

# Product Strategy for Cocoa.

State of affairs, product strategy and interventions for market entry in Europe.  
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<b>Title</b>	Product Strategy for Cocoa.
<b>Language</b>	English
<b>About SIPPO</b>	<p>SIPPO, the Swiss Import Promotion Programme, is a mandate of the State Secretariat for Economic Affairs, SECO, within the framework of its economic development cooperation. It is carried out by Osec, the official Swiss foreign trade promotion agency.</p> <p>The programme helps SMEs in developing and transition countries to gain access to the Swiss and European markets by providing information, training courses and other matchmaking services. SIPPO also assists importers from Switzerland and the European Union with finding suitable partners and high-quality products from selected developing and transition countries. The programme has five main goals:</p> <ul style="list-style-type: none"> <li>• To inform the Swiss and European import economy about new market sources</li> <li>• To strengthen trade institutions and business sector associations in the trade promotion process</li> <li>• To increase the competitiveness of SMEs in selected partner countries</li> <li>• To develop the manufacturing and exporting skills of SMEs in selected partner countries</li> <li>• To establish qualified trade contacts between SMEs from emerging markets and markets in transition and the Swiss and European import economy</li> </ul>
<b>Report Content</b>	<p>Within the scope of the project Perubiodiverso, an initiative supported by the State Secretariat for Economic Affairs (SECO) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (german cooperation), in convention with the Ministry of Foreign Trade and Tourism (MINCETUR), the Peru Export and Tourism Promotion Board (Promperu) and the Ministry of the Environment (MINAM), SIPPO is mandated to support Peruvian companies in accessing the European market. In this context, SIPPO compiled product strategies for: Maca (<i>Lepidium ssp.</i>), Sacha inchi (<i>Plukenetia volubilis linneo</i>), Tara (<i>Caesalpinia spinosa</i>), Aguaymanto (<i>Physalis peruviana</i>), Algarrobo (<i>Prosopis ssp.</i>), Camu Camu (<i>Myrciaria dubia</i>) and Native cacao (<i>Theobroma cacao</i>).</p>
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### List of abbreviations

APOs	Asociaciones de Productores Organizados
EOI	Expression of Interest
FLO	Fairtrade Labeling Organization
GACP	Good agricultural and Collection Practice
GIZ	Gesellschaft für Internationale Zusammenarbeit, Eschborn, Deutschland
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Points, See Codex Alimentarius and ISO 22000
HR	Human Resources
INRENA	Instituto Nacional de Recursos Naturales del Perú
R&D	Research and Development
MSDS	Material Safety Data Sheet
PBD	Perúbiodiverso (Phase I, Phase II)
REACH	Chemical regulations in European Union (Registration, Evaluation, Authorization and Restriction of Chemicals); European Com- munity Regulation: Regulation (EC) No 1907/2006
SECO	Staatssekretariat für Wirtschaft SECO in Bern, Switzerland
SIPPO	Swiss Import Promotion Programme (Osec)
SMEs	Small and Medium-size Enterprises
SNV	SNV Netherlands Development Organization
SWOT	Analysis of Strengths, Weaknesses, Oppor- tunities and Threats
TDS	Technical Data Sheet
UN	United Nations

# 1. Product relevance.

The genus *Theobroma* originated millions of years ago in South America, to the east of the Andes. Twenty-two species of *Theobroma* are known of which *T. cacao* is the best known.

For Peru the main local and native species are Porcelana and Chunchu, according to the Agricultural Ministry of Perú. These two species belong to the generic group Forastero Alto Amazonas Raza nativa Piura and Cusco.

Three main cocoa tree species can be mentioned. Cultivated, wild and semi-wild populations of Forastero trees are the largest group, of which the Amelonado populations are the most extensively planted. Criollos trees can only be found in very scattered patterns. The cross between Criollo and Forastero is called Trinitario and can be found from Ecuador to Cameroon and to South-east Asia.

Figure 1. Cocoa Porcelana (left) and Chunchu.



A tropical and humid climate and a location close to the equator are needed to grow cocoa trees, which yield fruits - pods - each containing 40 beans. A distinction can be made between “fine or flavour” cocoa beans or “bulk or ordinary” cocoa beans.

The latter come from the *Forastero* trees. The global production of “fine or flavour” cocoa beans is under 5% of total production annually.

Fermentation and processing (grinding, pressing) of *Theobroma cacao* yield various market products, including beans, liquor, butter, powder and chocolate.

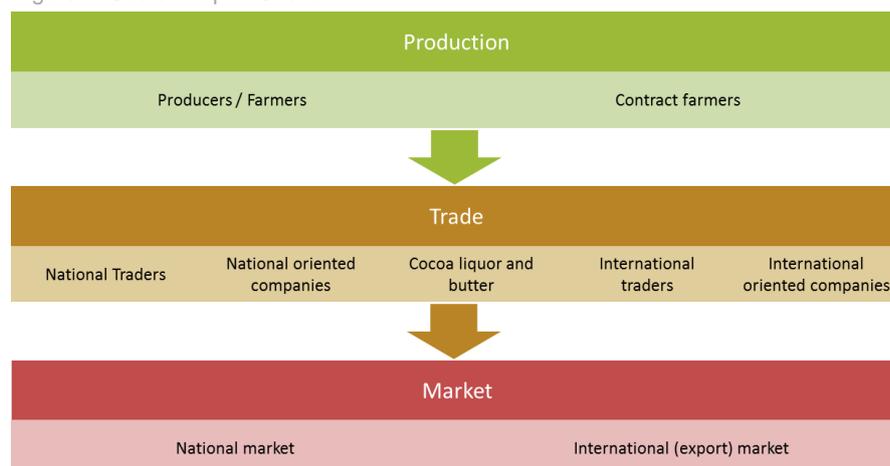
Peru's biological wealth is distributed in 11 ecological regions and 84 life zones. Some 22,000 species of higher plants (8.8 % of the world's plants) grow on 82 million hectares of forests (64% of the national territory).

