Introduction

In this brochure we present the activities of Agro Eco in the cocoa value chain in Ghana. We work in Ghana for more than 15 years with farmers, farmer organisations, authorities, cocoa buyers, chocolate makers, NGOs, universities and research bodies to make cocoa farming more sustainable. Agro Eco – LBI is an independent advisory, research, training and development institute to advance truly sustainable agriculture: farms with a future.

In the past 30 years Agro Eco has worked throughout Africa in developing certified value chains of all kinds of commodities. Originally in organic, sometimes Fairtrade, nowadays more in Rainforest Alliance or Utz Certified (or a combination of these), or buyer specific requirements. Currently the focus is on Ghana, where, besides fruits and vegetables, cocoa is the mainstay of our work. Hence this brochure about the activities in cocoa.

Agro Eco – LBI has a value chain approach. This means that there is a market with certain requirements which the farmers have to fulfil. We set up value chains, solving all kinds of challenges and once they are up and running we identify and improve on the bottlenecks optimising the chain. We work on inputs, on planting materials, on registration of shade trees. We work with the farmers, the men and the women. We work on farmer organisation. With processors, the market. We build capacity. We train those who train thousands of cocoa farmers.

We introduce innovative approaches, like setting up youth teams, grafting, giving impact training. We develop information management systems to monitor performance and impact. We like to work more on community/landscape level. We work with a long term holistic approach that is presented in this brochure.

Certification

Ghana produces one-quarter of the world’s cocoa. The price that chocolate manufacturers are willing to pay for Ghanaian cocoa mainly depends on the physical quality of the cocoa beans, i.e. moisture content, low percentage of mouldy beans, uniformity, but there is more ...

About two decades ago chocolate producers became concerned about the traceability and later sustainability of their supply. The existence of child labour was a symptom of a deplorable socio-economic situation. Cocoa farming was linked with deforestation. Consumers became aware of the problems and a certain segment wants to know that the cocoa, of which their chocolate is made, is produced sustainably. As a main tool to address all these issues, certification was introduced. This had been in existence for organic and Fairtrade, but should now involve far more farmers.

With certification came transparency in the value chain and a move towards vertical integration. Farmers are more linked with specific buyers, produce for a market with certain quality but also sustainability requirements. Farmers
receive a premium which can be used as an extra income but it can also be used for training or for financing farmer organisations. Agro Eco – LBI supports bean buyers and farmer groups with for example assistance to obtain and maintain certification and by training the staff of these entities. For us certification is a tool to work with farmers on improving their farming, their livelihoods.

**Standards**

**From ICS to SIMS**

The presence of an Internal Control System (ICS) is a requirement for group certification to organic standards. It is also used for other types of certification. For us it has evolved into a smallholder information management system (SIMS). It is a tool to manage the traceability of the product, the adherence to standard requirements but also to monitor performance and effectiveness of interventions, and improve the quality of production. It results in a database with unique information about the farming practices but also the socio-economic situation of the farmers.

Being certified is not a one-off thing but an ongoing process with continuous improvement. Farmers are expected to comply with the standards throughout the year; the surveillance by the ICS/SIMS should also be active throughout the year. ICS activities include registering farmers; training on good internal inspection-monitoring, planning of external certification, tracking farmer performance over the years, documenting the ongoing activities in the field, etc.

Agro Eco was at the forefront of developing ICS and continues to invest in SIMS as a tool to monitor and increase the impact of its intervention. We assist grower groups to develop and maintain an ICS/SIMS, train the internal inspectors. We try to make the annually recurrent monitoring visits more interesting for the farmer.

**Organic, Fairtrade & Rainforest Alliance Certification**

Whereas organic originally was its main specialty Agro Eco has developed plenty of experience in Fairtrade, Rainforest Alliance, UTZ Certified and specific trade standards. AE-LBI is working closely with different certification bodies and is an active member of IFOAM (International Federation of Organic Agriculture Movements).

