Organic cocoa farming
Expanding opportunities for cocoa farmers
In this issue of *Cabosse*, we highlight organic cocoa farming programs in Africa, South America and the Caribbean that are making a difference in the lives of farmers and their families.

*Cabosse* is the French term for cocoa pod
Contents

4 Contributing to a sustainable cocoa supply chain
5 Organic cocoa – what does it mean for farmers?
7 Organic cocoa farming in Brazil
   Managing the conversion program
   From organic beans to chocolate
   “Permaculture” education program benefits children of cocoa farmers
   “Native” – The first Brazilian bio chocolate drink
14 Organic cocoa farming in Tanzania
20 Organic cocoa from Uganda
23 Organic cocoa from the Dominican Republic
25 “Organic” cocoa – understanding the claim
28 A range of organic cocoa and chocolate products
30 Looking ahead
Contributing to a sustainable cocoa supply chain

Barry Callebaut’s vision is to be the heart and engine of the chocolate industry. Cocoa is the basis of our business. This precious crop grows in a narrow belt 20° north and south of the equator in the Americas, Africa and Asia. Most of the world’s cocoa is grown on small farms of about five to eight hectares. Cocoa must be carefully tended, harvested, fermented and dried to yield beans with the necessary quality and flavor required to produce delicious chocolate for consumers around the world.

As the world’s leading cocoa and chocolate manufacturer, with operations in more than 20 countries and more than 7,000 employees, we believe that contributing to the development of a sustainable cocoa supply chain is imperative for achieving profitable growth. Contributing to a sustainable cocoa supply chain is also the cornerstone of our corporate social responsibility program.

We view “corporate responsibility” in a broad sense. We believe we have a responsibility to all our stakeholders – shareholders, customers, consumers, suppliers, employees and the communities where we operate – and an obligation to consider their respective expectations. We pay particular attention to conditions in cocoa-growing countries and those lacking a welfare structure. We are committed to working to empower cocoa farmers, to ensure that children are not harmed in cocoa farming and to provide our employees a safe, healthy and inspiring work environment and skill enhancement and development opportunities.

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

The World Commission on Environment and Development (The Brundtland Commission), 1987
Barry Callebaut has long been engaged in activities to support cocoa farmers and cocoa farming communities. We regard activities that help to empower cocoa farmers to be vital for ensuring a sustainable cocoa industry and facilitating the economic growth of origin countries.

In this issue of Cabosse, we describe the organic farming program that Barry Callebaut launched in Brazil and the program that Biolands, a company in which Barry Callebaut owns a 49% stake, started in Tanzania. We also highlight the successful organic farming programs run by two organic cocoa suppliers to Barry Callebaut, Esco Ltd. in Uganda and CONACADO in the Dominican Republic.

Although the economic, social and environmental factors differ from country to country, organic farming is helping to make a positive difference in the lives of many cocoa farmers and their families, as these examples illustrate.

This progress notwithstanding, organic certified cocoa beans represent less than 1% of the worldwide cocoa crop. The majority of organic beans, about 75%, are produced in the Americas, with the Dominican Republic topping the list. The category of organic chocolate confectionery is expected to grow 34.3% worldwide from 2008 to 2012, or from 30,300 tonnes to 40,700 tonnes, according to market intelligence provider Euromonitor International. Despite the strong growth in recent years, organic cocoa and chocolate remains a niche market. Europe is the biggest market for imports of organic cocoa beans, and most organic products sold in the United States and in Canada are imported from Europe.
Business and government leaders, economists and organic experts often have differing views about the value of actively increasing the amount of land under organic management. One of the challenges cited in debates about organic agriculture is increasing crop yield per hectare to match or exceed the yields produced under conventional farming practices. While an in-depth look at the technical specifications and ramifications of organic agriculture is beyond the scope of this publication, we hope the following success stories will provide useful examples and insights that contribute to the pursuit of sustainable cocoa farming practices.

“Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.”

International Federation of Organic Agriculture Movements (IFOAM), June 2008

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<th>HEALTH</th>
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<td>ECOLOGY</td>
<td>Organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.</td>
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<td>FAIRNESS</td>
<td>Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.</td>
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<td>CARE</td>
<td>Organic agriculture should be managed in a precautionary and responsible manner to protect the health and wellbeing of current and future generations and the environment.</td>
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Source: IFOAM
Prompted by the growing interest of consumers in organic products, Barry Callebaut launched a program in November 2001 to develop a source of certified organic quality cocoa in the state of Bahia, Brazil.

