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A STUDY ON THE MARKET FOR ORGANIC COCOA

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INTRODUCTION

1. The market for certified organic food has developed very dynamically in recent years. According to *Datamonitor*, the organic food and drinks market was estimated to have reached in 2005 a value of US$ 18 billion in the US and a value of US$ 5.4 billion in Germany and US$ 4.1 billion in the United Kingdom, the two major European markets for organic products. The recent strong growth was mainly driven by increased consumer concern over food safety. The outbreak of "food scares", such as Bovine Spongiform Encephalopathy (BSE) and salmonella, together with the emergence of public awareness of the risks of food processing have raised concerns over food safety and production methods. In response to this strong growth, organic food production is increasing on all continents, with much of the increase occurring in third world countries, where farmers are attracted by the higher prices for organic food products. For the same reason, many governments encourage farmers to convert to organic farming.

2. The organic chocolate market also benefited from strong growth in demand, as mirrored by the success of *Green & Black's*, the United Kingdom's leading organic chocolate maker. In 2004, the company's turnover increased by 69% to £22.4 million, compared with a growth rate of 2% for the chocolate industry as a whole. It has already been a few years since organic chocolate products have reached supermarket shelves, with leading retailers launching their own organic products, often cheaper than branded ones. However, despite the strong growth that occurred over the past five years, the share of organic cocoa remains small in the cocoa market.

3. The Consultative Board on the World Cocoa Economy had (under Action point 11 of its work programme) requested the secretariat to prepare a background paper on the market for organic cocoa. This first document on the organic cocoa market defines the specifications of the organic market, provides information on the major participants and regulations applying to organic products and presents an estimate of the size of the organic cocoa market.

DEFINITION AND PRINCIPLES OF ORGANIC AGRICULTURE

4. The definition of organic farming is complex and cannot be restricted to a "chemical free" method. At present, there are many definitions in use in different regions of the world, reflecting different approaches to organic agriculture (agricultural/technical, economic or scientific and philosophical). A general definition has been formulated in the Codex Alimentarius (FAO/WHO 1999):

> *"Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specify function within the system."*

5. The *International Federation of Organic Agriculture Movements* (IFOAM), an umbrella organization for the participants in the organic market, defined and adopted in 2005 revised principles of organic agriculture and is now in the process of establishing a definition of organic agriculture, which is expected to be adopted in 2008 after consultation with market participants. The principles adopted are based on the following:

Principle of health Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.
Principle of ecology Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.
Principle of fairness Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.
Principle of care Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

IFOAM 2005

CERTIFICATION AND KEY PARTICIPANTS IN THE ORGANIC COCOA MARKET

6. The second part of this document presents the various organizations involved in the organic labelling process (IFOAM, regional and national regulators and certifying bodies). It summarizes the legislations applied in the three major markets consuming cocoa and chocolate products (the European Union, the United States and Japan), and focuses on the process of importing organic products into these markets. Information is also provided on exporters of organic cocoa and on the costs and benefits associated with the production of organic cocoa beans at producer level.

Agencies and institutions involved in organic certification

a) The International Federation of Organic Agriculture Movements (IFOAM)

7. The founding of IFOAM in 1972, the first formal global network for organic agriculture, was probably one of the main landmarks for the organic movement. IFOAMS's mission is "leading, uniting and assisting the organic movement in its full diversity" and its main goals are to:

- build a global platform for the organic movement;
- develop, communicate and defend the principles of organic agriculture;
- advocate and facilitate the adoption of organic agriculture;
- promote the development of organic markets;
- ensure an effectively managed organization with sufficient and sustainable resources.

b) Competent regional and national authorities

8. While organic standards have been set at EU Commission level, implementation and enforcement of the regulations, whether food is produced locally or imported, are the responsibility of the individual member states. Competent authorities, those officially designated, implement the scheme. These bodies correspond to official governmental agencies, which are in charge of approving national and foreign certification bodies as well as auditing them. For instance, the Department for Environment, Food and Rural Affairs (DEFRA) in the UK, the Federal Agency for Agriculture (BDE) in Germany and the Department of Economic and International Policies (DPEI) of the Ministry of Agriculture in France are the national bodies in charge of implementing national legislation. In the United States, the competent authority is the US Department of Agriculture (USDA), through its National Organic Program (NOP).

c) Certification/inspection bodies

9. Certification and inspection bodies are normally private organizations, organizations of producers or non-profit institutions. Their main function is to control compliance with national organic regulations by all parties in the organic supply chain (farmers and processors). The certification process normally follows three steps:

- application, which normally includes payment of a fee, a commitment by the producer to follow the relevant standards, and a description of the production unit;
- inspection: i.e. a visit to the site to verify that production follows standards and is consistent with the producer's declaration;
- evaluation of inspection results and formulation of a certification decision. This decision often includes a number of corrective actions to be taken by the producer. A certificate is then issued.

