



COMUNE DI TERLIZZI



LIFE04 ENV/IT/000480



DEMONSTRATIVE PROJECT FOR THE ENVIRONMENTAL PRODUCT DECLARATION: THE
FLOWERS OF TERLIZZI AND THE LOCAL ECO-LABEL "ECOFLOWER TERLIZZI"

Task 4

Activities for EPD writing

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INDICE

1	FLORICULTURE IN THE WORLD.....	4
2	EUROPEAN FLORICULTURE.....	5
3	ITALIAN FLORICULTURE.....	6
4	FLORICULTURE AND ECO-LABELLING.....	7
5	THE MAIN CERTIFICATION PROGRAMS.....	9
5.1	Veriflora (USA)	10
5.2	Code of Practice - Kenya Flower Council (Kenya).....	11
5.3	Florverde (Colombia).....	12
5.4	Flower Label Program - FLP (Germany)	14
5.5	Milieu Project Sierteelt – MPS (Holland).....	16
	MPS – ABC.....	16
	MPS – SQ.....	17
	MPS – GAP	17
	MPS – Florimark	18
	MPS – FFP	18
5.6	British Ornamental Plant Producers Scheme – BOPP (Great Britain).....	19
5.7	EUREPGAP (Europe).....	21
5.8	Max Havelaar (Switzerland).....	23
5.9	Sierra Eco Label (Canada)	25
5.10	Milieukeur (Holland).....	26
6	THE ENVIRONMENTAL PRODUCT DECLARATION (EPD): THE FLOWER OF TERLIZZI	27
7	CONCLUSION.....	30

1 Floriculture in the world

Statistical data on world-wide floriculture are largely incomplete and altogether not homogenous: on the whole, in 1995 the GSP (Gross Selling Production) approximately reached 25 billions of dollars, exploiting 650,000 hectares of soil and an amount of 2 million workers.

The main Asian producers are: China (86,000 he), India (34,000 he), Japan (8,000 he), Thailand (7,000 he), Korea (5,300 he).

In the Middle Eastern: Israel (2,063 he) and Turkey (670 he).

In North America: United States (10,000 - 15,000 he) and Mexico (5,000 he)

In South America: Colombia (4,200 he), Costa Rica (3,600 he); Ecuador (2084 he)

In the African area: Kenya (1,280 he), Zimbabwe (940 he), Ivory Coast (690 he), Morocco (450 ha).

The increasing production in areas where local consumption of flowers is low, is led by great foreign companies while in Europe and Japan the traditional companies are medium-small and led to familiar level.

The international commerce will presumably lead to the affirmation of three great areas of production with the consequent export increment towards the main markets of consumption: from Holland and Africa towards Europe, from the South America towards the United States and from China towards the other Asian nations, like shown in Fig. 1.

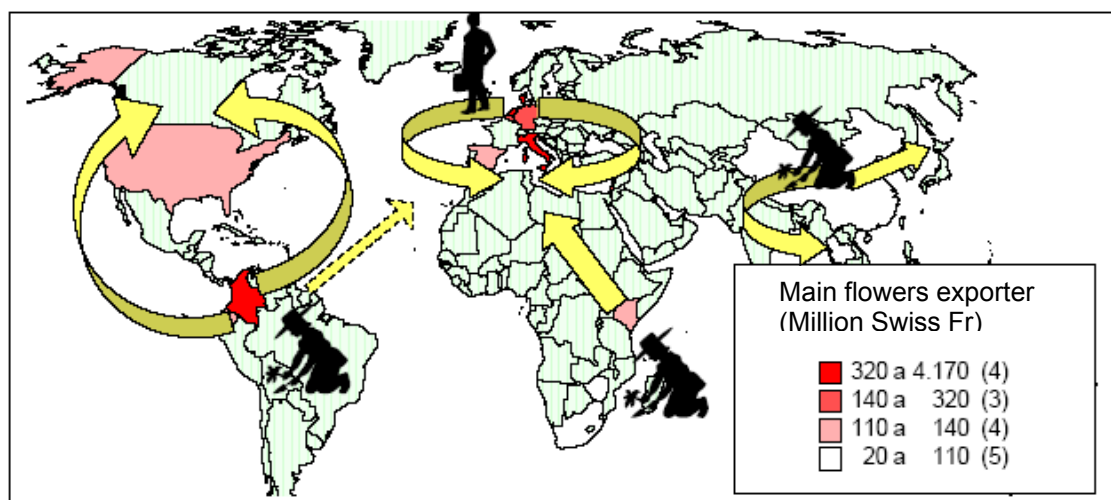


Figure 1 – Flowers commerce tendency in the main areas of production (data elaboration Coldiretti)

2 European Floriculture

Italy employs the widest area in Europe in flower production but Holland, thanks to the techniques and the productions in greenhouse, produces 70% more per hectare than Italy.