The south of Bahia was historically known as one of the world’s largest cocoa producing regions, with some 600,000 hectares of cocoa plantations. A widespread attack of the fungus known as witches’ broom in the 1990s decimated cocoa plantations in the area. Cocoa bean production plummeted from a high of about 400,000 tonnes to about 100,000 tonnes in 2000.

By 2005, the total production volume in Brazil had crept back up to 170,000 tonnes. Current estimates indicate that 400,000 hectares are being used to grow cocoa, though at much lower yields per hectare than in previous years.

Creating opportunities for cocoa farmers

Barry Callebaut’s Organic Cocoa Project offered farmers an opportunity to improve their livelihoods as they restored their farms. Seven target areas were selected for the conversion program: Ilhéus, Itabuna, Ipiú, Gandú, Ubaitaba, Coaraci and Camacã/Belmonte. Setting up the program involved educating farmers about the benefits and techniques of organic farming. Some 25 local farmers from each area agreed to participate in the training to learn about organic principles and practices and how to implement them on their farms.

Barry Callebaut assisted farmers to convert their fields from conventional to organic farming and helped ensure compliance with the requirements of organic certification. We hired and trained field technicians who are based at Barry Callebaut buying stations in key locations. Farmers meet monthly with a field technician for support and advice, and also meet regularly with one another to exchange experiences.
Experimental areas established
Three five-hectare experimental areas were established on participating organic cocoa farms. The purpose was to showcase the benefits over a three-year period of a well-managed organic plot, under the supervision of organic conversion specialists and our field technicians.

Organic materials are used by the farmers and converted into organic fertilizers. These help to enhance soil fertility and promote the vigorous growth and production of the cocoa trees. Shade trees are controlled and techniques such as pruning and grafting are used. Grafting mother trees and increasing tree density with high-yielding seedlings has resulted in young and highly productive organic cocoa fields.

When the experimental areas were started two years ago, cocoa bean yields were close to 150 kg per hectare. Average yields now are up to about 450 kg per hectare. After the third year, when all recommended procedures have been implemented, yields of 750 kg per hectare are expected.

The results and lessons learned from the experimental areas will be made available to all farmers participating in the Organic Cocoa Project. Many have already visited the areas and witnessed the effectiveness of the farming methods and the opportunity to further improve their livelihoods.

“I had already been engaged in natural farming for 30 years, by conviction and passion, when Barry Callebaut introduced their organic project to our cocoa communities. In joining them, I achieved a better organization and understanding of organic cocoa farming under the valuable cooperation of their leaders, consultants and field technicians. The partnership in the organic project increased our commercial relationship and encourages us to constantly improve the quality of our cocoa harvests and the environment. Finally, we are very much concerned to maintain high standards to ensure safe supplies to the consumers.”

Narciso Alves da Cunha Lisboa, farmer partner,
Farm Reunidas Lisboa, Municipality of Gandu/Bahia
Managing the conversion program
Converting conventional cocoa farms in Brazil to organic farms is a long-term endeavor. The process – from changing farming practices to harvesting certified organic cocoa beans – normally takes from 18 to 36 months.

To meet international standards for organic farming and manufacturing, a product must be cultivated, produced and processed in a highly responsible social and natural environment, without the use of any artificial fertilizers, genetically manipulated substances or chemical preservatives.

Barry Callebaut Brazil works with the advisory firm Sertão Verde, which specializes in organic conversion programs. The firm’s agricultural experts provide technical and scientific advice and support to our field technicians and farmer partners. They visit participating farms and liaise with the Brazilian certification organization Instituto Biodinâmico (IBD).

IBD, Brazil’s largest certifier, is accredited by the International Federation of Organic Agriculture Movements (IFOAM) and by the Deutsche Akkreditierungsprüfweisen (DAPEC). An IBD auditor visits each farm to ensure that organic guidelines are followed. Once they achieve organic certification, farms are expected to maintain organic farming practices and comply with the certification requirements. Each year farms must pass another audit in order to be re-certified “organic”.

“Going organic we saw our plantations begin to harmonize with Mother Nature. Soils turned alive. Cocoa trees, green gardens and other vegetation became vigorous. Almost no diseases; back to pure air and water. Plenty of animals returned to the revitalized environment, which made the whole community happy, including farmers, workers and their families. Our thanks to Barry Callebaut for their remarkable contribution to nature and the cocoa communities and for offering to consumers a healthy option of traceable organic quality cocoa.”

