ORGANIC FARMING: LESSONS FOR NEW PLAYERS

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SUMMARY:

This article presents some of the best findings of a research done by the author with the intent to characterize some market opportunities for producers of organic agriculture production (OAPs) and the management techniques necessaries to take competitive advantage of those market opportunities. In doing so, initially is characterized what historically is comprehended as organic agriculture; after that is identified a lot of market opportunities, mainly in the developed countries. Next step, it is presented a lot of ways of getting access at those markets with various focus and approaches demanded by those distinct markets. After that, a lot of managerial tools are identified with the intention of orienting the OAPs producers in choosing and ameliorating their businesses management, mainly their commercial activities in those distinct markets. Finally are presented three generic systems for sustainable management which will be able to adequate the business practices of the OAPs producers to the growing demands of the target markets, as with the society in general.

Key words: Organic agriculture products (OAPs); markets for OAPs; environmental management system for OAPs producers.

Desertification/deforestation, carbon dioxide and sulfur dioxide build-up, ozone layer depletion, and water shortages and contamination are issues that demand attention in any farming process. In some way, each of the afore mentioned global conditions have resulted from contemporary farming practices and the way we view food on and off the field.

Global awareness of human health and environmental issues has grown significantly over the last two decades. At the root of this is a strong consumer movement in developed countries. In developing countries as well, the rapid and widespread environmental degradation has led to a growing recognition that environmental integrity is a necessary condition for human prosperity and sustainable development.

The practice of organic agriculture and the harnessing of its production and export potential could provide opportunities for developing countries to meet their long term environmental and development needs: it is the focus of this paper.

BACKGROUND

Organic agriculture is said to have had its beginnings in Germany at the turn of the 19thcentury during the land and food Reform movement. The movement originated as a reaction to the negative impacts of the Industrial Revolution on people. However, even up to the mid-1990s in most markets (with the exception of Denmark and Switzerland), Organic agriculture products (OAPs) retained a very small share of total food sales.

Since the mid 1990s however, organic food sales have increased dramatically in Europe. Today the EU is the leading producer of, and the largest market for, organic products in the world. A much larger segment of the population is now interested in OAPs, although they may be less willing to pay higher prices.

Major markets

Trade in OAPs is of particular interest in a development context because of the spectacular

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growth that has taken place in recent years. Retail sales in the three major markets are expected to continue to grow between 5 to 40 per cent (with some variations across markets) over the next 10 years or so, which is quite remarkable considering that sales in food are growing slowly or stagnating.

Markets in developed countries

In the EU, the percentages of agricultural land managed organically range from 10 per cent in Austria, to about seven per cent in Switzerland, three per cent in Germany and below one per cent in Southern Europe. While these figures may seem low for the time being, organic farming in the EU is booming with annual increases of organically farmed land exceeding 20 per cent in the past decade. Similarly, sales are expected to grow between 10-30 per cent over the next ten years.

This has resulted in an increasing and more reliable supply of organic produce (especially dairy produce, grain, vegetables and fruit), in almost every European country. Furthermore, those products that cannot be grown in the EU, increasingly have been brought in from worldwide sources, thereby further increasing the variety of products available.

This includes tropical fruits and vegetables, cereals, cocoa, coffee and tea, dried fruits and nuts, herbs and spices, fats, oils and sugars. Germany is by far the largest market in Europe and the second largest in the world after the United States. It accounts for about one third of total sales followed by France, the United Kingdom, the Netherlands, Switzerland, Denmark and Italy.

A more interesting market for non-european exporters is the United Kingdom. In comparison to other EU markets, it is relatively underdeveloped and consumption growth rates over the next decade are expected to be the highest. At present the UK imports about 70 per cent of its requirements, and this situation is expected to continue.

The United States is the largest market for organic agricultural products, however second to EU as a group. The market grew from US\$ 78 million in 1980 to about US\$ 6 billion in 2000 and sales is growing at an annual rate of about 10 to 15 per cent in the last years and are expected the same over the medium term. Similarly, organic food production is booming at over 20 per cent growth per year and the number of organic farmers is increasing by 12 per cent per year. Within the last year in California, organic produce sales have increased 41%, and are projected to double or triple in the next two years. A recent Gallup Poll published in USAToday found that 84% of people surveyed preferred to buy organic produce, with 49% of those willing to pay more for the organic produce.