From 1989 to the 1997 the EU imports have grown (109%). The main suppliers of flowers of the European Union are Israel (37,000 t), Kenya (29,000 t) and Colombia (20,000 t). Holland satisfies more than 50% of the European flowers import and also represents the 60% of the export world-wide.

As far as the consumption, Europe absorbs 50% of the world-wide production of cut flowers. The Germany is the main consumer, followed by United Kingdom, France and Italy. The European market showed in the last decade a general consumption decreasing (Table 1)

Table 1 - consumption of plants and cut flowers (in million euros)

	2002	2003	2004
Total Consumption			
Germany	3,098	3,017	2,972
UK	2,400	2,480	2,667
France	1,995	1,969	1,939
Italy	2,020	1,950	1,804
Spain	776	819	969
The Netherlands	957	860	877
Belgium	449	440	450*
Austria	352	n.a.	370*
Sweden	n.a.	308	310*
Poland	282	264	252
Denmark	n.a.	219	220*
Greece	n.a.	183	180*
Finland	179	177	167
Portugal	n.a.	163	170*
Hungary	126	133	143
Ireland	119	123	141
Czech Republic	97	106	100*
Slovenia	57	58	47
Slovakia	40	38	36
Total*	12,049	11,888	12,014

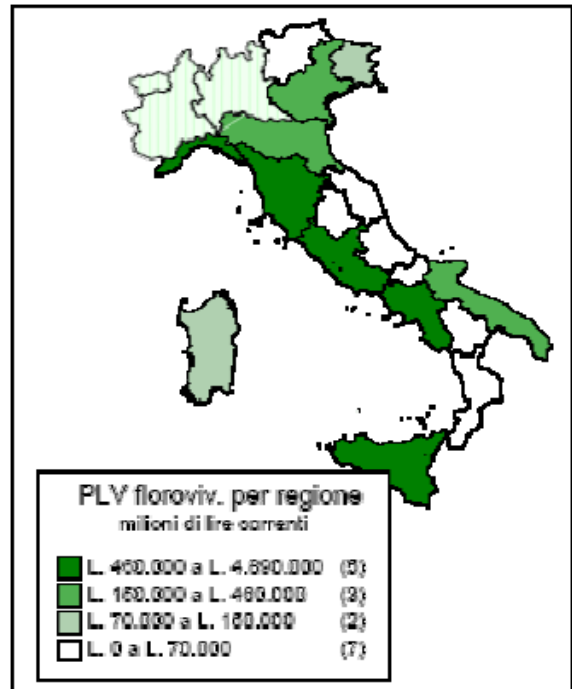
3 Italian Floriculture

The ISTAT for 1998 has estimated that in Italy the floriculture activities reached 2.5 billions of € (3,658 billions flowers and 1,071 billions plants), approximately 7% of the national agriculture (GSP). The national land used for the floriculture reaches altogether is 36,300 hectares. The number of the companies is of 31.843 that employ approximately 100.000 workers.

The greater amount of plants and produced flowers is commercialized in Germany (39% of export the total), while the Holland is the main import partner (Figure 2).

Table 2 – 1998 Italian GPS in million Liras (source data ISTAT data processing Coldiretti)

Milioni di lire corr. - elaborazione Coldiretti su dati ISTAT			
Regioni	FIORI	PIANTE	TOT.
Liguria	1.075.690	2.900	1.078.590
Toscana	288.561	388.857	677.418
Campania	501.453	17.549	519.002
Sicilia	421.541	85.665	507.206
Puglia	400.011	58.354	458.365
Lombardia	210.500	132.612	343.112
Lazio	170.896	30.452	201.348
Veneto	165.804	34.252	200.146
Piemonte	83.250	68.346	151.596
Emilia-Romagna	85.475	66.001	151.476
Sardegna	36.200	65.233	101.433
Friuli-V. Giulia	44.563	55.930	100.493
Marche	41.988	27.017	69.005
Abruzzi	33.222	7.305	40.527
Calabria	19.541	19.174	38.715
Trentino-Alto Adige	18.350	2.973	21.323
Umbria	8.400	5.762	14.162
Basilicata	2.186	5.400	7.586
Molise	-	994	994
ITALIA	3.607.721	1.074.776	4.682.497