Leilson Dos Anjos Oliveira, farmer partner,
Farm Santo Antonio, Itacaré/Bahia
Organic cocoa farming in Brazil

From organic beans to chocolate

Working closely with local specialists, Barry Callebaut has succeeded in converting more than 7,200 hectares to organic cocoa farming methods in southeast Bahia, home of its Brazilian cocoa processing operation. One of the conditions of the Organic Cocoa Project is that Barry Callebaut maintains priority to buy the certified organic cocoa, which is sold at a higher price than conventional beans. Farmers in Brazil receive a premium of about USD 550 to USD 600 per tonne for organic versus USD 200 to USD 400 per tonne for conventional cocoa from Brazil.

Some 4,120 hectares were certified organic by IBD by March 2005. At this time, 106 cocoa farmers, among them six women, participated in the program. By March 2008, an additional 3,116 hectares were certified organic.

Farmers together supplied approximately 850 tonnes of traceable organic beans to Barry Callebaut buying stations during fiscal year 2007/08. The Organic Cocoa Project now includes 7,236 hectares of organic cocoa fields and 116 farmer partners. The aim is to increase the total annual production volume of the participating farmers from 850 to 1,500 tonnes of traceable high-standard organic beans during fiscal year 2008/09.

Barry Callebaut’s processing facility in Ilhéus/Bahia, includes a production line certified for processing organic cocoa beans into organic cocoa mass, also known as cocoa liquor. Strict rinsing and separation procedures were implemented to ensure purity during processing.

“Our Organic Cocoa Project is a principal driver for sustainable development in the Bahia cocoa region with special focus on the Mata Atlântica Rainforest. With the cooperation of Barry Callebaut, I was able to complete university courses in biodynamic agriculture and environmental engineering. This acquired knowledge is very helpful for my daily work and contacts with our farmer partners in the project.”

Elvidio Antonio Dos Santos Junior, a Barry Callebaut Brazil field technician
“Permaculture” education program benefits children of cocoa farmers

A vegetable garden is an extension of the classroom in three rural schools located on large cocoa plantations in Brazil where farmers are growing organic cocoa in partnership with Barry Callebaut. The gardens are part of the Permaculture Project (*Projeto Permacultura na Escola*) initiated by Barry Callebaut in September 2006.

The one-room schools were built on the farm premises for the children of cocoa farmers and workers. No other schools are close by. Some 65 to 70 children, from 6 to 14 years of age, attend the three schools and participate in the Permaculture Project. The children, who helped to plant the school gardens, learn about the importance of good nutritious food for their health and wellbeing – and how to grow vegetables and herbs. At lunch time, vegetables from the school garden are served.

The word “permaculture” is derived from the expression “permanent agriculture.” The concept calls for planting in a way that mirrors a natural ecosystem. In addition, agricultural techniques are closely linked with the environment.

The benefits of the school vegetable gardens and the special instruction in health, nutrition and caring for the environment are clearly visible. Teachers and parents report that since the project started, children are performing better in school and eating more nutritious food.
The project has also brought together members of the community who get to know each other while helping out in the gardens. This has served as a catalyst for other community activities such as the production of handicrafts, foods and other items to be offered for sale in locally organized workshops or fairs. The public education authorities have generously provided transportation assistance to enable community members to visit the different schools participating in the Permaculture program and the Barry Callebaut Ilhéus production site.

“The lives of my children have very much changed in a positive way because the Permaculture project offers a new quality of life in terms of nourishing food and also respect for the individual, which I feel is so important today.”

Jivoneide Oliveira Dos Santos lives on São José Farm where her husband is a farm worker; her children attend a rural farm school in the municipality of Barra do Rocha.

“It’s amazing to me, this Permaculture project! I never would have imagined I would be able to learn so many new things and to participate in such a program – I, a person with almost no school education. The sense of learning comes through in everything I plant, cultivate, harvest and eat.”

Marcelina Dias Santos, 66, is the mother of 12 children and an active helper in the Permaculture garden of the rural farm school in São José, Ibirataia/Bahia.

“I never imagined I’d get the opportunity to participate in such a project and to contribute to the success of a higher-quality education for so many children and members of our communities.”

Jocelita Silva Santos (“Cely Luz”), coordinator of the Permaculture Project taught in three rural farm schools in three cocoa growing communities in Bahia.
“Native” – The first Brazilian organic chocolate drink

Using beans supplied through its Organic Cocoa Project, Barry Callebaut provided the organic red cocoa powder to make the first organic chocolate drink to be launched in Brazil.

