# ASSESSING THE IMPACT OF FAIRTRADE FOR PERUVIAN COCOA FARMERS



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## **ABBREVIATIONS**

CLAC: Coordinadora Latinoamerica y del Caribe de Pequenos Productores de Comercio Justo

DEMUNA: La Defensoría Municipal del Niño y del Adolescente

FLO: Fairtrade Labelling Organizations International

FTA: Fairtrade Africa

FTMP: Fairtrade Minimum Price HDI: Human Development Index GOP: Government of Peru

ICCO: International Cocoa Organization

LIFFE: London International Financial Futures and Options Exchange

MINAG: Ministry of Agriculture of Peru NYBOT: New York Board of Trade

NAPP: Network of Asian and Pacific Producers PDA: Programa de Desarrollo Alternativo

PEN: Peruvian Nuevo Sol

SPO: Small Producer Organization

**TOC: Theory of Change** 

**UNDP: United Nations Development Programme** 

USAID: United States Agency for International Development

**USD: United States Dollar** 

## **ACKNOWLEDGEMENTS**

The team would like to extend their thanks to all the farmers and other agricultural innovation stakeholders in Peru that gave their time so readily to the study. Further thanks to the FLO stakeholders that commented on the draft report and to the companies in the value chain that gave us an interview. Many thanks go to Adrienne Martin for her in-depth advice on the design for this study. Finally, thanks Kate Kilpatrick at Fairtrade International and Johann Declerq, Max Havelaar Belgium.

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## 1. INTRODUCTION

The objective of this study is to assess the impact of Fairtrade in cocoa in Peru. At a time when Fairtrade is evolving extremely rapidly, Fairtrade International (FLO) is seeking to understand whether the Fairtrade tools (Fairtrade organizational and trade standards, Fairtrade prices and premiums, Fairtrade certification, Fairtrade producer support, Fairtrade market access) have had an impact (positive or negative, expected or unexpected) on small-scale cocoa farmers in Peru.

Issues of particular interest for Fairtrade International and highlighted in the TOR for this study are the:

- Economic, environmental and social development impacts for participating farmers;
- Impacts on farmer organization, organizational capacities and organizational strengthening;
- Development impacts at household and community level;
- Impacts on the position of small farmers in international cocoa supply chains.

Additionally Fairtrade International is interested to know how the identified impacts contribute to the overall Fairtrade goals of sustainable livelihoods, collective and individual empowerment and making trade fair for poor farmers and workers.

Two co-operatives in the San Martin region in Peru were chosen by FLO to be used as case studies:

- PO 1 is a medium sized co-operative, with 1600 members, 2000 MT of cocoa export and 6 million dollars of turnover in 2010. Its primary focus is cocoa, but it is starting to diversify into coconut (dry grated) and raw sugar. It has been Fairtrade certified since 2003, and sold 66 per cent of its cocoa as Fairtrade in 2010.
- PO 2 is a medium sized co-operative with 1200 members, which focused primarily on coffee, and has diversified into cocoa since 2007; currently 325 members produce cocoa. It sells 680 MT of coffee (2009), 320 MT of cocoa (2010), and had a turnover of 2.5 million dollars in 2009. It has been Fairtrade certified since 2002 and sold 83 per cent of its cocoa as Fairtrade in 2010.

Conditions for producer organizations in Peru are relatively favourable, and the cooperative sector is dynamic: on the Amazon side of the Andes, conditions for cocoa production are also relatively favourable, with good soils and good access to land.

This document presents the findings of the research undertaken in May-June 2011. Firstly, the methodology is outlined, followed by a description of the Peruvian and global market contexts. This is followed by an analysis of the findings on the different dimensions of Fairtrade impact. Lastly, conclusions regarding Fairtrade avenues of impact are drawn, and some recommendations for improvement are proposed.

## 2. METHODOLOGY

The field research for this study took place between the May 20 and June 3 2011. The timetable of work is presented in annex 1.

## 2.1 Conceptual framework

In order to answer the research questions outlined above, the Fairtrade International impact methodological framework developed by Eberhart and Smith<sup>1</sup> was used as a starting point. This outlines both the broad areas of impact and the potential avenues of impact of Fairtrade. The following broad areas of impact are of primary relevance:

- Changes in the social structure (i.e. effects on social equity and inclusion);
- Changes in the socio-economic situation of producers/workers and the members of their households;

 $<sup>^{1}</sup>$  "A methodological guide for assessing the impact of Fairtrade", Eberhart, N. and Smith, S., August 2008

- Changes in the organization of producers/workers;
- Changes in local and national development;
- Changes in the management of natural resources.

The main avenues of impact are defined as the following:

- *Producer Standards:* effects resulting from having to comply with Fairtrade International's core and development requirements for Small Producer Organizations or for Hired Labour situations; impacts resulting from recent changes in the standards.
- Trade Standard: effects resulting from adherence to Fairtrade International's requirements for trade
  in Fairtrade products, such as payment of a minimum price and Fairtrade Premium, provision of prefinance and commitment to long-term trading relations; impacts resulting from recent changes in the
  standards:
- Organisational support and business facilitation: effects of the support provided by Fairtrade organizations and trading partners, as well as other local and international organizations linked to Fairtrade, to strengthen producer and worker organizations;
- Networks: effects of involvement in Fairtrade (and related) networks (such as CLAC, AFN and NAP).

For this study we also developed a **theory of change** (TOC), or impact pathway, to better show how Fairtrade inputs or mechanisms create an impact in *theory* and also in the context of Peru based on the findings of the study. The avenues of impact identified in the Fairtrade International methodology provide an initial guide as to how Fairtrade may have had an impact, but these can be expanded. However, <u>how</u> these mechanisms lead to the expected areas of impact (i.e. the causal linkages in the chain) is not part of the existing Eberhart and Smith (2008) methodology. In this study we initially developed a hypothetical theory of change and then tested and refined this in the field with producer organization managers. A generic theory of change for Fairtrade is presented below (figure 1). Annex 2 includes a participatory theory of change that was produced with one of the Fairtrade producer groups while in Peru. In section 10 we return to the findings of the study and present these in the form of a 'findings' change/impact pathway for Fairtrade in cocoa in Peru (figure 1: A Generic, hypothetical TOC for Fairtrade)

In some cases the changes we see happening in cocoa producer households are fully or in part the result of external factors and in other instances they are the result of Fairtrade alone. We have not had the resources to conduct a full counterfactual, even were this feasible or desirable, but we have interviewed non-Fairtrade cocoa producer organization managers. In this study we are using a 'plausible impact chain or pathway' approach (Nelson and Martin, 2012)<sup>2</sup>, whereby participatory research and triangulation of sources and types of data (qualitative and quantitative data from farm and organizational level, as well as key informant perceptions and information) is used to construct a plausible picture of impact, moving through the hypothetical impact pathway, and in our view represents a sufficient level of confidence in attributing change.

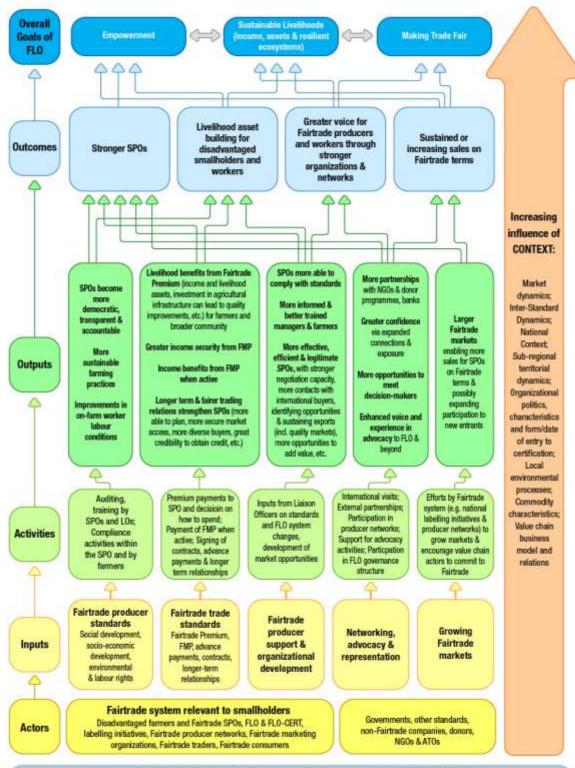
A **set of indicators** was developed from the work previously undertaken by Eberhart and Smith<sup>3</sup> and Oréade-Brèche<sup>4</sup>, as well as the theory of change developed with PO 2<sup>5</sup>. These indicators aim at assessing change all levels and dimensions where it could have taken place and can be found in Annex 4.

<sup>&</sup>lt;sup>2</sup> Nelson, V. and Martin A. (2012) 'The impact of Fairtrade: Evidence, shaping factors, and future pathways'. Practical Action Food Chain Journal, Volume 2, Number 1, May 2012.

<sup>&</sup>lt;sup>3</sup> "A methodological guide for assessing the impact of fairtrade", Eberhart, N. and Smith, S., August 2008

<sup>&</sup>lt;sup>4</sup> "Etude des effets et de l'impact du commerce equitable labellisé au Pérou et en République Dominicaine, Rapport transversal", Duval L., Zarioh, N., Oréade-Brèche / F3E, November 2007. A summary is available at : the funders (f3e) website: http://f3e.asso.fr/-Etude-des-effets-et-de-l-impact-du-.html

<sup>&</sup>lt;sup>5</sup> The theory of changed developed with PO 2 was confirmed in meeting with the manager, and board members, but it was not possible to organize a formal meeting to draw a specific PO 1 theory of change due to time constraints of key PO 1 staff.



Generic FLO Fairtrade Theory of Change: SMALLHOLDERS

## 2.2 Key steps in the methodology

During the preparation phase, a theoretical theory of change was prepared (see annex 2), as well as checklists and a farmer questionnaire (see annexes 4 and 5). The checklists were based on the work of Eberhart and Smith (2008) and Oréade-Brèche (2007). At the beginning of the fieldwork, the hypothetical theory of change was discussed with and verified by PO 2, and confirmed with PO 1 (see annex 3). The checklists were adapted to ensure the gaps or issues identified by PO 2 were indeed covered. The questionnaire was also discussed with PO 2 to ensure that it was appropriate for the local situation and covered all key issues. Committees to be surveyed were then selected (see following section 2.3 for more details), and approximately a half day was spent with each committee. The following activities were undertaken:

- focus group discussions with committee members
- individual/household questionnaires with members
- discussion of other issues, local context (depending on time available, people met, etc.), with local key informants

The focus group discussions covered the following issues (see annex 4 for detailed checklist):

- local context
- farming systems
- family and farm finances
- working conditions
- relations with the SPO
- environment

The questionnaire was administered in parallel to the focus groups discussions (see annex 5).

Specific meetings were also held within the SPOs with:

SPO managers

SPO technical and accountancy staff

SPO board members

Other meetings took place with the following key informants:

Hiderico Bocangel, former manager of PO 2, former president of Appcacao

Barry W. Silver, advisor to PO 1 and PO 2 on financial issues (cooperative capital management)

DEMUNA officer in Juanjui

Police officer in charge of child abuse in Juanjui

Rural credit officer at Caritas in Juanjui

Sergio Lopez Zapata, PDA coordinator in Tarapoto

Representative, manager of La Gran Saposoa cooperative in Saposoa

Representative, assistant manager of Cooperativa El Dorado in Sisa

Emilio Rojas, Fairtrade International liaison officer for Southern Peru

César Paz, Avsf director in Peru

Edgardo Murrieta, AVSF Procacao manager in Lima

Teonila Guerra, Appcacao manager in Lima

E-mail exchanges took place with the following key informants:

Manuel Aguirre, Fairtrade International liaison officer for Northern Peru

Nicolas Eberhart, Ethiquable

Sergio Neira, Coordinador Nacional de Comercio Justo

Representative, Pronatec

The data from the questionnaire was then analysed using excel with pivot tables and the findings interpreted to explore plausible areas and levels of impact.

Two small producer organizations (SPOs), PO 1 and PO 2, were identified by Fairtrade International and Max Havelaar Belgium for inclusion in this study. Both of these organizations are composed of "committees" of members at the primary level, with a secondary level farmer organization. The two organizations are in the same region, and although they do not operate in the same districts, they are located relatively close to each other.

The selection of committees and households was randomised from the list of 47 committees from PO 1 - 5 numbers were randomly selected<sup>6</sup>, and the committees corresponding to these numbers in the list were chosen to participate in the study<sup>7</sup>. However the same randomized selection was not fully possible at PO 2. There the producer organization staff had already announced the meetings to some committees before the arrival of the research team. The decision of the staff had been based on the fact that some of the committees had their monthly general assembly during the few days spent by the research team at PO 2. The other committees were thus chosen by the PO 2 management using selection criteria, namely production related criteria and length of membership of the committees. Because of the time constraints involved, the research team decided to follow PO 2's choice.

After the committees had been selected, SPO technicians advised the local committee coordinator of the study and asked for a meeting to be convened. This coordinator in turn called committee members for a meeting. Depending on the situation (availability of staff, experience of the local coordinator, other workload, relative difficulty of reaching the location, etc.), the research team was accompanied by senior or junior SPO staff on some occasions. In other instances they were met by the local coordinator or board member. This person introduced the work being undertaken, and sometimes intervened to facilitate understanding between the consultants and members of the group.

All members of the committees were rarely present during the focus group meetings (e.g. if they had been advised relatively late about the meeting or had other commitments or tasks to do). The method used to select interviewees for the household questionnaire depended on the situation encountered when the research team reached a committee: if most members were present, the committee list was used, and random numbers selected to choose the interviewees; where a small number of members was present, the basis for random selection was the list of participants in the meeting.

The meetings took place in the committee offices or at the house of the president of the committee (a meeting was composed of a focus group and then individual interviews). An introduction to explain the objective of the study and the purpose of the meeting was made by the SPO staff (if present) and the committee president. The group was then asked to explain the history of the committee and cocoa cultivation in the neighbourhood. Where there were sufficient numbers of participants, the group was divided into two, and two focus group discussions were held. Each researcher used a checklist of issues to discuss with the group (as described previously). Discussions with the focus groups were generally very open. Longer standing members of the SPOs were sometimes given priority to "do the talking" by other members, but in general all participants were eager and able to contribute their piece to the research. Younger women were relatively shy in the mixed focus group discussions, though this was generally not a problem with older women. If the number of women was considered sufficient (above 3), a specific focus group with women was also held; this happened on two occasions, in Pinto Recodo, PO 2, and Bagazan, PO 1.

In PO 2, individual questionnaires were conducted after the focus group discussions. In PO 1, they were conducted at the same time by two enumerators (two French students who were undertaking an internship at PO 1 and were able to assist with the study).

Overall, the following were conducted:

<sup>&</sup>lt;sup>6</sup> A simple excel tool was used for this, which proposes x numbers randomly selected in a group of y (x and y are supplied by the researcher).

 $<sup>^{7}</sup>$  i.e.: 5 numbers between 1 and 47 as there are 47 committees in PO 1

- 9 focus group discussion with 9 committees: four in PO 2 and five in PO 1
- A total of 98 household questionnaires were completed: 19 from members of PO 2 and 79 from PO 1 members, reflecting their respective weight in the total group of cocoa farmers in the two organizations (1,925 in total, of which 1,600 are from PO 1 and 325 are PO 2 members). These members belonged to 13 committees.

Table 1: Number of participants in focus group discussions and household survey questionnaire

Committee	Number of	- I	rticipants in focus	Number of questionnaires
	members		group discussion	
		Total	Women	
Chirapa	22 <sup>8</sup>	22		4
Pinto Recodo	13	11	4	5
San Juan Salado	20	5		4
Las Palmeras/Banda de	14+10	9	1	6
Pishuaya				
PO 2 board		3		
Bagazan	41	30	8	15
Alto El Sol	43	14	2	5
Huicungo	103	5		9
Ledoy/Pajarillo	22+33	12 (only from	2 (only from	22
		Ledoy)	Ledoy)	
Mojaras/Monterey	33			14
Saposoa	67	12	3	14
PO 1 board		5	2	
Total		125	22	98

NB: in the cases where several committees are mentioned (e.g.: Ledoy/Pajarillo), it means that members of a committee close by joined the meeting with the first mentioned committee.

The size of the sample gives a confidence level of 90 per cent and a margin of error of 8.1 per cent to the survey<sup>9</sup>. No counterfactual was included in the household survey sample (see section below) which means that there are limits as to the inferences that can be drawn in terms of impact from this questionnaire data – except for recall questions posed to household members on their perceptions of changes that have occurred between a certain point in the past (5 years ago) and now.

## 2.4 Limitations

Attribution of impact is commonly thought to require 'a comparison of the actual changes brought about by the programme, with the situation (real or hypothetical) as it would have been if the programme had not taken place (the counterfactual)' (White, 2009a and b)<sup>10</sup>. But constructing a counterfactual in complex situations is not always possible: There may not be a like-for-like comparison between different groups and regions: there may be structural biases which mean that a counterfactual is unlikely to exist, but this can only be assessed once the data is collected and analysed rather than speculated beforehand (one example of such

White, H (2009b), Theory-Based Impact Evaluation: Principles and Practice. The International Initiative for Impact Evaluation (3ie) <a href="http://www.3ieimpact.org/admin/pdfs">http://www.3ieimpact.org/admin/pdfs</a> papers/51.pdf

<sup>&</sup>lt;sup>8</sup> Only coffee members so far: some members have cocoa, and work has been done on cocoa by the SPO, but there is no collection centre yet.

<sup>&</sup>lt;sup>9</sup> See www.raosoft.com/samplesize.html

<sup>&</sup>lt;sup>10</sup> White, H. (2009a) Some Reflections on Current Debates in Impact Evaluation. International Initiative for Impact Evaluation, Working paper 1. <a href="http://www.3ieimpact.org/admin/pdfs">http://www.3ieimpact.org/admin/pdfs</a> papers/11.pdf

structural bias could be if the level of education of the population studied was very different to that of the general population). Due to limited resources, planning and survey design time it was not possible to undertake a full counterfactual household questionnaire survey. Instead, the survey covered only the Fairtrade farmers, and the findings can be used a) to provide impact data on some questions regarding perceptions of change over time, b) as a potential baseline against which future impact can be measured within these SPOs.

However, non-Fairtrade producer organizations were included in the qualitative part of the fieldwork (i.e. not in the household survey): Cooperativa La Gran Saposoa in Saposoa (in the region covered by PO 1) and Cooperativa El Dorado, in San Juan Salado (in the region covered by PO 2). Both are relatively new organizations, and were supported by the PDA programme, which has sought to empower farmers to be more organized in order to be able to better negotiate with buyers. They both produce organic cocoa and are interested or already planning to obtain Fairtrade certification as well. They also sell their cocoa to some of the same buyers that PO 2 and PO 1 work with. It was not possible to hold focus group discussions with the members of these organizations, but the managers of both organizations were interviewed.

Some difficulties were encountered in the sampling process, although this is not uncommon for rural research surveys. In particular the fact that not all members of a committee could be present at the meeting, often because they were away (in their fields or other) and could not be reached. In some communities (Ledoy, Bagazan) most members were present, but in other (often bigger) committees (Saposoa, Huicungo which have over 100 members) it was only possible to conduct the survey with those members who were actually present.

This is not believed to be a major bias, as the reason why one member was present and not another was purely based on availability/activities planned on the day the meeting was called.