Consequently, Peru offers appropriate environmental conditions and a high potential for extended cocoa cultivation, as other cocoa producing countries are reaching their limits.

In Peru, cocoa is grown on small farms and usually together with other crops, providing work and income for rural families. The Peruvian government and some development agencies are promoting initiatives to create a cocoa value added chain. In addition, governmental and international agencies recognize the importance of cocoa as a sustainable alternative crop to growing coca in some regions of the country.

A small-scale Cocoa of Excellence event was held at the 2009 *Salon du Chocolat* featuring 40 samples from seven Latin American and Caribbean countries. Criteria for selection of varieties included cocoa aroma, sweetness, and five flavour descriptors (fruity, floral, nutty, spicy, woody). Peru led in the aroma category.

Figure 2. Sector map of Cocoa.



## 2. Product status.

### Introduction to the market

We know now 22 species of Theobroma originating from South America. Of these, T. cacao is the most widely known. Theobroma cacao reaches markets as beans, liquor, butter, powder and chocolate.

Present global demand for cocoa beans is outpacing cocoa production.

Cocoa is primarily grown in West Africa, Central and South America, as well as in Asia. More than half of the world's cocoa bean supply comes from Ivory Coast and Ghana. However, since the production in West African countries is declining, the industry is expanding production to Asia and South America.

More than 70% of cocoa bean processing is completed in consuming regions rather than at origin.

In 2008/09 the Netherlands processed 13% of the global cocoa grinding making the Netherlands Europe's – and the world's – largest grinder of cocoa beans. Further cocoa processing and manufacturing companies are found in Switzerland, Germany and Belgium.

The high demand for and the reputation of European chocolate have a positive effect on domestic and international demand and trade. However, some obstacles need to be removed, including below standard product and process quality (beans, fermentation), quality of certification, inconsistent supply and logistics, as well as unstable prices.

Recent years have seen a significant growth of the international market for premium and specialty chocolate, i.e. organic, fair-trade certified chocolate, fine flavour/single origin. A SIPPO study revealed world market annual growth of about 15% for organic chocolate, during the early 2000s.

Still, premium chocolate accounts for less than 10% of the global chocolate market with Europe by far the major market for organic cocoa beans. Within Europe, the United Kingdom's organic chocolate market is the largest, and is estimated to grow by about 2.4% over the next five years

Product certification as a tool to add value can also contribute to improve the social, environmental and economic condition of cocoa producers, while sending a credible sign to end consumers. Cocoa production standards are Fairtrade (FLO), EU Organic, Rainforest Alliance and UTZ Certified. Further certifica-

tion for health and food safety, as well as social quality and labour norms is also feasible.

Latin America is estimated to account for more than 70% of the global organic cocoa production, compared to its 13% share of the conventional cocoa market, dominated by African producers.

More detailed information on markets appears in the Annex.

### Trade barriers

SIPPO and its facilitator/national consultant play a pivotal role in trust building in Peru. Facilitation through SIPPO's consultant contributes to building trust in and demonstrating SIPPO's competence.

An expanding EU regulatory environment, and its direct effect on the suppliers of finished products, have resulted in tighter product standards and internal control systems at companies (e.g. REACH, GACP, GMP etc.).

Regulations based on international guidelines set forth by different UN organizations (WHO, the WHO/FAO Codex Alimentarius) are now widespread and mandatory within their respective jurisdictions and elsewhere. They however may not be required in new markets outside Europe which might be temporarily easier to penetrate.

### Constraints and opportunities

Constraints are determined by the environment, funds, business acumen, labor rights and ethics, and market opportunities.

The following SWOT analysis articulates specifically the core needs for export marketing and market entry in Europe pointing to specific bottlenecks in product documentation and market access.

Table 1. SWOT Analysis (Biotrade 2005, reviewed by K. Duerbeck 2011).

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Peru is recognized worldwide as a main supplying country of organic and fair trade cacao.</li> <li>• Active sector associations (APPCACAO)</li> <li>• Appropriate legislation governing conservation and sustainable use.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Lack of standardized scientific information.</li> <li>• Few available specialized laboratories for chemical composition analysis.</li> <li>• Insufficient determination of production costs leads to an inefficient sector.</li> <li>• Good/Best Practices absent among most processors.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Widespread worldwide trend towards expansion of consumption of cacao and its by-products (conventional and specialty).</li> <li>• Implementation of marketing strategies.</li> <li>• Institutional support to companies.</li> <li>• Income generation for rural areas to expand sustainable production.</li> <li>• Free trade agreements (EFTA, US, etc.).</li> <li>• New uses, e.g. cosmetics ingredients.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Loss of markets for not complying with international quality standards and buyer requirements, like hygiene and quality conditions (HACCP, GACP, GMP).</li> <li>• Inexperienced exporters unable to meet basic market requirements.</li> </ul>

Typically prices in Peru are mainly fixed by buyers, and are not based on cost calculations. This has led to loss of interest for sustainable procurement of raw materials.

Table 2. Constraints, opportunities and objectives.

Constraints	Opportunities	Objectives
Resource management and control mechanisms	Best practices	Strengthen natural resource management (NRM)
Enabling environment Socio-economic	Market information Access to markets Product quality	Organize access to market information and increase transparency of value chain
Enabling environment Policy	Policy Framework conditions Access to credits, subsidies Access rights/land tenure policy	Support stakeholder involvement and representation; market control and facilitation
Enabling environment Institutional	HR development and management Access to rural extension	Encourage capacity building in management skills
Enabling environment Production and processing	Access to resources Land tenure	Facilitate access to communication and services

These constraints need to be acknowledged before considering opportunities and pathways to improve the responses to environmental and natural resource issues. Four categories of risk (supply, process, demand, and control) have a direct impact from the standpoint of environmental risk and its management.