“Native” organic chocolate drink, produced by the Brazilian company Native Organic Products Ltd., made its debut in 2005 at the Bio Brazil Fair in São Paulo. The drink, which also contains organic sugar, is sold in about 3,000 outlets across Brazil, including food stores, delicatessens and major supermarket chains. It is also sold to stores in South Africa, Spain, Portugal, Malaysia and Taiwan.

More recently, Native Organic Products launched a line of organic cookies, including a chocolate cookie made with the same organic red cocoa powder as the chocolate drink.

The product launches mark important milestones for the participants in the Organic Cocoa Project and for establishing Barry Callebaut as a preferred supplier of certified organic cocoa products across the Americas.
Organic cocoa farming in Tanzania

Biolands, based in Tanzania, is Africa’s largest exporter of certified organic cocoa. Barry Callebaut has purchased 100% of Biolands’ top-grade organic cocoa since 2000, and in April 2008 we acquired a 49% stake in the company.

The Biolands enterprise is one of the largest organic smallholder cocoa programs in the world. In Tanzania, among the poorest countries of the world, agriculture is the main source of income for most of the population. Farms are small: about 0.6 hectare on average, with about 300 trees including cocoa and other varieties. Biolands has implemented a “bottom-up” cooperation model in Tanzania. Farmers are encouraged to grow other crops, such as rice, in addition to cocoa, to diversify their sources of income. Biolands works directly with farmers to increase production, improve the quality of cocoa, ensure fair prices are paid to the farmers – and improve the farmers’ quality of life.

This certified approach guarantees full traceability for every bag of cocoa sold by the participating farmers, enabling consumers to know this cocoa has been produced in a sustainable and responsible manner. Biolands cocoa is certified organic by the Swiss Institute for Market-ecology (IMO), one of the most renowned international agencies for inspection, certification and quality assurance of eco-friendly products.
Organic cocoa farming in Tanzania

Cooperation and trust
Biolands has been working since 1999 with local farmers in the district of Kyela, Mbeya region. It has provided training, technical advice, supplies of seedlings and pruning equipment to 20,000 smallholder cocoa farmers. Some 647,000 seedlings have been planted to date, according to the Biolands monitoring system. The first crop of certified organic cocoa was shipped in 2000, and since then approximately 14,700 tonnes have been produced.

Thanks to cooperative efforts and business relationships built on mutual trust, Kyela farmers are producing higher yields of high quality cocoa, and they are receiving a fair price relative to the world market.

“When we started the program, for many farmers, it was the first time they were treated seriously as partners – partners who are expected to produce a good product in return for a better price. They feel that their cocoa and their work are valued,” said Eric Smeets, Biolands founder and managing director.

Before Biolands started working with farmers, there was no properly fermented, washed and dried cocoa from the area. Now, up to two-thirds of the cocoa crop is processed according to the highest quality standards. “Tanzania’s potential as a producer of fine-flavor cocoa is being restored,” he said.

“Having a company that believes in treating people fairly and honestly is appreciated,” said Eric Smeets. “Still, it is results they want. And we work hard to ensure we deliver fair and honest services. As a result of our field visits, where we promote the pruning and cleaning of farms and removal of black pods, farmers have been able increase production by an average of 20%.”
Organic certification and internal controls

The improvements in cocoa quality were achieved as a result of rigorous controls instituted by Biolands. The company developed an Internal Control System to introduce, monitor and maintain the organic farming of cocoa first under KRAV certification and then under the IMO certification. The company also achieved ISO 9001 certification.

The 20,000 farmers supply cocoa in 107 villages. This is done under the supervision of 185 people in the villages who are employed by Biolands. This approach facilitates the constant two-way communication between farmers and Biolands, and ensures transparency and traceability of the crop. Daily purchase statistics and cash requirements are reported from the field to the office through SMS text messaging, as most of the area has mobile phone coverage.

Biolands supplies bicycles to all the village coordinators. To help improve productivity and efficiency, Biolands is developing with partners an innovative new kind of bicycle designed to transport five 50-kg bags of cocoa beans.
Fair prices, proper payment for weight

“When Biolands started to buy organic cocoa in Kyela in May 2000, the existing cocoa buyers faced almost no competition and payments to farmers were very low,” says Jeremy Lefroy, Director. “Prices to agents were equivalent to US$ 0.31 per kilogram at the time. Biolands introduced direct payment to farmers at a higher level than they used to receive — provided that the cocoa was organically produced and of good quality.”