## 3. CONTEXT OF THE COCOA TRADE

## 3.1 International market and trends

To analyse the international cocoa market, it is important to distinguish between the two main varieties: *criollo* and *forastero*. The difference between the two varieties lies in the skin and the colour and flavour of their beans. In a *criollo* cocoa shell the fruits are white or violet, with a sweet and pleasant taste; cocoa *forastero* is characterized by its thick shell, purple fruits and bitter taste. The cocoa global market is divided into two major categories: i) fine cocoas ("*fino*" or "*de aroma*") which usually come from varieties of *criollo* and *trinitario* (*trinitario* is a hybrid variety, coming from a cross between *criollo* and *forastero*) and, ii) the ordinary cocoa beans which comes mainly from "*forastero*" type varieties. <sup>11</sup>

The largest cocoa-producing region in the world is West Africa with about 70 per cent of world production. Ivory Coast and Ghana are the biggest producers, followed by Indonesia, Nigeria, Cameroon and Brazil. These six countries together produce 85 per cent of the world's cocoa bean production. Note that the production of these countries is of ordinary cocoa. These countries produce approximately 3.2 million to 3.7 million MT of world cocoa bean production. 12

<sup>&</sup>lt;sup>11</sup> La ventaja Comparativa del Cacao Ecuatoriano. Rosero R. José L, Apuntes de Economía No. 20, Dirección General de Estudios. Guayaquil, Junio 2002.

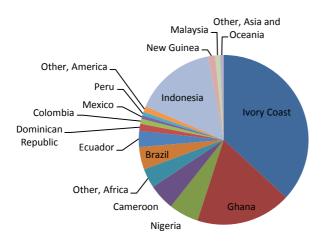
<sup>&</sup>lt;sup>12</sup> ICCO Quarterly Bulletin of Cocoa Statistics, Vol. XXXVII, No. 1, Cocoa year 2010-2011

Table 2: Cocoa output of producing countries (thousand MT)

Country	2007-2008	2008-2009	2009-2010	2010-2011
AFRICA				
Ivory Coast	1370	1222	1242	1325
Ghana	675	662	632	825
Nigeria	210	250	240	240
Cameroon	185	227	205	220
Other, Africa	137	158	156	178
Total Africa	2577	2519	2475	2788
AMERICA				
Brazil	160	157	161	190
Ecuador	114	134	160	150
Peru	31	34	37	
Other, America	145	161	167	208
Total America	450	486	525	548
ASIA and OCEANIA				
Indonesia	580	490	550	500
New Guinea	50	59	50	50
Malaysia	34			
Other, Asia and Oceania	26	49	47	52
Total Asia and Oceania	690	598	647	602
WORD TOTAL	3717	3603	3647	3938

Source: ICCO Quarterly Bulletin of Cocoa Statistics, Vol. XXXVII, No. 1, Cocoa year 2010-2011

Figure 1: Major cocoa producing countries



The share of fine or aromatic cocoa in world production has declined dramatically since the beginning of the century, mainly because cocoa development activities in the past fifty years have focused on regular cocoa, having higher levels productivity and reduced sensitivity to attack by diseases. Latin America and the Caribbean provide 80 per cent of fine cocoa of the world, followed by Asia and Oceania (18 per cent) and Africa (2 per cent).

The international price of cocoa is determined by the two major trading platforms in the markets of London (LIFFE)<sup>13</sup> and New York (New York Board of Trade or NYBOT). During the last decade, the international price of cocoa has risen, reaching USD 3,700 per MT in 2011, a historical record of the last 20 years. One of the reasons for these high prices is the strong speculation associated with this product, similar to commodities such as oil, coffee, cotton, etc. Another important reason for this speculation is the dollar depreciation and strong interest of investment funds in the commodity markets. The U.S. economic situation, along with rising crude oil prices and fluctuations in the exchange rate of the dollar, has motivated investors to adopt anti-inflationary measures covering the commodity markets. Demand in consuming countries has maintained an upward trend, while dry weather in exporting countries has affected crop yields, mainly in the Ivory Coast. In Nigeria, over the last two years, diseases and dry weather have also reduced the supply of cocoa.

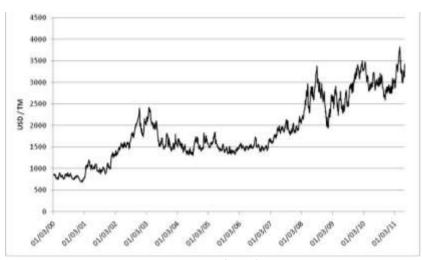


Figure 2: New York Board of Trade cocoa prices from 2000 to 2011

Source: Intercontinental Exchange – ICE (NYSE)

The market for fine, aromatic cocoa, compared to the international market for bulk cocoa, is considered a small and highly specialized market, with its own supply and demand characteristics. Specialized agents buy directly from producing countries to supply the chocolate companies. Although the stock price also serves as a reference for the negotiation of prices with respect to specialty cocoa, these are determined by the balance between supply and demand for a particular type of cocoa and the taste and quality required by the manufacturer to satisfy the tastes of consumers, through quality bonuses on New York prices. Currently the fine cocoa market represents less than 5 per cent of the world cocoa market. The main countries with greater production of aromatic cocoa are Ecuador, Papa New Guinea and the Dominican Republic, which collectively export 81 per cent of the supply of global fine cocoa. Peru ranks sixth in the world exports of this variety of cocoa.

London International Future and Option Exchange

Table 3: World aromatic cocoa exports (MT)

(Member countries of Council of the International Cocoa Organization, May 2008)

Countries	2004-2005	2005-2006	2006-2007
Ecuador	61,067	66,993	73,950
Papua New Guinea	35,524	38,130	35,464
Dominican Republic	10,316	10,912	15,337
Venezuela	5,811	9,950	10,949
Indonesia	3,608	4,926	4,162
Peru	1,021	2,231	4,075
Madagascar	2,098	3,003	3,700
Colombia	100	1,503	2,094
Sao Tome and Principe	1,178	788	928
Trinidad and Tobago	700	771	682
Costa Rica	424	434	416
Jamaica	188	205	386
Grenada	307	80	218
Dominica	70	60	20
St. Lucia	8	2	17
Total aromatic cocoa exports	122,420	139,988	152,397
Per cent aromatic cocoa exports of world cocoa exports	5%	5%	6%
Total world cocoa exports	2,495,082	2,739,866	2,559,575

Source: ICCO QBCS, Vol. XXXIV No.2

The buyers in consuming countries are the processors and chocolate manufacturers. A few multinational companies dominate both processing and production of chocolate. It is not possible to accurately determine the global demand for cocoa beans, because products made from cocoa (butter, powder) are used in a wide range of industries and an even wider range of products. Therefore, to assess the demand for cocoa beans, the grinding totals per country are an important measure.

The International Cocoa Organization (ICCO) provides information on the estimated consumption of cocoa (ground cocoa, plus net imports of cocoa products and chocolate products in grain equivalent, <sup>14,15</sup> which could provide a better understanding of industrial demand. However, this information should be used with caution, as it still does not represent the total industrial demand for cocoa products.

Global consumption of cocoa has an upward trend at an average 2.7 per cent annual growth. ICCO estimates world consumption of 3.78 million MT for 2011. The following table shows the global trends of production and consumption over the past 10 years.

<sup>14</sup> Using the following conversion factors: cocoa butter 1.33, cocoa paste/liquor 1.25, cocoa powder and cake 1.18, chocolate and chocolate products 0.40 or 0.20

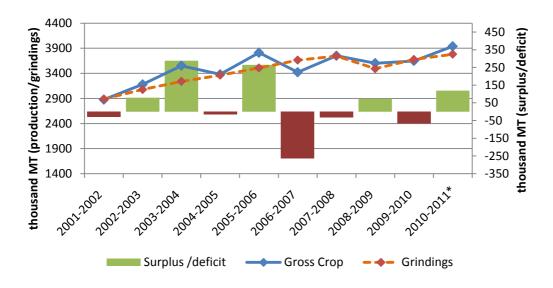
<sup>&</sup>lt;sup>15</sup> CBI market survey: The (organic) coffee, tea and cocoa market in the EU. Pierrot Joost, Centre for the Promotion of Imports from developing countries – CBI, May 2008

Table 4: World cocoa bean production, grindings and stocks

Crop Year	Gross Crop	Change	Grindings	Change	Surplus / deficit	Total end- of-season stocks	Stocks to grindings ratio
2001-2002	2877	0.4%	2886	-5.8%	-29	1315	45.6%
2002-2003	3179	10.5%	3078	6.7%	79	1394	45.3%
2003-2004	3551	11.7%	3238	5.2%	288	1682	51.9%
2004-2005	3381	-4.8%	3363	3.9%	-16	1666	49.5%
2005-2006	3811	12.7%	3508	4.3%	265	1931	55.0%
2006-2007	3422	-10.2%	3662	4.4%	-263	1668	45.5%
2007-2008	3751	9.6%	3745	2.3%	-32	1636	43.7%
2008-2009	3602	-4.0%	3492	-6.8%	74	1710	49.0%
2009-2010	3647	1.2%	3677	5.3%	-66	1644	44.7%
2010-2011*	3938	8.0%	3780	2.8%	119	1763	46.6%

Source: International Cocoa Organization - ICCO

Figure 3: Supply and demand balance of cocoa 2001 - 2010



Source: International Cocoa Organization-ICCO

Instability in production leads to deficits in supply relative to demand in some years, which generates more speculative movement and the upward trend in international prices. 2007 and 2010 were the years of greatest deficit in recent times. The financial and economic crisis in 2008-2009, combined with the steady rise in the price of cocoa beans, had a negative impact on consumer demand for chocolate products. While the final consumption of chocolate confectionery seems not to have been significantly affected by the economic crisis, the overall consumption of cocoa has been deeply affected. Many chocolate manufacturers reported that they have reduced the cocoa content in chocolate products, in order to alleviate the impact of rising raw material costs in their products, and to continue providing chocolate products at affordable prices. <sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Annual Report 2008 – 2009, ICCO

The main cocoa bean consumer countries are the United States, Germany, France, Britain, Japan, Italy and Brazil. One of the areas showing a major expansion of the chocolate industry is the Asia – Pacific region, where chocolate consumption is becoming more popular and is growing on average by 4 per cent per year.

Poland \_ Belgium Canada 3% 2% 3% Mexico 3% Spain Brazil 4% Italy **United States** 4% 33% Japan Russian ederation Germany 11% France 10% United Kingdom 9%

Figure 4: Main cocoa bean consumer countries

Source: International Cocoa Organization - ICCO

The processing industry has become more dependent on the supply from Africa, which in 2007-2008 accounted for 69.3 per cent and now accounts for 70.8 per cent of world production, with Ivory Coast and Ghana as current leading suppliers. Any political or social unrest in the region – as recently experienced in Ivory Coast - leaves consumers, industry and other actors of the cocoa chain susceptible to adverse changes in raw material prices. Political uncertainty also slows investment in the cocoa sector in African countries, preventing an expansion in the supply needed to meet growing demand.

There is significant uncertainty with regard to cocoa price levels: speculation will continue to determine the trends in the international cocoa market in terms of prices and a high degree of volatility is expected in the short and medium term, given the strong presence of investment funds.

The cocoa and chocolate industry, including distribution, is oligopolistic. Two or three companies cover more than 58 per cent of production in these three different areas, <sup>17</sup> including Barry Callebaut, Archer Daniels Midland (ADM) and Cargill. According to the FAO, <sup>19</sup> the global market for premium chocolate (including aromatic, single origin, organic, Fairtrade and chocolate of high cocoa content) has grown significantly in recent years and will continue even in periods of economic downturn. This is because consumers seek affordable luxuries during hard times. It is expected that the global premium chocolate market will grow from USD 7 billion in 2007 to USD 12.9 billion (USD 3.6 billion only in the USA) in 2011, driven by growing consumer awareness and manufacturer interest in premium quality chocolate.

<sup>&</sup>lt;sup>17</sup> Cocoa industry, chocolate industry and distribution.

 $<sup>^{18}</sup>$  Cocoa: Trade issues for the ACP. Executive brief: Update. Agritrade, October 2009.

<sup>&</sup>lt;sup>19</sup> The market for organic and fair-trade cocoa, FAO, Sept 2009.

## 3.2 Organic cocoa market

The global market for organic products in general has seen strong growth over the last decade, especially in Germany, Austria, Switzerland, Denmark, UK and France and in the same period demand for certified organic cocoa beans has also been high. Demand has come from both conventional and specialized buyers. The organic chocolate market also benefited from a strong rise in demand in response to the promotion and distribution strategies of retailers and supermarkets, as well as the perception of consumers about organic products providing safer food and better quality than conventional ones. However, this growth was maintained only until the economic crisis in 2008-2009. After the crisis, industry players faced an oversupply of organic cocoa in the market, which negatively affected prices. During the crisis of 2008-2009 the organic chocolate demand decreased as did the whole consumer demand for chocolate products.

According to the ICCO (2006), <sup>20</sup> Europe is the largest market for imported organic cocoa beans, as well as processing and manufacturing activities for certified cocoa and chocolate products. Part of the organic cocoa and chocolate produced in Europe is exported, mainly to the United States. Barry Callebaut is considered as the main processor of organic cocoa products globally. Organic chocolate consumption in Europe is growing rapidly. The UK market has also grown considerably. There are two major organic chocolate producers in the UK: i) Green and Black's was founded in 1991 and acquired by Cadbury-Schweppes in 2005; ii) Duchy Originals, was created by the Prince of Wales in 1992.

Despite rapid growth, organic products still represent a small fraction of the total market: currently only about 0.5 per cent of the global cocoa market can be considered as organic production (ICCO, 2009). According to the Coalition of Tropical Commodities, the potential availability of organic certified cocoa in 2010 is 26,000 MT compared to around 20,000 MT in 2009. Approximately 40-50 per cent of the organic cocoa produced worldwide goes to the European market. The main European markets are Germany, the Netherlands and France - although Switzerland is also of great importance.

## 3.3 Cocoa in Peru

Aromatic cocoa, which is produced in Peru, is characterized by a high fat content, which can reach levels of 57 per cent. This gives it a high commercial value in the international market, with great potential for organic cocoa production as it is a crop grown mostly in agroforestry systems. Production is mainly by smallholder farmers who have, at most, 2 to 3 hectares, and use a low level of technology. Cocoa production in Peru has seen rapid growth due to the support of international cooperation, especially in the USAID funded Alternative Development Program, whose goal is to eradicate coca cultivation, especially in the region of San Martin. Domestic production rose from 24 000 MT in the year 2000 to 36 800 MT in 2009.

There are two important features in cocoa production in Peru, regarding the type of variety grown. In the coca-growing areas, where the USAID Alternative Development Program - PDA<sup>22</sup> has had a strong influence (San Martin, Huanuco, Ucayali and Ayacucho), the CCN-51 predominates (CCN-51 is an improved cocoa variety developed in Ecuador), there is also better management of plantations and higher crop yields. In marginal areas where there is no major technical assistance (Jaén, Bagua, Piura), it seems that the *criollo* Andean type cocoa (traditional) still prevails, and plantations tend to be less well maintained and yields are low (irrigation is also needed for cocoa to grow as rainfall is not sufficient, and in fact in some areas it is almost non-existent).

<sup>&</sup>lt;sup>20</sup> A Study on the market for Organic Cocoa. ICCO – Executive Committee, July 2006.

<sup>&</sup>lt;sup>21</sup> PDA Impact Survey 2010. Alternative Development Management. Office of monitoring. Devida – USAID Peru, Lima, Dec 2010.

<sup>&</sup>lt;sup>22</sup> USAID/Peru's Alternative Development Program (ADP) is a key component of the U.S. Government and Government of Peru's (GOP) comprehensive counternarcotics strategy, to promote development in formerly coca-growing areas and to sustain coca reduction achieved with eradication programs

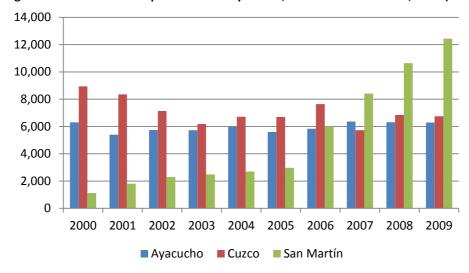
Table 5: Peruvian cocoa production by department 2000 – 2009 (MT)

Year	Amazonas	Ayacucho	Cuzco	Junin	San Martin	Other	National total
2000	2,922	6,297	8,943	2,108	1,113	3,403	24,786
2001	2,384	5,393	8,357	2,237	1,814	3,486	23,671
2002	3,241	5,738	7,139	2,546	2,298	3,391	24,353
2003	3,357	5,722	6,182	3,026	2,494	3,433	24,214
2004	3,349	5,997	6,708	3,352	2,704	3,811	25,921
2005	2,642	5,603	6,698	3,571	2,975	3,768	25,257
2006	3,929	5,834	7,638	4,045	5,992	4,238	31,676
2007	2,729	6,359	5,732	3,986	8,411	4,170	31,387
2008	2,136	6,313	6,837	4,057	10,643	4,017	34,003
2009	2,858	6,286	6,743	4,036	12,440	4,440	36,803

Source: Minag - OEEE

The production areas with more favourable conditions for cocoa production in Peru are Tocache (Alto Huallaga), Aucayacu (Alto Huallaga) and the Apurimac river valley: these areas usually have rainfall above 2,500 mm per year. The main regions of cocoa production are San Martin, Cuzco and Ayacucho. However, trends in production for the various areas are very different: San Martin has increased its production over the past 10 years eleven-fold; Cuzco saw decreased production (by 25 per cent) and production in Ayacucho has been stable over the same period.

Figure 5: Growth of cocoa production in Ayacucho, Cuzco and San Martin, Peru (2000 - 2009)



Source: Minag – OEEE

The growth of domestic production is mainly due to the expansion of cultivated areas in the region of San Martin, which increased by 13,743 ha of cocoa between 2000 and 2009. Table 6 shows the changes in the size of harvested cocoa areas in different regions of Peru.

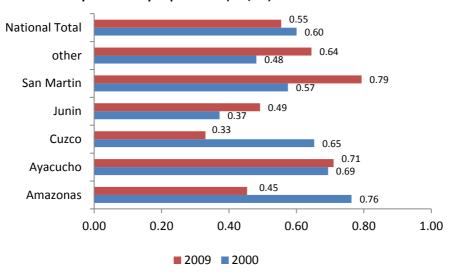
Table 6: Areas harvested in Peru 2000 – 2009 (ha)

Year	Amazonas	Ayacucho	Cuzco	Junin	San Martin	other	National total
2000	3,826	9,074	13,695	5,666	1,936	7,067	41,264
2001	3,729	8,073	17,593	6,462	3,184	6,774	45,815
2002	3,589	8,076	20,513	6,673	3,721	6,616	49,188
2003	3,573	8,144	20,669	6,855	3,857	6,689	49,787
2004	3,581	8,144	20,764	7,050	4,217	7,123	50,879
2005	3,561	8,144	20,843	6,753	4,237	6,775	50,313
2006	6,236	8,144	20,739	6,987	8,182	6,444	56,732
2007	6,191	8,849	20,170	7,079	10,790	6,756	59,835
2008	6,152	8,851	20,982	7,856	13,238	6,547	63,626
2009	6,298	8,851	20,418	8,202	15,679	6,887	66,335

Source: Minag - OEEE

Although production nationwide has increased significantly, the average yield (MT/ha) across the country has decreased from 0.60 to 0.55 MT/ha. The only departments that have achieved improved productivity levels are San Martin and Ayacucho. In departments such as Cuzco and Amazon, productivity fell by almost half compared to what it was in 2000, while in San Martin and Junín productivity grew by 32 per cent in ten years. This difference between these regions is the implementation of alternative development programmes in the latter, which led to renewed cultivation of cocoa and expanded production areas. In contrast, in Cuzco and Amazonas, the plantations are old and productivity is decreasing.