**Organic**

Global demand for organic products has been growing for more than ten years and farmers from developing countries can benefit from this niche market which offers premium prices. Consumers have an interest in organic production mainly for environmental and health reasons. Organic chocolate products are among the novelty foods of today, for example raw chocolate.

During its cultivation environment friendly, natural methods are applied (the use of synthetic fertilisers and pesticides are prohibited) and during production of chocolate only traceable, organically certified ingredients (sugar, milk powder, vanilla) are used. Organic is healthy and responsible.

In this segment the organic cocoa trader and chocolate makers always insist on direct contact with the producer group. They visit the farmers, show interest in their work, have a genuine interest
to improve their livelihood. Exporting organic cocoa can be attractive for farmers; the specific niche markets offer the opportunity for better prices and a long-term privileged market position. Sales of organic products are steadily increasing. In 2007 Agro Eco – LBI trained COFA, the first cocoa farmers in Ghana, exporting organic cocoa beans. What appeals to a lot of farmers, is the fact that they will not need unhealthy, expensive inputs.

Research has pointed out that being certified is not enough. There are problems with availability of organic inputs (botanical insecticides and compost), with inconsistent supply: very small volumes available at harvest time only (instead of on-demand). Agro Eco is working on these issues. Three other organic farmer groups have been generated since the first organic exports.

**Rainforest Alliance**
In 2008, Agro Eco – LBI entered into a partnership with Rainforest Alliance (RA). The partnership sought to build
the capacity of farmers to follow the SAN standard and assist the farmers to prepare for RA certification. RA works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior.

It is a welcome addition to, or starting point for organic cocoa growing. It is also an alternative marketing channel besides organic.

**Fairtrade**

The term ‘fair trade’ usually refers to trading partnerships between producers in developing countries and market partners in consuming countries. It is based on conditions that enable producers to improve their livelihoods. A crucial role is played by the farmers’ organisation. Farmers are empowered.

Here too, certification provides third-party auditing which ensures the functioning of the farmers organisation, farming practices, the integrity of the trading relationship (minimum prices paid), as well as communication to consumers.

The most widely used Fairtrade standard and certification system is the one under the Fairtrade Labelling Organisation International (FLO).
Cocoa Projects in Ghana

- **CocoaLife +**
  - Location: Nyinahin
  - Communities: 34
  - Farmers: 1000
  - Area: 4,000 ha

- **iMPACT Assin Foso Cocoa Farmer Association**
  - Location: Assin Fosu
  - Communities: 17
  - Farmers: 1000
  - Area: 1,200 ha

- **COFA**
  - Location: Akwadum
  - Communities: 5
  - Farmers: 350
  - Area: 400 ha

- **ABOCFA**
  - Location: Aponoapo
  - Communities: 13
  - Farmers: 400
  - Area: 1200 ha

- **Ntoboroso organic cocoa farmers Union**
  - Location: Ntobroso
  - Communities: 4
  - Farmers: 400
  - Area: 1000 ha

- **Touton Climate Smart Cocoa**
  - Location: Bonsu Nkwanta
  - Farmers: 16,000

- **RA Climate Smart Cocoa**
  - Location: Juaboso-Bia
  - Communities: Farmers: 1200
  - Area: 3500 ha

- **CocoaLife +**
  - Location: Tepa
  - Communities: 38
  - Farmers: 1250
  - Area: 2500 ha

- **Fine flavor Cocoa**
  - Location: Offinso
  - Communities: 7
  - Farmers: 300

- **iMPACT Asankragwa Cocoa Farmer Association**
  - Location: Asankragwa
  - Communities: 35
  - Farmers: 1660
  - Area: 2,500 ha

- **Tano Blakoye Organic Cocoa farmers’ Association**
  - Location: Tano - Bibiani
  - Communities: 17
  - Farmers: 1000
  - Area: 1000 ha

Legend: 📍 Project with cocoa partner  🌿 Project run on certification premiums
Certified Projects

**COFA**

In the years 2006-2008, the Cocoa Organic Farmers Association (COFA) in Akwadum-Brong Densu received support from the Dutch Rabobank Foundation to organize themselves and go organic. The area was identified by the Cocoa Research Institute of Ghana as being relatively disease free, and thus suitable to test organic practices. The support was also to develop export of high quality certified organic cocoa beans in three years’ time. At the end of the project period, COFA was, and still is, a self-sustaining association, managing its own affairs, including maintenance of certification which is a Ghana first.