“The improvement in quality coupled with direct payments to farmers and a healthy level of competition have all contributed to a rise in farmers’ incomes which has far outstripped the improvement in the world market price since 2000,” added Jeremy Lefroy. “You can see the evidence in the improvements to houses and higher school attendance. Cocoa is also the main contributor to local government finance through the 5% levy charged. That helps to maintain and improve the public infrastructure.”

Biolands has also led the way in championing the proper weighing of cocoa. “In the past, farmers have been cheated on weight as buyers have used a tin or ‘kopolo’ to measure instead of calibrated scales. Invariably the tin held more cocoa than the buyer claimed,” explained Dickson Mkisi, General Manager of Biolands. Biolands regularly checks and recalibrates its scales to ensure accuracy, and all weights and measures are inspected and certified by the government.

Asked to describe the relationship between the farmers and Biolands, organic specialist Gosta Ericsson said: “Biolands is perceived by the farmers as a reliable business partner. There is trust. This is extremely important because farmers have often been cheated by unfair practices. The farmers know that Biolands pays a fair price and that we pay for the weight delivered. We do not take cocoa on credit and then ‘forget’ to pay. We pay cash on the nail.”
Improving the quality of life

Biolands is one of the biggest employers in the Kyela district in Mbeya. Besides its network of 20,000 farmers, it offers full-time, part-time or seasonal employment to about 300 people. In addition to positions supervising cocoa collection in the villages, the jobs include office staff, loaders and hand pickers.

Biolands pays staff well above the national minimum wage. “We are bringing real employment opportunities to rural areas and helping to boost the image of agriculture in the eyes of young people, who otherwise might be tempted to drift to the towns,” said Jeremy Lefroy.

The company is run by Tanzanian staff. Eric Smeets and a small group of directors provide guidance. Biolands managers are expected to train their successors. Employees are encouraged to “grow with the company” and to take on senior managerial positions. Some have moved into senior positions at Lima, a Biolands counterpart specializing in coffee, and Mavuno, another Biolands company.

Biolands works together with the local community on a number of health, education and social welfare projects in Kyela, providing financial support and other services. It has a long relationship with the local district hospital in Matema and helps pay for the maintenance of the hospital’s only ambulance and administrative services such as e-mail. In 2008, it helped fund the purchase of a generator.

The company has assisted local primary schools and provided books and helped to finance educational materials about AIDS/HIV. Biolands also sponsors an employee football team.
Investing in the future

In 2007, the farmers produced about 2,500 tonnes of organic cocoa. Biolands is committed to seeing this volume grow. Eric Smeets believes the way to grow is to make farms more productive by continuing to deliver seedlings and providing tools to clear and maintain fields.

“Our investment in the Kyela region is an investment in the future — for the farmers and their incomes, as well as for Biolands,” he said.

“Without Barry Callebaut’s steadfast commitment to buy cocoa from us at a fair price, we would not have been able to achieve our mission in Kyela,” said Eric Smeets. “Barry Callebaut’s support as a reliable business partner makes it possible for us to do our work to empower local farmers.”
In addition to our organic project in Brazil and Biolands in Tanzania, Barry Callebaut also sources organic cocoa from various other suppliers around the world. One is Esco Uganda Limited, the largest cocoa and vanilla exporter in Uganda. An organic project launched by Esco in the Bundibugyo district in western Uganda has had a positive economic and social impact on the livelihoods of several thousand cocoa farmers and their families. Sustainable agricultural practices have improved, and farmers are producing larger volumes of organic beans for which they receive a higher price than for conventional beans.

Bundibugyo covers 2,400 square kilometers and is geologically part of the Western Rift Valley. The soil is volcanic and very fertile, especially in the low lying areas. The average temperature ranges between 28 to 35 °C (82 to 95 °F) and annual precipitation is about 2,150 mm (84 in.).

Mukasa Samuel, a farmer in Kyamiazl, Busaaru parish, started organic farming in 2002 on two acres of land. Today he owns seven acres of organic cocoa and plans to buy more. He can afford the school fees for his four children and aims to support them through primary and secondary school so they can attend university.
Organic cocoa from Uganda

From coffee to cocoa and vanilla

Although cocoa growing in Uganda dates back to the 1950s, it has played a minor role to coffee as an export commodity for several decades. In the 1990s, however, after a widespread attack of coffee wilt disease decimated the coffee crops, farmers began again to propagate cocoa from the existing cocoa trees. From the 1990s to about 2000, the cocoa industry gradually rebounded, offering farmers an opportunity to diversify their crops and improve their livelihoods.

