Increasing Products' Value through Ecological and Organic Certification

CAMELIA IOANA UCENIC
Department of Management and Industrial Systems
Technical University Cluj Napoca
Address: Muncii Boulevard 103-105
ROMANIA

Abstract: - There are many key opportunities for improving the export and competitive performances of the sector of ecological certified products. Romania has great openings for promoting and developing the ecological agriculture due to an agricultural area of 14.8 million hectares and unpolluted soils. The project of Social Enterprise from Garda de Jos, Alba County, Romania is among the examples of how can be increased the product value, open new markets and export medicinal plants ecological certified. The procedure can be extended to other natural resources.

This study presents the general criteria regarding how should be organized and obtained a biological certification for a natural resource, in this case a medicinal plant, *Arnica montana.* The procedure is addressed to the requesters of the biological certification because only a small part of them know the correct method. In author's opinion, it is no other detailed work to support the producers and exporters of ecological certified products. The project for *Arnica Montana* was conducted under WWF supervision.

Key-Words: - authorization, certification, ecological market, ecological products, sustainable development, value

Acknowledgements:

The authors are grateful for the help of WWF and team members of the project. Special thanks for Mr. Klemens Michael and Razvan Popa, who were directly involved in the study of supply chain and ecological certifications.

1 Introduction

The marketplace of ecological products is on the increase at worldwide level. On the other hand it is a small amount of studies targeted on the international marketing strategies of eco-firms. The most important openings and challenges for international green marketing have to be recognized and analyzed in order to generate the best strategies which provide competitive advantages.

The results of comparison among Romanian and foreigner companies demonstrate significant differentiation between them. For example, the distinction from Romanian and British firms is principally determined by the level of development of their domestic market. The Romanian organizations frequently export ecological products using foreign agents, while the British firms trade internationally using their own brand name and attempting to control the foreign distribution channels. The similarity of the foreign market selection process applied by the UK eco-firms has allowed the development of a tentative theoretical framework in the second part of the paper. (Gurau and Ranchhod)

Within the last years, the growth of population and the increasing level of urbanization induced a set of changes in agriculture and in consumer's preferences. The population expansion and improvement in the standard of living created a higher demand for organic and ecological quality food products. In the same time the diet became more diverse. It was characterized by a higher demand for fruits and vegetables. On the other hand, the higher income determined increased quality consciousness of the urban population.

2 Romanian ecological market evolution in facts and figures

Agriculture plays an important role in the

Romanian economy. Some of the most important data, which characterized Romanian agriculture, are presented below.

Considering an agricultural holdings as a single unit both technically and economically, that has single management and which produces agricultural products, the number of Romanian agricultural holdings was 7.656.000 in 2001, 4.484.890 in 2003 and 4.256.150 in 2005 (Eurostat)

According with the research of OECD, Center for Cooperation with nonmembers, after the revolution, the property restitution has left 91,6% of all private farms, or 54,5% of the country's arable land, in plots smaller than 5 hectares. This surface is enough to provide subsistence income for a family. A negative aspect is the lack of the investment capital and the neglected infrastructure. The storage facilities, farm equipment, irrigation systems have deteriorated significantly in the last decade when the state ownership no longer applies.

The evolution of the number of agricultural holdings according with the area of holding is listed in the following table.

	2003	2005
Agricultural holdings with area < 5 ha	4205.08	3870.72
Agricultural holdings with area < 5-20 ha	256.29	355.48
Agricultural holdings with area < 20-50 ha	9.48	16.12
Agricultural holdings with area > 50 ha	14.05	13.83

Table 1: Number of agricultural holdings (Source: Eurostat)

The attention for organic farming is growing. The National Federation of Ecological Agricultural (FNAE) comprises about 4000 farmers (Ucenic, 2003). The government is also concerned about this topic and promoted organic agriculture, in particular in mountainous areas.

One of the problems was that in a survey about what almost any Romanian farmer knows about organic agriculture, the first answer was that all family farms are organic. The justification is that they cannot afford to pay fertilizers and pesticides. Some authors named this situation "organic farming by poverty" (Lubieniechi, 2002). After the last measures and supports it is the expectation of the development of a modern organic farming in Romania.

In addition, there are also nongovernmental organizations, which work in the equivalent trend and are among the most important players in promoting sustainable agriculture. The past shown that is interest in more environmentally friendly practices despite that the execution is not easy.

The producers have the same opinion with the idea of the establishment of a healthier product in the same time with obtaining a better price for it. Unfortunate the risk is high because do not exist a real domestic market for organic products. The concept is relatively unknown for the majority of the population. Another problem is that the producers will loose money during the conversion period before certification. In the end, the long-term benefits must be more important than the risks.