### Risks and constraints

The greater uncertainties in supply and demand, market globalization, and complex international supply network relationships have resulted in higher exposure to risks in the supply chain, including chaos and decision risks. The risks in production include:

- Difficulties in assuring supply of raw materials on the field;
- Quality of raw material;
- Supply chain risk in the management process:
- Vulnerability (logistics, extent, elements at risk and why, people and their locations at risk);
- Degree of resilience in natural resource management and logistics;
- Lack of confidence in supply chain;
- Lack of visibility;
- Lack of supply chain control.

Moreover, these producers have historically been absent from international markets and now their ability to reach them is limited.

### 3. Product strategy.

The aim of the SIPPO product strategies is to achieve consistency with what Perúbiodiverso II (PBD II) does using SIPPO's indicators. Simultaneously, it aims at building a common platform for other potential SIPPO partners so they can develop separate interventions and still be consistent with these strategies. SECO may use this document to unify strategies for the selected product. The bulk of data and analysis is provided by the sub-sector analysis done by Biocomercio & Perúbiodiverso in recent years.

The product strategies of products preselected by PBD II are meant to revisit the earlier recommendations in the context market entry in Europe using the following filters:

- market access,
- achievable target for March 2013, and
- work planning for 2013 and beyond.

Based on the SWOT analysis, we identified short-term and long-term strategies to leverage true strengths and neutralize weaknesses that might pose significant disadvantages.

Short-term strategies concentrate efforts in acquainting companies with the requirements to enter international markets. Special reference is made to opportunities for adding value through technical processes, as for instance for producing unfermented cacao or cacao butter. An important new development consists in adding value through company and product documentation and certification.

In long-term strategies, an overall review of the value chain can help in eliminating structural weaknesses that significantly hinder competitiveness.

The principal weaknesses to be considered are lack of world class research on the use and testing of natural cacao varieties, like cacao from Piura, to take account of local soil characteristics, local culture, and tax and sanitary requirements.

A key product strategic goal to help significantly increase rural incomes in Cajamarca, Piura and San Martin regions of Peru may be to increase exports by 15 - 20 %.

Given the constraints discussed so far, SIPPO identifies four core elements of the product strategy to achieve this target. They are as follows.

- Increase output of natural cacao products, including modern processing for unfermented cacao, to meet Vegan food demand
- Increase value added of exportable products:
  - Through an increase in the share of products with appropriate certification
  - By moving up the value chain to manufacturing of cacao liquor and butter extraction through investment in more modern technologies
- Reduce cost of production based on SWOT analysis and cost calculation
- Develop a promotional strategy that supports these initiatives through:
  - Creating greater awareness, in strategic markets, of the value proposition of native cacao from Peru (BioFach, etc)
  - Emergence of private sector trade associations to represent this industry in major markets

As can be gathered from the above, the industry is too small to compete with any economy of scale even once it expands to its full potential. Hence, the option for Peru is to utilise a focused strategy whether in terms of cost or differentiation. Peru's government may seem to be focusing on moving the industry up along the speciality (differentiation) route.

It recently started promoting local cacao varieties with a focus in the fine flavour/single origin niche market. A small Cocoa of Excellence event was held at the 2009 Salon du Chocolat featuring 40 samples from seven countries in Latin America and the Caribbean. Cocoa varieties were screened for aroma and sweetness using in addition five flavour descriptors, i.e. fruity, floral, nutty, spicy, and woody. Peru led in the cocoa aroma category. Sector companies operating in Peru are moving towards organic or are already organic-certified. At the same time, and in the context of fair-trade certification, companies could also consider adjusting their costs and prices, or justify the prices they charge in the international market.

## 4. SIPPO Focus.

### Guiding criteria

This section explains where in the value chain SIPPO will focus its attention in order to make the maximum possible impact on the industry’s competitiveness and export orientation. Which of the following guiding criteria for determining the appropriate point of intervention are likely to have the greatest impact on SIPPO/PBD indicators for market entry?

- Is the desired change feasible for the selected target group?
- Can the project’s output be delivered in a sustainable way?
- Can this be done within the project’s time frame and available resources?

Based on this rationale/logic SIPPO can characterize the sector’s evolution. SIPPO’s facilitator/national consultant will therefore focus on local governance, environmental education and awareness raising through institutional strengthening with and among resource owners and users.

Table 3. Assessment of market-based solutions.

Type Value Chain Constraint/Opportunity	Identified potential market-based and commercially viable solutions
<b>Product Development and Registration</b>	<ul style="list-style-type: none"> <li>• Organize training courses for personnel of companies in quality standards, export requirements, new technologies, etc.</li> </ul>
<b>Service Providers</b>	<ul style="list-style-type: none"> <li>• Assist sector service providers, such as consultancies, research institutions in improving service capacities</li> <li>• Support promotion of authentic products</li> </ul>
<b>Organization and Management</b>	<ul style="list-style-type: none"> <li>• Encourage companies to introduce business and management plans and to implement good practices</li> <li>• Organize trainings for producers that will cover issues in management and business plan development, marketing, etc</li> </ul>
<b>Regulatory (Policy)</b>	<ul style="list-style-type: none"> <li>• Support national legislation development in accordance with UN guidelines and help create an enforcement enabling environment</li> <li>• Generally improve the business enabling environment</li> </ul>
<b>Finance</b>	<ul style="list-style-type: none"> <li>• Identify micro-finance schemes for collectors and companies</li> <li>• Identify service providers for improving access to finance</li> </ul>
<b>Input Supply</b>	<ul style="list-style-type: none"> <li>• Promotion and support for cultivation</li> <li>• Support conservation of species’ traditional agricultural knowledge and farming practices</li> </ul>
<b>Infrastructure/Human Resources</b>	<ul style="list-style-type: none"> <li>• Farmer training</li> <li>• Logistics</li> </ul>
<b>Business Membership organisation</b>	<ul style="list-style-type: none"> <li>• Keep permanent dialog and cooperation with all value chain stakeholders</li> <li>• Strengthen sector work and help create competent sector representatives at national, regional and international levels</li> <li>• Organize education trainings</li> <li>• Help associations adopt a role as service providers and enhanced income generators</li> </ul>