Gaining market access

There is a growing tendency towards sourcing supplies of OAPs more globally and developing partnerships with developing countries. New opportunities exist therefore for exports for developing countries. However, there are significant conditions that exporters should meet before they can establish a foothold in organic trade. These include standards, certification and the development of partnerships with key players in the trade.

(a) Standards

Essentially the goal of organic standards is to define "organic". Standards should be based on a strict and precise definition of what is organic. They should also be uniform and easy for consumers to understand. Finally standards should bring economic benefit to organic farmers so that their activities are commercially sustainable. Organic standards only pertain to how a product is produced. Just because a food product is labeled organic does not mean it is safer,

cleaner, or fresher than conventional food.

Different associations, industries or governments have varying perceptions of how organic products should be defined and certified. Thus, individual brands naming products organic may in fact have widely different standards for production and certification behind them, giving rise to unfair competitive advantages in the trade of OAPs.

(i) Codex Alimentarius Commission

The Commission is an intergovernmental body that was created in order to protect consumers from health hazards and to facilitate international trade in food products. Two Codex committees are currently developing standards that are relevant to organic products. The first is on food labeling, including livestock products, and the second is on export and import inspection and certification systems.

(ii) IFOAM

IFOAM was established in 1972 as an umbrella organization for national organic agriculture associations, but members also include certification bodies, traders and processors. It has established international basic standards of organic agriculture and food processing. The standards are updated regularly by the IFOAM Standards Committee and are approved by the IFOAM General Assembly every second year.

(iii) International Standards Organization (ISO)

ISO is a worldwide federation of national standards bodies from about 130 countries, one from each country. ISO sets international standards for a wide range of goods and services. The most important guideline for organic certification is currently ISO/IEC Guide 65. Another important guide is ISO/IEC Guide 61:1996, which defines requirements for accreditation bodies.

(iv) Regulations in the European Union

Council Regulation (EEC) 2092/91 of 24 June 1991 and subsequent amendments establishes uniform standards and the main rules governing organic production, importation, labeling and marketing of OAPs. The use of the term "organic" is now limited to products that conform to the Regulation. Non-EU products need to show that certification has been carried out by a national authority (in the exporting country) whose equivalence has been approved according to Regulation 2092/91 or by an EU inspectorate that operates internationally.

(v) Standards applicable in the United States

In the United States the Organic Foods Production Act (OFPA) was adopted as part of the 1990 Farm Bill in order to establish a National Organic Programme (NOP). The Act was adopted to (1) establish national standards governing the marketing of certain agricultural products as OAPs; (2) assure consumers that organically produced products meet a consistent standard; and (3) facilitate interstate commerce in fresh and processed food.

(vi) Agreements of the World Trade Organization

The basic aim of WTO agreements is to encourage member countries to pursue more open and liberal trade policies. Within this framework, member countries also have a right to restrict entry or import of a good or service if plant, animal or human health or life come under threat. Specifically, under Article XX of the GATT (1994), member countries have a right to set their own national environmental and food safety regulations.

(b) Certification

Once OAPs are produced according to domestic or international standards, this information needs to be communicated to consumers, in order to justify the price premium the consumer is



required to pay. A common way of informing consumers is through product labels. Certification is one way of ensuring that products claimed to be organic are actually produced according to organic production standards. It is thus a way of protecting consumers, producers and traders from the use of misleading or deceptive labels.

(c) Key institutional players in importing markets

(i) Importers/processors/repackers

The most important market segment in developed countries on which exporters from developing countries should focus is the food processing and repackaging sector. Almost all organic food and beverages imported from developing countries consist of fresh produce or raw material that needs some form of repackaging/processing before it can be offered for sale to the consumer. In the EU, for each market and for each product group, a few specialized organic traders tend to dominate imports. The United States also has numerous organic traders, brokers, wholesalers, processors, many of whom are members of the OTA (Organic Trade Association) through which they may be contacted.