According with the survey of SOEL in February 2003, the situation in Romania regarding land area under organic management is:

- number of organic farms: 1200;
- organic hectares: 18,690;
- share of the total agricultural area: 0,20%.

The Ministry of Agriculture, Food and Forestry MAAP announced in a report in 2002 its plans to increase the areas for ecological farming to around 57,200 hectares in 2003 and to 75,500 hectares in 2004. At the same time, MAAP planed to increase the number of livestock involved in ecological farming from 20,000 in 2002 to 24,000 in 2003 and 30,000 in 2004.

The National Ecological Farming Federation targeted production development, marketing of organic products and the harmonization of production and inspection regulations. The Farming Federation's Strategy was to create farming conditions beneficial for exports. (Crowder, 2001) The goal was that, by 2004, Romania to be able to export organic products under its own trademark.

A good aspect was that in 2000, the Romanian government approved the legislation setting EU compatible organic standards in Romania. The problem is that both, conventional and sustainable agriculture depend on improved seeds variety, soil conservation, rational use of modern machinery and waste management. The organization TER believes that the goal of 10% organic and 15% sustainable agriculture is achievable by 2010 (AgroTerra, 2007).

3 New trends and strategic goals in Romanian eco sector

The procedure of scheming of the Romanian export strategy targeted on ecological products is on the rise in the framework of market globalization and the tendency towards healthy products.

Simultaneously with the expansion of market necessities, it is indispensable to generate a plan which encloses the required steps for responding at the great demand for ecological products at European level, both from qualitative and quantitative standpoint. The market of ecological products is improving constantly and has a twelve-monthly enlargement of 20 %, according with governmental reports.

The products have to stand on their labels precise indications regarding the ecological processes and methods of manufacturing them and about their quality appraisal official recognition issued by a supervising organization in order to be authenticated as ecological and commercialized in the market.

There are some main concerns that should be identified and putted into operation in order to develop the ecological segment and to improve the competitiveness of the ecological products on their way to export markets.

One of the major points is to confine and maintain a greater part from the nationwide element of value chain during the orientation of production and sales towards primary products. It is also required a better promotion of the Romanian ecological products on the external markets, as well as a more intensive niche marketing and consolidation of the existing ones.

The control system for the ecological products has to be consolidating through complementary procedures designed to take charge of the examinations and official recognition bodies in order to develop the quality of exported products and goods. In addition, it is necessary to correctly implement the regulations that are elaborated for this sector.

Another concern is to create a suitable manufacturing, processing and marketing system for the ecological products, aimed to suit the needs of national and foreign markets. The development of the research area of activities related to the eco products and markets has to be increased.

All actors implicated in the ecological sector (growers, processors, inspectors, experts from the ministry, exporters and importers) need to pay a special attention for their professional improvement.

The quantitative goal was established as extending the cultivated area on ecological methods to 150,000 hectares in 2007 and creating the domestic market with ecological products. The qualitative goal was defined as positioning the ecological agriculture at the core of national agriculture as a booster for long-lasting development in rural environment.

The achievement of export targets is associated to other objectives in short, medium and long run that should result in competitiveness improvement of Romanian ecological sector in pre and post adherence period.

4 WWF as important player in supporting Romanian ecological certified product policies

WWF is one of the world's largest and most qualified independent conservation organizations, with approximately 5 million followers and a worldwide net active in more than 100 countries. Its mission is to prevent the deprivation of the planet's natural environment and to construct a future in which human beings live in harmony with nature:

- conserving the world's biological diversity;
- ensuring that the use of renewable natural resources is sustainable;
- promoting the reduction of pollution and wasteful consumption.

What do the initials WWF stand for?

WWF was founded in 1961 and the initials stood for the "World Wildlife Fund". The organization grew over the 70s. Starting with the 80s, WWF began to enlarge its effort to preserve the environment as an entire, reflecting the interdependence of all living things, rather than focusing on selected species in isolation. The legal name became "World Wide Fund for Nature" in spite of the fact that the initials remained the same. The only exception was in North America where the old name was maintained. In order to avoid misunderstanding and mixed messages across borders and languages, WWF is known as simply "WWF, the global conservation organization."

To carry on with the developing features of conservation and environmental movement, WWF did not grown only in size and but it also matured in its understanding of what was wrong and what was required to put things right.

Its center of attention evolved from restricted efforts in favor of single species that distinguished WWF in the 1960s, to new perspectives on all sides of national, regional and global scales of complexity.