There are around 400 certification and inspection bodies, with a large majority located in developed countries and their combined turnover is around US$ 400 million. The choice of a certification body for a cocoa producer will depend on a number of factors, including the amount of the fee, the image attached to the certification body ("branded" certification), the familiarity of the certification body with the issues involved in the cocoa sector, its international expertise to assist with export markets and its geographical coverage (it needs to be accredited in the country of destination of the cocoa beans).

Legislation related to organic certification

10. Most developed countries, but only a few developing countries, have national standards, regulations and inspection and certification systems for organic products. Differences in certification and labelling schemes can inhibit trade flows; even within the European Union, government approaches towards EU legislation may hinder trade. Regulatory bodies are in the process of adopting new rules intended to be simpler and they are also working towards mutual recognition between the various national organic labels. In order to facilitate international trade, harmonization of standards and certification is needed. This does not imply that exactly the same standards should apply for all countries, as agricultural conditions are dissimilar.

11. At international level, the Codex Alimentarius guidelines (FAO/WHO, 1999), adopted in 1999 and revised in 2001, define the general principles and requirements applying to production and labelling of organic products. That was a first step in official international harmonization of organic

product requirements in terms of production and marketing standards, inspection arrangements and labelling requirements.

12. In the **United States**, the recent implementation by the USDA's National Organic Program (NOP) of the Organic Foods Production Act (OFPA) established national standards for the production and handling of foods labelled as "organic." This should increase consumer confidence in the organic label.

13. In the **European Union**, the European Council adopted Regulation (EEC) No. 2092/91, which created a Community framework defining in detail the requirements for agricultural products or foodstuffs to be considered organic. This regulation was recently subjected to a complete review, which led to a new proposal adopted in December 2005, which should come into force in January 2009. The new rules are intended to be simpler, and to allow a certain amount of flexibility that takes account of regional differences in climate and conditions. The import regime will then be amended to allow certification bodies outside the EU to be recognized by the Commission.

14. In 1992, the Ministry of Agriculture, Forestry and Fisheries (MAFF) in **Japan** issued guidelines describing farming practices necessary for growers to label a product "organic". However, it did not have any enforcement tools. In 2000, MAFF revised the Law of Japanese Agricultural Standards, establishing an inspection and accreditation scheme. Finally, since April 2001, the labelling of organic products as "JAS organic" requires compliance with these standards.

15. The general requirements for cocoa beans, cocoa and chocolate products to be labelled "organic" are the following:

- Cocoa beans must grow on land which has been free of prohibited substances for three years prior to harvest. Cocoa beans grown on land which is "in transition" to organic (during the first three years after switching from conventional farming, for instance) cannot be labelled organic.

- Production methods are strictly regulated (fertilizers, soil conditioners, pesticides).

- 95% of the ingredients (not counting added water and salt) in a chocolate product must be organically produced and the processor must be a certified organic handler in order for the finished product to be labelled as organic. However, special provisions allow labelling to state that a product is "100% Organic", if the product contains 100% organically produced ingredients, "Made with Organic Ingredients" (or a similar statement), if the product contains at least 70% organic ingredients, and "Has some organic ingredients" (or similar statement), if the product contains less than 70% organic ingredients.

Organic cocoa exporters

16. Producers of cocoa, all located in developing countries, have to meet all the requirements associated with the production of organic products to allow them to export their output to consuming countries, which are mainly developed countries. Significant changes in legislation during the last decade have made it more difficult for small producers to meet these requirements. They have to arrange for an import permit from the relevant competent authority, providing evidence that the imported organic cocoa is produced in accordance with the relevant legislation. Import permits are issued for a defined period. However, cocoa exporters are not allowed to apply directly for import

authorizations; applications must come from importers registered with their respective competent authorities. It is, therefore, quite complicated to arrange for a proper application of an import permit.