Figure 6: Productivity of cocoa by department (MT/ha)



Source: Minag – OEEE

Most of the Peruvian cocoa (75 per cent) is supplied to the national agri-food industry: there are more than ten companies that prepare chocolate and cocoa products both domestically and for export. Most important are the following companies: Machu Picchu Coffee Trading, Negusa Corp. SA, Corporacion El Bosque and Goods Foods (ex Winter). The estimated processing capacity in Peru is 35,000 MT of cocoa beans.<sup>23</sup> The type of

<sup>&</sup>lt;sup>23</sup> Diagnostico con un enfoque organizacional de la cadena productiva del cacao en Perú. Finet, Arnaud and Paz, Cesar. CICDA, June 2004.

bean used by the domestic industry is of low quality since it has not gone through a fermentation process (fermentation eliminates the bitter taste, gives the aroma of chocolate and also removes excess moisture in the beans, and is thus important for a good quality product).

On the other hand, exports of cocoa beans from Peru have been growing rapidly in the last decade. In 2000 less than 100 MT of cocoa beans were exported, in 2006, more than 2500 MT were exported and in 2010 the figure reached 11, 000 MT of cocoa. <sup>24</sup> The main market destinations of Peruvian cocoa are Belgium, Holland, Germany and the United States.

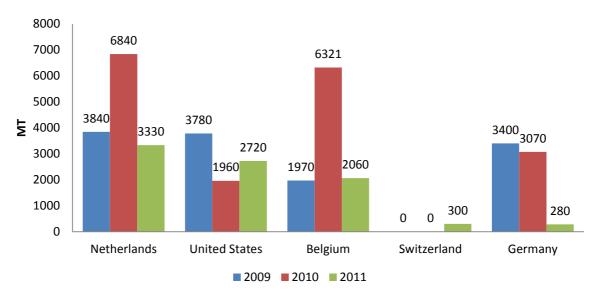


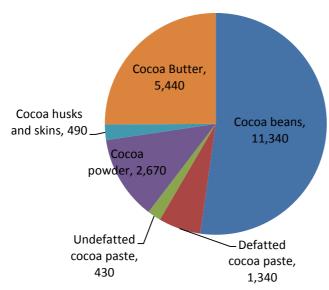
Figure 7: Peruvian exports of cocoa bean by destination (thousand USD) 2009 – 2011

Source: Asociación de gremios productores agroexportadores del Perú - Agap

In 2010, exports of cocoa beans accounted for 52 per cent of total exports of cocoa and derivatives, and this share continues to grow due to the increases in Peruvian cocoa production and productivity.

<sup>&</sup>lt;sup>24</sup> Agrodata Perú, 2011

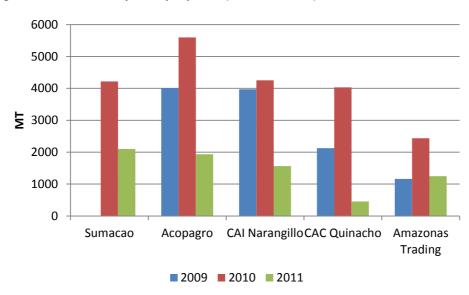
Figure 8: Exports of cocoa and its derivatives 2010 (MT)



Source: Estadística Mensual, SIEA Minag, April 2011

The main Peruvian companies exporting cocoa beans are: Sumaqao S.A.C., Cooperativa Agraria Cacaotera - PO 1, Cooperativa Agraria Industrial Naranjillo, Cooperativa Cafetalera Quinacho and Amazonas Trading Peru S.A.C. All these companies show a continued growth of exports in 2009 and 2010, and in the first half of 2011 (when fieldwork was completed for this study).

Figure 9: Cocoa bean exports by exporter (USD thousands)



Source: Asociación de gremios productores agroexportadores del Perú - Agap

Of the 55 cocoa-producing organizations that were Fairtrade certified in 2010, 16 were located in Peru. Peru is the fourth largest provider of Fairtrade cocoa beans, with 1500 MT sold in 2009-10, behind the Ivory Coast, the Dominican Republic, and Ghana.<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> Monitoring the scope and benefits of Fairtrade, FLO, 2011

#### 3.4 Fairtrade market and trends

According to Fairtrade International statistics in 2000, 1153 MT<sup>26</sup> of Fairtrade certified cocoa were sold worldwide, while in 2009-10, sales reached 37,000 MT.<sup>27</sup> Forty-eight per cent of all Fairtrade cocoa sold worldwide in 2008 was certified organic. Despite this rapid growth, in 2009 Fairtrade certified cocoa still represented only 0.1 per cent of global cocoa consumption. In value terms, global sales of Fairtrade cocoa came to €185 million in 2008. Despite the low representation of Fairtrade chocolate in the total European chocolate market, there is a rapid growth of this market segment in most European countries. In 2008 Fairtrade sales of Barry Callebaut chocolate represented 40 per cent of the worldwide market for Fairtrade couverture sales.

The market-reported sales volumes for Fairtrade cocoa (all origins, all markets) are presented in table 7 below for the year 2010.

Table 7: Total Fairtrade reported cocoa sales (2010)

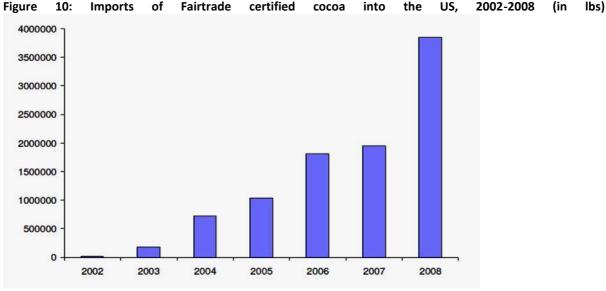
Product	Conventional	Organic	Conventional (per cent)	Organic (per cent)	Total 2009	Total 2010	Growth Rate
Cocoa							
beans)	29,343 MT	5,836 MT	83.41%	16.59%	13,898	35179	153.12%

Source: Fairtrade International

Fairtrade certified cocoa imports into the United States have grown rapidly over the past 6 years. In 2002 when Fairtrade certified cocoa was launched in the U.S., imports reached 6.4 MT, while in 2008 imports were 1,745 MT, meaning an average growth of 83 per cent annually. In 2008, approximately 90 per cent of all Fairtrade cocoa imported into the United States was certified organic. According to TransFair USA in 2008, Fairtrade cocoa imported into the United States came from 17 producer cooperatives in nine different countries, compared to six cooperatives in 5 countries in 2004. This rapid growth in sales of Fairtrade cocoa products in the United States reflects the expanded distribution of these products into the large supermarket chains and retail outlets, as opposed to the previous limited sale of these products to specialty stores.

<sup>&</sup>lt;sup>26</sup> The market for Organic and Fairtrade cocoa. FAO, Sept 2009.

<sup>&</sup>lt;sup>27</sup> Monitoring the scope and benefits of Fairtrade, FLO, 2011



Source: Transfair USA, 2008

Sales of Fairtrade cocoa in the Australia and New Zealand markets were not very significant until 2009, compared to other Fairtrade products. In 2010, sales of Fairtrade cocoa reached AUD 87 million, compared to AUD 5.3 million in 2009, i.e. an increase of 16 fold during the course of one year.

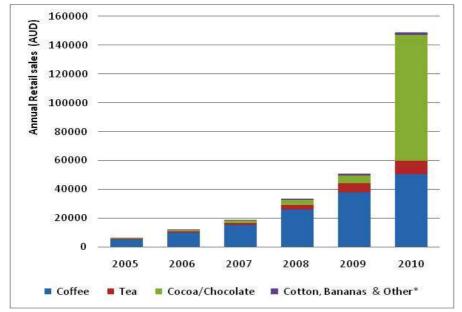


Figure 11: Retail Sales for Fairtrade labelled products in Australia and New Zealand 2005 - 2010

Source: Fairtrade Australia and New Zealand, Feb 2011

This rapid growth in Australia and New Zealand is due to the introduction of Fairtrade products in supermarkets and retail outlets for wholesale, as well as the launch of a new range of Fairtrade products certified as hot chocolate, milk chocolate, and so on.

Overall, the future of the Fairtrade cocoa market seems to be very favourable. First, there is a strategy of distributing Fairtrade certified products through mainstream retail outlets worldwide, which has expanded demand in Europe, USA, Australia and New Zealand. There is a great willingness by consumers to pay for differentiated products like dark chocolate with high cocoa content. The sustainability of the Fairtrade cocoa

market will depend on a steady supply of cocoa that can meet growing demand, which may not necessarily be matched by growth in producer organization.

## 4. NATIONAL AND REGIONAL CONTEXT

Peru is divided into 3 geographical regions: the dry Pacific coast ("la costa"), the Andes ("la sierra"), and the Amazon ("la selva"). Cocoa is mostly grown in the selva, with the exception of some irrigated production on the coast, in the regions of Piura and Tumbes, in the North of the country. The sierra is characterized by higher levels of poverty and higher *percentages* of indigenous populations. The selva is an extremely isolated area. The study took place in the region of San Martin, which is part of the selva. The population of the selva region represents 2.7 per cent of the Peruvian total.

## **4.1** Economic context

Peru has experienced very strong economic growth over the last decade (8.9 per cent in 2007, 9.8 per cent in 2008, 0,9 per cent in 2009, and 8.8 per cent in 2010<sup>28</sup>), but despite a decline of 28 per cent points in poverty levels since 2004, many inhabitants feel left out from this economic development, particularly in the sierra, and to a lesser extent in the selva<sup>29</sup>.

**Table 8: National and regional socio-economic indicators** 

	National		Selva rural		San Martin	
	2010	2004	2010	2004	2010	2004
Population	29,496,000				800,000	
Per cent of the population below poverty line*	31.3	48.6	45.6	63.8	31.1	51.9
Per cent of the population below extreme poverty line	9.8	17.1	17.8	30.4		
Average monthly income (real PEN base 2001)	491.4	371.5	245.7	155.9	395.3	
Extreme poverty line (current PEN)	149	115	127	102		
Poverty line (PEN/month/person)	264	216	191	158	220	
Gini index (income)	0.46	0.49	0.40	0.37		

Source: Evolucion de la pobreza al 2010, INEI, May 2011

<sup>\*</sup>Poverty lines are based on the actual cost of living, and calculated by the Peruvian authorities

<sup>&</sup>lt;sup>28</sup> World Bank, country brief Peru

<sup>&</sup>lt;sup>29</sup> Economic growth, USAID Peru, February 2011

Until relatively recently, San Martin was a very isolated region within Peru. It is only since the 1970s that roads have been constructed, allowing direct access from Tarapoto to the North of Peru and the coastal region<sup>30</sup>. Since the 1990s, road networks have improved tremendously, new roads were built and metal roads were tarred. For instance, until 2009, the trip from Tarapoto to Juanjui was a four to five hour drive, but it is now half this.

The last three decades has been a period of very important social change in Peru. In 1980, its human development index was just below the average for Latin America. It is now just above this average. Peru is situated in the medium-ranking countries of the UNDP human development index (HDI)<sup>31</sup>.

Table 9: Peru human development indicators (HDI)

	1980	2010
HDI Value	0.560	0.723
HDI ranking		63

Source: UNDP

## 4.2 Livelihood activities in San Martin

The main economic activity in San Martin is agriculture: the agriculture and forest sector produces 30 per cent of the regional GDP (nationally, agriculture and forest account for only 8.6 per cent of the GDP)<sup>32</sup>. The San Martin region stands as a link between the Andes and the Amazon basin. To the North and North-West of the region, the foothills of the Andes, with elevations to 2,000m, are favourable for coffee cultivation. The centre and South, around the Huallaga river valley, are tropical low-lying areas, which have recently become the main centre for cocoa growing in Peru. The area surrounding Tarapoto, with wide flat fertile land, is dominated by rice growing, as well as other commercial crops such as papaya, corn, etc. Most of the farmers in this area grow several crops a year and have an intensive use of machinery and chemical inputs. We do not have data comparing average income from cocoa obtained by Fairtrade farmers compared to producers of other cash crops in the region.

San Martin is the biggest producer of cocoa in Peru, with over a third of the national production. There are 32,410 has of cocoa, but only two thirds of this area is currently in production (one third is less than 4 years old and is not yet producing cocoa beans). There are approximately 21,600 cocoa producers in the region: 23 per cent of whom are members of a cocoa association or cooperative and these producer organizations together collect 26 per cent of the cocoa produced. There are 15 cocoa growers' associations in San Martin<sup>33</sup>, two of which are currently Fairtrade and the subject of this study.

## 4.3 Socio-cultural characteristics of the area

The San Martin region has seen waves of colonization between the 1960s and the 1990s, as migrants have moved into the area from more populated parts of Peru in the search for new farm land. In 1981, the population included 75,000 recent migrants; by 1993 there were 175,000 migrants representing close to one

<sup>&</sup>lt;sup>30</sup> Las potencialidades y limitaciones del departamento de San Martin, Zonificacion ecologica y economica como base para el ordenamiento territorial, Gobierno regional de San Martin, March 2009

<sup>31</sup> http://hdrstats.undp.org/en/countries/profiles/PER.html

<sup>&</sup>lt;sup>32</sup> Carpeta Estadística Georeferencial Departamento de San Martín, Direccion general parlamentaria, March 2011

<sup>&</sup>lt;sup>33</sup> Propuesta preliminar para mejorar la calidad del grano de cacao en la region San Martin, PDA, April 2011

third of the population of the region<sup>34</sup>. Most migrants come from the regions of Cajamarca, Amazonas, Piura, Loreto, Lima and La Libertad. Most of the population in the region is *mestizo*. Among these recent migrants, there are some indigenous families from the sierra; the population of local indigenous communities is very small

Many migrants have cleared farms from areas of natural forest, leading to a significant level of deforestation: 27.45 per cent of the territory was deforested by the year 2000. The current deforestation rate is 25,000 hectares per year<sup>35</sup>. The region has strong tourism potential due to its high levels of biodiversity. There are currently three national parks in these areas. The largest town is Tarapoto, with close to 120,000 inhabitants.

## 4.4 Historical context

Farmers identify three phases of development within the area:

1960-1970s: this period was characterized by agricultural intensification and in-migration. Coffee production (unwashed coffee) was strongly supported by the government, and organized by a network of cooperatives, which disappeared in the late 1970s.

1980s-90s: this phase featured a growing drug trade and terrorism. It was a period of economic affluence and social decline, during which the state effectively lost control of the whole region, which came under the rule of terrorist groups. Insecurity and crime were high, even in remote communities.

1990s: Since the late 1990s the government managed to pacify the region, and initiated development projects (building roads, in particular), coca eradication and support for increasing cocoa production in "the cocoa boom" – all with strong support from the US government

After this process of 'pacification' and the abandonment of coca, farmers were very poor. Previously they had almost ceased to grow food crops, because they earned sufficient income through coca production to buy all of the food they needed. With this source of income lost, families had to start growing food again, but the first few years were difficult. USAID together with the Peruvian government launched a programme called the PDA, or Programa de desarrollo alternativo, which aimed to support and facilitate the transition to licit crops. The programme is described by USAID as "a key component of the U.S. Government and Government of Peru's (GOP) comprehensive counter-narcotics strategy, to promote development in formerly coca-growing areas and to sustain coca reduction achieved with eradication programs." 36

The programme provides assistance to communities, in the form of planting of new crops, technical support to increase yields (e.g. of cocoa, coffee, palm oil), increased access to financial services and support to farmer organizations.<sup>37</sup> The programme has clearly been extremely widespread in its coverage of the region and has played a crucial role in the tremendous expansion of cocoa production. The programme has also funded and facilitated farmer training in the technical management of cocoa plantations, especially in the pruning of plantations. Representatives of the PDA in Tarapoto insist that these results could only be achieved because the Peruvian government and local authorities were providing adequate backing and support to the programme.

While coca production in the Alto Huallaga region (which covers part of San Martin and neighbouring Huanuco) show a 2 per cent decrease between 2008 and 2009<sup>38</sup> (last data available), it has actually increased 9

<sup>35</sup> Las potencialidades y limitaciones del departamento de San Martin, Zonificacion ecologica y economica como base para el ordenamiento territorial, Gobierno regional de San Martin, March 2009

<sup>&</sup>lt;sup>34</sup> Gobierno regional de San Martin, 2009

<sup>&</sup>lt;sup>36</sup> USAID/Peru Alternative development program leaflet, February 2011, p.1 (http://www.usaid.gov/pe/downloads/alternative-development-english-february2011.pdf)

<sup>&</sup>lt;sup>37</sup> USAID/Peru Alternative development program leaflet, February 2011

<sup>&</sup>lt;sup>38</sup> Peru Monitoreo de cultivos de coca 2009, UNODC-DEVIDA, June 2010

per cent since 2005<sup>39</sup>. Over the same period (2008 to 2009) production increased 6.8 per cent overall in the country. The cultivated area is now close to 60,000has<sup>40</sup>, and this leads to Peru becoming the top exporter of cocaine in 2010. Illegal coca production (some farmers have permits to produce for the internal coca leaf market) remains extremely lucrative for farmers: 1ha produces USD 6, 600 worth of coca leaves (in the best scenario, 1ha of cocoa produces only half that value)<sup>41</sup>.

So far, the PDA has focused on the region of Tarapoto (in San Martin), and its representatives there clearly state that the success of the programme is due to the full support of local authorities, a condition, which, for various reasons, is not yet met in Huanuco (a neighbouring region), nor in other major coca growing regions of Peru. Given the strong link between coca production and drug-trafficking, very few cocoa farmers who are still producing coca are willing to discuss this issue with external researchers (because coca trees require little care, the fields may be in different locations, even very far from the farm). Several interviewees stated that the PDA had not done much to reduce coca production in San Martin – because it had already disappeared there - but that it greatly supported the development of cocoa.

## 4.5 Structure and governance of the case study SPOs

This section presents the key characteristics of the two case study producer organizations - PO 2 and PO 1

Table 10: Key data for PO 2 and PO 1

	PO 2	PO 1
Year of founding	1999	1997
Legal structure	Cooperative	Cooperative
Total number of members	1,200	1,600
Fairtrade certified since	2007 for cocoa 2002 for coffee	2005
Number of members producing cocoa	332	1,600
Per cent of cocoa farmers who are certified organic	62%	35% of members and 56% of the volume in 2009
Governance structure	General assembly formed by elected delegates of local committees	General assembly formed by elected delegates of local committees
Number of staff	7	86 (including 72 cocoa collectors who are members)
Turnover (in USD, 2010)	Cocoa: 472 000 Overall: 2 500 000 (2009)	6 100 000
Services offered to its members		credit inputs at special price life insurance <sup>42</sup>

<sup>41</sup> Peru Monitoreo de cultivos de coca 2009, UNODC-DEVIDA, June 2010

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 $<sup>^{39}</sup>$  Peru Monitoreo de cultivos de coca 2009, UNODC-DEVIDA, June 2010

<sup>&</sup>lt;sup>40</sup> Against 95 000has in 1996.

<sup>&</sup>lt;sup>42</sup> paid out if a member or his/her spouse deceases

	PO 2	PO 1
Volume of cocoa exported in 2010	150 MT	2 000 MT
Per cent of Fairtrade sales in cocoa	83%	66%
Other productions	•	Starting dried coconut production for export as FT small project of raw sugar

Source: PO 1, PO 2

Figure 12: The region of San Martin in Peru



Source: Wikipedia

The two SPOs are composed of committees of individual farmer members. All of the committees have a similar history: at some point between the mid-90s (for the pioneers, such as Alto El Sol) to the late-1990s (for later entrants), their communities were visited by UN or NGO personnel to try and convince the farmers to eradicate coca and to plant cocoa instead. The committees were either formed at this stage, or at a later date, with interested cocoa farmers from the community. The committees later approached the SPO (or participated in its founding) to try and find a market for their produce (Ledoy, Alto El Sol) or to try and counter the low prices paid by intermediaries (Las Palmeras).