In 2001, as a post-war conflict situation in the area stabilized, Esco initiated the organic cocoa project with the support of EPOPA (Export Promotion of Organic Products from Africa), a program created by the Swedish International Development Agency (SIDA).

The project started with 1,500 certified farmers in Kasitu subcounty and has expanded to 6,500 certified farmers across almost the entire district. Farmers regularly participate in training sessions on organic agricultural practices. Training is also provided on health topics including malaria prevention, AIDS/HIV and family planning.

The farmers’ total annual production volumes have increased each year and currently are about 2,000 tonnes of certified organic cocoa and 4,000 tonnes of conventional cocoa. Alongside the cocoa, farmers also grow organic vanilla.
Economic and social impact of organic farming

Farmer training has resulted in an improvement in agronomic practices including mulching, pruning and soil erosion control. Soil fertility has been improved through the regular practice of applying organic manure. Cocoa fermentation practices have also improved. These efforts have led to better quality and higher yields of both cocoa and vanilla.

Before the project started, farmers did not usually plant trees except cocoa or support trees for vanilla. Now they actively plant trees to maintain tree cover and to provide shade. The Esco organic project team provides free tree seedlings to participating farmers and closely supervises tree planting.

The premium paid for organic was a key motivator for farmers to grow organic cocoa. Earning more has enabled farmers to improve their homes, support their children’s schooling, and increase their mobility through the purchase of bicycles and motorbikes.

A savings program instituted by Esco offers farmers the opportunity to save money in a safe and reliable way, providing a fallback position during the off-season when the earning potential from cocoa is low. Farmers who deliver cocoa to Esco buying stations may deposit 300 Ugandan shillings per kilogram (about US$ 180 per tonne) in a personal account that earns a promotional premium. Money can be withdrawn when needed, such as at the start of the school term to pay for school fees. When the money is paid out, the farmers receive a substantial premium.

“The savings program is something I am personally very passionate about,” said Philip Betts, director of Esco Uganda Ltd. “Farmers can set aside funds so they will have money when they need it, plus a premium, instead of having to take out loans at often high rates to pay for essentials.”
Barry Callebaut partnered with CONACADO, the Dominican Republic’s Small Cocoa Growers Association (Confederación Nacional de Cacaocultores Dominicanos) to establish an organic cocoa production program and to produce high-quality “fair trade organic” chocolate for the European market. Since the successful conclusion of the two-year project in 2004, CONACADO has been a supplier of organic cocoa to Barry Callebaut.

In the Dominican Republic, the cost of living for cocoa growers is relatively high compared with African growers. CONACADO has therefore looked for market niches, such as the organic cocoa market, to guarantee a reasonable price level to its members and thereby offer them some protection against the impact of the international market price fluctuations. A “fair” price, according to the Fairtrade Labeling Organizations International (FLO), covers the production costs and provides the growers a modest profit. The cocoa farming communities get back part of the proceeds in the form of social projects, such as school renovations, the construction of a medical center or road repairs.

The objectives of the multipartner project included developing a sustainable market for CONACADO small growers, producing raw organic cocoa beans of superior quality for Barry Callebaut, increasing the competitiveness of CONACADO and Barry Callebaut in the organic cocoa sector, developing the necessary incentives to motivate growers to focus on the quality of cocoa on an ongoing basis, and sharing the knowledge gathered with all CONACADO organic cocoa growers. The project was funded by CONACADO, Barry Callebaut and a grant from the Business Linkages Challenge Fund (BLCF), which was financed by the British Government’s Department for International Development (DFID).
Organic cocoa from the Dominican Republic

Demonstrated success

As a result of the project, cocoa quality has improved – as well as the livelihoods of small growers in the poorest production regions. More women have been employed and the entire community has benefited from a higher purchasing power. While the project was focused on two of CONACADO’s eight regions (Block 2 and 8), the training and lessons learned on how to grow quality organic cocoa were shared with the management and technical staff of all other regions.

“Cocoa farmers and technicians have learned how to handle the cocoa as a food product, taking care of all hygiene procedures and quality and traceability aspects,” explained Abel Fernández, Operation Manager at CONACADO. “Research carried out as part of the project has enabled our technicians to identify the best fermentation and drying process from among different surfaces including wood, concrete and plastic certified for food management. CONACADO has been able to increase our offer of high quality beans, to guarantee some additional income to our members as well as to be internationally recognized as a supplier of high-quality organic cocoa beans.”