This assessment of market-based solutions will result in:

- a) Identification of existing (domestic) service providers: consulting firms, institutes, etc.
- b) Identification of number of existing and potential users: farmers, companies, etc.
- c) Identification of vendor constraints (by type of service provider).
- d) Proposals for providers of sustainable market-based solutions.
- e) Determination of the commercial feasibility of market-based solutions (by type of service provider).

In sum, market-based solutions will be prioritized for their potential to meet the two major targets: their potential for adding momentum to value chain growth and competitiveness, and the number of SMEs target group that will benefit directly and indirectly (outreach).

#### **Status of supply supporting the strategy**

The main weaknesses of Peruvian supplier companies and their operating environment were described earlier in the strategy and are summarized as follows:

- Limited cropping area
- Low technical development
- Need to create a better working and business environment
- Lack of authorities' interest in becoming more active sector players
- Insufficiently developed legal framework
- Weak industry marketing

Visibility and control can be achieved by documentation, transparency and open pro-active communication throughout the supply chain. Ultimately, consumers should also be made aware of the chain's greater transparency through a labelling or verification framework that preserves their trust in the whole supply chain. In the long term, fair trade certification for these products could address such transparency issues.

#### **Partners**

The core partners in implementing the project's interventions are:

- Intervention: Fulfilling market access requirements based on national legislation and Peruvian technical standards. In this intervention PDB will target increased facilitation and linkage between service providers on the one side, and companies on the other.
- Intervention: Promotion for export. The partner is PromPeru, which gathers export oriented MAP companies and provides support to IPPN, or the APPCACAO Association.
- Other interventions: PDB will work on identifying other partners depending on the type of intervention, for example for developing national legislation; partners will be representatives of the respective ministries, etc.

# 5. Interventions.

## Ongoing interventions.

Identification of new companies: The purpose for this activity is to increase the impact of the interventions among as many companies/APOs as possible so that all good export-ready companies in Peru can profit from better market access.

Collaboration with APPCACAO, the sector’s association, and PromPeru: Trade associations so far have been hampered because of their inability to build trust and get enough funding for their activities. The ministries of agriculture, and trade and industry have expressed their interest in supporting the cacao sector and involve it in their rural development strategy, if they get sufficiently organized. Subsidies and financial support are available under a special budget heading to meet requests from clusters or associations.

## Types of interventions needed

The overall objective of SIPPO’s involvement in PBD II is to enhance the export-oriented competitiveness of companies and therefore help to alleviate poverty in the countries where we work. To measure SIPPO’s success in accomplishing these objectives indicators should be the same as in other SIPPO activities, namely increased sales or exports, larger revenues, more employment, market, product

and service diversification, and increased participants at promotional events.

## Sequencing of SIPPO interventions

The two selected interventions are “Implementation of market access requirements” and “Access to market”. The “Access to market” intervention is closer to SIPPO’s usual line of business.

Starting from intervention areas (productive environment, human resources (HR), basic infrastructure, among others) and categories, the context and the sequencing of interventions will require access, availability of service providers, and lead firms. After the first intervention, the number and expertise (to be used) of the lead firms is expected to unfold and develop. The lead firms and the service providers may vary depending on the type and sequencing of interventions.

Consistent with their temporary nature, the interventions need a clear exit strategy that will be defined from the onset. The exit strategy must be linked to the achievement of the development objective, like the establishment of sustainable service providers for the target group of companies.

Table 4. Priority matrix.

Interventions	Aim	Actor	Time	Lead by
Elaboration of product parameters	R&D for MSDS, Novel Food, REACH, GMP	National research institutions, universities	April 2011 - March 2013	PBD
Product documentation	Product profiles (data sheets, certification, etc.)	Companies, national service providers	June 2011	SIPPO
Resource (natural and financial) planning	Sustainable wild collection and harvesting, domestication, cultivation	Companies, national service providers	August 2011	PBD
Access to market	National & international trade fairs, buyer missions	PromPeru, SIPPO	September 2011 – March 2013	SIPPO

### Ranking and prioritization of issues.

At meetings with stakeholders the expert will present the findings of the gap analysis, and the respective prioritization based on identified potential market-based and commercially viable solutions.

1. Preparing product documentation

2. Implementation of market access requirements based on national legislation

3. Promotion for exports

4. Assistance to service providers

5. Organization of training courses

6. Contributing to creating an enabling environment (local and international)

7. Business planning

The stakeholder meeting will review the expert's recommendations and advise on issues of access to finance and company promotion to be included in the national priority listing.

### Intervention pipeline

#### First Intervention: Product documentation

Product documentation has been identified as one of the main constraints for companies. Typically it was not regarded as a major constraint for cacao products to access national, regional and international markets.

The Results Chain for this intervention with indicators at each level is as follows:

Table 5. Impact logic and indicators for product documentation.

Impact Logic		Indicators of Impact Logic
Activity	Identification	Companies, products and parameters
Output	Documentation	Documentation (companies and products, e.g. brochures, business contact sheets) Marketing strategy
Use of output	Contacts Offers	Market research, intelligence Contacts, marketing activities
Outcome	Contracts, orders	Pre-fair: company/product documentation, tools for fair Fair presentation style: booth, HR, documentation, EOI Post-fair: contacts, EOI, trail orders, contracts
Impact	Sales	Increased turnover
Aggregated impact	Increase of employment	Increased employment

Table 6. Indicators and used measurements within the result chain.