The levels of Fairtrade sales for the case study organizations are shown in figure 12. The overall level of sales has been increasing constantly (from lower levels before 2008), as have the volumes of Fairtrade sales, with the notable exception of 2009. Both SPOs believe this lower level of sales in 2009 is due to the international financial crisis. The two SPOs fix a monthly price for cocoa (dry beans). The producers deliver fresh (just harvested) beans to the local collection and processing centre and receive an up-front payment for the dry weight equivalent of these beans. At the end of the year (or twice a year in the case of PO 1), members receive a second payment, coming from the profit of the cooperative (or the Fairtrade Premium). This is because the SPOs need to buy beans before their sales happen, so they fix an up-front buying price depending on local market price (which can evolve during the harvest). This up-front buying price is usually slightly higher than the local price (except at the beginning of the season when strong demand and low offer might push prices upwards), and often more stable during the season. This strategy ensures that the SPO stays competitive and can collect most of its members' production. Then at the close of the year (or before if the SPO has confidence in its level of sales and profit), another payment might be made, based on the level of profit of the SPO; its level is decided by the board.

1200
1000
800
600
400
2008
2009
2010

Oro Verde Fairtrade sales

Oro Verde non-Fairtrade sales

Acopagro Fairtrade sales

Acopagro non-Fairtrade sales

Figure 13: Fairtrade and conventional sales of the case study organizations

Source: PO 1/PO 2

#### 4.6 Fairtrade and Fairtrade cocoa in Peru

Peru has been the biggest producer of Fairtrade coffee for several years. It is also the country with the most Fairtrade certified organizations of any country with Fairtrade certified groups and has the largest diversity of Fairtrade products (coffee, cocoa, bananas, mangoes, sugar, and a number of processed products such as juices, jams, etc.) being produced and traded.

The majority of certified cocoa SPOs have previously been involved in Fairtrade coffee. The impact of Fairtrade cocoa is therefore very much linked with the impact of Fairtrade coffee. In some respects the diversification by these organizations into Fairtrade cocoa may result from their prior involvement in Fairtrade coffee (as they have been able to lead a profitable activity, invest in certification, train their staff, and had the possibility of access to funds and projects through sales of Fairtrade coffee, in particular during the period of low prices up to the mid-2000s). In our case studies, PO 1 is an example of an organization that has not been involved in Fairtrade coffee, whereas PO 2 began and continues with Fairtrade coffee.

Most Fairtrade cocoa organizations are members of the Appcacao (Asociacion de Pequeños Productores de cacao), a national-level network organization, which has been instrumental in promoting Peruvian cocoa and positioning it as a quality product, and as the produce of smallholder farmers.

## 5. IMPACT OF FAIRTRADE ON THE SOCIAL STRUCTURE

## 5.1 Ability to participate in Fairtrade

This section aims to clarify how feasible it is for farmers to participate in Fairtrade. The criteria used by SPOs to select new members have a bearing on the ability of local farmers to participate in Fairtrade. Both organizations are currently actively recruiting new members. In particular, PO 1 is implementing an ambitious strategy of increasing cocoa collection: by increasing harvests and collection from its existing members and by recruiting new members. This strategy of expansion is dictated on the one hand by demand from clients for more cocoa, and on the other hand by the SPO to reduce overhead costs per unit of cocoa exported. But the main influence are the board and members, who want their SPO to be stronger and able to give better services, both to improve their own socio-economic situation, and to make more farmers benefit from those.

Table 11: Membership rules for the case study organizations

	PO 1	PO 2
Minimum area	1.5 ha	None
Membership fee	(not available)	50 PEN
Buying social shares in the cooperative	(not available)	600 PEN

Source: PO 1/PO 2

Additionally, in both cases, members must be willing to convert their farms to organic practices, to comply with the requirements of the certifications (both organic and Fairtrade), and must be willing to produce quality cocoa. When a farmer becomes a member, the membership extends to his or her spouse, meaning that any member of the couple (or both) can be present at meetings and vote when needed (although they only have one vote unless both are officially members and each fulfil entry conditions, which is rare). A number of benefits also extend to the spouse. As both organizations are expanding, new members are joining regularly. There are a few inactive individuals (i.e. who are not selling their cocoa to the SPO), but the SPOs only count active members.

This section compares entry criteria to the characteristics and constraints of producers, and tries to assess if there are any barriers to participation. Access to land does not seem to be a significant issue for members who were interviewed: there seems to be only a few families with very small or no landholding at all. In most of the committees where members were interviewed, members reported that it was relatively easy to buy land. A number of farmers also reported being 'posesionarios', i.e. they have taken ownership of land which was unused – however, this may be less possible in the future. Following the extremely broad investment and encouragement to farmers to plant cocoa trees by the PDA, a significant number of cocoa growers have planted sizeable cocoa landholdings. In 2000 there was less than 2,000 hectares of cocoa plantation in San Martin. By 2009 this figure had increased to 15,679 has. It seems that organised farmers, i.e. those already part of co-operatives were targeted at the beginning of the PDA programme, as the cooperatives or associations facilitated the expansion of the programme (e.g. by arranging workshops, logistics etc.). Both of the case study SPOs participated, although PO 2 has now decided to pull out, feeling that they have to put in more than they get out of participation.

However, there are some individuals and families in the area that have landholdings of less than 1.5 ha of cocoa (which is the minimum level required for membership in PO 1) or do not have any cocoa plantation at all (the average cocoa landholding is 0.74ha<sup>43</sup> – see section 5.2). The largest constraint is the minimum cocoa plantation landholding that is required statutorily to be a member of PO 1: there is no such limit for members of PO 2. The logic of PO 1 is that they need to work with farmers who are more dedicated to cocoa, and who will spend enough time on this production (as opposed to producing cocoa as a side activity, which makes the management of quality much more difficult). This rule facilitates quality assurance for PO 1 and its clients.

While no farmers of this category of landless or very small farmer could be met during the course of the survey, a study undertaken in 2010 by Higuchi et al. 44 reported that one category of non-members were the farmers who have less than 1.5has of cocoa. Farmers in Ledoy also reported that most of the casual workers they employed were maize farmers in the area, who were looking for off-farm activities outside of periods of peak activity on their own farms. The Ledoy farmers indicated that growing maize alone does not sufficiently provide for smallholder families and these farmers do not have any cocoa trees either. This condition is not

 $^{43}$  The proportion of cocoa farmers who cultivate less than 1.5ha of cocoa is not known.

<sup>&</sup>lt;sup>44</sup> Comparative marketing performance between the Peruvian Cooperatives and the Intermediaries: PO 1 cooperative vs. Intermediaries- a Case Study, A. Higuchi, M. Moritaka, S. Fukuda, Kyushu University, Fukuoka

considered as a major concern or risk of exclusion, as land is generally available in the area, and support to install a cocoa plantation can be found by farmers through different channels.

The financial requirements for new entrants is relatively light, as they are able to make the payments on a monthly basis spread over several years and deducted from their regular cocoa payments (cocoa is harvested twice a month on average). At 50 PEN, membership fees for PO 2 correspond to approximately 2.5 days of daily wage <sup>45</sup>.

The rules imposed by organic and Fairtrade certifications are a more significant barrier to entry, as was reported by several of the focus groups. Traditional conventional cocoa production systems do not use any chemical inputs (neither fertilizers, nor pesticides), so members do not consider the conversion to organic production very onerous. However, various changes have been made in terms of the standards (according to members interviewed in the focus groups). These changes are as follows:

- on waste management: installation of toilets, digging pits for solid waste, etc. and the change of habits associated;
- on the treatment of daily labourers: during the focus groups, some farmers reported that they were now more careful about the amount and difficulty of the work they are giving to labourers, that they were also more careful to give a proper meal and drinks;
- participation in meetings and the time this requires.

The work involved with maintaining quality (in particular sorting damaged beans) is also considered a constraint, by some members, particularly since the prices paid by intermediaries are similar (or even higher) than the prices paid by SPOs – and they do not require any sorting.

Therefore, the entry barriers or factors shaping ability to participate are the following:

- possession of sufficient cocoa plantation (only in the case of PO 1)
- having benefited earlier from the PDA programme to plant cocoa
- willingness to change certain habits (in particular waste management, also to do some activities as a group)
- willingness to invest in the cooperative part of the income generated by cocoa

Of these pre-requisites, possession of a sufficiently-sized cocoa plantation and prior engagement with the PDA programme represent the most significant ones.

Farmers with very small cocoa landholdings are excluded from participating in PO 1 (not in PO 2): this is a condition of membership defined in the status of the cooperative. This is because these farmers produce relatively small quantities of cocoa and are considered to require too much attention from the SPO staff, without enabling the SPO to generate sufficient additional turnover. If these farmers want to join the cooperative, they will have to find support to invest in new plantations.

Higuchi et al. (2010), in a study undertaken in 2009-10 with members of PO 1 and other cocoa farmers (non-members) in the region, point to another group of farmers who do not want to join the cooperative (PO 1), because they do not perceive any benefit from doing so. This group are younger and better educated farmers, who prefer to remain free to sell their cocoa to whoever pays a better price at a given time. This study concludes that these non-members (non-Fairtrade) and members (Fairtrade) end up receiving similar prices for their cocoa, but that SPO members receive an end of year second payment, based on profits of the SPO. A precise analysis of price received by members and non-members could not be undertaken in the course of this study, but it would seem that in the villages where SPOs have members, prices received are very similar (see section 6).

<sup>&</sup>lt;sup>45</sup> At a daily wage of 20 PEN per day, as reported by farmers interviewed.

Many farmers interviewed also pointed to another type of farmers who do not willing to participate: those who think the conditions of organic and quality management of the farms are too constraining. The focus group farmers largely described these particular farmers as being generally averse to change.

The existence of positive discrimination policies in favour of specific target groups was researched (for members of indigenous groups or women, for instance). But neither of the case study organizations have specific positive discrimination policies in place. There was not sufficient time to explore this issue further.

In terms of equipment, very little is required for cocoa processing: simple wooden boxes for fermentation and a tarpaulin for drying are necessary. Because both SPOs ferment the cocoa themselves, members do not need any equipment. On the contrary, some members who had fermentation boxes sold them to the SPOs.

## 5.2 Ability to benefit from Fairtrade

An important question in relation to Fairtrade impact and social inequality explores how equal is the distribution of benefits and costs? For example, how are the benefits from the Fairtrade Premium or any Fairtrade price uplift distributed amongst Fairtrade members? Are there any negative impacts on Fairtrade farmers or on farmers outside of the Fairtrade system? What proportion of the local population is Fairtrade reaching?

Together, PO 1 and PO 2 group represent close to 9 per cent of the cocoa producers of San Martin. Both organizations are growing very rapidly: PO 2 has only been involved in cocoa since 2007 and started with 46 members, while PO 1 had 950 members that same year. It is difficult to conclude whether these SPOs involve a growing part of the region's cocoa producers, because the overall number of cocoa producers in the region is not monitored precisely. However, it is clear that in 2010 a substantial number of the region's cocoa producers were members of a Fairtrade organization (see table 13 below).

Table 12: Growth of case study organizations (number of members) compared to total number of cocoa producers in region

	2007	2008	2009	2010	2011	
Regional total					21,600	100%
PO 1	950	1,250	1,500		1,600	7.41%
PO 2	46	50	200	225	332	1.54%

Source: PO 1/PO 2/ PDA

The average cocoa area cultivated by farmers in the case study Fairtrade SPOs is much higher than the average area cultivated in the region (see table 14 below). Although this regional average probably hides important variations, it is clear that members of the two SPOs dedicate a relatively larger area than average to cocoa, and are part of a group of farmers who are more dedicated to cocoa production. Appcacao estimates that 80 per cent of Peruvian cocoa farmers have less than 2 ha of productive cocoa areas (Appcacao, 2009 unnamed document on Peruvian cocoa sector).

Table 13: Comparison of average areas of cocoa cultivation between members and non-members

	Cultivated area per producer (ha)
Regional average	0.73
PO 1 average	2.5 (2009)
PO 2 average	2.1

Source: PO 1/PO 2/ Ministry of agriculture 46

Because a large proportion of cocoa has been planted recently, these figures include areas which are not yet producing cocoa pods.

In terms of volumes produced by members and non-members the average production per producer for PO 2 is 939 kg compared to a regional average of 658 kg per producer (see table 15 below). This is partly due to larger land holdings and possibly higher yields as well. But because landholdings include an unknown proportion of areas which have not yet started fruiting, comparison of yields are difficult.

Table 14: Comparison of production volumes between members and non-members

	Volume of production per producer (kg)
Regional average (Ministry of agriculture)	658
PO 1 average (calculated from data supplied by PO 1)	1,250
PO 2 average (PO 2 records)	939
Average based on data from household surveys	1,665

In most of the communities interviewed, access to land was not an issue. It can be bought at a cost of 2000 to 4000 PEN per hectare (720 to 1440 USD). In one case, Pinto Recodo, farmers said there was no land available. Some communities have access to particularly good soil and weather conditions, which differentiate their cocoa from others (Alto El Sol), and other areas have higher yields, mostly because of better rains (contrary to coffee, altitude is not recognized as affecting cocoa quality, but lower altitude conditions, heat in particular, are usually more suited). However, despite specialist advice that their altitude was not suited to cocoa, farmers in Chirapa reported that cocoa grew well in their village, which is situated at approximately 1800 metres above sea level.

There are, however, significant differences in levels of isolation, which relate to the relative proximity to a road. Some communities are situated on the banks of the Huallaga river, and are only accessible by small boat (between two and five hour journeys for the different villages in Juanjui, such as Mojarras), others are close to Juanjui, but on the other side of the river, such as Ledoy, and it is necessary to cross the river by ferry. Access to villages on the other side of the river is not so difficult, rather it is costly: the trip in the boat costs much more than if the distance was covered by car. This is the biggest limitation to accessing markets. In Ledoy, farmers recounted how in the past there was only one cocoa buyer who came to their village, when there are now ten different intermediaries wanting to buy their cocoa.

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<sup>&</sup>lt;sup>46</sup> Direccion de estadistica agrarian, Direccion regional agraria San Martin, 2011

All communities visited have a primary school and an easily accessible high school, as do most of the villages in San Martin. All the villages visited also have electricity and tap water, although neither Bagazan nor Mojarras have cell phone coverage. Isolated villages in the upper Huallaga valley are less likely to have these services (tap water, electricity, cell phone coverage).

In comparing the education level of members of the Fairtrade SPOs with the general population, it was found that most of the members (62 per cent) have studied up to primary school and about 35 per cent have been to secondary school (survey data, see figure 14 below). These statistics are closest to those identified as rural poor by INEI in its last report on poverty evolution in Peru<sup>47</sup>: Throughout Peru 69 per cent of the rural poor have studied up to primary school and 29 per cent up to secondary (whereas in the non-poor rural population, the same *percentages* are 51 per cent and 38 per cent, respectively) Overall, an average of 64 per cent of the Peruvian population has studied up to primary school level<sup>48</sup>.

It therefore appears that Fairtrade producers are more specialized, with a greater *percentage* having secondary schooling, than the average San Martin cocoa producer.

Table 15: A sample of cocoa farms/households data

Members since	1995 to 2000	2001 to 2005	2006 to 2007	2008 to 2011	
Average farm profit	25,056 PEN	17,642 PEN	12,181 PEN	9,438 PEN	
Average number of has of cocoa	4	3	3	3	
Share of income coming from cocoa	64%	71%	73%	66%	
Average quantity of cocoa produced	1,941 kg	2,460 kg	1,522 kg	952 kg	
Average number of household members (adults + children)	3+1	3+1	3+2	3+2	
Per cent of members in this category (and number of respondents)	26% (25)	18% (18)	33% (32)	23% (23)	

Source: Household survey

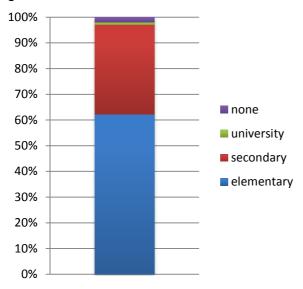
In calculating farm profit, all possible sources of income were taken into consideration (although few households had substantial non-farming incomes), from which farming expenses were subtracted. Because farming was the main activity and source of income, this profit is called farm profit. It is not easy to obtain reliable yield figures and so we suggest that the average number of hectares should rather be considered as capital. We do not know why older members have relatively lower production.

Newer members are those with relatively recent involvement in cocoa production. While they generally produce 30 per cent less cocoa than the average producer, they clearly have lower incomes and the very low yield/ha suggests that these are new plantations. However, they also depend very much on cocoa for their income. This also shows that the SPOs are extending their membership by reaching to poorer households of the community (most of farmers' income comes from farming activities).

<sup>&</sup>lt;sup>47</sup> INEI, Evolucion de la pobreza al 2010, May 2011

<sup>&</sup>lt;sup>48</sup> Ciudadanos al dia, 2009, from INEI data http://www.ciudadanosaldia.org/press/0609/NP\_Nivel%20Educativo\_Nacional.pdf

Figure 14: Education level of members



Source: Household survey

One of the mechanisms for ensuring the sharing of Fairtrade benefits is the discussion about the use of the Fairtrade Premium during general assemblies. While it was clear for all focus groups that the Fairtrade Premium was being discussed in general assembly, and that each committee could present proposals for its use through their delegates, not all felt confident on the rules for its use. Some committees had been able to build infrastructure (partly) from Premium funds (an office and storage space in Chirapa, a processing centre in Alto El Sol) and were particularly satisfied that this opportunity existed. Others mentioned the end of year second payment, which was also highly valued. But the decision processes on where to prioritize the use rested with board, management and FLO-Cert (for instance, both SPOs had been sharing part of the Premium funds, but FLO-Cert required them to document what each member had used the money for, so they both decided to stop redistributing profit from Premium funds, and instead prioritized investment in infrastructure, which they could more easily document - more details on Premium use are provided in the following sections).

This more restrictive interpretation of the Fairtrade standards seems to have been held by some FLO-Cert inspectors in the past. Despite SPO managers being clear at the time that the Premium could indeed be divided up among members, they did not argue with FLO-Cert, and instead redistributed other incomes, with no consequence for members.

#### 5.3 Gender issues

Understanding the role of women in cocoa production and the gender distribution of labour is a critical element of gender analysis in Fairtrade impact assessment. Some women interviewed in the study work on cocoa within the cooperative, and participate on the basis that they are cultivating cocoa and managing their own cocoa plot. Other women farmers engage with the cooperative through their spouse who is the member of the cooperative.

Of the women interviewed, most reported that, except for those who own and manage their own plot, their involvement in daily management of cocoa was limited, and was generally a responsibility of men. However the one stage in which they are regularly involved is the harvesting. For one or two days (twice monthly on average), harvesting requires significant labour over a short period, but workers are scarce (either hired workers or neighbours who provide mutual support).

The preparation of meals for occasional workers is the one activity in most households that is likely to be the responsibility of the women. The employment conditions of occasional workers usually include the provision of meals (usually a light snack and a full meal), as is the case when family and communal labour occurs.

Although this issue was not mentioned in the course of the survey, this task might be expected to increase with cocoa production intensification.