In 2011 COFA beans were used to produce 200,000 organic chocolate bars for HEMA’s “Return to Sender” project, supported by the Dutch Postcode Lottery and DOEN Foundation.

**ABOCFA**

The project was initiated in 2008 by AE-LBI with the support of Cadbury on behalf of its organic brand Green & Black’s, and targets over 400 farmers in the Aponoapono enclave in the Suhum Kraboa Coalter district of the Eastern Region near Suhum in Ghana.

An association of organic cocoa farmers has been formed. Its name is Aponoapono Biakoye Organic Cocoa Farmers Association, or ABOCFA. The project covers 13 communities that have a total area of 2800 acres of cocoa farms.

At the end of the second phase of the project the farmers’ association implements all organic and fair trade related activities independently, and the Fairtrade cocoa business is a sustainable business for the association.

ABOCFA is assuming all responsibilities, including provision of farm inputs. They have a dedicated buyer: Tony Chocolonely who is making chocolate bars and organic chocolate milk.
Two organic-RA groups

The Ntobroso Organic area consists of 5 villages with a total farmer population of 1500 located in the Atwima Mponua District in the Ashanti region of Ghana. 500 farmers participate. The District is bordering the Western region (60 km West from Kumasi) and covers an area/landscape of approximately 900 square kilometers.

This project was developed in cooperation with the Ghana Organic Agriculture Network (GOAN) with support from Progreso from 2007 to 2012. The area is badly hit by illegal mining, causing some farmers to sell their farms and others to abandon them because of the environmental destruction and dropping groundwater table.

The Ntobroso group achieved Organic and Rainforest Alliance certification in 2009. All of its cocoa has been sold with a RA premium since. We have been pushing the LBC to get a license to buy organic in order to open that market which has a higher price premium. That turns out not to be easy which frustrates the farmers.

The project has a potential of 500MT of beans. The Farmer Based Organisation is slowly developing its capacities, for example to organise organic inputs for its members.

Cocoa farmers from the Tano catchment area requested for a similar intervention. Some of the communities are part of a project addressing child labour/trafficking, funded by CRADA/ACE from Japan. Subsequent consultations gave birth to the Nyinahini-Tano Sustainability Cocoa Production and Community Empowerment Project.

The farmers set up the Tano Organic-RA Cocoa Farmers’ Cooperative. This project is also located in the Atwima Mponua district (100 km West of Kumasi). About 1500 cocoa farmers received training in organic and Rainforest Alliance standards. The potential tonnage is 2000 MT. Farmers have grasped organic and good agricultural practices and are enthusiastic.

These two organic/RA projects help to sustain the wider ecosystem as they act as a bio corridor linking the three forest reserves within the district.

iMPACT

In the framework of a development partnership Mars Inc. initiated the Mars Partnership for African Cocoa-Communities of Tomorrow (iMPACT) project with partners like GIZ and BMFG in 2009.

About 2,500 farmers in the 40 iMPACT communities in Ghana were to improve their living conditions. The project was successfully implemented in Asankrangwa and Assin Fosu but by the end of the 3 year project period we feared, together with Rainforest Alliance, that all efforts would quickly vanish when the farmers were left without support.
Together with RA we pursued farmer organization and RA certification as two tools to keep the momentum going. The farmer organisations, financed with part of the certification premium, are now well established. A larger part of the premium is used as a guarantee fund for an input scheme. More than 70 per cent of the small-scale farmers have adopted more sustainable agricultural practices such as diversification into various crops, planting new cocoa seedlings and shade trees.

These activities lead to increased productivity and higher incomes. Some challenges remain but these farmers are well on their way to collectively take their fate in their own hands.