(ii) Food manufacturers

Since the mid-1990s however, growth in demand has resulted in consumers looking for a wide range of processed foods, similar to those available in conventional production. The result is that many food manufacturers who focused only on conventional processing are now finding it profitable to add organic products to their production lines.

In the United States, the most phenomenal growth in OAPs has taken place in the snacks and candies with annual growth rates of over 100 per cent. As food processors are constantly developing new products and increasing variety, opportunities for export exist in those tropical products not otherwise grown in the United States or off-season fruits.

(iii) Retail trade

Although there are wide country variations in the EU, a greater and more committed participation of supermarkets and chain stores has been one of the main contributors to the rapid increase in retail sales of OAPs. In fact, the growing supply and more efficient distribution of large quantities helped to lower price premia to levels more acceptable to a larger segment of consumers. European consumers also buy organic foods direct from farm outlets and at organic markets. In the United States about two-thirds of retail sales of OAPs take place at natural product stores, one third at super- and hypermarkets of which half now carry OAPs.

TOOLS TO ASSIST AGRICULTURE PRODUCERS

There are various tools available for use in an environmental management system (EMS) or for organizations that do not wish to commit themselves to a formal EMS model accreditation system. Such tools can be used to minimize and control an organization's environmental impacts.

Partnerships

An environmental partnership is defined as a cooperative agreement between business and government and/or environmental organizations or commercial entities. The business voluntarily agrees to achieve certain environmental improvements in exchange for some benefit provided by the other partnership participant. Environmental partnerships offer a middle ground between traditional regulation and voluntary approaches to environmental management.

Indicators

Several environmental indicators are already used by farmers e.g. to determine soil fertility.

There are a number of different indicators being used which may identify a need for a change in practices or the introduction of new practices e.g. improved energy efficiency, or a fresh look at agricultural practices triggered by a decline in biodiversity.

Life Cycle Analysis

Life cycle analysis (LCA) is an analytical environmental management tool used to assess the environmental loading of a product, process or activity over its entire life cycle, i.e. from raw material to final waste disposal. LCA has yet to be specifically applied to an agricultural system as the focus for study. However concepts of life cycle thinking may not be unfamiliar to the farmer, in areas such as energy and nutrient budgeting. LCA often fails as a technique on more specific day-to-day issues due to its broad approach. LCA could be complemented with a smaller more flexible tool such as environmental risk assessment (ERA).

Environmental Risk Assessment (ERA)

Risk is defined as a combination of the probability, or frequency or occurrence of a defined hazard and the magnitude of the consequences of the occurrence. Risk is influenced by perceptions of stakeholders and also uncertainties in knowledge. ERA often focus on the potential impacts on human health. In ERA many of the secondary impacts such as eutrophication and greenhouse gas emission can occur or cause harm off-site, thus determining impacts can be difficult.

Environmental Farm Plans

Environmental Farm Plans are a planning tool that is available for farmers to assist with establishing the impacts of activities. They range from simple riparian management plans to comprehensive environmental programmes that address all soil and water issues, as well as biodiversity. They identify a set of core criteria that should require attention in environmental farm plans. These include: soils and Land Use Capability (LUC), assessment soils management control of runoff stream margin protection, water quality irrigation, management use of chemicals disposal of, effluent protection of significant indigenous habitats, control of pests which affect farm production nutrient and fertilizer management.

Generic Systems for Sustainable Management

After World War II new quality concepts, which looked at managing inputs and processes, were developed to deal with increasing component failure. These concepts were the foundation for the development of the International Standards Organization (ISO) series of quality management models. These models are based on the premise that if production processes can be controlled, the outcome can be consistent and of appropriate quality.

International Standards Organization (ISO)

The ISO 14001 EMS standard specifies the structure of an EMS. ISO 14001 focuses on the quality of an organization's management process, and can therefore offer a framework that a range of organizations can adapt to meet their individual environmental needs.

The promotion of products originating from ISO 14001 certified farms and the group management of certain ISO 14001 requirements could potentially be solutions to some of the barriers to market worldwide.