Indicators	Measurement used
Preparation of companies	Completeness of documentation; sample preparation; booth arrangements; marketing strategy
Documentation	Technical Data Sheets (TDS), Safety Data Sheets (SDS), price calculation, business contact sheets
Marketing strategy	Brochures, posters, website, language, company visualization
Market research	Number of new ideas gained and quality/ technology/ marketing improved
Contacts	Number of contacts established
Marketing activities	Number of brochures distributed, number of mailing campaigns
Expression of interest,	Number of offers sent out
Orders and contracts	Number of contracts signed and orders made
Increased sales and turnover	% business growth
Increase of employment	Number of new workers hired after intervention

Table 7. Impact logic and indicators for access to markets.

Impact Logic	Indicators of Impact Logic	
Activity	Trade fair	Preparation for trade fair
Output	Documentation, MES	Documentation, (e.g. brochures, web pages, business contact sheets); marketing strategy
Use of output	Contacts Offers	Market research, intelligence Contacts, marketing activities
Outcome	Contracts, orders	Pre-fair: company/product documentation, tools for fair Fair presentation style: booth, HR, documentation, EOI Post-fair: contacts, EOI, trail orders, contracts
Impact	Sales	Increased turnover
Aggregated impact	Increased employment	Increased employment

**Second Intervention:** Implementation of market access requirements based on national legislation

Market access has been identified as one of the main constraints for companies. Since more than 50 % of all companies in the natural ingredients sector are organically certified, Bio-Fach was considered the most interesting trade fair in Europe to showcase their products and get market

exposure in the European market. At least 10 companies should participate. Both long standing and new companies should attend the trade show presenting a range of products so that not only raw materials and ingredients (vegetable oil) are featured.

The Results Chain for this intervention with indicators at each level is as follows:

Table 8. Indicators and used measurements within the result chain.

Indicators	Measurement used
Preparation for trade fair	Completeness of documentation; preparation of samples; booth arrangements; marketing strategy
Documentation	TDS, MSDS, price calculation, Business contact sheets
Marketing strategy	Brochures, posters, website, language, company visualisation
Market research	Number of new ideas gained and quality/ technology/ marketing improved
Contacts	Number of contacts established
Marketing activities	Number of brochures distributed, number of mailing campaigns
Expression of interest	Number of offers sent out
Orders and contracts	Number of contracts signed and orders made
Increased sales and turn-over	% business growth
Increased employment	Number of new workers hired after intervention

SIPPO's market access intervention requires the support of the second intervention for sustainable resource management to be executed by components 2 and 3 of PBD II.

In the course of the first two interventions the intervention pipeline for additional interventions in the context of PBD II should generate a number of raw ideas that will be validated and further developed into new interventions. For additional interventions new sourcing and funding may be made available by national interest groups, service providers or national government and donors.

#### Lead firms

A target group for each intervention is specified consisting of lead firms and core companies, as part of outreach efforts. For cacao products the following lead firms were identified for the following product groups:

Unfermented green cacao: APPROCAP, Morropón

Fair-trade cacao: CEDICAFE, Piura

Cacao butter: Candela Peru and Ecoandino, Lima

Lead firms are considered the main pillars of PBD II in Peru, as they lead sector companies in enhancing business partnering, communicating with national service providers and contributing to create a more enabling business environment.

## 6. References.

Biotrade Peru (2005): Sector assessment of natural ingredients for cosmetics and pharmaceuticals in Peru.

Carrion, Luis F. (2010): Catálogo de cultivares de cacao del Perú. Ministerio de Agricultura. Dirección General de Competitividad Agraria. Lima, Peru.

Correa, Jaime E. and Bernal, Henry Y. (1992): Especies vegetales promisorias de los países del Convenio Andrés Bello. SECAB - Secretaria Ejecutiva del Convenio Andres Bello. Tomo VII.

Brack Egg, Antonio (1999): Diccionario Enciclopédico de las Plantas Útiles del Perú. CBC.

FAO (2009): The market for organic and fair-trade cocoa. Rome.

FIBL & SIPPO (2011): The Organic Market in Europe. Overview and Market Access Information for Producers and International Trading Companies.

Garcia, Javier (2002): Amazonía competitiva. El reto de la bioindustria.

ICCO (2010): International Cocoa Organization's Annual Report 2008/09.

ICCO (2010): International Cocoa Agreement 2010

Montserrat, Rios et al. (2007): Useful Plants of Ecuador. Applications, Challenges and Perspectives.

Montserrat, Rios and Pedersen, Henrik (1997): Uso y Manejo de Recursos Vegetales.

Porter, M. (1980): Competitive Strategy. Free Press. New York.

Soukup, Jaroslav (1970): Vocabulario de los nombres vulgares de la flora peruana y catalogo de los generos.

TCC (Tropical Commodity Coalition for Sustainable Tea, Coffee, Cocoa, 2010): TCC Cocoa Barometer 2010.

UNIDO (2006): The future of products of the Andean High Plateau and Central Valleys. Pages 203-305.

## 7. Annex.

The genus Theobroma originated millions of years ago in South America, to the east of the Andes. Twenty-two species of Theobroma are known of which T. cacao is the most widely known. Theobroma cacao reaches markets in various presentations, such as beans, liquor, butter, powder and chocolate, historically known as cocoa.

Figure 3. Production of cocoa beans (thousand tons).