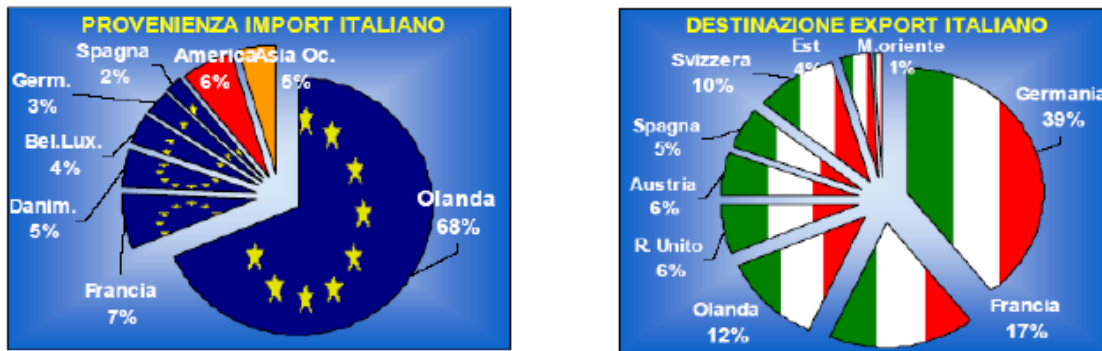


Figure 2 - Italian Import-Export of flowers and plants in the 1998 (data elaboration Coldiretti).

The Italian perspectives for the national cut flowers' market do not seem to be encouraging. An organic strategy lacks to back the floriculture development. Various structural problems affect this sector: the offer fragmentation (business medium amplitude 0,6 has) and the weakness of the distribution (14,500 points sale, 3,250 garden, 2,150 near super and hypermarket) determine losses of competitiveness.

The increase of the international competition and the production costs, with the concomitant lowering of prices and inner consumption, reduced the operating margin of the enterprises.

Coldiretti suggested various actions to throw the market::

1. Cost reduction;
2. Professional formation and R&D activities;
3. Reorganization of the commercialization network;
4. Valorisation and promotion of the field.

Considered the increased sensibility of the consumers towards the environmental problems, Coldiretti suggested the adoption of a label of eco-compatibility for the national production.

4 Floriculture and eco-labelling

Biological and sustainable agriculture, because of the consumer's increasing interest, attracted the attention of the producers. Sustainable agriculture asks efficient use of the resources, ecosystems safeguard, minimization of the impacts maintaining and improving the business profit.

In order to achieve this objective is necessary to adopt management systems for the entire productive cycle. Such systems are regulated from specific Guide Lines representing the core of every certification program. A program finalized to the spread

of biological agriculture is the NOP (National Organic Program), developed in the 2002 from the USDA (United States Department of Agriculture), for the certification of biological agricultural products including cut flowers, which defines specific agricultural criteria.

More information is available at the site:<http://www.ams.usda.gov/nop/indexIE.htm>.

Such approach in Italy is still little developed. The first Italian research program on the biological floriculture was in 2004: "The Probiorn Project (Biological Production of Plants Ornaments <http://www.cespevi.it/probiorn/probiorn.htm>).

In some Countries of the North and Center Europe, in the United States and some Africans and South Americans Countries, the flowers produced with low impact cultivation techniques are acquiring market shares. In order to contribute to the diffusion of such products and improve their economic value various programs of certification and eco-compatibility labels were developed. Beyond guaranteeing the respect of the enforced norms, they define social and quality standards compulsory for label attribution.

The criteria regulating the cultivation of the flowers are:

Social Aspects:

- ✓ infantile job;
- ✓ obliged job;
- ✓ health and safety on the job;
- ✓ freedom of association, rights of joint negotiations;
- ✓ discrimination;
- ✓ working hours;
- ✓ Payment criteria.

➤ **Environmental Aspects:**

- ✓ organic methods in agriculture;
- ✓ environmental protection and of the various ecological resources;
- ✓ minimization of pesticides and fertilizers use;
- ✓ water resources management
- ✓ waste management;
- ✓ optimization of the energetic efficiency.

➤ **Standard** quality of the product.

5 The main certification programs

The certification programs described are:

1. Veriflora (United States)
2. Code of Practice - Kenya Flower Council (Kenya)
3. Florverde (Colombia)
4. Flower Label Program - FLP (Germany)
5. Milieu Project Sierteelt - MPS (Holland)
6. British Ornamental Plant Producers Scheme - BOPP (England)
7. EUREPGAP (Europe)
8. Max Havelaar (Switzerland)
9. Sierra Eco Label (Canada)
10. Milieukeur (Holland)

For each of them the main characteristics and the web site have been listed.

5.1 Veriflora (USA)



Veriflora is the first environmental label created in the United States for Floriculture Company's certification. It has been introduced in the conference "Eco-Flower Power: Sustainability Trends for the Floral Industry" (S. Francisco 03 June 2005) within the "World Environment Day 2005", instituted by the United Nations.