Costs and benefits associated with organic cocoa exports at the producer level

17. Organic cocoa commands a higher price than conventional cocoa, which should cover both the cost of fulfilling organic cocoa production requirements and certification fees. The differential in cocoa bean price between conventional and organic markets represents the consumers' willingness to pay for an organic certified product. A significant share (around 10%) of organic certified cocoa beans in the market is, in addition, "fair trade" certified. For reference, FLO (Fair trade Labelling Organization)-certified organic cocoa beans receive a fixed price premium of US$ 200 per tonne. For "non-fair trade" certified cocoa beans, there is no fixed price premium, as it is subject to market fluctuations, usually ranging from US$ 100 to US$ 300. For instance, according to trade statistics provided by the *Centro de Exportación e Inversión de la República Dominicana (CEI-RD),* the organic price premium averaged US$ 100 in 2003/04 and US$ 275 in 2004/05. However, some origins with small volumes can fetch much higher premiums. For several exporters, a premium of US$ 200 seems to be the minimum at which they can continue with organic exports.

18. The cost of compliance to organic standards includes the fee to be paid by the farmer organization/exporter to the certification body and indirect costs to comply with organic requirements. The total fee can be composed of an initial application fee and an annual certification fee (on a fixed basis or in proportion to sales). According to The Organic Standard (TOS, 2001), the average certification fees at farm level (for all types of products) were 3% of farm turnover. This may underestimate costs for cocoa farmers, as they are subject to additional costs due to the international aspect and the usually small size of their business. In addition to certification fees, the farmer organizations have to bear additional administrative costs, additional labour costs (as organic production is more labour-intensive than conventional production) and opportunity costs associated to the loss in yields after discarding synthetic inputs and converting their operations from conventional to organic production. Before restoration to a full organic system, pest suppression and fertility problems are common. The degree of yield loss varies and depends on the inherent biological attributes of the farm, farmer expertise and the extent to which synthetic inputs were used under the previous management regime.

GLOBAL ORGANIC COCOA MARKET OVERVIEW: TRENDS AND SITUATION

Demand for organic cocoa

19. Promotion and marketing strategies of retailers and supermarkets have stimulated the demand for organic chocolate products. Food-retailing chains also promote organic foods as a tool to improve their public image. Concerns about growth-stimulating substances, GM food, dioxin-contaminated food and livestock epidemics (such as BSE) have given further impetus to organic food demand in general, as consumers increasingly question the safety of conventional foods. Several governments have responded with declarations of targets for the expansion of organic production. Many consumers perceive organic products as safer and of higher quality than conventional ones. According to the market research company Global Insight, the consumers' growing interest in organic chocolate was evident during the last Easter period (April 2006) when sales of organic products surged.

20. In **Europe**, many companies specialised in premium chocolate markets, such as organic, have experienced strong growth. Europe is by far the major market for imports of organic cocoa beans, as

well as for processing and manufacturing activities to obtain certified cocoa and chocolate products. Part of the organic cocoa and chocolate produced in Europe is exported, mainly to the United States. *Barry Callebaut* is considered the major processor of organic cocoa products in the world. Consumption of organic chocolate in Europe is growing quickly. In the **United Kingdom**, sales of organic chocolate products are increasing at a strong pace, with *Green & Black's*, created in 1991 and acquired by *Cadbury-Schweppes* in 2005, and *Duchy Originals*, created by HRH The Prince of Wales in 1992, as the major players in the UK organic chocolate market.

21. Most organic chocolate products currently sold on the North American market are imported from Europe because of a lack of organic certified cocoa processors in the **United States** and in **Canada**. This situation probably explains the lower share of the organic chocolate market in this region. It is expected that increased demand for this premium chocolate would encourage processors, which currently work with conventional cocoa to become certified. Indeed, the growing importance of such a market in the US is emphasized by the founding of *Corigins* by *ED&F Man*, as specialty division for organic sugar and cocoa. So far, a large share of US imports of organic products is sourced from *Barry Callebaut*, which produces all its organic products in Europe. *Dagoba Organic Chocolate*, established in 2001, and *Endangered Species Chocolate Company*, founded in 1993, are the leading US organic chocolate companies. The procurement options for US firms buying organic cocoa/chocolate products can be broken down as follows (Menter, 2005):

- A US firm buying organic cocoa beans can either:

  a) buy from an organic cocoa broker (e.g. Corigins/ED&F Man);
  b) buy organic beans at origin from a producer co-operative (e.g. Conacado).