The formal general director of WWF International, Dr. Claude Martin, declared:

"Our objectives have never been clearer - slow climate change, reduce toxics in the environment, protect our oceans and fresh waters, stop deforestation, and save species. Our great achievement over the past forty years is spreading the message - through us people know that nature counts."

In the future years WWF will keep on assuming its responsibility as a trustworthy and prominent global leader influencing at the maximum achievable levels and at the same time continuing firmly in contact with the realities. WWF is about "doing conservation", not simply talking about it!

The first WWF's mission in Romania was in 1990 and targeted the Danube Delta. The projects of association include the preservation of species which disappeared from other European countries as well as the untouched conservation of the rural style of life. Other two programs focus on the sustainable administration of natural parks and private forests.

Last but not least, the representatives of WWF Romania encourage the perpetuation of traditional habits from rural areas, including the projects related to the exploitation of medicinal plants from Apuseni Mountains, ecological agriculture and ecotourism - Andreas Beckmann vice director of WWF Danube – Carpathian program (Olivotto and Borza, 2007)

5 Case study: The obtaining procedure for organic certificate and export license in Romania – Example of "Social Enterprise" from Garda de sus, Alba County, Romania

The subsequent procedure establishes the general criteria regarding how should be organized and obtained a biological certification for a medicinal plant, *Arnica montana.* The procedure is addressed to the requesters of the biological certification. The study was done for S.C. ECOHERBA S.R.L, from Gîrda de Sus, Alba county. The steps for the certification process, harvesting, storage, drying, transportation and commercialization are controlled and should comply with the requests, with the national and international standards.

The agriculture represents a management system that produces ecological products which support and guarantee the health of the agro-ecosystem. This includes biodiversity, biological cycles and biological activity of the soil, having as purpose the minimization of using the synthetic fertilizers and pesticide. The ecological agriculture involves the major exploit of biological and mechanical methods instead of synthetic methods, notably contributing in this way to the safety of the habitats for a lot of plants from spontaneous flora.

Many species of medicinal plants can be collected from the spontaneous flora without be affected the population but it is an important number of species that are at extinction due to over exploitation. Their exploitation has dramatically costs at local level as well as at global one. It takes place generally as a seasonal activity that provides material benefits, completing in this way the incomes of the local communities.

The harvesting from the spontaneous flora is cheaper and does not involve a lot of intellectual and material efforts. It is necessary a more efficient protection of spontaneous flora in order to identify varieties that are more adaptable to the cultivation and which can represent a genetic resource.

One of the instruments that reflect and guarantee the appropriate management of the biological resources and the ethical trade is the ecological certification. The ecological certification is a value adding process to the biological material, due to the higher price that could be obtained after the commercialization. In January 2006, in Romania were registered 12 certification companies that are acreditated by the Environment and Water Management Ministry through the Ecological Products National Agency. Most of the companies have a working branch in Romania but the headquarters are based in foreign countries as Germany, Hungary, and Switzerland.

The first step for obtaining biological certification is to survey and identify the offers of as many as possible certification companies. In the first stage it is necessary to fill a set of forms related with firm activity. In order to initiate the biological certification procedure for a plant species from spontaneous flora, there are required the next authorizations:

- scientific documentation issued by the Biological Research Institute, and approved by the Nature Monuments Commission within the Romanian Academy;
- environmental authorization that may or may not approve the scientific documentation, is issued by the Environmental Protection Agency from the counties where the harvesting is done;
- environmental agreement for export issued by the Environment and Water Management Ministry.

The first step of certification process is to register the template forms that are provided by the certification body between the inspection visits. The following documents are required for field inspection:

- specification of collection area;
- specification of collected goods;
- collectors name list;
- contracts with collectors;
- certificates.

The specification of collection area consist on data regarding the geographical position, place of

harvesting, landowners, plant communities, size of the area, contaminations risks, land use and potential problems that could affect the sustainability of the species and the quality.

The specification of collected goods contains the name of the company, name of collected species, habitat description, parts of the plant that will be collected, harvesting interval, collection methods, collection quotas, estimation of resources from the collection area, daily collected quantity and potential problems that can affect the species.

The collectors name list provides the names and collectors addresses as well as the collection points where these have to bring the biological material.

The contracts with collectors are required to be sign for the persons who will work in the specific area. The contracts may contain also the planned quantities of biological material.

The maps of the collection area mark the places where the species can be found and the harvesting points.

Certificates attest that in the last years were not used chemical treatments on the collection area.

