solid scientific knowledge that CA is the right set of techniques to conserve/ preserve essential natural resources such as soil, water, biodiversity and air, and in this regard over-exceeding the over-recognised OA and IA practices.

Similarly, we can say that consumers' awareness of the environmental benefits of conservation agricultural products is still non-existing or very low. In other words, joint ventures in between conservationist farmers, transformation industry, food distribution and shopping chain need still to be developed.

In addition to the existing trans-national CA federations, such as American CAAPAS (Confederation for a Sustainable Agriculture), ECAF (European Conservation Agriculture Federation), and others, to bring all these together into a *World Conservation Agriculture Federation* may strengthen and enrich the CA movement by a) providing and exchanging authoritative information; b) setting up basic standards, accreditation criteria, certifying programmes, and certified quality logo; c) linking organic sectors producers, industry/ manufacturers and consumers at a trans-national level; and d) representing conservation agriculture at international policy making forums such as UN, FAO, EU, and World Trade Organization.

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