**Scaling out**

Departing from the smaller certified organic projects we are working with some of the larger bean buyers in developing their sustainable sourcing.

In 2012-2014 we worked with Armajaro Ghana Ltd, now part of Ecom, in developing its Rainforest Alliance certified supplier base. Agro Eco gave training to the company’s trainers at the top of the pyramid; there was a cascade of capacity building throughout the company and of its supplier base.

Agro Eco also monitors at the base of the pyramid. In this model, the certification is introduced, maintained and held by the company. Currently Agro Eco is advising Ecom how its supplier base could be organised so that the information flow happens more efficient.

In 2014 a program was developed together with ADM Cocoa, based on a common working paper ‘Farms 4 the Future’. It included a basket of interventions, which is a comprehensive set of facultative measures based on needs assessment in the communities, to make cocoa farming more sustainable and at the same time lift cocoa farmers out of poverty. It is based on what the farmers and their families require rather than a top down recipe of certification.

At the same time it wanted to investigate the socio-economic conditions in the communities better, look at farmer motivations, typologies, their challenges and opportunities, breaking away from the one treatment fit all thinking. The approach is partly being implemented in the Mondelez CocoaLife project, co-financed by Olam Cocoa. It is implemented in 116 communities in 3 districts. It includes the development of over 300 farmer groups as a means of communication.
The cocoa value chain

West Africa’s cocoa sector has been under pressure to liberalize; most countries have done that and not always with good results. In Ghana, however, the Cocoa Board is regulating the sector. As a result the sector is more stable compared with its neighbours. On the other side there may be less room for private sector innovations. Agro Eco has been in the forefront by introducing organic cocoa, preparing the way for other certification schemes as well. Buying cocoa from the farmers is done by various Licensed Buying Companies (LBC), for a fixed price. All export is done by the Cocoa Marketing Company, a subsidiary from the Cocoa Board. However, for a LBC it is possible to be engaged in a district or community with an intervention, keep the beans separate and buy back the beans from their community, by creating a traceable chain.

Any project has to have an agreement with the Cocoa Board and all rules and regulations should be followed, which may look a little laborious for newcomers. Developing a project or value chain means that one has to engage with the different Cocoa Board departments or services. Both the public and the private sector have to deal with an increasing number of regulations, standards and expectations on food safety, sustainability, traceability, business and ethical practices. This requires sensitization and capacity building throughout the value chain and with all stakeholders. This is important for the development of the cocoa sector.
Focus on Flavor

Fine Flavor Cocoa
Since 2008, The Ghana Fine Flavor Cocoa Project (FFC) has been a collaboration of fine flavor connoisseurs, breeders, chocolate manufacturers and farmers. The project provides superior cocoa clones and training to Ghanaian farmers to produce Ghana’s first fine flavor cocoa.

The project started as part of the New Business Models for Sustainable Trading Relationships for Raising Smallholder Farmer Income in the Developing World funded by the Bill and Melinda Gates Foundation (BMGF). Farmers at Offinso have self-organized into the Offin Fine Flavor Cocoa Farmers Association (OFFCFA). The OFFCFA is the first farmer group to plant grafted FFC in commercial quantity in Ghana. Lead farmers pledged one to two acres of land to establish the FFC varieties. Initially, 60 farmers have received FFC grafted planting materials (clones), training and technical assistance on the production and post-harvest management of the crop.

To establish the FFC plot, the farmers have a revolving loan scheme managed by Opportunity International. Part of the clones are top grafted onto existing cocoa trees. Others are grafted onto seedlings.

Flavor labs
The FFC project links with the establishment of cocoa flavor labs in Ghana which is done by TCHO, a US-based fine flavor buyer. Flavor labs are established with a trained staff and sensory panel.

They screen cocoa from different areas to possibly identify ‘origins’ for which there might be a special market. They will also determine which improvements in fermentation and drying technologies would bring out the desired flavor characteristics even better. Tests will involve farmers and several of our sites are part of it.