Environmental Management Systems (EMS)

Typically an EMS involves the following steps as part of a process of continual improvement: establishing environmental policies; setting goals and targets; adopting plans and procedures to achieve goals and targets; monitoring implementation; instituting actions to ensure compliance; and reviewing progress. The environmental policy documents an organization's commitment to environmental management.



Eco - Labels

Eco-labels are an example of production-oriented standards, which define specific features of a final product and may also define how that product has been produced. When marketing eco-labeled products, food processors and distributors should have to prove that their raw materials, such as farming products, really come from environmentally friendly farming practices.

Social Standards: Social Accountability 8000 (SA8000) standard.

The Council on Economic Priorities Accreditation Agency established the Social Accountability 8000(SA8000) Standard in 1998. SA8000 was developed as a result of rising concerns about inhumane working conditions in developing countries and defines a set of prescribed standards and an independent auditing process to protect workers' rights. It has been estimated that upwards of 100 million children worldwide are in full-time labor, but under the terms of SA8000, companies must not support child labor.

CONCLUSIONS AND RECOMMENDATIONS

Organic agriculture is of particular interest to developing countries because it is in consonance with long-term sustainable development strategies. Furthermore, the spectacular growth in demand for organic agriculture that took place in recent years has opened up export possibilities for developing countries.

However, in order to succeed in export trade of organic agricultural products, there are a number of difficulties to overcome. Markets in developed countries are highly exigent in terms of price/quality ratios. Furthermore, certification of organic origin is critical to export success because consumers will pay price premia only when there is a high degree of confidence in the standard and organic origin of the product. Carefully selecting a trading partner and developing a long-term partnership from among distributors and processors of OAPs, are an important way of gaining entry and establishing a foothold in foreign markets.

The organization needs to develop a clear environmental policy that includes the aim of sustainable management. Sustainable management needs to consider social goals alongside economic and environmental goals. Social goals include justice and equity and there is also the opportunity.

The agricultural sector also faces many environmental challenges. To be successful, members of the agricultural sector need to embrace the concept of sustainable management of the environment and recognize the role that EMS can play to assist this management.

References

AS ISO 9000. 1994. Quality Assurance Explained: A Handbook For Small Business. Standards Australia: Homebush N.S.W.

CASTELNUOVO, R. 2000. Environmental Management Systems in Agriculture. Adding Value Through Environmental Marketing: Opportunities For Food Producers, Processors and Retailers. Proceedings of the Conference, Madison, Wisconsin, USA, 6-7 December 1999.

ELKINGTON, J. 1998. The Triple Bottom Line: Sustainability's Accountants. Chapter 4 in Elkington, J. 1998. Cannibals with Forks. The Triple Bottom Line of 21st Century Business. New Society Publishers, Gabriola Island, Canada.

FAO/WHO Codex Alimentarius Commission Guidelines for Production, Processing, Labelling and Marketing of Organically Produced Foods

FAO, Opportunities and Constraintsof Organic Agriculture: a Socio-Ecological Analysis GTZ/Protrade, The Export of Products Originating from Organic Cultivation, Marketing

Handbook, second edition, 1997

IFOAM, Basic Standards of Organic Agriculture and Food Processing, 1997

ROBERT, K.H. 2002. The Natural Step Story: Seeding a Quiet Revolution. New Society Publishers, Gabriola Island, British Columbia.

TIBOR, T. and FELDMAN, I. 1996. ISO 14000: A Guide to the New Environmental Management Standards. Irwin, Chicago.

UNCTAD/WTO International Trade Centre, Organic Food and Beverages: World Supply and Major European Markets, 1999

UNCTAD/WTO International Trade Centre, Business Guide to the World Trading System, 1999

UNCTAD, Organic Production in Developing Countries: Potential for Trade, Environmental Improvement and Social Development, 1996

UNEP. 1999. Global Environmental Outlook 2000. Earthscan, London pp 362-373.

WCED. 1987. Our Common Future. World Commission on Environment and Development. Oxford University Press, Oxford.