- A US firm buying organic cocoa semi-finished products can either:

  a) buy from an organic cocoa trader (e.g. Corigins/ED&F Man, Tradin USA or Global Organics);
  b) buy from a European cocoa processor (e.g. Barry Callebaut, ED&F Man);
  c) source the beans itself and have them processed in Europe (e.g. La Siembra);
  d) buy beans that are processed at origin by a producer cooperative (e.g. Conacado).

- A US organic chocolate manufacturer that buys chocolate can either:

  a) buy from an organic commodity trader (e.g. Tradin USA or Global Organics);
  b) buy from a manufacturer in Europe (e.g. Chocolat Bernrain);
  c) buy from a manufacturer in the US (e.g. Debelis, Barry Callebaut - only organic);
  d) source the beans itself and have them processed and manufactured in Europe (e.g. La Siembra).

22. The market for organic chocolate is still in its early stages in **Japan** and it is very difficult for a Japanese consumer to find this product on the shelves of organic stores. According to a study conducted by IFOAM Japan, one of the reasons is that most domestic confectioners and processors do not make organic chocolate products. This is partly because the Organic JAS certification system does not include milk, thus preventing processors from making organic chocolate products containing milk. Nonetheless, a few manufacturers make bitter chocolate domestically (e.g. *Nisshin Kako*). So far, Japan imports organic cocoa not as beans but as cocoa processed products. However, the market may grow, especially if certain conditions are met, such as amendments regarding the Organic JAS

certification for milk, and also if Africa, from which most of the conventional cocoa imported in Japan is sourced, increases its volume of organic cocoa beans produced and/or if Japan sources more of its imports from the Americas.

Supply of organic cocoa and market size

23. Future growth of the organic cocoa market will depend more on supply constraints than on developments in demand, at least in the medium term. Many market analysts state that the tendency so far has been for the rate of demand growth to outstrip the rate of supply growth. "To meet our growth target will be impossible unless we persuade farmers to convert to organic", declared the marketing director of one of the major players in the market. However, the general level of price premiums for organic cocoa does not support this tenet.

24. It is very difficult to find reliable statistical data for organic markets. The market is made up of a small number of traders who are reluctant to divulge price and volume information. Data collection by NGO's and other organizations is less than optimal and official statistics do not distinguish conventional from organic certified cocoa, except in the Dominican Republic (whose data is incomplete). The competent national authorities in Europe (e.g. DEFRA in the United Kingdom, BDE in Germany and DPEI in France) do not collect data on imported volumes of organic cocoa but only data on expected volumes corresponding to the import permits issued. However, they are in the process of collecting systematic data on imports of organic products at customs level. The need for transparency and the increasing volumes traded in the organic market underlines the importance of a better collection of statistics.

25. **Table 2** in the annex provides an overview of the size of the organic cocoa market by country of origin. This table shows that production of organic cocoa beans was estimated at 15 500 tonnes and exports at 11 170 tonnes in recent years. This means that the organic market still has a very low share of the cocoa market, estimated at less than 0.5% on average. However, organic cocoa has a higher market share than fair trade-certified cocoa (with 3 901 tonnes exported in 2005 according to FLO-International). Most of the countries producing organic cocoa beans (14 out of 24 found) are located in South America (**Table 1**), which is the origin of more than 70% of organic cocoa in the world, compared to a market share of 13% for conventional cocoa beans. This picture differs substantially from the conventional market for cocoa beans where most of the production is located in Africa. A small percentage is processed at origin by producer cooperatives (e.g. Conacado in the Dominican Republic). The Dominican Republic is by far the major supplier of organic cocoa beans in the world, with a production estimated at 5 000 tonnes. It has five organic cocoa exporters, with Conacado (Confederación Nacional de Cacaocultores Dominicanos) being the largest one. This cocoa cooperative was founded in 1988 as a response to low global cocoa prices to assist small-scale cocoa farmers to improve their working and living conditions. Its aim is to generate work and income for disadvantaged groups in society, to decrease dependency on intermediaries by exporting products directly, and to offer technical assistance and credit to farmers to improve the quality of their cocoa production.