“Things are going much better for me now. Before I had any cocoa and only had my small field to grow food for my family, nobody wanted to lend me money, not even 100 pesos. Since I have cocoa, everyone asks me, wherever I go, ‘How much would you like to have? We're at your service.’”

Damiana Castro, cocoa farmer, Block 2

“Since I joined CONACADO in 1993, the quality of my life has improved. During this time, I have received better prices for my cocoa because I am taking part in the organic production program. As a result, my cocoa farm is in a very good condition.”

Francisco Antonio Méndez, cocoa farmer, Block 8
“Organic” cocoa – understanding the claim

To be certified “organic,” cocoa must meet the legal standards for organic agriculture of the country where it will be sold and therefore the farms must be regularly inspected by a recognized certifying body. The United States, the European Union and Japan have comprehensive organic legislation and the term “organic” may be used only by certified producers.

It is commonly assumed that “organic” means “chemical-free,” and indeed organic certification standards include as a minimum requirement that chemical fertilizers and pesticides are not used. But organic cocoa production means more than not using chemical inputs.

Converting conventional cocoa fields to organic can be a major challenge and take several years, particularly if the cocoa farming system has been abused by the excessive use of chemical fertilizers. Such overuse creates imbalances in the soil and indirectly causes severe problems with pests and diseases. In turn, farmers have often turned to chemical pesticides to combat these problems.

The use of chemical fertilizers and pesticides, however, is more widespread in certain regions of the world than in others. On smallholder farms in Africa, for example, farmers may not be able to afford such synthetic aids or may use them infrequently or not at all.

In addition to avoiding chemical inputs, organic certification also requires that farmland be free from chemicals for three or more years. Traceability must be ensured through written production and sales records. Organic products must be strictly separated from non-organic products. In addition, periodic on-site inspections by certifiers must take place.
“Organic” cocoa – understanding the claim

An optimal environment for cocoa
A more holistic way to define a healthy cocoa production system is to consider what is needed to produce cocoa in a sustainable way. A sustainable cocoa production system is one that provides an optimal environment for a cocoa plant. The more optimal the environment, the fewer interventions are needed to manage diseases and pests.

The cocoa tree’s natural environment is the Amazon Rainforest, replete with a diversity of shade trees. For optimal growth, cocoa requires a humid and tropical climate with well distributed rainfall and stable high temperatures.

Shade and biodiversity
Shade trees are indispensible for organic cocoa production. Farmers are encouraged to combine cocoa with hardwood trees, trees that can be used for firewood, as well as other farm crops and plants. Many of the shade trees lose their leaves during the season and contribute a steady supply of nutrients through the organic fertilization of the soil.

Cocoa and shade trees must be regularly pruned and old and diseased branches must be removed, in order to create a balance between shade and sunlight. Pruning also ensures proper ventilation which helps prevent fungi infestations. Such biodiversity on cocoa farms can help control pests and diseases, while the additional food crops can enrich the family’s daily diet and offer additional sources of income.
Soil fertility
To thrive, a cocoa tree needs soil that has a good balance of essential nutrients. A healthy plant is less prone to attacks by pests and diseases, so improvement and maintenance of soil fertility is a critical factor in organic cocoa production. This can be achieved by preventing soil erosion through the use of stone walls or barriers, building terraces, or planting hedges and trees in rows across the main slope of an inclined area.

One of the most important measures to improve and maintain soil fertility is to continuously add to the soil organic material such as branches cut during the pruning of cocoa trees and shade trees, weeds, and empty cocoa pods. The application of manure and compost is also helpful, especially on young farms.

Pest and disease control
Cocoa is at high risk to be attacked by various pests and diseases such as swollen-shoot virus, black pod disease, pod rot, witches’ broom, vascular streak dieback and black root disease. It is estimated that one-third of the annual worldwide cocoa crop is lost to such diseases.

The use of chemical inputs like pesticides and fertilizer is not allowed in organic production, so taking care to maintain an optimal balance of sunlight, shade, air, water and nutrients is important to help prevent attacks. If pests or diseases appear, the infected branches and plants must be cut and removed. Grafting cocoa trees with disease-resistant varieties is always recommended in organic cocoa farming.