	2005/06		2006/07		2007/08		2008/09	
<b>Africa</b>	<b>2656</b>	<b>70.1%</b>	<b>2361</b>	<b>68.8%</b>	<b>2688</b>	<b>72.0%</b>	<b>2484</b>	<b>70.7%</b>
Cameroon	171		169		185		210	
Côte d'Ivoire	1408		1229		1382		1222	
Ghana	740		614		729		662	
Nigeria	210		215		220		240	
Others	126		133		171		150	
<b>America</b>	<b>461</b>	<b>12.2%</b>	<b>423</b>	<b>12.3%</b>	<b>452</b>	<b>12.1%</b>	<b>456</b>	<b>13.0%</b>
Brazil	162		126		171		157	
Ecuador	118		124		111		112	
Others	182		173		171		187	
<b>Asia &amp; Oceania</b>	<b>669</b>	<b>17.7%</b>	<b>650</b>	<b>18.9%</b>	<b>591</b>	<b>15.8%</b>	<b>575</b>	<b>16.3%</b>
Indonesia	560		545		485		475	
Papua New Guinea	51		49		52		52	
Others	58		56		54		48	
<b>World total</b>	<b>3786</b>	<b>100.0%</b>	<b>3434</b>	<b>100.0%</b>	<b>3731</b>	<b>100.0%</b>	<b>3515</b>	<b>100.0%</b>

**Cocoa production and processing**

Global demand for cocoa beans is growing progressively and outpacing cocoa production, resulting in an imbalance between demand and supply. Cocoa is primarily grown in West Africa, Central and South America, as well as in Asia. The five largest cocoa-producing countries are Ivory Coast, Ghana, Indonesia, Nigeria, and Cameroon. More than half of the world's supply of cocoa beans comes from Ivory Coast and Ghana.

A closer look at Ivory Coast and Ghana's output reveals that the two most important cocoa producers' production has declined steadily since 2005/2006 by about 15%. The industry is trying to expand cocoa production towards Asia and other cocoa producing countries.

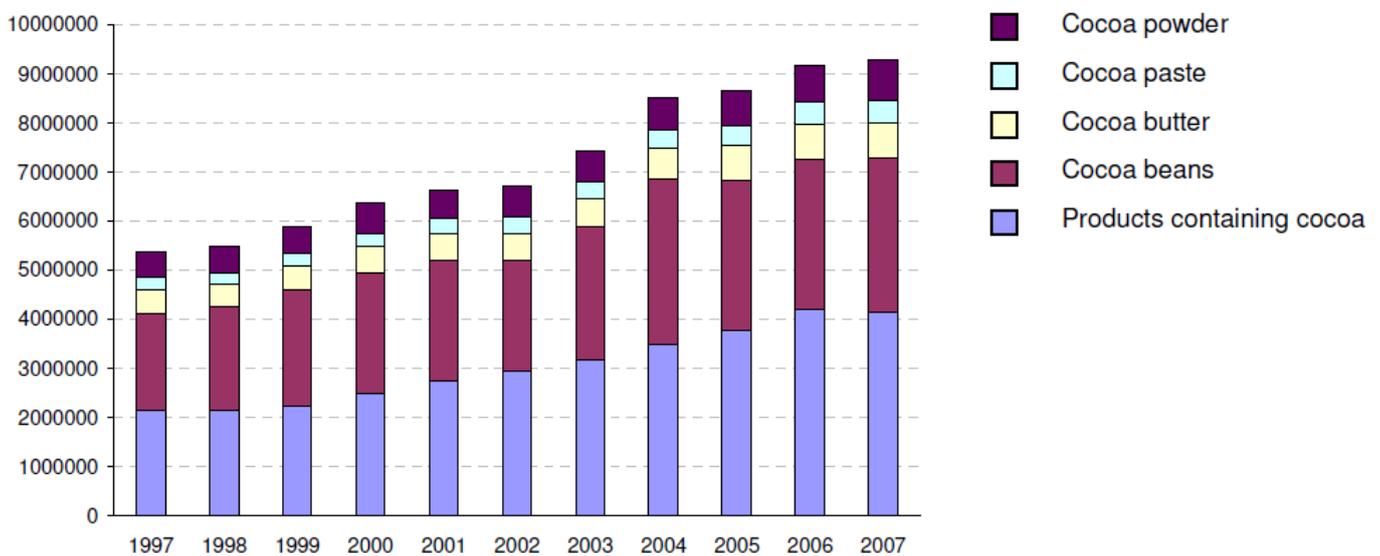
Cocoa beans grinding is mainly done in the Netherlands. The Netherlands is Europe's – and the world's - largest grinder of cocoa beans, with 475 000 ton of beans ground in 2008/09, or 13% of the world's total. Germany follows suit, with total

grinding of 360 000 tonnes in 2008/09. Both, the Netherlands and Germany account for 55% of total grinding in Europe. But also France, the United Kingdom, Italy, Spain and Belgium are important for the European grinding industry.

According to Eurostat data, the EU27 countries imported about 30% of their cocoa beans from Ivory Coast, 15.9% from Ghana and 12% from Cameroon and Nigeria, respectively, in 2009. Peru only accounts for 0.4% of EU27 cocoa imports. The largest importers of Peruvian cocoa beans are Italy with 2.2%, Belgium with 2.1% and Sweden with 1.8% of their respective imports. Moreover, the EU27 countries import 1% of their cocoa butter from Peru, with Spain importing 18.4%, the United Kingdom 3.4% and the Netherlands 1.3% of their respective totals.

The development of worldwide imports of cocoa beans, processed cocoa products and products containing cocoa from 1997 until 2007 appears in the table below. In 2008 the imports of those products reached about 2 million tons, or 4% increase from 1999 to 2008.