The certificatory inspection:

According to the certification company schedule, the inspection can take place during the collection period or a short time after. The inspection takes one up to three days. It is important that the inspection requester to be very well organized and posses all documents in order to decrease inspection period with positive effects in cost reduction. A special attention has to be paid for:

- the collection points regarding the acquisition methods, storage and drying methods. It is important the traceability of the material from the collection to the packing.
- collectors training as well as the training of all personnel involved in the acquisition and processing.
- the harvesting fields and if the harvesting was sustainable. It has to be mentioned the distance between collection areas and potential contamination sources. It is necessary laboratory analysis of the soil and/or of the vegetal material realized by acreditated laboratories if are identified contamination sources.
- the acquisition documents of the vegetal material and the rate of fresh / dry matter.
- the drying methods

The inspection result

The inspection result, if it is a positive one, is proved by ecological product certificate, which is available one year. The weak points that were identified during the inspection and which have to be solved until the next year are presented in „Summary Assessment according EU Regulation (EEC) N 2092/91". The certifying company decision is announced by a document, signed by the director. The document is „Certification Decision according to EU Regulation 2092/91".

The points that were followed by the certifying company are completed together with the applicant during the inspection, and then are discussed together and proved by two forms which are signed by both. These forms are "G-e Operator Profile Processing and/or Export" and "G-e Operator Profile Wild Collection".

The G-e Operator Profile Processing and/or Export contain general data about the inspection, marketing, processing, export, and data regarding quality, product flow, transport, labeling and accountancy.

Through "G-e Operator Profile Wild Collection" are verified data regarding the certifying company access to the information from the requesting company, collected areas, collected species, collectors and collection centers.

In order to export the dried medicinal plants, if the biological certificate for the vegetal material was obtained, it is necessary that each exported pack to be stamped with the ecological product logo (Figure 1) and with the exporting company stamp (Figure 2), together with the certifying company.

Figure 1: Ecological product logo

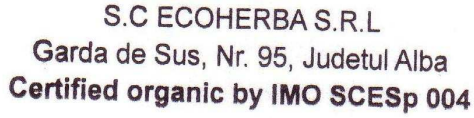

Figure 2: Exporting company/ certifying company

Before the export, the importing company has to submit an importing request to the certifying company, which then is send to the abilitated bodies to be approved. The packing methods of the vegetal product need to be discussed with the importer, because each importer has their own requests. It is

very important to stamp BIO on the packs with the ecological product, to recognize as ecological product in the country where is exported.

The procedure for achieving the export license for Arnica Montana was focused on the practical aspect of this activity in order to obtain a Standard Operation Procedure. The first step for obtaining the export license is to submit the request for plant quantities that are planned to be harvested in the current year.

The request should be presented to the Biological Research Institute (BRI). It is recommended that this request to be submitted before the end of February. The answer to the request will be confirmed into a period of two months. In this way, an answer regarding the quantity of the biological matter that can be collected, will be provided around the middle of April. Also it is considered the number of the companies that submit requests for the same species. Depending on how much biological material is allowed to be collected, the overall quantity will be divided among the companies that presented a request to BRI.

The scientific document issued by BRI has to be advised by the president of the Nature Monuments Commission that is assigned to the Romanian Academy. This procedure usually is not time consuming because the Nature Monuments Commission bureau is located in the same building as BRI.

The scientific document issued by BRI and advised by Romanian Academy has to be also approved by the Environmental Protection Agency that is corresponding to the county where the plants will be collected. Considering the ECOHERBA LTD, the collection was realized in Alba county.

The request for approbation of the quantity by the Alba Environmental Protection Agency should be submitted as soon as possible after the scientific document issued by BRI. It is advised by the Romanian Academy. Usually, the time period necessary to obtain the approval from the Environmental Protection Agency can vary between 30 and 40 days.

If all the abilitated institutes will issue an affirmative response, it is possible to start the collection activity for the proposed quantity in the areas that was announced. For obtaining the export license is important to make a trip to Bucharest only after the entire quantity was collected because is important to know the quantity of the dried biological matter that will be exported. The export license should be obtained from the Environment and Water Management Ministry

To obtain the export license it takes about one or two days, depending by the number of the requests submitted by other companies, too. According to the agreement should be issued in three working days since the submitting and registering the request of the company.

After obtaining the export license, through establishing an agreement with an international transport company and fulfilling the requests of the importing company is possible to export the biological material. The steps that have to be done in order to obtain an export permit for the "Social Enterprise" are designed in the figure 3.