When these measures are followed by correct harvesting and careful fermentation and drying, the result is good quality organic cocoa beans produced in a sustainable manner.
A range of organic cocoa and chocolate products

Barry Callebaut is one of the largest processors of organic cocoa products in the world. We introduced our first organic chocolate in 1996. Today, we offer industrial and gourmet customers a wide range of certified organic products including cocoa powder, cocoa mass, cocoa butter, chocolate and fillings. Our chocolate range includes semibitter and extra bitter dark chocolate, milk chocolate and white chocolate.

According to EU regulations, certified organic chocolate must be produced with at least 95% organic ingredients, based on the total weight of the finished product. Our organic chocolate products meet strict quality requirements as well as the EU requirements and/or NAFTA or Japan’s requirements for certified organic products.

All organic cocoa products are manufactured with organically grown or certified ingredients. We use organic ingredients including cocoa, sugar, nuts and milk powder from suppliers in Europe and other regions.
Organic plus Fairtrade
In addition to certified organic cocoa, we also offer cocoa powders that are certified both organic and Fairtrade. The Fairtrade Labeling Organizations International (FLO) arrange direct contracts with cooperatives, manufacturers, traders, importers and exporters of foodstuffs, and ensure that they are paid a fair price for their products. Barry Callebaut is certified by FLO-CERT, the certification body for FLO, to produce a range of Fairtrade cocoa and chocolate products. The products are manufactured with raw materials purchased from Fairtrade manufacturers recognized by FLO-CERT. All these products are manufactured and registered in separate production runs.

Organic products for consumers
Barry Callebaut offers solutions for retailers who want to offer customer label products made with organic chocolate to consumers. In addition, we offer the “bio” line of organic chocolate products sold under the Sarotti brand to retailers.
Looking ahead

Barry Callebaut has a long-term commitment to supporting sustainable and environmentally-friendly cocoa growing practices. In addition to our own programs to empower cocoa farmers, such as the organic cocoa programs described in this issue of Cabosse, Barry Callebaut has joined forces with other companies and industry organizations to work together on solutions to complex problems in cocoa growing regions of the world. This collaboration includes taking a leading role in industry associations – such as the World Cocoa Foundation (wcr) – and participating in other partnerships committed to sustainable cocoa farming and to ensure children are not harmed in cocoa farming.

The World Cocoa Foundation, established in 2000, works to strengthen the partnership between industry and cocoa farmers. With more than 60 member companies and organizations, the wcr supports a range of economic, social and environmental programs in cocoa communities in Africa, Asia, Central America and South America. wcr programs focus on raising farm incomes, encouraging responsible, sustainable cocoa growing and strengthening communities.

Barry Callebaut supports the Sustainable Tree Crops Program (stcp), a public-private partnership and innovation platform started in 2000 that seeks to generate growth in rural income among tree crop farmers in an environmentally and socially responsible manner in West and Central Africa. The organization is managed by the International Institute of Tropical Agriculture (iita) and is supported financially by the u.s. Agency for International Development (usaid), and the global chocolate industry and trade associations represented by the wcr.
As part of the Sustainable Tree Crops Program in West and Central Africa as of April 2008, 24,114 farmers were directly trained through the participatory Farmer Field School approach and 51,780 farmers indirectly benefited from farmer-to-farmer knowledge sharing. Trained farmers realized yields 15 to 40% greater than non-trained farmers while using 10 to 20% less pesticides. Participating cocoa-farming household income in 2004 was on average 23 to 55% higher than in previous years as a result of improved production and marketing skills developed through the program.

In line with our strategic goal to increase direct sourcing volumes, Barry Callebaut is supporting Biolands in its efforts to replicate in other countries in Africa the “bottom-up” model for organic cocoa production that has proved successful for cocoa farmers in Tanzania. At the same time, Barry Callebaut is working to further improve its Quality Partner Program (Partenaire de Qualité) for cocoa farmers in Ivory Coast. This program is based on a “top-down” model in which we work with some 40 cooperatives representing 40,000 cocoa farmers. In 2008/09, we will be testing the two models in the field and evaluating their effectiveness in improving the quality and quantity of cocoa produced as well as the livelihoods of cocoa farmers and their families.

For more information
Barry Callebaut – www.barry-callebaut.com/csr
International Federation of Organic Agriculture Movements (IFOAM) – www.ifoam.org
World Cocoa Foundation – www.worldcocoafoundation.org
Sustainable Tree Crops Program – www.treecrops.org
People Processes Products

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