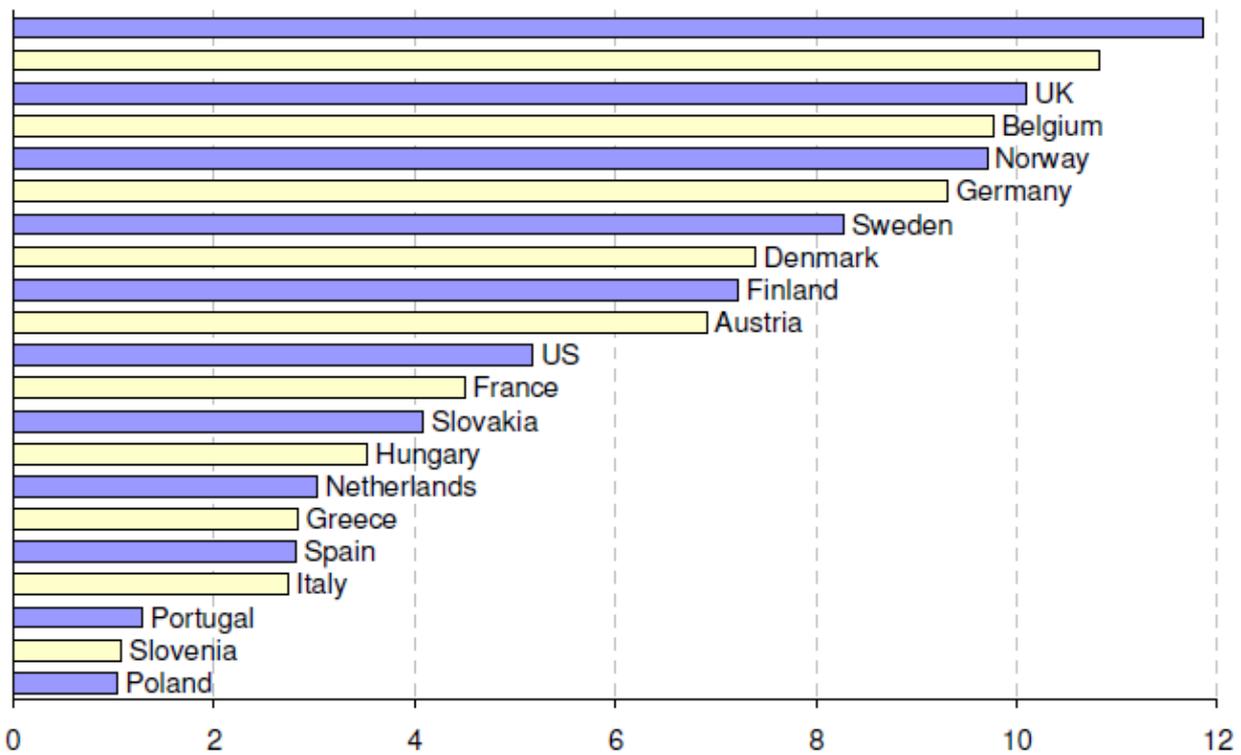
Figure 4. Worldwide imports of cocoa beans, processed cocoa by-products and products containing cocoa, 1997-2007 (in tons).



Source: FAO, 2009.

Although cocoa and its associated products are mainly produced in developing countries, industrialized countries are the largest cocoa consumers. Cocoa is bought in the consuming countries by a handful of multinational processing and chocolate manufacturing companies. The main cocoa consuming countries in Europe are Ireland, Switzerland, United Kingdom and Belgium.

Figure 5. Annual per capita consumption levels of chocolate confections in selected countries, 2007 (in kg)  
(First two countries are Ireland and Switzerland)



Source: FAO, 2009.

In Switzerland, as in most other European countries, specialized shops as well as supermarkets sell both ordinary and specialized organic chocolate.

Secondary to the dominating small and medium-sized chocolate manufacturers, a few large companies in Europe (as Barry Callebaut and Cadbury) are involved in producing organic cocoa. These companies focus on innovation, uniqueness and traceable sustainability criteria driven by consumer demand. Other companies as Nestle are not likely to take up organic chocolate in the near future. The reputation of Swiss chocolate in particular has a positive effect on local and international demand for organic chocolate and makes Switzerland an attractive trade partner.

The most important issue is to meet the requirements of the international market. The main obstacles in this context are:

- Insufficient quality of the products (beans, fermentation)
- Insufficient quality of certification
- Availability/consistency of supply
- Logistics
- Distribution (lack of large retailers)
- Reliability (lack of communication)
- Restricting bureaucracy
- Lack of harmonization and mutual recognition of labels/certifications, and
- Prices (production meets demand, avoiding fluctuations)

Cocoa prices mainly depend on demand and supply factors. Over the years cocoa bean prices evolved similarly to the price of other agricultural commodities in general (see graph below). However, the price of cocoa is increasing again and, in combination with certification standards, cocoa can earn price premiums.

Figure 6. ICCO monthly average cocoa prices, September 1984 - July 2009 (in US\$ per ton).



Source: FAO, 2009.

### Certification as value added

Recent years have seen a significant growth in the world market for premium chocolate (including flavoured, single-origin, organic, ethically traded and high-cocoa content chocolate), according to industry sources. A sustained increase is predicted, even in times of economic recession, since consumers look for affordable luxuries during bad times. In this context, it is forecast that the global premium chocolate market will grow from US\$7 billion in 2007 to US\$12.9 billion (US\$3.6 billion in the United States alone) in 2011. These developments are driven by increasing consumer awareness of premium products and a growing interest from the world's leading chocolate manufacturers in the premium chocolate segment.

According to a study by the Swiss Import Promotion Programme (SIPPO), the world market for organic chocolate grew by 10–15% per annum during the early years of 2000. However, premium chocolate accounts for less than 10% of the global chocolate market.

Nevertheless, Europe is by far the largest market for organic cocoa beans, as well as the largest processor and manufacturer for certified cocoa and chocolate products. Within Europe, the United Kingdom's organic chocolate market is the largest, with sales reaching €27.3 million in 2005. According to industry sources, the present organic chocolate market accounts for around 1.4% of the total UK chocolate market. This share is estimated to grow to around 2.4% in the next five years.