A significant proportion of women interviewed in the focus group discussions were particularly satisfied with the fact that they had received training by the SPOs (all members and their spouses can participate), on issues such as cocoa pruning or grafting, which they find useful and economically empowering. This is because they can use this knowledge on other farms and get paid for it. This also seems to have built up their confidence. Women in PO 2 actually emphasized that technical assistance is the most useful service that they received from the SPO.

In terms of membership of the SPO, the proportion of female and male members is as follows: in PO 2 there are less than 20 per cent female members (except in 2009 when the figure rose to 21 per cent). In PO 1 the figures are even lower, with less than 10 per cent being female in 2010. This is mostly due to a strong cultural norm, where land is mostly managed by men (even if women participate in its management and daily activities, the domain they manage is the house and the production activities which take place in the house, such as small animal rearing). The proportion of female members did rise in PO 2 in 2009, but has fallen back to 15 per cent in 2010 (as a group of farmers left the cooperative and benefitted from a programme by the Ministry of Agriculture to found a new SPO).

Table 16: Percentage of female and male members of PO 2 and PO 1

	2006		2007		2008		2009		2010	
	Men	Women								
PO 2*	85.0%	15.0%	85.0%	15.0%	84.0%	16.0%	79.0%	21.0%	85.0%	15.0%
PO 1									90.4%	9.6%

Source: PO 2/PO 1

The main policy of the SPOs of relevance to gender issues is the one that stipulates that a member can be replaced by his or her spouse in all activities relating to the functioning of the organization and that both spouses can participate together in meetings and in trainings, etc. This is beneficial to the SPO because in cases where a farmer has gone to the field for the day, meetings can still be organised, information passed on efficiently by their spouse etc. It also gives an official role for spouses of producer-members, who are mostly women, enabling them to take part in training activities and SPO meetings. However, in most cases women are accessing the SPO mainly through their spouses. Women who participate in the meetings seem to have a good level of participation: they are active and express opinions, although they tend to do so only after most other participants have expressed their opinions. Women interviewed in focus group discussions said that they discussed all SPO issues with their husbands (and vice-versa), meaning that they were following the progress of discussions, even when they did not participate directly in meetings.

There are other activities to which all members (and women members when they are the main member) participate, such as the management of the local collection and processing centre. In particular, this involves giving time and work for collective work, "faenas", to build or improve facilities, for instance.

<sup>\*</sup> out of all members (including coffee members)

A key indicator of relevance to Fairtrade impact is the proportion of women in elected positions. In PO 1, for instance, three women were members of the board<sup>49</sup>. Women interviewed in focus group discussions said it was difficult for them to find enough time to take on any official position (as a delegate or a board member). In PO 2, as in many coffee cooperatives, there is a committee called Codemu (*Comité de Desarrollo de la Mujer* or Committee for the Development of Women), to which all spouses of male members can participate (and those who are members on their own account). The president of this committee is *de facto* a member of the board, and a woman (ensuring that at any time there is at least one female board member). The cooperative finances some of this committee's activities through Fairtrade Premium funds (over 10, 000 USD are earmarked for 2011), in particular income diversification activities (guinea pig rearing). The impact of these activities could not be assessed during this particular study.

Gender norms shape the control of income from cocoa. Rules on how income is shared within the household were also not explored due to time constraints and this issue would merit further exploration (e.g. who in the household is paid by the SPO).

Most of the women interviewed (in focus group discussions) consider that cocoa, contrary to most other crops (which are harvested once a year), provides a regular income during the year with a minimum of three or four payments each year, and up to two per month. This means budgeting is easier than for other crops, and the temptation to spend is less as the amount is relatively small (several persons mentioned heavy consumption of beer by men as an issue in rural parts of Peru, such as San Martin).

As a result of this sustained income, which they attribute to increased cocoa production and increased price, women said that housing had improved (houses 'look nicer', they are increasingly made of cement and corrugated iron, instead of traditional mud bricks and palm leaves). They also said that they were now able to give their children some pocket money when they asked for it, and that some cash (even small amounts) was always available. Others considered the credit system of the SPO as very helpful. This is a consequence of the development of cocoa production in the region, and of the increase in market prices. Fairtrade SPOs have played an active role in this development, supported by growing Fairtrade sales (this will be discussed in more detail in section 6).

### 5.4 Farm labour

All paid work is done by workers employed on a daily basis, very few farms employ permanent labourers. It also appears that daily workers ("peones") are becoming difficult to find. Whereas in the past there may have been a pool of daily labourers available, now most families in the areas studied have their own farm (often with cocoa), and hope to get a higher income from the farm than from selling their labour. As one Bagazan farmer said, "Everybody wants to be a boss, nobody wants to be a worker". This point could not be studied in much detail, but it would seem that the development of cocoa in some communities has made the notion of class more relative ('peon' vs. boss): many farmers interviewed also worked on other farms during the year, when their own farm requires fewer of their own inputs.

The consequence of this is that farms adapt so as to be able to rely on available labour resources: family work, and shared work (called "choba-choba"), depending on the area. In Pinto Recodo, it has meant more choba-choba, while in Bagazan and Huicungo, this collective labour practice has almost disappeared. One farmer said: "Nobody wants to leave their farm, even for one day". There is also competition for workforce. On the one hand, the state and local authorities are investing in public works, roads, etc. which requires labour. On the other hand there is demand for labour from smallholder farmers for assistance in the coffee harvest for which labourers are paid a higher wage<sup>50</sup>. All this has led to an important increase of the daily wage. Farmers in focus

<sup>&</sup>lt;sup>49</sup> Unfortunately due to time limitations further data was not gathered on historical figures of male and female representation in elected positions in PO 1.

<sup>&</sup>lt;sup>50</sup> Farmers in focus groups reported that a daily wage in coffee harvest was paid up to 40 PEN per day (against 20 in other farming activities). This is due to very high market prices for coffee at the moment of the last and current harvest, as well

groups reported that 3 years ago the daily wage was ten PEN plus food, or about fifteen PEN (5.5 USD), now it is around twenty to twenty five PEN (7.2 to 9 USD, including food).

It was calculated (from data collected in focus groups) that on average, for the production of a MT of cocoa, 55 days of labour are contracted out of 170. This would mean that one third of the field work is done by hired labour (if those who do not employ anyone are not considered, the *percentage* of work undertaken by hired labour goes up to 41 per cent). This issue is discussed further in section 6.

A more important share of hired labour occurs at processing centres, which are managed by a member of the local committee. This person is paid a fee per kilo of cocoa bought and processed (about 2 PEN/kg), and then manages the centre and the process. This activity could not be studied in detail due to time constraints.

# 6. IMPACT OF FAIRTRADE ON THE SOCIO-ECONOMIC SITUATION OF PRODUCERS, WORKERS AND THE MEMBERS OF THEIR HOUSEHOLDS

#### **6.1 Outcomes for producer prices**

This section presents the findings on the outcomes of Fairtrade for producer incomes, i.e. the contribution that Fairtrade has made to improving or stabilising the price paid to producers according to those interviewed.

In terms of the difference (absolute and relative) between SPO average selling price and conventional market prices, the average prices received by both SPOs are similar to market prices. On average in 2009 and 2010, PO 2 received a price very close to the ICCO average, while PO 1 received lower prices in 2009, and higher prices in 2008 and 2010.

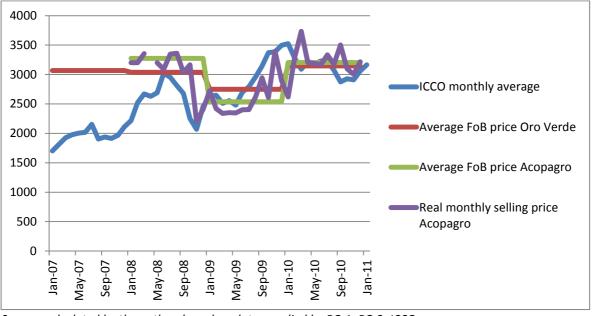


Figure 15: Difference between cocoa market price and FOB\* price received by the SPOs (USD/MT)

Source: calculated by the author, based on data supplied by PO 1, PO 2; ICCO

as the more pressing need for workforce in coffee harvest (which must be harvested before the grains are too ripe or get damaged by rain), which happens only once a year.

<sup>\*</sup>FOB (Free on Board) price covers the delivery of goods to the port of shipment

In terms of the percentage of the higher selling price resulting from Fairtrade at the SPO level, the average selling prices of PO 1 in 2010 were higher for organic Fairtrade than non-Fairtrade cocoa. However, the conventional Fairtrade cocoa price received was not much higher than the non-Fairtrade price (see table 18 below).

The Fairtrade minimum price (FMP) for organic cocoa was 1, 800 USD/MT until January 2011 (plus 200 USD/MT Fairtrade Premium). It is now 2, 300 USD/MT (plus 200 USD/MT Fairtrade Premium). Conventional FMP was 1,600 USD/MT, it is now 2 000 USD/MT (and the Premium was at the same level as organic, and remains unchanged). In all cases, market prices have been higher than the Fairtrade minimum prices since early 2008.

Table 17: Average selling prices of PO 1 in 2010 (in USD/MT)

	Organic	Conventional
Fairtrade	3,365	3,027
Non Fairtrade	2,842	3,007

Source: calculated by the author, based on contract price data supplied by PO 1

The overall average selling price was 3202 USD/MT for the same year, so it was clearly the Fairtrade/organic certification combination of cocoa which pushed the selling price upward. Fairtrade/organic cocoa represented 59 per cent of the volume sold by PO 1. Non-Fairtrade conventional cocoa reached almost the same price as Fairtrade conventional, which can be explained by other types of premium (for quality, etc.).

A key question in assessing the contribution of Fairtrade to improving producer incomes is 'what proportion of any higher prices received by the SPO for Fairtrade certified products is passed onto the producer (i.e. what is the difference between producer price/FOB price)?' In both SPOs, cocoa producers receive 83 per cent to 84 per cent of the FOB price of cocoa, while on average producers in San Martin receive a lower range, namely between 64 per cent and 79 per cent (most of these producers sell their cocoa to local buyers). Given the fact that there is not a significant difference with the FOB price between Fairtrade and non Fairtrade producers, it means the Fairtrade SPOs pass on more of the added value to the producers (see table 19 below). The reason for this difference is believed to be that the SPOs are 'mission-oriented' entities, and their role is to provide a better return to their members.

Table 18: FOB and producer prices received in 2010

	PO 2	PO 1	Regional
FOB price (average in PEN)	3,146	3,202	2,875-3,525
Producer price (PEN/kg)	7.5	7.49	6.42
Producer price (USD/MT)	26,48	2,644	22,66
Per cent of the FOB price			
the producer receives	84%	83%	64%-79%

Source: calculated by the author, based on data supplied by PO 2/PO 1/Ministry of agriculture (OEEE database)

The Fairtrade pricing mechanisms are, however, not raising the price for producers. But, beside the cocoa price that farmers are paid when they deliver their cocoa beans, members of the SPOs receive a "second payment" (called the 'reintegro') at the end of the year (paid in two instalments a year in the case of PO 1).

In PO 1, this second payment was partly made up of the Fairtrade Premium in 2007, 2008 and 2009 (55 per cent of the Premium received was redistributed as 'reintegro'). In 2008 the general assembly voted that each member should receive an additional 82 USD/MT of cocoa, from the Fairtrade Premium, corresponding to a 3 per cent top-up of the price. This second payment was additional to the 7.5/7.49 PEN/kg paid by the two cooperatives in 2010.

Local cocoa prices have increased over the years, starting at around 3 PEN/kg 10 years ago, and slowly increasing to reach the 6-8 PEN/kg range of the last two years.

The difference between the price paid by the SPO to farmers and prices paid by other non-Fairtrade buyers was also investigated. Prices at the farmer level vary from week to week, according to export/international prices, as well as a number of other factors. Average data is collected by the Peruvian Ministry of Agriculture (see figure 16 below). The SPOs themselves buy fresh cocoa beans from their members, while most other local buyers (including other cooperatives) and intermediaries buy dry fermented beans. The SPOs buy fresh beans and pay for their equivalent in dry fermented beans (depending on the processing ratio of each processing unit), making it easy for the producer to compare the prices offered by the SPO and by others.

At the time of the fieldwork, farmers in Pinto Recodo reported a price paid by the SPO of 7.2 PEN/kg, against 6.5 PEN/kg by intermediaries. While comparing regional averages, the prices paid by SPOs are clearly higher (as shown in table 19 above). This may not be true at the local level everywhere, because the presence of the Fairtrade SPO is reportedly raising the prices paid by intermediaries in the villagers where Fairtrade committees exist, so that non-Fairtrade farmers also benefit in those locations, but possibly lowering prices in other communities without a Fairtrade presence.

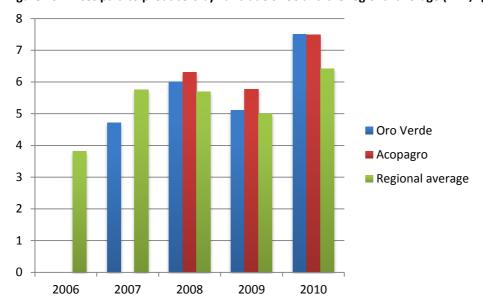


Figure 16: Prices paid to producers by Fairtrade SPOs and the regional average (PEN/kg)

Source: calculated by the author, based on contract price data supplied by PO 2 and PO 1; Ministry of agriculture

Figure 17: Prices paid to producers by Fairtrade SPOs and the regional average (PEN/kg)

Source: calculated by the author, based on contact price data supplied by PO 1/Ministry of agriculture (OEEE database)

As can be assessed from the two previous graphs, prices paid by both SPOs are higher than local prices (average regional farm-gate prices collected by the Ministry of Agriculture): +17 per cent in 2010 for both SPOs, +15 per cent for PO 1 and +2 per cent for PO 2 in 2009, +11 per cent for PO 1 and +5 per cent for PO 2 in 2008 (except it seems, in 2007 for PO 2 - but much depends on the time at which the cocoa was bought, and it might be that at the time of buying, prices were different from the yearly average).

Despite these figures which show SPOs are paying higher prices than other local intermediaries, an important phenomenon seems to happen at the local level, which is not reflected in the statistics and that was explained above, that intermediaries who come to the villages offer higher prices in the particular communities where they know the SPO pays more than they normally would. This is because they need to buy volumes, and know the relatively higher quality they will get will increase the average quality of their lots. Further, they also lower their buying prices in communities where they can pay lower prices. Our evidence for this phenomenon is limited because it could not be observed in practice, but it was reported by several informants. Many farmers also clearly stated in focus group discussions that intermediaries matched the prices paid by the SPOs in the villages with Fairtrade committees, so that even non-members in these villages are benefitting from higher and more stable prices. According to members, the SPOs act as a regulator of prices locally (in the villages where there are committees) – in communities where there is no cooperative committee the intermediaries do not pay these slightly higher prices.

So, while Fairtrade farmers obtain higher than average prices according to the figures provided by the SPOs and regional averages, there is important micro-level variation occurring which complicates the picture. Also very few Fairtrade farmers acknowledge the fact that they are selling *fresh* beans, whereas non Fairtrade farmers also have to ferment their beans, which represents some additional work for them and a time saving for the Fairtrade farmers.

A majority of producers perceived an improved stability of prices and a better level of prices. All of the members interviewed (in the household survey) also reported a clear stabilization of their prices over recent years. There are still variations (in the prices paid by SPOs), but these are much less than they used to be, so that over the year, incomes are more stable as well. This is partly due to Fairtrade sales.

## 6.2 Profitability of production systems

Regional yields have increased by 42 per cent over the last 10 years (Ministry of Agriculture OEEE database). This is mostly due to the fact that new plantations are starting to produce cocoa beans and yields are very good for the first few years. But very few farmers are fertilizing their plantations, which will inevitably lead to a decrease in yields in the future, as is already happening with slightly older plantations. PO 1 has higher yields than the regional average, owing partly to areas where yields are naturally high (1800kg/ha in Santa Rosa, in the Upper Huallaga region, where rains are more abundant), and partly to a relatively higher level of training and professionalization of members.

Table 19: Change in farmer cocoa yields (a comparison in and outside of Fairtrade) (kg/ha)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Regional	575	570	618	647	641	702	732	780	804	793	818
PO 1									900		
PO 2											689

Source: Ministry of agriculture (OEEE database), PO 1, PO 2 (management records)

PO 2 yields are slightly below average as this yield includes many new members with young plantations which have just started producing fruits.

An important question is whether Fairtrade has increased productivity and yields, either through training in improving farming practices, the promotion of organic methods, or other factors.

There are two groups of factors influencing cocoa productivity:

- *technical management of the crop*: pruning, disease control, fertilizing, etc.
- environmental factors, in particular availability of water: Cocoa farms in the Selva region of Peru are rain-fed (although in Ecuador and the coastal region of Peru, some farms irrigate cocoa).

The first group of factors has been strongly influenced by the PDA programmes since the late 1990s. In particular, pruning is now a well-known agronomic practice and is undertaken by the vast majority of cocoa producers, according to the SPO technicians interviewed. Disease control and fertilization, as well as management of the genetic characteristics of the orchards through selecting and grafting trees, has been extended mostly by the SPO technical teams, mostly with support from external programmes, and in small part through Fairtrade Premium funds.

Most cocoa farmers of San Martin have seen their yields increase through the installation of new orchards and good pruning, but better yields are obtained by SPO members who correctly manage fertilization and disease control, based on extension work by the SPOs technical teams. In PO 1 technical assistance currently focuses primarily on improving fertilization, with soil testing, fertilizer recommendations and organic fertilizers offered at gross prices for members. All farmers who had started improving their fertilization methods based on SPO technical advice said that their yields had increased.

Climate variability represents the main uncertainty for farmers in relation to their yields. Farmers reported that there had been a drought in 2010, and as a result, their production was noticeably lower than normal (no specific response from the SPO or others was reported, but some farmers interviewed in the focus groups mentioned the possibility of organizing an insurance system to cover income loss). Farmers producing cocoa in higher areas (above 500 meters: normally considered unsuitable for cocoa production) reported good yields, because of better rainfall.

It is difficult to compare work productivity between Fairtrade and organic production because in both SPOs new members automatically start the transition towards organic certification. Both SPOs have a strong demand for organic cocoa, and have decided to focus on organic practices. Because of growing market

demand for their cocoa, there is also an incentive for both SPOs to increase the quantity of cocoa produced by each member (and collected by the SPO).

Differences in the number of different activities involved in Fairtrade, conventional, and organic production were explored, because changes in labour demands are an important aspect of impact – not least for women household members upon whom responsibility for such tasks are often placed. In this context it is very difficult to differentiate tasks that are required by Fairtrade, organic or by the SPO itself, because in most cases farmers became members of a SPO, which was already working under both organic and Fairtrade conditions.

This package of requirements/support (of SPO, plus Fairtrade and organic certification) has brought important changes in:

- the technical management of the cocoa plantations: e.g. improvement of pruning, introduction of composting;
- *environmental management of the farm:* installation of toilets, management of waste, soil conservation techniques (anti-erosion hedgerows, etc.) and agroforestry.

Essentially the cultivation has become more technical, with many new activities being introduced, thus requiring more work overall. Some activities take more time and others are newly introduced activities (e.g. preparation of compost). One of the most time-consuming tasks of cocoa production is harvesting the cocoa so any increase in yields also increases the amount of work needed.

Table 20: Comparison of activities required by traditional cultivation and in newer methods

Traditional system	More technically complex organic (and Fairtrade) system promoted by SPOs
Weeding	Weeding
Harvesting	Pruning
Fermentation	Disease control
Drying	Preparation and application of compost
	Harvesting
	Transport to collection centre

Source: Focus groups with Fairtrade farmers

Costs of production for Fairtrade producers were explored by the research team, through focus group discussions. The detailed data on costs of production is presented in Annex 7.