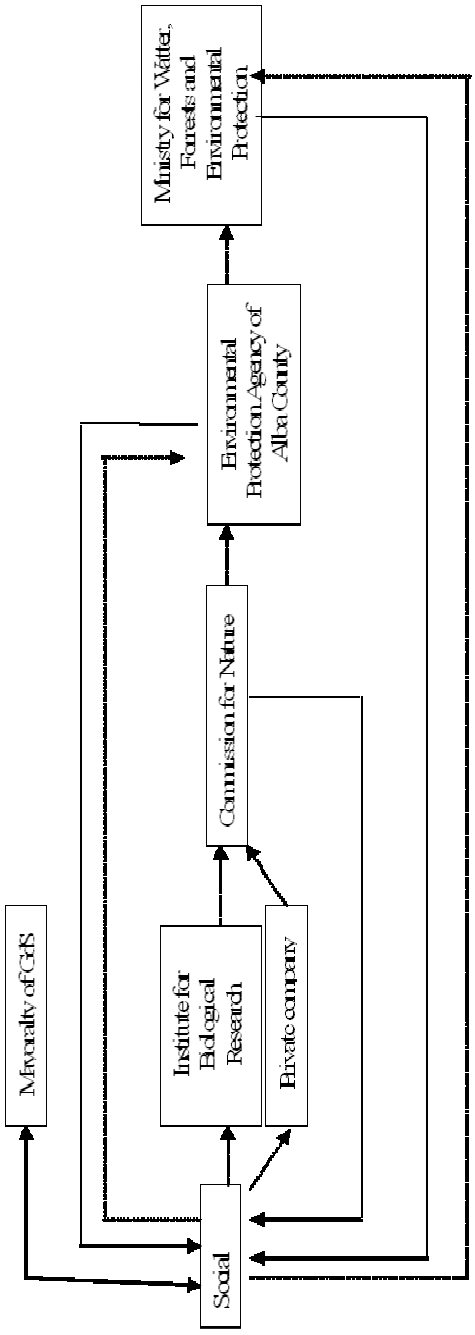

Figure 3: How to obtain an export permit for products ecologically certified (Popa R.)

6 Conclusion

There are many key opportunities for improving the export and competitive performances of the sector of ecological certified products. Romania has great openings for promoting and developing the ecological agriculture due to an agricultural area of 14.8 million hectares and unpolluted soils.

An important target is to improve the attendance of eco agricultural producers to economic events within the country or abroad (BioFach 2006). The technical assistance programs granted by foreign countries, in order to improve the professional training of Romanian specialists create the proper infrastructure for future development. The optimism of exports and its increased share is an outcome of improving the quality of products and management.

The project of Social Enterprise from Garda de Jos, Alba County, Romania is among the examples of how can be increased the product value, open new markets and export medicinal plants ecological certified. The procedure can be extended to other natural resources.

References:

[1] AgroTerra (2003) – Magazine AgroTerra, Year 1, Issue 7, July 2003

[2] Crowder Ch. (2001) – Romania hopes organic agriculture makes business sense, 2001

[3] Gurau C., Ranchhod A. (2005) - International green marketing: A comparative study of British and Romanian firms, International Marketing Review, Volume: 22 Issue: 5 Page: 547 – 561, ISSN: 0265-1335, Emerald Group Publishing Limited

[4] Lubieniechi S. (2002) - Romanian consumers' behaviour regarding organic food, British Food Journal, Apr 2002 Volume: 104 Issue: 3/4/5 Page: 337 – 344, ISSN: 0007-070X, Publisher: MCB UP Ltd

[5]Krauss A. – Quality production at balanced fertilization: the key for competitive marketing of crops, 12th CIEC International Symposium on Role of the fertilizers in sustainable agriculture, Romania, 2000

[6] Ministry of Agriculture, Food and Forestry (MAAP) – Report 2002

[7] Olivotto A. and Borza (2007) – Cotidianul, March 2007

[8] SOEL (2003) – Land Area Under the Organic Management, survey, February 2003

[9] Ucenic C. (2003) - *Aspects Regarding the Evolution and New Trends in Production and Marketing of Quality Products in Romania* , in 83rd EAAE Seminar European Association of the Agricultural Economists, Chania, Greece

[10] Van den Berg S. and Lange (2006) – Analysis of the trade and market for Arnica Montana in Western Europe

[11] *** - Euromonitor, 2002

[12] *** - Eurostat Database

[13] *** - FAO – Statistics, 2003

[14]*** - Industrialization, a view from agribusiness, Agri Business Group, Ed. Mc Millan, 2001

[15] *** - OECD survey

[16] *** - WWF – Factsheet 7