Figure 7. Sales of fair trade-certified cocoa products in selected European countries.

	Sales of Fairtrade certified cocoa (latest available year)	% of total Fairtrade sales (latest available year)	Year-on-year growth in latest available year
Austria	€16.4 million (2008)	25%	8%
Belgium	€3 204 600 (2008)	7%	0%
Denmark	€6 289 966 (2007)	15.9%	213%
France	1 556 000 kg (2007)	10%	47%
Germany	867 000 kg (2008)	n.a.	10%
Ireland	€1.3 million (2008)	4%	n.a.
Italy	31 666 kg (2007)	n.a.	23%
Luxemburg	40 000 kg (2008)	n.a.	0%
Netherlands	806 888 kg (2008)	6%	76%
Norway	37 919 kg (2008) NOK 6 643 491 (2008)	0.2% (in volume) 2.6% (in value)	110% (in volume) 19.6% (in value)
Spain	70 057 kg (2007) €560 456 (2007)	15% (in value)	83% (in value)
Sweden	300 000 kg (2008) SEK 45 million	6.4% (in value)	297%
Switzerland	300 000 kg (2008) CHF 6 563 000 (2008)	2.5% (in value)	2% (in volume) 8.7% (in value)
UK	GBP 26.8 million	3.8%	5.1%

Sources: Fairtrade Italia, Fairtrade Mark Ireland, Fairtrade Max Havelaar Norge (Norway), Max Havelaar - France, Max Havelaar Stiftung (Switzerland), Max Havelaar - Denmark, Stichting Max Havelaar (Netherlands), Rättvisemärkt (Sweden), Reilukauppa (Finland), Rooda (2006), Schmidt (2006), SETEM (2009), TransFair Italia, FLO.

Certifying products to add value is one important way to transform the cocoa sector into a sustainable production chain. Several instruments are available that could improve the social, environmental and economic condition of cocoa producers, and send a credible signal to end consumers:

- Cocoa production standards: Fairtrade, EU Organic, Rainforest Alliance and UTZ Certified
- Health and food safety standards: HACCP, ISO 22000
- Social quality and labour norms: ILO conventions.

The TTC Cocoa Barometer provides an overview of the strengths and weaknesses of those certification standards. Moreover, multi-certification of products must be avoided to save effort.

Latin America is estimated to account for more than 70% of the global organic cocoa production, compared with its 13% share of the conventional cocoa market, currently dominated by African producers. Trade data for certified organic cocoa are extremely difficult to find due to the following factors: the extremely limited volumes produced and sold; the varying presentations of cocoa products, and the disparity between quantities produced and traded due to stocks.

By far, Europe is the main market for organic cocoa beans, as well as the main site for processing and manufacturing of certified cocoa and chocolate products. The first company to market organic chocolate was Germany's "Rapunzel" in 1989. Today, "Rapunzel" ranks among the world's leading organic chocolate marketers, producing the first 100% organic chocolate bar available globally.

While fair-trade certified chocolate still accounts for only a fraction of the total European chocolate market, sales of fair-trade chocolate are growing rapidly in most European countries (see Table below), as purchasers are no longer restricted to higher income groups, and fair-trade chocolate products outgrow their niche status. However, the price of organic cocoa is subject to strong fluctuations, mainly due to the small volumes traded, the lack of consistency in quality and the irregularity of supplies.

### Fine Flavour/ Single Origin

Definitively, organic and fair trade is a well-known add value strategy in specialty cocoa market, however niche markets have emerged around properties related to geographic origin as: flavour, aroma, etc. According to the International Cocoa Organization - ICCO, the share of fine or flavour cocoa in the total world production of cocoa beans is just under 5% per annum. Virtually all major activity over the past five decades has involved bulk cocoa. The 2010 year, ICCO recognized Peru as one of the producer countries for fine and aromatic cocoas (see next table).

Figure 8. Producing countries exporting exclusively or partially fine or flavor cocoa.

Colombia	Madagascar
Costa Rica	Papua New Guinea
Dominica	Peru
Dominican Republic	Saint Lucia
Ecuador	São Tomé & Príncipe
Grenada	Trinidad and Tobago
Indonesia	Bolivarian Republic of Venezuela
Jamaica	

Source: International Cocoa Agreement, 2010.

During the 2000s, an increasing number of gourmet chocolate (made with fine flavour cocoa) marketers have launched chocolate products with cocoa from a single country of origin. Some industry analysts and chocolate marketers see this as a continuing trend, particularly among a growing number of small marketers who are looking for ways to differentiate their products from those of larger, more well-established companies. High-end manufacturers market fine flavour, single source chocolate much in the same way wine is marketed. They emphasize characteristics such as colour, flavour and depth (Donovan, 2006).

The selection of sources of raw material for fine flavour/single source cacao requires that buyers identify a flavour profile that is not only unique but is also able to stand alone (i.e., not blended with other origins) in chocolate with 70 percent cocoa content. In a typical gourmet chocolate bar, beans from two or more origins are mixed to create a complex flavour. Asked about single origin chocolates, representatives from two well-known manufacturers shared their opinion that the complexity of single origin chocolates could not match that of blends (Petchers 2003).

### **Perspectives**

Manufacturers and marketers who incorporate single origin chocolates into their product range run the risk of being unable to deliver their product if single origin supplies of quality beans run short. For that reason, manufacturers or marketers must carefully evaluate the stability of supply and quality consistency of beans from a particular origin before launching a product made with beans solely from that origin (Donovan,2006). For Peruvian suppliers, this means they would have to carry the burden of demonstrating their ability to deliver high-quality cocoa in sizeable and consistent quantities over several seasons. This will require substantial investments in research and development for variety characterization, upgrading production and improving processing capacities.

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