Table 21: Comparison of costs of production<sup>51</sup>

	Fairtrade farmers who have adopted new methods (focus groups)	Traditional system used by the majority of farmers in the region	Difference between traditional system and that practiced by groups interviewed
Number of workdays/MT	177	112.5 (2)	+57%
Cost of inputs (USD/MT)	178	18 (2)	
Daily wage (USD) (1)	7.2	7.2	
Theoretical costs of production if all work valorized at daily	1,385	830 (3)	+67%

<sup>&</sup>lt;sup>51</sup> The data in the table above does not compare costs of production of Fairtrade and non-Fairtrade farmers: it compares Fairtrade farmers (who have all adopted "improved" production methods) and farmers using the traditional production methods. Non Fairtrade farmers may use one or the other method.

wage level (USD/MT)		
I Wase level (USD/IVIT)		

Sources: (1): Daily wage level of 20 PEN/day (source: focus groups), exchange rate 1 PEN = 0.36 USD; (2): data from "Diagnostico con un enfoque organizacional de la cadena productiva de cacao en Peru", Paz C., Finet A., June 2004, Cicda-Gdf; cost of inputs indicated was corrected for inflation so as to compare with 2010 data; the yield used was 400kg/ha; (3): Appcacao estimates costs (expenses) for one MT of cocoa to be around 1000 USD. Other data calculated by the authors from data collected in focus group discussions

The costs of production for Fairtrade-organic farmers are, on average, 45 per cent to 75 per cent higher than other conventional producers in Peru (data from Appcacao, collected from their members in 2009-2010). However, there is likely to be a much smaller difference in the costs of production experienced by non-Fairtrade producers that are managing organic farms with a similar level of technical complexity.

The collection of costs of production data allows for a calculation of the difference in gross margins/MT in conventional/Fairtrade compared to Fairtrade organic production (see table 23 below).

**Table 22: Comparison of gross margins** 

	Amount in USD/MT
Real level of expenses for cocoa (1)	577
Price received (2)	2 311
Theoretical margin (3)	926
Real margin (4)	1 734

- (1): from survey: labour+equipment+inputs;
- (2): 6.42 PEN/kg, at 1 sol=0.36 USD, price paid by PO 1 in 2010;
- (3) Price received theoretical costs of production (as presented in previous chapter farmer own work valued as a cost);
- (4) Price received real expenses (farmer own work not valued)

This shows that, on average, SPO members make a margin of 1, 734 USD/MT, which remunerates their own household's work in cocoa production, although an intra-household gender analysis of costs and benefits was not made. Or, looking at the figures in a different way: if a farmer remunerates his own family work at opportunity price (the price at which a day's work would be paid locally), there is still an additional margin of 926 USD/MT (as the real margin includes the remuneration of family work, which does not effectively correspond to an expense).

The differences in yearly gross margin per farm, for members of the SPOs who took part in the survey, are quite variable. More recent members have a gross margin of close to 9,500 PEN (just under 3,400 USD), while farmers who have been members for a longer time (before 2000) have an average margin of slightly over 25,000 PEN (close to 9,000 USD). Newer members have started cultivating cocoa more recently, and their plantations have not yet reached full production.

Table 23: Gross margins for SPO members

Period in which members joined the SPO	1995 to 2000	2001 to 2005	2006 to 2007	2008 to 2011
Average farm profit	25,056 PEN	17,642 PEN	12,181 PEN	9,438 PEN
Average number of hectares of cocoa	4	3	3	3
Share of income coming from cocoa	64%	71%	73	66%

Source: survey data

Newer members are mostly farmers with more recently established cocoa plantations which are therefore only starting to produce cocoa. These farmers therefore have lower yields, despite holding similar size plantations. These new members are also converting to organic production, and are beginning to implement the new technical tasks necessary (e.g. using organic fertilizers, etc.).

Given that the technical assistance provided by the SPOs appears to have a positive influence on yields, it is important to establish how far Fairtrade has improved the technical assistance provided by the SPO. In PO 1 the Fairtrade Premium has financed part of the technical assistance for several years: between 10 and 20 per cent of the total amount of Premium received between 2008 and 2010, or a total of 60, 000 USD. This has allowed the maintenance of a better level of technical assistance than would have otherwise been possible. The cost of one technical staff member is approximately 12,000 USD/year (source: PO 1 manager), so that 60,000 USD would cover the salary of 1.6 technicians over the period 2008-2010. PO 1 maintains a team of technicians, currently eight people whose jobs currently focus on collecting cocoa and quality assurance, and not so much on technical assistance. This figure is not considered sufficient by many members compared to needs.

# Box 1: Conclusion on Fairtrade outcomes on technical assistance and productivity

In addition to the age of plantations and climate (amount of rainfall), the level of technical management capacity of farmers influences the yields of cocoa plantations. This may improve as a result of the training and technical assistance provided, which has largely been provided by external programmes such as the PDA. This external support explains why yields in this particular region are relatively high. However, the level of external support is likely to diminish in the short to medium term, with the PDA programme ending in 2012.

The capacity of SPOs to maintain a good level of technical assistance should enable their members to continue increasing their yields (as is taking place within PO 1 on improved fertilization with soil testing).

However, the technical assistance (provided by SPOs, in part with support from other programmes) has introduced more technical tasks, which in turn have raised labour requirements by 60 per cent on average. These additional tasks cost approximately 75 per cent more than traditional methods of cultivation, as some inputs (fertilizers such as phosphorus and guano), and tools (shears) are being used

Yields are the biggest factor influencing gross margins/MT. Profitability is closely linked to the agronomic practices undertaken on farms in cocoa production. Fairtrade has contributed to improvements in agronomic practices and hence yields through the support that has been achieved in technical assistance (using Fairtrade Premium funds), but the PDA programme has been the biggest factor in improving yields.

### 6.3 Producer income stability and levels

In the sample of farmers interviewed in the questionnaire survey, cocoa represents 59 per cent of all household income on average. The overall income is on average 18,640 PEN (6,710 USD), and the profit 15,825 PEN (5,700 USD). In some communities, cocoa is the only source of cash income.

Fairtrade producers that were interviewed in the focus groups perceived a clear improvement in their income levels and living standards as a result of increased farm productivity and cocoa income. New members (such as those in Las Palmeras who recently joined PO 2) said that they hope to improve their income levels compared to the present situation, selling cocoa to local intermediaries. They consider their membership in the Fairtrade SPO as a strategy to increase their revenues.

Farmers in Huicungo (PO 1) consider their present level of income is similar to what it was during the coca period, which they consider a good level of income. It also means that changing their production systems (from coca to cocoa) was worth the effort and investment, as it does not bring the difficulties that coca did.

100%
50%
Steady
Increased
Overall income
Cocoa income

Figure 18: Change in farmer household income and cocoa incomes

Source: Survey data

Some farmers also stated that cocoa was a better crop than others, as its regular harvest during the year gives a regular source of income, unlike coffee, corn or oranges which only produce for a few months a year. The development of cocoa has led to a stabilization of income (both because of its regularity and because of the market situation of recent years), and as a result farmers have been switching to cocoa from other crops. This allows them to cover all basic needs, as well as invest in more cocoa plantations.

Some farmers also added that the yield increases they have achieved by following the technical recommendations of the SPOs – some but not all of which have been funded by Fairtrade – have played an important part in raising their incomes.

Producer perceptions of changes in the relative stability of their income (with and without Fairtrade) were explored. Most of the producers interviewed reported a stabilization of their income, because of a stabilization of the price by the producer organization. They also note that this influences what intermediaries pay in villages where there are Fairtrade committees, and has therefore also stabilized the incomes of some non-members.

Comparison of producer incomes compared to poverty thresholds is important, especially in a study without a non-Fairtrade counterfactual. The average income of the households interviewed in the questionnaire survey is 15,825 PEN/year (close to 5,700 USD/year) and the median income of households interviewed is 9,140 PEN/year (3,290 USD/year). The average family size is 2.8 adults and 1.5 children. The average monthly income is close to 400 PEN/person (144 USD), substantially above the poverty line of 220 PEN/month (79 USD) defined by Peruvian authorities (for San Martin), but the median monthly income per person is only 186 PEN, showing that over half the members' households earn incomes placing them below the poverty line.

The data hides important disparities: when considering income per person per month, 51 per cent of the households surveyed would be below the poverty line, and 34 per cent would be below the extreme poverty line (127 PEN/month). If taking the UNDP definition of absolute poverty of 1.25 USD/day/person, 26 per cent of the surveyed households would fit that definition. Although the income calculated from the household questionnaire survey does not value food produced on farm, out of the households with income levels placing them below extreme poverty levels, more than half (18 out of 33) report producing only a small part of their food needs on the farm.

Improved expenditure on goods is an indicator of improved incomes. A significant number of households have been able to invest in common consumption goods over the last 5 years. If considering the most expensive goods (DVD player, motorcycle, satellite, new land, computer), they are almost all investments by households earning over half of the median income (4,570 PEN/year) – (half of the median income is another definition of poverty). In other words, it means that the 80 per cent of sampled farmers who earn above 4,570 PEN/year, are able to buy some form of basic household assets. Given the fact that the income analysis is based on one year only, and these investments were analysed over 5 years, they may be a better reflection of wealth.

70%
60%
50%
40%
30%
20%
10%
0%
Television DyD player
Republic Computer
New agricultural land in common co

Figure 19: Investments by household in basic household assets (in the last 5 years)

Source: Household questionnaire survey

Looking at the issue from a different perspective, farmers in the focus groups<sup>52</sup> were asked to define minimum costs for a family to live decently in their respective communities (i.e. the actual cash needs required, thus valuing the food produced on farm). The average and median costs are presented in Table 25 below.

Table 24: Average and median costs required by households and actual farmer household incomes

	Necessary amount		Actual farmer household income	
With 1 child at With no university universi		With no child at university	PEN/year	USD/year
	(PEN/year)	(PEN/year)		
Average	13,660	8,250	15,825	5,697
Median	13,450	7,520	9,140	3,290

Source: Focus groups

Actual incomes reported by farmers in the household survey indicate that roughly one in three households do not earn enough to cover all the needs that they consider necessary to live decently in their communities, and that only a third earns enough to finance the studies of a child (see table 26 below).

**Table 25: Actual farmer household incomes** 

	PEN/year	USD/year
Average	15,825	5,697
Median	9,140	3,290
Per cent of households earning below 7,000 PEN	32%	
Per cent of households earning above 13,000	36%	
PEN		

Source: Household survey

No precise data on the income levels of non-Fairtrade producers was gathered, which limits the extent to which this study can attribute changes, without ambiguity, to Fairtrade as we do not have a comparison with the non-Fairtrade situation.

<sup>&</sup>lt;sup>52</sup> These groups were mixed, data was not collected separately from men and women, but in general women were quite active in this discussion, and when they were less active, men sought their opinion on figures.

Trends in livelihood specialization and diversification have an important bearing upon household incomes. As shown in section 6.4 below, many farmers are currently in a phase of specialization in cocoa production. However, some farmers, who have already reached a good level of specialization (as in Alto El Sol), or who benefit from less favourable conditions for growing cocoa (such as in Bellavista) are eager to diversify activities, in particular in coconut, which is locally called a "weed" as it multiplies and there is no real use for it, and people consume little of it.

Cocoa is the biggest source of income in the communities studied (cocoa contributing to an average of 60 per cent of the total income) and therefore the overall composition of the income depends mostly on the income coming from cocoa, which itself depends highly on the yields. Farmers reported that in drier years the productivity of the trees can drop, greatly affecting their income. Other income (depending on the area) may be coffee (Saposoa, Huicungo), citrus (oranges, mostly in Ledoy, Huicungo), cattle, and corn etc.

The study explored the producer perceptions of quality trends, including the effect of quality on prices obtained and the reasons for any changes. Farmers consistently reported that the quality they now produce is much better than it was 10 years ago (when cocoa was a new production). The main reason is that they now manage the plantations, so that diseases (which appear mostly on unmanaged plantations) affect fewer pods, and they sort the beans, which may be affected by diseases. So Fairtrade farmers recognize that improvements in quality have come with training, (rather than price incentives which are not in place) and that all farmers who benefitted from training are now producing better quality than they used to. Some of this training has been financed by Fairtrade, through a portion of Fairtrade Premium funds financing a small part of the technical assistance, as was mentioned earlier.

### Box 2: Conclusion on the plausible outcomes and impacts of Fairtrade for producer incomes

According to the household survey cocoa is by far the biggest source of income for members of the SPOs who also consistently report that their income has both improved and stabilized (there are fewer year to year variations). Since 2007, the Fairtrade minimum price has been below market prices for cocoa, and SPOs have been selling at market prices or slightly above. So the Fairtrade price mechanism has not been active.

Most farmers continue to invest primarily in cocoa, reinforcing its position as the main livelihood activity. The average income is 400 PEN/month/person which is above the poverty line of 220 PEN/month/person as defined in Peru (79.2 USD/month, or 2.6 USD/day). But 51 per cent of household members still have incomes placing them below this poverty line (as defined by the Peruvian state). Subsistence food production was not taken into account in this calculation, but only half of the 51 per cent of the households below the poverty line reported producing a significant part of their needs. Depending on the methods used, between half and a third of households can be considered poor by local standards, and 1 in 4 households are in absolute poverty (by national standards). This falls roughly within the regional averages. So there is no marked income difference for Fairtrade farmers compared to the rest of the population, despite their appreciation of the "reintegro" or second payment, which only represents a modest top-up. However, this is a static picture taken at a given time, and there are indications that the dynamic evolution might be different. Firstly, over the last 5 years, 60 per cent of the Fairtrade households have invested in their houses, 50 per cent have bought at least one cell phone, and over 25 per cent bought motorbikes. Overall, 1 in 3 families earns enough to be able to send a child to university. Only 16 per cent of farmers surveyed have not had access to any of the goods and investments listed. And secondly, there is a clear difference (close to 3 times) in incomes between farmers who have been members of the SPO for a longer period of time, and those who joined more recently. A similar study in a few years time might show different results.

#### **6.4 Farmer livelihood assets and productive investments**

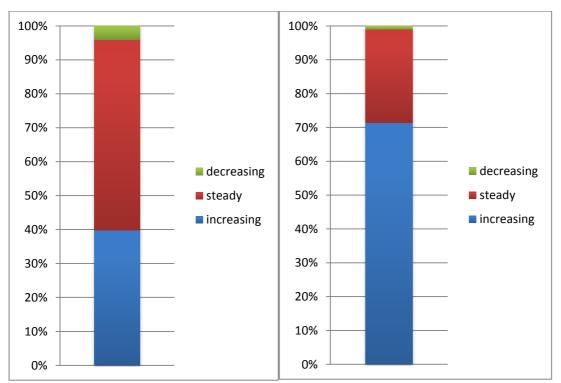
Cocoa farming requires very little equipment: a machete, a small seesaw, a knife and a pair of shears, wooden boxes (for fermentation) and tarpaulin (for drying) are sufficient. In the case of both of the SPOs studied, farmers sell fresh beans, so they do not need boxes or tarpaulins. Farmers interviewed estimated that they spend 3 per cent of their total income (177 USD) each year to buy this sort of equipment. The SPOs invest in

processing units, and pay staff to manage them (always a member of the SPO as well, who gets a specific budget to manage the unit, depending on volume treated). Non-Fairtrade farmers also prune their trees, so they need similar equipment, plus tarpaulins to dry the cocoa, so their investment in equipment is similar or slightly higher.

Discussion with Fairtrade farmers covered changes in the size of farmers' land under cultivation and specifically under cocoa cultivation. Fairtrade producers' farms have mostly been stable (in terms of size) over the last 5 years, but a big minority have increased the area they cultivate (40 per cent of household survey respondents reported an overall increase). But cocoa areas have increased for a vast majority (for 70 per cent of household survey respondents), which would indicate that while farms are stable in size or slightly on the increase, there has been a strong re-orientation of their activities towards cocoa, through re-allocation of land, amongst others. Other less profitable cash crops such as corn or plantain have been reduced or abandoned. This change was greatly supported by the PDA, and farmers were convinced to turn to cocoa by seeing the example of early cocoa producers. Unfortunately we do not have household survey data for non-Fairtrade farmers.

Figures 20: Change in total farm area for for Fairtrade farmers

Figures 21 Change area under cocoa cultivation for Fairtrade farmers



Source: Household survey data

On average, for the farmers interviewed in the household survey, cocoa represented 59 per cent of their income (see figure 22 below). For some households interviewed, other crops represented a significant part of the income after cocoa, but this depended on location (i.e. suitability for the crop such as coffee, plantain, oranges) and cultural traditions. Few farmers relied solely on cocoa for their farm income, but cocoa specialisation is clearly increasing. Sale of livestock or work outside the farm (mostly as a labourer on other farms in the same neighbourhood were the most common other forms of income).

Work outside the\_ Remittances Sale of \_\_\_ Renting out farm 1% wood land Commerce . 7% .2% .01 % 3% Animal sales 6% Other crops Sacha Inchi\* -Cocoa 14% .08% 60% Plantain 1% Rice 1% Corn 3% Coffee.

Figure 22: Average share of different sources of income in overall household total

Source: Household questionnaire survey

4%

The vast majority of farmers interviewed said that, in the future, they were planning to invest any available income in cocoa. A minority (close to a third of household questionnaire respondents) reported a desire to diversify their income sources with increased production of wood or cattle farming, while still sustaining a strong involvement with cocoa.

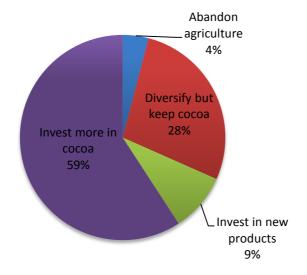


Figure 23: Producer perceptions of their future strategy regarding specialization/diversification

Source: Household questionnaire survey

Data on the education level of producer children was not collected in the survey. However, it is clear that their children's tertiary education is a priority for most producers, and that significant numbers are already financing their children's university education. This became clear in discussing farmer definitions and analysis of their "costs of living" (see annex 6). SPO management confirmed the tendency of most of the better-off farmers to finance their children's studies. Although this is a common trend across Peru, one key informant

<sup>\*</sup>Sacha inchi is a local vine producing nuts, often used as oil for cosmetics or as cooking oil

said that this is one of the main and most visible effects of Fairtrade. As soon as farms become profitable (reaching profit levels which allow more than the simple upkeep of the farm and household basic needs), the priority of farmers is to finance their children's education and in many cases Fairtrade facilitates this. Data presented previously (under section 6.3) shows that one third of households can afford to educate their children to university level.

# Box 3: Conclusion on the plausible outcomes and impact of Fairtrade for livelihood, assets and productive investments

Little equipment is needed by farmers to cultivate cocoa. The major investment is the installation of new plantations, which most farmers have already done. This has been a very strong trend in San Martin in general, due to the PDA programme and has resulted in a strong specialization of many farmers, who found a more reliable market than for other crops. The specialization does not seem to have resulted in increased vulnerability, except to market forces. There is little diversification into other income generating activities, except the crops or activities which pre-dated cocoa (coffee, oranges, cattle, etc.). Three fifths of Fairtrade farmers said they want to keep investing primarily in cocoa (household questionnaire survey). Investing in their children's education is a priority for most Fairtrade households and it is estimated that a third of households can afford tertiary education for their children (household questionnaire survey and focus groups, primary and secondary education are available locally). Fairtrade has not been the main driving force of these processes, but has certainly supported the changes.