Having proven the fine flavor concept, the project is scaling out to 600 farmers in the Offinso district, to come
In-country processing

There is an interest in smaller quantities of processed certified cocoa beans from Ghana. NICHE is a privately owned and operated cocoa processing company in Tema. It produces high quality cocoa liquor, butter and powder to customer specifications.

It is certified to ISO 22000. The factory is specifically designed to process and store relatively small quantities of certified or specialty cocoa.

NICHE has organic certificates for the European, Japanese and North American markets. In addition, the plant has certification for Kosher and for Halal production.

It has exported organic cocoa liquor to as far as Japan. Farmers have visited the factory to understand better what happens with their beans. It was an opportunity to stress quality management from the farmer’s side.
Market Linkages

Farmers not only need support in their organisation and in improving farming practices, but also in building relationships with the buyers. There is little need to improve production when there is no market demand. AE-LBI’s contacts in the international trade are of great value, in both the traditional organic field and in supermarket/ large industry trade. Every year, Agro Eco-LBI is participating in the Biofach, world’s largest organic trade show, where it assists (also non-cocoa) exporters to market their products. The last years the main theme in the Ghana country stand was the promotion of organic cocoa.

Research

We see cocoa farming not as a mere technique but as a social activity. Much of our work could be seen as social experimentation, a constant search for improving our work with the farmers and their communities.

Every year we employ students to study certain aspects in the community. We currently work on farmer typology, determine their challenges and opportunities. We test different approaches how to engage cocoa women in the farming business.

However, Agro Eco is also involved in formal research. It is participating in the ProEco project which is a 5 year study to compare high and low input conventional farming with certified and non-certified organic farming.

Data on farm activities and production are collected on a fortnightly basis on sets of 70 farmers per category. The research is done in Ghana and Kenya and involves, next to cocoa, other crops like vegetables and maize. It will lead to the first African study comparing the four farming systems among comparable farms. The African Union is keen to receive the results as it may lead to policy recommendations.

Together with IITA, Agro Eco works on climate smart cocoa. Climate change is undeniable, in some parts of the country cocoa is already on the retreat. The research investigates how farmers react to the changes, what they can do to mitigate climate change, what the trade-offs are, how they make their decisions. That continues to be the major challenge,
to understand how the farmers, their household, their communities think and make decisions. We try to help and support in making those decisions.

We work with the Ministry of Food and Agriculture on the Green Label, a certificate for the vegetable farmer who uses inputs in an appropriate way.

Other research is technical, like the work on inputs. We work on making safe compost from faecal sludge. While Agro Eco originally focused on organic agriculture and prefer to work on botanicals like Neem and Pyrethrum, we work with agrochemicals. A main reason for pesticide residues in food is because of the inappropriate use of agrochemicals by farmers.

We are working with Syngenta on demo farms to compare timely and proper application of pesticides with the usual practices in cocoa. Given the good results we promote in all our sites that spraying is to be done by trained professionals using the best, maintained equipment. We have come a long way. The journey has not yet ended.
Organic Schoolgardens

In rural Ghana a large part of the children suffer from undernourishment, a poor diet, parasitic infections and diarrhoea. This has an effect on their learning. When the Ghana government restored its School Feeding Program in 2006, we put in place organic school gardens alongside a series of primary schools all over the country. Agro Eco revamped its intervention in the Olam-Mondelez project.

These vegetable gardens and fruit trees have the aim to supply the children with a better lunch while at the same time it would be an opportunity -for some grades- to learn about biology and agriculture. Government and NGO extension staff train interested teachers, and the topics are brought into the curricula of the schools (soil fertility, composting, talking about micro-organisms, chicken and goat rearing are a few examples).

Setting up the schoolgardens requires some heavy labour so parents are invited to assist. This has as a result that a number of schoolgardens become a kind of Farmer Field School location for some of the parents who start to grow more vegetables; for home consumption, for selling to the school and local markets. In some cases they go into commercial vegetable production, delivering to nearby restaurants and hotels (very much appreciated because of its organic production: better taste, longer shelf life).