Veriflora is a certification program created on the base of various existing European experiences: its standards address the respect of the environment and the protection of the workers. The program defines practical criteria for flowers and plants cultivation managing the activities that go from the preparation of the land and the cultivation to the final treatments for the preservation of the cut flowers.

The criteria of the Veriflora program are based on six classes of principles:

1. The use of agricultural practices based on organic methods of cultivation;
2. Water resources management;
3. Protection of the environment and of the ecological resources;
4. Waste management;
5. Social responsibilities (safety of the workers, working contracts);
6. Quality products maintenance also after their collection.

More information on the program at the following web sites:

<http://www.scscertified.com/csrpurchasing/veriflora/index.html>

http://www.organicbouquet.com/i_57/Pressroom/OrganicNews/Veriflora.htm

<http://www.sijournal.com/living/1744762.html>

5.2 Code of Practice - Kenya Flower Council (Kenya)



The Code of Practice is a national environmental certification program for the floral industry created in 1996 in Kenya by the Kenya Flower Council (KFC). KFC is a national consortium that promotes the economic, social and political interests of the floral industry, participating to the preparation and the execution of the politics governing the development of the sector.

The 52 agricultural companies associated, distributed on the national territory, with their production consisting mainly of gillyflowers and roses, cover approximately l'80% of the exports of cut flowers from Kenya. Such exports represent approximately 25% of the European Union sales of which the Kenya, after Israel, is the main extra communitarian supplier. The Code, in particular, defines the standards for the environment and the workers protection; it has the objective of improving the techniques of cultivation of flowers, protecting the health and the working conditions of the employers of the sector and contributing to the diffusion of these products in the world. The Code of Practice (sixth reviews) has obtained the "Equivalent Status" from EUREPGAP (EUREP Good Agricultural Practices) for the cut flowers. The Code of Practice KFC has two levels of certification, depending on the fulfilled requirements. The first level, called "Silver Standard", requires the respect of the following points: the international standards of the ILO (International Labour Organization), the keniota norms, the working rights, the standards of health and safety. The level called "Gold Standard", which can be obtained only after the Silver one, imposes to the companies more restrictive limits. The controls in order to verify the respect of the program are carried out every six months and the companies that pass the verifications can expose the logo KFC on their products. In 2002 KFC has signed an agreement with the Milieu Project Dutch Sierteelt for its involvement in the certification and auditing process.

More information on the program at the web site:

<http://www.kenyaflowers.co.ke/>

5.3 Florverde (Colombia)



Florverde is a certification program instituted in 1996 in Colombia from Asocolflores, Colombian association for the commerce of the flowers. The national voluntary program has been created in order to improve the environmental and social performances in flowers production, exploiting also the economic aspects. In Colombia the cultivation of cut flowers begun in 1965 with the promotion of the USAID (United States Agency for International Development) in order to replace the cultivation of the cocaine.

Colombia has become the second exporter in the world for cut flowers after Holland (approximately 80% towards the United States and 14% towards the Europe of which it represents the third supplier), thanks to the favourable climatic conditions, the strong orientation to the export and a trade's organization similar to the Dutch model.

The criteria of Florverde are based on:

Social Aspects:

- management and organization of the staff;
- formation of the staff;
- Health of the workers.

Environmental aspects:

- reduction of the pesticides use;
- water resources management;
- Waste management;
- organic fertilization and reduction of chemical products

Florverde is articulated in four levels of certification, depending on the fulfilled requirements. The program includes not only the management of the certification process, but also the support to the companies for the improvement of their

performances (conferences, workshop and monographs on the best techniques available on the market). Moreover the companies can send their production data to Asocolflores which supplies technical advising identifying the necessary actions of improvement. The costs of participating to the Florverde program is approximately 750 \$. In the 2002 Florverde started a collaboration with the Société Générale de Surveillance (SGS), an independent international certification and verification agency who annually leads the official verifications in the companies. Currently, 60 of approximately 140 Columbian companies that have joined the program have obtained the certification from the SGS, and are able to exhibit the Florverde logo on the own products.