#### 6.5 Cash flow management

Cocoa is produced almost all year round, and therefore farmers benefit from a fairly regular income. But in years of drought or lower levels of rain (mostly from November to March), trees may stop producing. During that period, farmers will either try to find work on other farms as workers or offer their work through the mutual labour or 'choba-choba' system. Farmers may also sell other produce of the farm, if it is sufficiently diversified (e.g. oranges, corn, and beans). SPOs do not have any specific drought strategies aside from the existing credit schemes.

The SPOs have agreements with a number of credit cooperatives (e.g. Caja Maynas, Norandino etc): the SPO provides a technical guarantee (the borrower is a member of the cooperative and produces cocoa), and the credit institutions offer lower than average interest rates. Norandino was initiated by several Fairtrade coffee SPOs from Northern Peru (including PO 2), as a service to their members who were affected by cash-flow deficit problems. It has now extended its portfolio to producers beyond the members of their founding organizations. Non-Fairtrade SPOs also have similar agreements with local banks: these agreements were facilitated by the PDA, but Fairtrade SPOs had organized such arrangements several years earlier than the others (with Norandino for PO 2, and by providing credit directly to its members for PO 1).

PO 1 can also offer advances to its members at better rates: 1.7 per cent/month (or 20.4 per cent annual) for a maximum of 15 months, with 3 months of grace, and up to 10,000S. Interest rates may be lower for good creditors. A variable number of members use these credit facilities - a few in Alto El Sol, most in Saposoa. Interest rates at local banks can be lower (15 per cent annual), but access to it can be more difficult for farmers.

Fairtrade farmers clearly value these credit services, for them it has become a normal and readily available service, whereas it is still a novelty for non-Fairtrade cocoa producers, because it is more recent. The sustainability of the credit arrangements for non-Fairtrade SPOs has not yet been proven as the PDA is still backing them.

# Box 4: Conclusion on plausible outcomes and impacts of Fairtrade on cash flow management

The development of cocoa production can improve cash flow management, because the crop itself provides a regular income, when it is harvested several times a year. Farmers who are associated with a producer organization, whether Fairtrade certified or not, also facilitates cash-flow management, as local banks have recently started to give credit to farmers when a SPO can provide a technical guarantee.

Fairtrade SPOs have also set up specific credit facilities for their members (direct credit for PO 1, a dedicated micro-credit institution for PO 2). However, non-Fairtrade farmers are also improving their cash-flow management because of the development of cocoa and because access to micro-credit is becoming easier for associated farmers.

Fairtrade contributes (amongst other factors) to improving cash-flow management, as Fairtrade SPOs had set up credit services became widely available to non-Fairtrade producer organizations. They could do so because of their institutional and financial strength (see section 7 for more details), whereas the extended credit system benefitting non-Fairtrade SPOs is still relatively new and has not yet been proven in terms of its sustainability.

# 6.6 Stability of family farming

There is a common perception amongst farmers that production methods have become more technically complex, which has increased the workload involved, although alsoincreasing overall profitability. Fairtrade has played a role in this process, in helping sustain long-term and growing markets for the two cocoa SPOs, but it is not possible to quantify how far Fairtrade has obtained or sustained greater market access. However, the market situation for cocoa (the high prices of the last 3 years) combined with the PDA programme are the major drivers in sustaining the family farms production systems.

Labour requirements in cocoa production have increased almost 60 per cent (according to the household questionnaire survey, see section 6.2). All farms rely on family labour: 83 per cent of farmers say they practice some 'choba-choba' (traditional mutual labour system), even if it is only occasional. 83 per cent of farms employ workers, and those who do, contract on average 70 days per MT produced, or 40 per cent of the average amount of work to produce a MT of cocoa. But as was seen previously, it seems that an increasing number of farmers tend to prioritize work on their own farms and spend less time acting as labourers or exchanging work. Availability of hired labour is beginning to be a constraint for farms, as fewer people want to work for others as labourers. Production systems will need to evolve taking this factor into consideration. Some signs of this are already visible: for instance, some wealthier farmers have bought strimmers to do the weeding, to avoid the manual labour involved when using a machete (weeding is one of the most demanding activities in terms of time). Generally, men do most of the work in the production of cocoa. Sometimes women are also involved in the more technical activities (like pruning or grafting, as opposed to harder manual activities like weeding). For harvesting both men and women are involved.

Agricultural wages are increasing rapidly in the region. In 2004 a normal daily wage was 10S, or 14S (3.6 to 5.0 USD) if expressed in 2010 value, it is now 20S (7.2 USD - a 43 per cent increase in 7 years). This rise has been driven mainly by:

- high cocoa and coffee prices
- competition with other employment or income options
- increasing cocoa production and government investment in infrastructure (in particular roads)

Fairtrade farmers pay similar levels of wages to other employers locally. Several farmers interviewed in focus groups said they were more sensitive to the working conditions they were offering to their daily labourer: e.g. improving the quality of the food provided, reducing the hours or the difficulty of the work, but this could not be confirmed by interviews with labourers due to time constraints.

Farm areas are stable in size or increasing for most of the farmers interviewed according to the household survey. The main asset of these farms, their cocoa plantations, is also clearly increasing. Other physical assets (e.g. animals, equipment) are not very common (only a third of farmers interviewed had any cattle, only a fifth own pigs).

None of the farmers interviewed were involved in any kind of seasonal mobility or migration to find work, but 40 per cent of them did declare income from local casual work. Most of this work was done on local farms, usually in cocoa or coffee cultivation. A number of farmers reported using the specialised skills they had learnt from their SPO, such as grafting, on other farms (Fairtrade as well as non-Fairtrade farms). They are bringing specialized skills to farms which did not benefit from training in the first place. Men are mostly the ones to be involved in off-farm work. Some women also reported working on other farms, but were less likely to do so in a more distant neighbourhood compared to male household members.

As in many rural areas of developing countries, farmers are reporting that their children are unlikely to remain in farming in the future. A majority of the Fairtrade farmers with children interviewed in the household survey think that their children will not be farmers in the future. This issue could not be studied in detail, but it is clear that while the well-being of the current generations of farmers have improved significantly within their own lifetimes, no-one considers farming as a desirable livelihood - most families consider a "city life" to be more desirable than their own. This is possibly due to an insufficient increase of incomes in farming (compared to other activities), to a continued stigma associated with being a farmer, and the perceived difficulties (such as hard work and isolation) compared to other occupations, as well as the potential opportunities offered by life in a town.

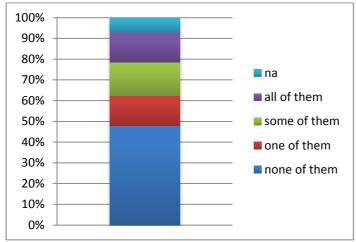


Figure 24: Farmers' opinion on whether their children will continue farming

Source: Household questionnaire survey

# Box 5: Conclusion on plausible outcomes and impacts of Fairtrade on the stability of family farming

The major change in cocoa cultivation has been the intensification and increasing technical complexity of cultivation techniques used by many farmers. These have been promoted by both the PDA and by the Fairtrade SPOs, and the changes have been greatly facilitated by the cocoa price increase. Fairtrade has participated in this phenomenon by helping to make cocoa an even more secure market for the Fairtrade producer organizations.

Labour requirements have increased for Fairtrade/organic farmers, but as daily wages have increased (due in part to competition with other opportunities, including work on one's own cocoa plantation) this has mostly meant an increase in family work. This work seems to have come mostly from a decrease in or abandonment of other cash crops such as corn, so it is mostly a reorientation of family work towards cocoa. This increase in labour does not appear to have affected the gender division of tasks, with men still doing most of the work on cash crops, but more analysis is needed of the intra-household gender division of labour. 40% of the work is still, however, undertaken by daily labourers, who are often cocoa producers themselves. This is the most common off-farm work undertaken by Fairtrade cocoa farmers. Less than half of the farmers think their own children will be farmers themselves and most desire that their children find other occupations. This means that although Fairtrade has contributed to maintaining family farming, it is not yet possible to say that cocoa farming can retain future farmers in the rural areas.

#### 6.7 Household food security

While all farms cultivate some crops for subsistence (at least some plantain, cassava and beans), a fifth of farmers interviewed in the household survey acknowledge that the amount produced is very little compared to household needs. A half of all respondents produce a substantial proportion of their food requirements. See Figure 25 below. A majority of farmers (51 per cent) report that the amount of food produced on-farm is increasing while only 12 per cent report it is decreasing. The reasons for this increase in food production were not studied in detail, but it is likely that although more work was required by cocoa, it was still less work overall than what was spent on previous cash crops or activities (such as labour on other farms), and so more time was available. Cocoa is also a crop which leaves some space available between trees to cultivate plantain, fruits or beans (as opposed to corn, for instance, which is grown as a mono-crop). And because farmers spend more time on their farm (instead of looking for work outside) they may have a bit more time to look after food crops — but again a more detailed gender analysis is needed of intra-household division of tasks and more information is needed on whether food prices are increasing and if this is driving farmers to increase their own food production. Both of the Fairtrade SPOs have promoted tree cropping within the cocoa plantation (see information on 'My retirement' project).

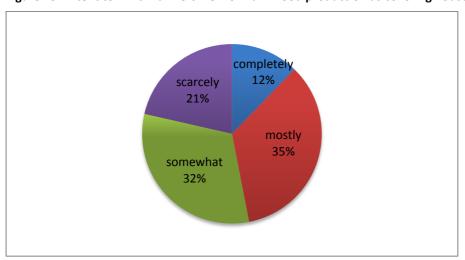


Figure 25: Extent to which farmers view on-farm food production as covering household basic needs

Source: Household questionnaire survey

While the Fairtrade farmers interviewed in the household survey have very precise data on the areas of their commercial crops, they are less clear about the areas dedicated to subsistence cropping. This is mostly due to the nature of these crops (plantain, cassava, beans) and the way farmers manage their farm: they are rarely cropped in a specific plot, but rather intercropped with the rest.

Fairtrade farmers were asked about the frequency of food deficit periods to see how this is changing. Roughly a quarter (27 per cent) of those interviewed in the household survey report the existence of periods of foods deficits, i.e. when on-farm production is not sufficient and cash available is not enough to buy the amount of food needed. 43 per cent of farmers interviewed consider the frequency of these periods of food deficit is steady, while 39 per cent consider it is decreasing and 18 per cent consider the frequency is increasing. Given the size of this study it was not possible to investigate climate data and patterns.

Farmers interviewed in focus group discussions were not aware of the existence of any SPO policy specifically targeting food security. SPOs are mostly concentrating on the production of cash crops (cocoa, coffee, coconut, raw sugar), and using their experience on the export markets to find markets for new crops, as clients are often the same for several products. They are also trying to sell on local markets (chocolate and sugar for PO 1, coffee for PO 2), but the possibilities are limited. Cocoa trees are often intercropped with other trees, especially higher-growing ones, some of which might be fruit trees (e.g. coconut) but the main aim of intercropping is wood production. This was strongly influenced by the Fairtrade SPOs through a project called "my retirement", aimed at providing future income though timber, while also providing environmental benefits.

# Box 6: Conclusion on plausible outcomes and impacts of Fairtrade on food security

It is not possible to conclude unambiguously whether Fairtrade has had an impact on farmer food security, as data from non-members was not collected and there are contextual factors which might influence the relative food security of both Fairtrade and non-Fairtrade farmers (independent of Fairtrade). It is however clear that for most Fairtrade producers, on-farm food production is increasing, and the trends indicate that food security is improving. Specialization in cocoa production, which is widespread in San Martin (largely a result of PDA programmes and strengthened by Fairtrade), is most marked among Fairtrade producers of the 2 SPOs studied. This process is not necessarily associated with a decrease in the growing of subsistence crops. Indeed, over the last 5 years, a majority of Fairtrade producers say they have increased the amount of food produced on-farm.

<sup>&</sup>lt;sup>53</sup> PO 1 has a small range of chocolates, which are produced in a local factory and marketed under the PO 1 brand. They serve mostly as a communication tool, to show what the SPO can produce. So far, only small volumes are sold, but they can be found in the shops in Juanjui.

# Box 7: Summary of conclusions on plausible outcomes and impacts of Fairtrade on the socio-economic situation of producers, workers and household members

In the current international context of very high cocoa market prices, and the local context of intense cocoa promotion, all cocoa farmers are receiving high prices and external support (such as technical assistance). However, Fairtrade farmers are getting better and more secure prices than others, because of the capacity of SPOs to return higher proportions of prices received (FOB prices) to farmers, because they have higher relative market visibility and greater security of these markets (amongst other elements, this will be detailed in the following section), and they have savings on processing in terms of time costs. Fairtrade has contributed to improving market stability for the Fairtrade SPOs, although it is difficult to quantify by how much, as there is no counterfactual for this situation. Non-Fairtrade farmers in villages where Fairtrade SPO committees exist are reportedly benefiting, as intermediaries are raising their prices, although in other villages the prices may be lowered to compensate. Other key elements of farm productivity (yields, technical assistance) have been mainly shaped by the massive support programme, the PDA, which has been implemented in the area. However, the Fairtrade SPOs have also provided some support in this regard, and may offer a higher level of technical assistance than average, although this has also been supported by various NGOs.

Income levels have improved for Fairtrade cocoa farmers, and while a small *percentage* (16 per cent) of Fairtrade farmers has yet to see this benefit, a significant minority has been able to improve their socio-economic household situation by, for instance, buying a motorbike (25 per cent), or being able to afford to send a child to university (30 per cent). A majority (60 per cent) has also been able to improve their living conditions by improving housing. Because we do not have the counterfactual data it is not possible to ascribe these changes to Fairtrade without any ambiguity, but it seems that *a contribution* has been made by Fairtrade, through slightly better prices, and better services reported by farmers (chapter 7 will cover how in more detail). Fairtrade farmers in the case study SPOs appreciate the access to credit that their SPOs have already achieved, which has come several years before the non-Fairtrade SPOs' credit provision – they are only now improving their own services, relying on support from the PDA programme, and have yet to demonstrate sustainability. The main livelihood investment priority remains cocoa, and ensuring children are educated and then obtain a "proper job" ("ser profesionales" was the usual phrase used in Spanish).

Intensification of cocoa cultivation and an increasing technical complexity has significantly raised the amount of work required (+60 per cent). The research did not collect sufficient information to conclude with certainty who is most affected by the increase of work. This remains an important question for further research. Work on other crops (corn, for instance) has reduced, because it has had to compete with other remunerative opportunities, such as cocoa growing.

There has not been a substantial increase in casual work (on average, one farm employs the equivalent of around 0.3 full time employee). Rather household labour on the farm has increased, because there is a lack of hired labour available locally, as most families grow some cocoa and consider it more profitable to work on their own farms. For farmers that are better off and have alternative livelihoods, there is still the hope that their children will not be farmers. Thus, to date, increased cocoa production and returns (of which Fairtrade has contributed to a certain extent) cannot yet make farming sufficiently attractive, but it may be enough to facilitate the transition to "city life" for a portion of the next generation. Lastly, the process of specialization described, partly encouraged by Fairtrade, has not led to farmers abandoning subsistence cropping. On the contrary, on-farm food production has increased for a majority of farms.

#### 7. THE ORGANIZATION OF PRODUCERS

Fairtrade aims to support small producer organization as a base for their empowerment and for achieving greater livelihood sustainability. This section assesses the outcomes of Fairtrade participation for these producer organizations in terms of: the strengthening of the SPO organization, the empowerment of its members, changes in market access and financial and administrative capacity, and uses and outcomes of the Fairtrade premium.

There is an important difference between the two cooperatives under study. The PO 2 cooperative is an organization created in 1999 with the idea of marketing members' coffee, and in 2002 it obtained Fairtrade certification for coffee. In 2006 it began the production and processing of cocoa and since 2007 it has expanded its Fairtrade certification to cocoa and initiated the export of cocoa. On the other hand, the cooperative PO 1, founded in 1997, was created as a cocoa cooperative from the beginning and achieved Fairtrade certification only later in 2005.

It should be noted that, according to statistics from the Ministry of Agriculture of Peru<sup>54</sup>, the San Martin region is now the largest cocoa producing region in the country.

#### 7.1 Structuring of the rural economy

This section explores the changing *percentage* of producers in the region who are members of the SPO, compared to the overall trends.

The managers of the case study SPOs said that their membership has grown strongly over the past 6 years. PO 1 increased its membership from 420 members in 2005 to 1824 members in 2011, while PO 2 was growing much faster: within a five year period, membership grew from 46 members growing cocoa in 2007 to 332 members in 2011. In 2005, according to the Ministry of Agriculture, there were 4,237 hectares of cocoa in production and about 7,700 farmers in the region of San Martin, which means that the two SPO case study organizations reached 5 per cent of all producers in the region at that time. The Fairtrade SPOs have grown rapidly, but the growth of non-Fairtrade producers has also been expanding rapidly. It is estimated that in the region of San Martín, there are currently about 30,000 families producing cocoa 55, therefore, producers grouped in the two Fairtrade organizations currently account for about 7 per cent of cocoa producers in the region.

Table 26: Trends in membership of Fairtrade SPOs in San Martin Region 2005 -2011

Year	Members PO 1	Members PO 2	Total Fairtrade cocoa Producers
2005	420	0	420
2006	470	0	470
2007	950	46	996
2008	1,250	50	1,300
2009	1,457	200	1,657
2010	1,520	275	1,795
2011	1,834	332	2,166

Source: PO 1 and PO 2 records

<sup>54</sup> Database, Office of Statistics and Economic Studies (OEEE), Ministry of Agriculture

<sup>&</sup>lt;sup>55</sup> Information provided by the Program Manager for Alternative Development – PDA - USAID.

According to statistics from the Ministry of Agriculture (OEEE database), in 2000, the region of San Martin produced 1,113 MT of cocoa, representing 4.5 per cent of the national total, while in 2009 the figure was 12,440 MT of cocoa, i.e., 33.8 per cent of the total production in Peru. It is evident that this very growth in production in San Martin is due to the strong support of the Alternative Development Program of USAID, promoting cocoa production as a strategy to eradicate coca cultivation.

The strong growth in cocoa production in the region is reflected in the rapid and sustained growth in the volume of cocoa collected by the organizations under study. PO 1 collected an increased volume rising from 287.3 MT in 2005 to 1947.4 MT in 2010, which represents an average of 35 per cent average annual growth. The projection for 2011 is 2500 MT. While in PO 2, production increased from 17 MT in 2006 to 155.06 MT in 2010, representing an annual rise of 55.6 per cent. The estimated production for 2011 for PO 2 is 210 MT.

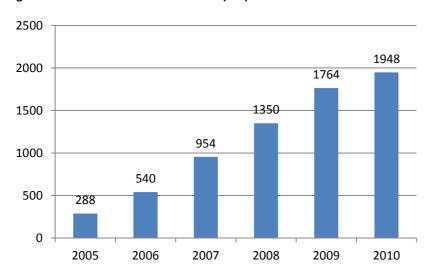


Figure 26: Production volumes of PO 1 (MT)

Source: PO 1 records

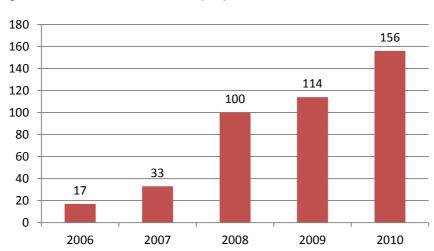


Figure 27: Production volumes PO 2 (MT)

Source: PO 2 records

In table 28 we compare the *percentage* of regional production handled by the two SPOs. While in 2005, only 9.7 per cent of the production was handled by the SPOs, in 2009, the participation of the organizations in the regional total had increased to 15.1 per cent. This increase in participation is determined mainly by improving the average productivity of cocoa farms of the producers who are members of organizations (the production of members was multiplied by 5 during the 2005-2009 period), through technical assistance programmes and improved fertilization provided by the SPOs to their members and also because of increasing membership (the number of members was multiplied by 4 during the same period).