A start is made using schoolgardens as a venue for training mothers in better cooking (maintaining nutritional value), in nutrition and better hygiene. This could easily be extended with issues like better cooking stoves, sanitation and waste management. We are keen to continue this work, particularly in cocoa areas; as well fed children are the basis of the communities’ development. And some of them are tomorrow’s farmers.

A budget is provided to start the schoolgardens: for fencing, a water tank, some tools and a small shed. Seeds are provided. The school boards annually provide a small part from their schoolfeeding budget to continue the exercise.
The basket of interventions

Agro Eco works with the CCE manual, developed by GIZ to train trainers (extension officers, lead farmers) to deliver the standard GAP, GBP, GEP and GSP (Good Agricultural, Environmental, Business and Social Practices) trainings. It has been experimenting with different formats of internal inspections, also requested by certification bodies, to make that recurrent practice more useful and productive for the farmer. It is not just a compliance check but the farmer is made to think how to further improve the farm. The hypothesis is that each discussion leads to an increase of production.

Other interventions clearly go beyond certification. We have a Cocoa Women in Food Business intervention that looks how women can increase food production inside the cocoa farms (during replanting) not only for feeding the household but also for gaining a little more income (which is generally also used for feeding the household particularly outside the cocoa harvesting season).

We find it unacceptable that around 40% of the children in cocoa communities have stunted growth due to bad nutrition and lack in hygiene. Many pregnant women suffer from anemia. School lunches should improve. Schoolgardens could be the venue to approach mothers to improve diets, sanitation and health in their families. Small animals are important to improve the intake of proteins. Supplying communities with already vaccinated pullets is one strategy that we try out. Contented cocoa farmers have diversified farms. They have enough to eat throughout the year. They have other farm incomes to pay for spraying or hired labour for weeding.

We look into commercial timber trees like mahogany, as shade in cocoa. Not only as a climate change mitigation measure but also as an asset, an additional value to the farm. It should fit with the replanting/regrafting scheme. Both cocoa and timber have a 30-35 year cycle. There are enough young men wanting to go into cocoa farming. We are thinking how to approach generally unproductive old traditional farmers so that modern young farmers can take over, and double or triple yields. Young men (and women) are trained to become professional cocoa farmers in Youth Teams. Those are groups of 6-9 people who can do the replanting, pruning, thinning, weeding and spraying for the old farmers, paid from the increased harvest in the next season.

These are some of the interventions, innovations that are developed to give cocoa a future in Ghana.
Beyond certification

Payment for Ecosystem Services
Ecosystem services are those services that an environment provides to society. These include water retention, rainfall attraction and thus provision of drinking water, and (agro) biodiversity. This means an ecosystem where natural balances prevent pest and disease outbreaks but also provides various foods, fruits and medicines to the farmer and the family; food security.

Another important service is carbon sequestration, in trees and in the soil. Deforestation, also for planting new cocoa, is one of the largest contributors to climate change. In Ghana, while parts of the cocoa belt are classified as biodiversity hotspots, biodiversity is quickly eroding. Maintaining various shade trees and planting new ones, protecting water streams and creating bio corridors on cocoa farms can partly compensate. That would also be a climate change mitigation strategy.

We want to generate productive and robust ecosystems where farmers can grow cocoa and make a decent living for some decades to come, so that no new primary or secondary forests need to be cleared. With the exception of carbon, these ecosystem services are usually not paid for. We believe in multifunctional agriculture but it should pay off. We studied ‘PES in Cocoa Agroforestry’ for the Dutch Ministry of Economic Affairs. This leads to a certified commercial timber in cocoa shade scheme that we are now putting in place.

We are developing management plans, identifying what needs to be done, the cost, and the (value of the) ecosystem services that will be delivered over e.g. 30 years. Initial calculations show that the Ghana cocoa farmer could earn a serious side income when he/she would grow commercial timber as shade trees. We are planning to initiate a social enterprise, in which various private and public stakeholders have a share.