More information on the program at the following web sites:

http://www.asocolflores.org/info/info_florverde.php

http://www.asocolflores.org/noticias/noticias.php?action=detail&id_publicacion=166

http://www.asocolflores.org/noticias/news.php?action=detail&id_publicacion=62

5.4 Flower Label Program - FLP (Germany)



The Flower Label Program is an international program of certification for the market of the cut flowers; it has been instituted in Germany in the 1998 from the two main German associations that represent the market of the flowers: the German Flower Wholesaler and Importer Organization (BGI) and the Professional Association of German Florists (FDF). The Flower Label Program is a result of the “The Flower Campaign” started in Germany and Switzerland to leave in 90s in order to improve the conditions of the Columbian workers. Various humanitarian organizations for the protection of the human rights played a fundamental role in the development of the program. The FLP promotes the protection of the environment, of the health and of the workers job conditions . The program adopted the 10 paragraphs of the International Code of Conduct (ICC) and the code for the protection of the human rights based on standards ILO (International Labour Organization). As a result of such integration, the criteria for the application of program FLP (“Guidelines for the Socially and Environmentally Responsible Production of Cut-flowers”) have been subdivided in 10 paragraphs that reproduce the structure of the ICC.

The certification program is managed by the “Board of Directors of FLP” whose members are:

- German Flower Campaign (Bread for the World, FIAN, Terre des Hommes);
- The international trade union IUF (International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco) in collaboration with the German trade union IG BAU (Trade Union for Construction, Agriculture and Environment);
- Africa and South America cut flower producers;
- Flower traders like BGI e la FDF.

The total amount of certified companies FLP is 60; the verification body is the AGC GmbH (German based Agrar-Control GmbH) inspection. If the outcome is positive the companies becomes members of the program, with the possibility to use the label FLP. The verifications are annual.

More information on the program at the following web sites:

<http://www.fian.de/fian/index.php?option=content&task=view&id=10&Itemid=50>

<http://www.fian.at/>

<http://www.fairflowers.de/?&L=1>

<http://www.fairflowers.de/7.html?&L=1>

<http://www.ekd.de/bulletin/2718.html>

5.5 Milieu Project Sierteelt – MPS (Holland)



The Milieu Project Sierteelt is an international organization of certification created in Holland in 1993, which operates in 15 Countries. The MPS has given origin to various programs of certification aimed at improving the cut flowers and the plants production from both social and environmental points of view. Such programs encountered the favour of the cultivators: ten years after their creation the adhesions approximately were 5000.

More information on the program at the web site:
<http://www.my-mps.com/asp/page.asp?sitid=336>.

MPS – ABC

It is a label for environmental certification subdivided in 3 levels (A, B, C) depending on the requirements fulfilment. The A level is associated to the “most environmental friendly cultivation” conditions.

The program evaluates the use of fertilizers, pesticides, energy and the management of the waste on a period of four weeks, determining the level achieved through a calculation system that sum the assigned points for each category. The MPS is an accredited organization since 1999 and it is authorized to the release of environmental certifications to the companies.

More information on the program at the web site:
<http://www.my-mps.com/asp/page.asp?sitid=453>.

MPS – Quality

The MPS-Quality is a quality assurance system for cultivators and traders of the floriculture. The quality assurance is a strategic choice for cultivators that, participating to the MPS-Quality, obtain an improvement of their image and of the quality of their products.

MPS – SQ

The MPS Socially Qualified (SQ) label certifies the respect of the workers conditions according the international standards of the ILO (International Labour Organization) for the protection of the human rights.

More information on the program at the web site:

mps.com/asp/page.asp?sitid=633.

MPS – GAP



Label MPS Good Agricultural Practice (GAP), created in 2004 to defend the good practices of cultivation of flowers and plants. It is based on the guide lines previously elaborated from EUREP.

MPS, on the basis of such guide lines, has created theist own label, including also various social aspects. Starting from June 2004, MPS-GAP was the first program to be recognized from EUREP, in other words, MPS-GAP can officially be considered equivalent to EUREPGAP.

More information on the program at the web site:

mps.com/asp/page.asp?sitid=454.

MPS – Florimark



Label of excellence for the best cultivators. It can be attributed after obtaining the following levels of certification:

- MPS-A;
- MPS-GAP ;
- MPS-Q ;
- MPS-SQ.

More information on the program at the web site:

<http://www.my-mps.com/asp/page.asp?sitid=455>.

MPS – FFP

This program of certification, created in 2005, combines the environmental and social standards of the other two programs of the organization: - MPS-A. ; MPS-SQ.

As for Florimark it is possible to obtain the release of the MPS-FFP (Fair Flowers Fair Plants) only after achieving these two levels of certification. The program is supported from public and private organizations of producers, traders and retailers. An important contribution to the development of the label has been given by the European Union that has stimulated the sustainable production of flowers.

More information on the program at the following web sites:

<http://www.my-mps.com/asp/page.asp?sitid=607>.

<http://www.fairflowersfairplants.com/home-en.aspx>.

5.6 *British Ornamental Plant Producers Scheme – BOPP (Great Britain)*



The British certification scheme BOPP (British Ornamental Plant Producers Scheme) was developed in the mid-90s from the cultivators of plants and cut flowers in order to guarantee the fulfilment of certain criteria with respect to legal, environmental and quality requirements.