26. It should be noted that several other countries are in the process of converting to organic cocoa production. These countries include Cameroon, Côte d'Ivoire, Guyana, Haiti, Honduras, Indonesia, and the Philippines.

SUMMARY AND PROSPECTS

27. The organic cocoa market represents a very small share of the total cocoa market, estimated at less than 0.5% of total production. However, the demand for organic cocoa products is growing at a very strong pace, as consumers are increasingly concerned about the safety of their food supply along with other environmental issues and as, in general, demand for chocolate with a premium status is growing. The exposure of consumers to organic chocolate has increased dramatically over recent years, with the presence of this product on supermarket shelves.

28. The supply side faces many challenges to meet the growing demand. At producer level, issues of supply consistency and quality must be addressed. Producing countries face many constraints, such as the high costs of certification by foreign organizations and a lack of knowledge about organic channels. Trade channels have to allow for increased volumes of organic cocoa, for instance through the entry of bigger players in the market (e.g. ED&F Man through Corigins). An emerging development of the processor and manufacturer industry in North America would boost the availability of organic chocolate to American consumers.

ANNEXES

TABLE 1: ORGANIC COCOA PRODUCERS

Region / Country	Co-operatives / Organizations
Africa (6)	
Ghana	
Madagascar	Arco Ocean Indien / Millot – Remandraibe - Sagi
São Tomé	Cecab
Tanzania	Biolands / Kyela Co-op Union
Togo	
Uganda	ESCO
Americas (14)	
Belize	TCGA
Bolivia	El Ceibo
Brazil	
Columbia	
Costa Rica	APPTA
Cuba	
Dominican Republic	Five exporters, incl. Conacado and Yacao
Ecuador	
El Salvador	
Mexico	Asesoria Técnica en Cultivos Orgánicos
Nicaragua	La Campesina - Cacaonica
Panama	Cocabo, Servicio Múltiple de Cacao Bocatoreña
Peru	COCLA - Cooperativa Agraria Cacaotera Acoprago Ltda - Cooperativa Agraria Cafetalera El Quinacho - Cooperativa Agraria Cafetalera Valle Rio Apurimac - Cooperativa Agraria Industrial Naranjillo Ltda -
Venezuela	Aragua state cocoa farmers association
Asia and Oceania (4)	
Fiji	
India	
Sri Lanka	
Vanuatu	Malecoula

Sources: IFOAM (2006), SIPPO (2002), FLO-International, competent national authorities in Europe and international news agencies.

TABLE 2:

ESTIMATED PRODUCTION AND EXPORTS OF ORGANIC COCOA BEANS

Region / Country	Date	Organic production (in tonnes)	Organic exports (in tonnes)
Africa (6)		***3,000***	***1,770***
Ghana	2005	n.a.	n.a.
Madagascar	2003	1,500	1,500
São Tomé		n.a.	n.a.
Tanzania & Uganda	2005	1,500	270
Togo		n.a.	n.a.
Americas (14)		***11,738***	***8,638***
Belize	2004/05	33	33
Bolivia	2003/04	400	400
Brazil	2005/06	1,100	50
Columbia		n.a.	n.a.
Costa Rica	2004/05	300	300
Cuba		n.a.	n.a.
Dominican Republic	2004/05	5,000	5,000
Ecuador		n.a.	n.a.
El Salvador	2005	30	30
Mexico	2005	2,500	600
Nicaragua	2004	98	98
Panama	2005	350	350
Peru	2005	1,850	1,700
Venezuela	2005	77	77
Asia and Oceania (4)		***762***	***762***
Fiji	2002	50	50
India	2005	12	12
Sri Lanka	2005	200	200
Vanuatu	2002	500	500
Total identified		***15,500***	***11,170***

Sources: ICCO surveys (2006 & 2005), IFOAM (2006), SIPPO (2002), FLO-International, EPOPA, competent national authorities in Europe and international news agencies.

Note: In view of the limitations of data availability, such estimates should be regarded as provisional and should be used with due caution

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