The next level: landscapes
One can work with hundreds of individual farmers in an organic project, or with thousands of Rainforest Alliance certified smallholder farmers, but at a certain moment one has to move to community level or landscape level to have real impact. This is particularly the case for natural resources conservation. There is little use to have 80% of the farmers abiding by the rules of better wildlife management when there are still a few illegal hunters.

The certified farmers can do their best to preserve the environment but this is destroyed when 25% of their colleagues sell out to illegal miners. We are thus moving towards working on community and landscape level, in an agroecological and multi-stakeholder approach.

In Ghana, there are a number of areas with
a high percentage of certified farmers. One of these is the western part of Atwima Mponua district. A former District Chief Executive has declared that she wanted the whole district to become sustainably managed. Her successor has repeated that. That is a good starting point.

The idea is that one can rally the different public and private stakeholders around the need to create a resilient ecosystem that will produce cocoa for the next decades, where cocoa farming families can generate a good income. With good schooling that will stimulate a local economy with increased employment for the young, an improved standard of living for the area.

The support of serious cocoa buyers - those who want to continue to buy cocoa in the area - can provide an excellent basis for such a development. It takes time for practices like illegal mining and logging to cease and for the different stakeholders to have a common vision for the landscape. Cocoa farming can only be sustainable in a sustainable landscape.
About Agro Eco

Agro Eco-Louis Bolk Institute is an international cooperation of different organisations. The Louis Bolk Institute (GH) is a not for profit NGO active in promoting more sustainable cocoa, fruits, vegetables and other agricultural products in West Africa. It is a research, advisory, training and development organisation in the field of more sustainable farming. The two offices (in Accra and Kumasi) have over 10 professional staff. It is associated with and implements work for the Agro Eco foundation (an NGO) and Agro Eco Implementation Agency (an Ltd) which are based in the Netherlands. All these units work in a partnership with the Louis Bolk Institute which is a Dutch research institute working in temperate climates on sustainable agriculture, nutrition and health.

The current cooperation is succeeding Agro Eco Consultancy BV and its African branch offices which merged with the Louis Bolk Institute in 2008. Since 2014 the entities operate independently but in harmony with each other. In the 35 years of its operation, Agro Eco build up expertise in the following areas:

**Project management**
- Proposal writing
- Product and project feasibility studies
- Baseline studies & Impact assessments
- Project and program evaluation

**Organic and sustainable agriculture**
- Training in organic agriculture
- Pest & disease control, botanicals
- Soil fertility management, compost production
- Organic crop protocols/manuals

**Assistance towards certification**
- Organic certification procedures
- Other standards like: Global GAP, Fairtrade, HACCP, Rainforest Alliance, Utz
- Setting up ICS/SIMS, digitalisation

**Farmer organisation**
- Capacity building
- Grower group certification
- Smallholders access to the markets
- Farmer Field School approaches

**Quality management**
- Pre & Post-harvest technologies
- Cold chain handling & management
- Setting up quality management systems

**Marketing**
- Market surveys
- Buyer contacts, match making
- Participation in trade shows, organisation of country stands
- Project presentations/ brochures
Partners

Agro Eco works primarily together with farmers; we actively and effectively pass on research findings and experiences; they are the ones to formulate the problems and identify and adopt the solutions. The work is based on developing sustainable value chains.

Agro Eco has a history of developing close to 100 value chains in the tropics, all kinds of products, for businesses and for development NGOs. Our ‘Development through Trade’ approach has substantially increased the sales of sustainably produced agricultural products from Africa onto the global market over the last 20 years and at the same time improved the living standards for the farmers involved.

Important clients and funding agencies include international development NGOs, farmer organisations, smaller and bigger private companies, the European Commission, Dutch Ministries, national and local governments, some natural conservation NGOs. We work with SME’s dedicated to organic, we assist large companies to start and develop a sustainable sourcing line.

For its research and advisory activities, Agro Eco-LBI works in close collaboration with universities (such as Wageningen UR, University of Utrecht and Groningen, University of Ghana) and research institutes (like CRIG, FiBL, IITA). Every year a number of students do their research in the various projects.