BOPP is a non-profit making organisation. It is now a Limited Company, comprising a Board of Directors and a Technical Standards Committee, with representatives from all sectors of the industry, which is in charge of the definition of the standards.

The Scheme aims to set high standards of professionalism in the way in which certificated businesses operate and, through effective evaluation by a UKAS (United Kingdom Accreditation Service) Accredited Certification Body, ensure these standards are maintained.

The BOPP has two different schemes of certification: one for the cultivators, one for the product's packaging producers. For the cultivators the program includes two levels of certification: the first one, called "Silver Grower Standard", is characterized from one evaluation per year, the second, the "Gold Grower Standard" needs two annual inspections.

Packaging producers can obtain the "Ornamentals Packhouse Standard", which requires only one yearly inspection. Who wishes to enter the program automatically becomes "a bronze" member and is required to become certificated against either, or both, the Silver Grower Standard or the Ornamentals Packhouse Standard within a year of joining the Scheme.

- ✓ Social Aspects:
 - Organization and workers management;
 - Health and wellness of the workers.
- ✓ Environmental Aspects:
 - Fertilizer and pesticides reduction;
 - waste management;
 - Optimization of the energy efficiency.

The program Silver Grower Standard has been recognized from EUREP and can officially be considered equivalent to EUREPGAP.

More information on the program at the web site:

<http://www.bopp.org.uk/home/>.

5.7 EUREPGAP (Europe)



EUREP (Euro Retailer Produce Working Group) was developed by the greatest European supermarkets in 1997 in order to support the commercialization of agricultural products cultivated in agreement with the common protocol called EUREPGAP (Good Practice Agricultures). It guarantees the protection of the environment and of the workers health.

The protocol has been written to represent all the fields of the floriculture industry. Program EUREPGAP is applicable in any Country of the world, it sets standards for various categories of products; those for the flowers and plants (“EUREPGAP Control Points and Compliance Criteria for Flowers and Ornamentals”) have been published in November 2002. For every category of standard they specify the criteria for the attainment of the certification.

The aspects considered are the following:

1. Traceability;
2. Recordings control;
3. Cultivar variety;
4. Business locations, site history and management;
5. Land management;
6. Fertilizers use;
7. Irrigation techniques;
8. Phyto-sanitary integrated defence of the cultivations;
9. Collection and storing;
10. Post collection procedures
11. Waste management
12. Job hygenical-sanitary aspects;
13. Environmental aspects;
14. Complaints management;
15. Inner inspections.

EUREPGAP encourages the introduction of techniques of IPM (Integrated Pest Management) and of ICM (Integrated Crop Management).The adoption of strategies

IPM/ICM is considered to be essential from EUREP members to improve the quality of flowers production.

The main objectives are:

- a.** keeping the consumer's confidence;
- b.** reducing the environmental impacts;
- c.** reducing the use of pesticides;
- d.** promoting an effective use of natural resources;
- e.** protecting workers health and safety.

The program has had a remarkable development thanks to the adhesion of the main English and Swiss supermarkets that have had the main role in the definition and the development of the standards.

A system called EUREPGAP Benchmarking allows comparing different national or regional certification programs to evaluate their equivalence to EUREPGAP and optimise the integration of different programs.

More information on the program at web site:

http://www.eurepgap.org/flower/Languages/English/index_html.

5.8 Max Havelaar (Switzerland)



The foundation Max Swiss Havelaar was created in 1992 on the example of the foundation that already operated in Holland from 1988. The success achieved from the first foundations Max Havelaar in Switzerland and Holland, has stimulated the creation of further agencies in other countries of the world:

- ✓ Max Havelaar in Belgium, France, Denmark and Norway;
- ✓ TransFair in Italy (<http://www.equ.it/>) Germany, Austria, USA, Luxembourg, Canada and Japan;
- ✓ Fairtrade Foundation in Great Britain (http://www.fairtrade.org.uk/about_us.htm) and Ireland;
- ✓ Rättvisemarkt in Finland and in Sweden (<http://www.rattvisemarkt.se/>).

The Max Havelaar is a non-profit making organisation., founded in Swiss from six great organizations of cooperation for the development (Brot für to, Caritas, Fastenopfer, HEKS, Helvetas and Swissaid), and with the contribution of the Swiss federal Office for the foreign economy (Seco). Objective of the foundation is the promotion of goods produced in underdeveloped nations that respect the principles of the fair trade and operate respecting the environment. In order to obtain the Max Havelaar label, it is necessary that the companies respect the standards established from the Fairtrade Labelling Organizations International (FLO), an organization of certification for fair trade created in 1997 that offers services in following fields:

- ✓ definition of the international standards of the fair trade;
- ✓ certification and control of the organizations of producers and workers in the development courtiers;
- ✓ net of support for the organizations of producers and workers;
- ✓ Management of the information on the organizations of producers and workers.

FLO has defined two categories of international standards for the fair trade: for small companies (Generic Fairtrade Standards for Small Farmers Organisations), and for companies that employ a large number of workers (Generic to you Fairtrade Standards

for Hired Labour). These standards are grouped in “minimum requirements”, necessary for the certification, and in “progress requirements”, in order to improve the job conditions and the quality of the product.

Beyond such standards, specific ones for product categories exist. In 2001 standards for cut flowers have been included and in 2004 those for the plants.

The Max Havelaar label guarantees:

- ✓ Prices able to assure the workers future;
- ✓ sailing contracts guaranteed, for at least one year,;
- ✓ raw materials coming from selected producers;
- ✓ Awards for the fair trade and the improvement of worker life conditions.

Prices of the products with the Max Havelaar quality label include an extra price, whose 50% is given to the companies that assign these sums to an economic fund (Joint Body) for the development of plans of improvement of the worker conditions. The remaining 50% is used from Max Havelaar in order to execute the necessary controls and to make the public opinion aware about the fair trade products purchasing.

The social aspects of the program, regarding the commerce of the cut flowers, require the respect of the international standards of the ILO (International Labour Organization) for the protection of the human rights; the program requires: written working contracts, clear regulation of the working hours and additional hours, freedom of association in union trades or organizations, protection of safety and health, renunciaiton to the children job and to the discrimination. The environmental aspects require the application of the Code of Conduct for the cut flowers (ICC) and the continuous improvement efforts particularly in reducing the use of chemical products

More information on the program at the web site:

<http://www.maxhavelaar.ch/en/>

5.9 Sierra Eco Label (Canada)



The Mountain range Eco Label (Canada 1986), is a program for the creation of an environmental label for the cut flowers, whose main objectives are:

- ✓ environmental and social awareness promotion in the cut flowers sector according to the principles of the fair trade
- ✓ workers job condition, health and wellness
- ✓ environmental protection promotion by improving the environmental performances;
- ✓ Increasing the sales of flowers produced according the program rules.

For the label development Mountain range has adopted the programs of certification FLP and Florverde establishing collaborations with these organizations, which offer the services of audit and the declarations of conformity.

More information on the program at the web site:

<http://www.sierraeco.com/>

5.10 Milieukeur (Holland)



Holland environmental Label is developed and managed by SMK (Stichting Milieukeur) organization in charge of the European environmental Ecolabel management in Holland. The Milieukeur program was born in 1992 on the initiative of the Ministry of the Environment and the Economy and since 1995 involved also the Ministry of Agriculture. In 1997 the flowers and plants certification criteria have been introduced , which concern the productive cycle from the production, trough the cultivation to the distribution and sale. To obtain this certificate the companies must have the MPS-A certificate

More information on the program at the web site:

<http://www.milieukeur.nl/nl-NL/default.aspx>

6 The Environmental Product Declaration (EPD): the flower of Terlizzi



Enea has carried out a review of the state of the art of the Environmental Product Declaration (EPD) and the environmental labels in the floriculture sector.

The produced documentation was the basis to define the procedures for the Program Operator of the system DAP Ecoflower.

The system needs the institution of a Program Operator (P.O.) for managing the Ecoflower DAP: It should also act as program manager in the ecological type I label awarding.

A draft statute of the Program Operator has been prepared, The members could be the partners of the project and stakeholders interested in the activity of the system.

The operative functions within the P.O. are the following:

- The Board of Directors,, with functions of steering the Program and approving the technical committees' acts;
- A Technical Committee for PCR and DAP evaluation;
- A Technical Committee for accreditation of the certification agencies

The activities has led to the definition of:

- Scope and objectives of the program;
- Identification of the Program Operator;
- Main objective of the Program with reference to the market;
- Stakeholders Involvement
- Procedures of EPD definition
- Procedures of PCR development and the updating;
- Procedures of DAP development and the updating;
- Procedures for the accreditation of the verifiers;
- Procedures for the independent verification.
- Tasks of the companies and the organizations
- Tasks and requirements of the Program Operator
- Use of the EPD in the information and marketing activities
- Registration and publication fees
- Statute draft

The final version of the documents has been prepared taking into account the comments collected during the partner's discussion.

The operating procedures of the Program Operator include also the definition of a Methodology of DAP validation.

The accreditation process needs the participation of experts accredited by a national accreditation Agency (SINCERT in Italy) for the verification and validation of the DAP according to the: UNI CEI EN 45011 Ed 1999; Guide EA-6/01 rev 0 Ed. 1999; ISO/TR 14025:2000; SEMEC MSR 1999:2.

The P.O. will have the legal order of the Association named C.A.C.V. (Ecoflower Committee for the Accreditation and the Conformity Verification). The C.A.C.V. will be a no profit association instituted for the promotion of the ECOFLOWER-TERLIZZI label. The statute regulates the operative functions of the C.A.C.V.

The program is mainly addresses to the final consumers.

The members of the C.A.C.V. are:

- The Assembly of the Associates;
- The Board of Directors;
- The President and Vice-president;
- The Director;

A Technical Committee that will assume the functions of:

- o Technical committee for PCR;
- o Technical committee for EPD evaluation;
- o The Accreditation Committee;
- o The Committee for the verification of conformity;
- o The Commission of appeal;

The Board of Directors exerts Technical functions as:

- o drafting, updating and communicating the general instructions of the Program;
- o assuring the respect of requirements for EPD;
- o publishing the names of the organizations involved in the program development;
- o publishing documents on PCR and EPD;
- o monitoring the changes of the procedure and documents regarding DAP;
- o writing the norm for EPD label attribution;
- o writing normative and criteria for certifiers accreditation and defining their basic knowledge in the field;
- o writing documents defining timing and modalities of "audit";
- o writing the procedures for PCR evaluation;

- approval of the procedures for keeping the data coherence ;
- approval of the procedures in order to avoid the erroneous use of the references to:
 - norm ISO 14025,
 - the EPD program,
 - EPD declarations,
 - The logo of the label.

They have to assure also the:

- accuracy in the independent verifiers and the technical committee selections;
- transparency of the procedures .

The Board of Directors will be supported by the following technical members:

Technical Committee will evaluate the PCR and the EPD

The Technical Committee in PCR appraisal will analyze to the companies/organizations proposals to obtain a certified EPD. Moreover, the committee establishes in collaboration with the companies/organizations the modalities of the “Open Consultation” that have to guarantee the transparency of the procedural system. To encourage the participation of worldwide stakeholders the Open Consultation has been activated in the form of a forum on the World Wide Web (www.ecodap.it).

The role of the Technical Committee regarding the EPD awarding is to analyze the companies/organizations proposals that ask for a certified EPD. The procedure will be organized as for PCR approval.

The final approval of PCR by the Board of Directors will pass through the open consultation on the web, and a first evaluation conformity verification of the Technical Committee

In order to assure the technical competence of the Certification Agency a Committee of Accreditation will be instituted. It has to establish the basic competence of the Certification Agency and verify the requirements satisfaction finally it will attest the accreditation.

The Committee of Accreditation in collaboration with the Board of Directors will define modalities and times of the inspections to the Certification Agency.

Because of the role and functions of the Committee is necessary that the members have technical-administrative competencies.

7 Conclusion

The analysis of the main certification programs of the flowers industry showed increment of a market for flowers production that uses techniques with low environmental and social impact .

One of the most widespread certification programs in world-wide is the Dutch Milieu Project Sierteelt (MPS), constituted by several certification programs according to the subject promoted (environmental protection, the respect of the workers, the quality of the product, etc.).

The German Flower Label Program (FLP) supports the protection of the environment and the safeguard of the job conditions. Another interesting program is the EUREPGAP (Good Practice Agricultures), which aims to favour the commercialization of agricultural products including flowers and plants. This system offers the possibility to define the equivalence between labels operating on national or regional level. Equivalence is verified through a system called acknowledgment EUREP (Euro-Retailer Produce Working Group) GAP Benchmarking: in this way the production companies have not to undergo multiple audit obtaining the harmonization of the existing labels.

KFC, MPS-GAP and BOPP Silver Grower Standard have been recognized by EUREPGAP. In general the certification programs regulate the cultivation of the flowers regarding the social aspects and the quality of the products.

Table 3 Scheme of the prescription types adopted by each label.

CERTIFICATION PROGRAM	ENVIRONMENTAL STANDARD	SOCIAL STANDARD	QUALITY STANDARD
VERIFLORA	X	X	X
KFC	X	X	X
FLORVERDE	X	X	
FLP	X	X	
MPS-ABC	X		
MPS-QUALITY			X
MPS- SQ		X	
MPS- GAP	X	X	X
MPS-FLORIMARK	X	X	X
MPS-FPP	X	X	
BOPP	X	X	X
EUREGAP	X	X	X
MAX HAVELAAR (FLO)	X	X	X*
SIERRA ECO LABEL	X	X	
MILIEUKEUR	X		

(*)Only generic recommendations

EcoFlower Terlizzi

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