Table 27: Production of Fairtrade cooperatives vs. regional cocoa production

Year	PO 1	PO 2	Total Fairtrade	Total San Martin Region	Per cent
2005	287.3		287.3	2,975	9.7%
2006	539.6	17	556.6	5,992	9.3%
2007	953.3	32.4	985.7	8,411	11.7%
2008	1349.6	99.82	1,449.42	10,643	13.6%
2009	1763.5	113.5	1,877	12,440	15.1%

Source: SPO data and Ministry of Agriculture

The vast majority of the focus group participants indicated that their primary motivation for joining their SPO was to access the services provided by the organization, such as secure and stable markets for their products, technical assistance, credit, etc. In the committee of producers from Huicungo (PO 1), the producers mentioned that one reason why they want to join the cooperative is to export cocoa to special markets that recognize quality. On the other hand, in the Alto del Sol Committee (PO 1) the producers said that new members are motivated by the second payment or "reintegro". They said that the price is better than that obtained from intermediaries, but there is strict quality control, which is a constraint. In most of the committees, the payment they receive at the end of the year is a strong motivation for staying within the SPO especially in recent years when prices of the cooperative (compared with the intermediaries) have been very close, but there has been a greater emphasis on quality in the cooperative. Therefore, the producers highly value the 'reintegro' and it is the main incentive for joining the SPO.

# Box 8: Conclusions on the plausible outcomes and impacts of Fairtrade on the structuring of the rural economy

The Fairtrade SPOs have grown rapidly, but the growth of non-Fairtrade producers has also been expanding rapidly. An estimated 30,000 families currently produce cocoa in San Martín, and the two Fairtrade organizations currently account for about 7 per cent of cocoa producers in the region. Strong growth in production has mainly been fuelled by the Alternative Development Programme (PDA) of USAID, which has aimed to eradicate coca production. Rapid and sustained growth in cocoa volumes collected by the Fairtrade SPOs is striking - in 2005 only 9.7 per cent of production was handled by these two SPOs, but by 2009 the regional total had increased to 15.1 per cent. This growth has outstripped membership increases, so we can infer that the productivity of Fairtrade farms improved more than non-Fairtrade farms. Farmers reported that they join these two SPOs because of the services provided and because of the 'reintegro' payment.

#### 7.2 Use of the Fairtrade Premium

PO 1, in the period from 2007 to 2010, invested 34 per cent of its Fairtrade Premium in 'reintegro' payments to farmers, 14 per cent in technical assistance, 37 per cent in infrastructure, 10 per cent in productive projects and 5 per cent in payment of certification fees (the SPO holds various certificates beside Fairtrade and organic).

Table 28: Fairtrade Premium investments - PO 1 (2007 – 2010) (USD)

Year	Payment to producer	Technical assistance	Infrastructure <sup>56</sup>	Certifications	Productive projects <sup>57</sup>
2007	72,422	13,168	46,087		13,168
2008	69,488	12,634	31,586		12,634
2009	37,779	10,303	20,607		
2010		37,241	93,103	27,931	27,931
Total	179,690	73,347	191,383	27,931	53,733
	34%	14%	37%	5%	10%

Source: Records PO 1

In contrast in PO 2 it is more difficult to accurately identify the uses of the Fairtrade cocoa Premium as it is managed jointly with the Premium funds for coffee. In 2008, USD 10,850 was invested in infrastructure for the collection and processing of cocoa, and the remaining funds were invested in providing services to members including strengthening the organization, technical assistance in coffee and cocoa, and consolidating assets (PO 2 does not pay a reintegro from Fairtrade Premium funds).

Table 29: Change in Premium payments per capita

PO 2

Year	Total Fairtrade cocoa Premium	Number of members	Fairtrade Premium cocoa per head (USD)
2008	11,448	50	229
2009	3,750	200	19
2010	14,976	275	54
2011	21,806	332	66

PO 1

Year	Total Fairtrade cocoa Premium	Number of members	Fairtrade Premium cocoa per head (USD)
2007	144,844	950	152
2008	126,343	1250	101
2009	68,690	1500	46
2010	186,207	1504	124
Total	526,083	5,204	101

 $^{56}$  E.g. Investment in fixed assets: offices, storage facilities, processing centres at community or SPO level

<sup>&</sup>lt;sup>57</sup> E.g. Projects aiming to increase production and quality, such as trainings, model farms, nurseries

Table 30: Cocoa and coffee Fairtrade Premium investments PO 2 (2007 – 2011)

Year	Infrastructure	Organizational strengthening	Technical assistance cocoa and coffee	Equity	Fairtrade Premium coffee	Fairtrade Premium cocoa
2008	111,781	20,210	22,523		143,066	11,448
2009	28,378	56,169	50,575	8,341	139,713	3,750
2010	28,500	35,505	33,050	14,200	96,279	14.976
2011	64,000	46,620	51,375		n.a	n.a
Total	232,659	158,504	157,523	22,541	379,058	30,174
Per cent	40.7%	27.7%	27.6%	3.9%	92.6%	7.4%

Source: Records PO 2

### Box 9: Conclusion on the plausible outcomes and impacts of Fairtrade Premium uses

When looking at the per capita equivalent, the level of Fairtrade cocoa Premium seems relatively modest. However, at the level of the SPO, the budgets generated are not negligible, and allow for investments in projects which would struggle to find other sources of funding (such as organizational strengthening, which non-Fairtrade SPOs are not required to invest in). Even if budget volumes are not sufficient to finance projects alone, they can make it easier to find matched funding.

# 7.3 Influence on other producer organizations in the region

All services provided by the organization using the Fairtrade Premium have improved the reputation of the SPO towards its members and has encouraged new partners to join the cooperative. The rapid growth of PO 2 and PO 1 in terms of numbers of members and in export volumes, as well as in increased recognition by its members of these improvements, have served as an incentive for new producer organizations to seek certification in Fairtrade, as a mechanism to strengthen and consolidate the market for their members. In the Saposoa area, where one of the PO 1 committees are located, there is another cooperative called "Gran Saposoa". It was formed in July 2008, and has benefited from the Alternative Development Program (PDA). They now have organic certification, and in 2011 will seek UTZ certification and by 2012 they plan to apply for Fairtrade certification. The marketing of their cocoa is done through Amazonas Trading. Similarly, in the town of Sisa, where there is a committee of PO 2, the "Cooperativa Agraria y de Servicios El Dorado" can also be found. This was created in 2008 and sells certified organic cocoa and UTZ certified cocoa through Sumacao to PRONATEC in Switzerland. This cooperative is also considering seeking Fairtrade certification.

Comparing these two cooperatives that do not have Fairtrade certification with PO 1 and PO 2, some fundamental differences emerge. Firstly, they do not have any infrastructure to ferment cocoa and ensure product quality, and secondly they do not have the capacity to export their product directly, but are clearly dependent on a single buyer-exporter.

# Box 10: Conclusions on the plausible outcomes and impacts of Fairtrade on other producer organizations in the region

The achievements of these SPOs also encourage new members to join them and encourage other organizations to seek Fairtrade certification, as a tool to achieve the same levels of success as PO 1 and PO 2. The non-Fairtrade producer organizations studied do not have infrastructure to ferment cocoa and ensure product quality, and further they do not have the capacity to export their product directly, relying on a single buyer-exporter.

Perhaps an under-explored aspect of Fairtrade impact is the changes in SPO capitalization that can result. A recent study by Camacho et al (2005) finds that: "One of the most important factors for the success of SPOs is when their members understand the strategic role that the SPO meets and the need to capitalize and invest in it. Sustainability and the development of any company will necessarily build their capacity to grow, modernize, improve their competitiveness (which means investing), but also create reserves to face crisis (caused by the changing environment or internal problem)". 58

Members of PO 1 and PO 2 have three systems of capital contribution:

- Fee at time of entry in the cooperative;
- Annual contributions;
- Retained members earnings invested in the capital of the cooperative (share of the cooperative's
  profit, which is not distributed to members, but goes towards increasing the capital of the
  cooperative).

In PO 2 the assets of the cooperative grew by 55 per cent between 2005 and 2009, i.e. from USD 189,779 to USD 294,340.

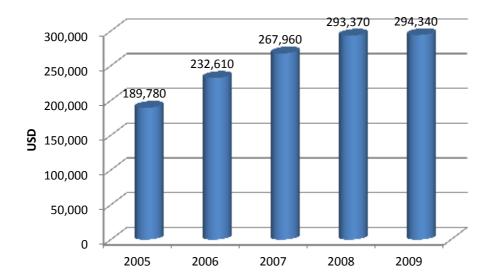


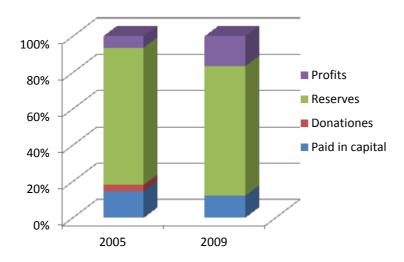
Figure 28: Change in equity in PO 2 (thousands of USD)

Source: Financial statements PO 2

In 2005, the contribution of members (in the three forms) represented 21 per cent of the assets (corresponding to the two categories "paid in capital" and "profit" in Figure 29), while in 2009, these contributions accounted for 29 per cent of assets. Retained earnings (share of the cooperative's profit, which is not distributed to members, but goes towards increasing the capital of the cooperative) are the category that most increased the share of contribution of the members in equity. The following graph shows the change in equity structure between 2005 and 2009. The general assembly of the SPO votes on uses of profit or increase of capital.

<sup>&</sup>lt;sup>58</sup> Regional study on "Success factors of producers' associations". Camacho, P.; Marlin, Ch; Zambrano, C. Ruralter, July 2005

Figure 29: Equity structure PO 2 (2005 – 2009)



Source: Financial Statements, PO 2

NB: "paid capital" corresponds to the initial capital of the cooperative, increased by annual contributions from members

On the other hand, PO 1 has seen a very rapid growth in its assets: they went from 266.59 thousand USD in 2006 to 1784.03 thousand USD in 2010, i.e. the equity increased almost 7 times in just 5 years.

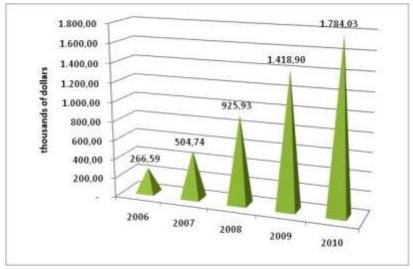


Figure 30: Change in equity of PO 1 2006 - 2010 (thousands of USD)

Source: Financial Statements PO 1

This accelerated growth of PO 1 is due to two factors: first, the contribution of members to the SPO capital, which grew from just over USD 41,000 in 2006 to more than USD 178,000 in 2010. The other source of growth has been annual profits, which in 2006 were USD 99,000 and USD 290,000 in 2010. This strong growth in equity of the cooperative is reflected in the assets they own, especially in the category of "Property, plant and equipment" which basically refers to the fermenting and drying centres in different committees and its own

office building and processing plant. The importance of these fermenting and drying centres lies mainly in quality levels: the organization can offer a product with consistent quality, make quality control more effective and offer the product for specialty markets. For members, these centres have had a positive impact - decreasing the work on their farms and having more time for improvement of the farm and other economic activities.

The change in the ratio of social capital/equity compared to the evolution of total equity was also explored in discussions with SPO managers. Donations in PO 2 represent 22 per cent of total assets, and have been important during the last 5 years (donations correspond to projects - from NGOs or other- investments which remain property of the cooperative, such as equipment, buildings, etc.). But members' contribution is what has contributed most to the growth of equity. The donations have been mainly for the construction of storage centres for coffee, financed by FONCODES<sup>59</sup>. PO 1 did not display donations in its financial statements as part of the capital of the cooperative.

For many of the members interviewed in the focus groups, there are expectations that it is positive to have a stronger and more capitalized organization and the farmer members are hoping that at some point benefits will accrue back to the individual members.

# Box 11: Conclusions on plausible outcomes and impacts of Fairtrade on SPO capitalization

The contribution of members to both cooperatives has been very important for organizational economic consolidation, and demonstrates that they have confidence in their organizations. A member is ready to invest in its' cooperative if it meets his or her expectations. The figures presented by PO 1 and PO 2 also indicate that members may have confidence in the performance of their managers. Part of the legitimacy of the SPOs in the eyes of the members is a result of Fairtrade, because the major source of contributions from members are profits, and these profits come from sales generated in this market segment, as well as competent administration of the SPO.

### 7.5 SPO administrative and management capacities

Both managers and leaders of the SPOs organization agree that the Fairtrade standards have been beneficial, although initially were difficult to comply with. The standards have led to the organizations working with greater transparency and this has given members greater confidence in their organizations. In the case of PO 2, the leaders indicate that initially they had trouble complying with some internal regulations (such as observing democratic proceedings in general assemblies, or following administrative rules). It was therefore necessary to implement a training programme for the leaders, so that now the decisions made adhere to the SPOs regulations. The PO 1 leaders said they have worked to ensure that management and administrative positions are taken by people who have the required capacity to carry out the SPO requirements and are committed to achieving the shared vision they have for improvement, and have therefore not had problems in complying Fairtrade standards.

In relation to Fairtrade audits, the leaders of PO 2 report that at the beginning when the organization was certified only for coffee, the auditors only evaluated compliance with the standards, but did not take into account the efforts that had been made to meet them (e.g. the audits only evaluated compliance or non-compliance, without taking the context into consideration) so there were years where they had trouble fully complying with the Fairtrade standards. In recent years the situation has changed, audits are more process oriented and less result oriented and make a broader assessment of the work of the organization.

The effects of the audit themselves were discussed with SPO managers. In PO 1, the leaders considered the FLO-Cert audits as important in enabling the organizations to comply with their own requirements and ensure that their members who are actually small producers also meet the requirements of Fairtrade International.

<sup>&</sup>lt;sup>59</sup> Fondo de Cooperación para el Desarrollo Social - Perú

The last audit was conducted in February 2011. Each year after receiving the inspection report, the Management Board together with the technical team reviews its recommendations and oversees the implementation of corrective measures.

Managers and board members at both Fairtrade SPOs believe that the support of the Fairtrade International liaison officer (LO) is important. The LO visits each SPO two or three times per year, and during the visits delivers training for leaders and for technical and administrative staff on the implementation of Fairtrade standards. The LO and management assess the state of the cooperative and make recommendations for its progressive improvement.

# Box 12: Conclusions on the plausible outcomes and impacts of Fairtrade on SPO administrative and management capacities

The Fairtrade Standard for Small Producer Organizations seeks continuous improvement of the organization. The leaders of the Fairtrade SPOs said that initially they had some difficulties to meet the requirements, but now manage to do so due to the training they have received, and the training provided to technical and administrative staff. The support provided by the Fairtrade International liaison officer is thought important by the managers in strengthening the organization. The Fairtrade SPO directors also consider that Fairtrade processes (standards, audits, LO support) result in a more transparent organization.

It is not easy to specify exactly the extent to which LO support has had an impact upon organizational strength, because this is shaped by many different factors (e.g. support from other NGOs and clients, activities undertaken by the SPO which may have occurred regardless of Fairtrade interventions). However, it is plausible to conclude that the value placed upon the support of the LO officer by the SPO managers in both case studies indicates that the help given is positive and constructive (e.g. helping to identify changes that can be made in response to non-conformities identified in audits). Nor does the LO role represent a risk to the SPO (as opposed to audits which could lead to changes in certification status) and is currently the main channel for the SPO to be connected to the Fairtrade system (beside Fairtrade clients).

# 7.6 Organizational business development

The fast growth in the volume of cocoa collection by the SPOs is also reflected in rapid growth in exports of both organizations. Figure 31 shows that in 2005 PO 1 exported 274.94 MT of cocoa and in 2010 this figure increased to 1864.84 MT, i.e. an average annual growth of 37 per cent. In 2011 exports are expected to reach about 2,500 MT. Furthermore, PO 2, although on a smaller scale, had faster growth in exports of cocoa. Exports increased from 28.5 MT in 2007 to 149.67 MT in 2010, which represents an average annual growth of 51 per cent. By 2011 they intend to be exporting 200 MT of cocoa.

200.00 2,455 00 1,865 1,533 100 불 2011\* Oro Verde Acopagro

Figure 31: Change in cocoa exports in PO 1 and PO 2 2005 - 2011 (MT)

Source: PO 1 and PO 2

An analysis of the share of volumes exported by the market is shown in Figures 32 and 33 below. In PO 2 100 per cent of cocoa exports went to the Fairtrade market and only cocoa that does not meet the required quality standards is sold on the local market. The Fairtrade organic segment sales had the highest share of exports, except in 2009 when sales of Fairtrade organic cocoa fell from 89.3 to 25 MT. These sales recovered in 2010 when exports rose to 124.7 MT of organic cocoa.

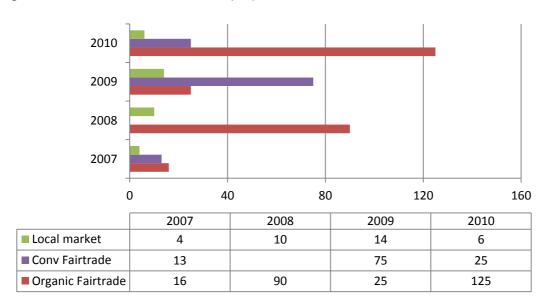
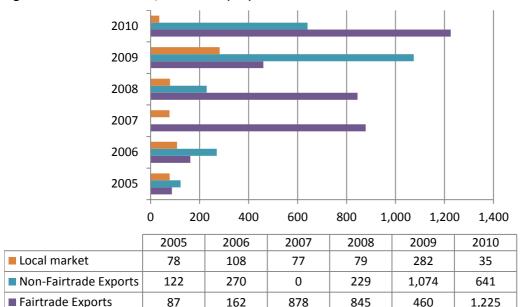


Figure 32: Cocoa Sales PO 2, 2007 - 2010 (MT)

Source: PO 2 records

Figure 33: Cocoa Sales PO 1, 2005 -2010 (MT)



Source: PO 1 records

PO 1 sales to the Fairtrade market have been more irregular compared to PO 2. In the first two years that PO 1 was certified Fairtrade, namely 2005 and 2006, Fairtrade exports represented less than 30 per cent of total sales, but in 2007 they grew strongly, representing 92 per cent of sales. In 2008 and 2009, Fairtrade exports fell, mainly due to the global financial crisis, and in 2010 exports to this market recovered again and reached a record 1224 MT and accounted for 64 per cent of total sales. For 2011, stronger growth is expected by the SPO and they plan to export about 2000 MT on the Fairtrade market.

# Box 13: Conclusions on the plausible outcomes and impacts of Fairtrade on organizational business development

Exports of cocoa by both SPOs have been rising rapidly in recent years. Both show strong sales on Fairtrade terms. PO 2 sells 100 per cent of cocoa exports to the Fairtrade market. For PO 1, Fairtrade export sales volumes as a proportion of overall export have been less regular, but still high.

# 7.7 Quality

Both PO 1 and PO 2 have been working on continuous quality improvement. This focus on quality is a demand from their customers and the market (including a segment of the Fairtrade market which positions itself in the quality segment). Before organizations started cocoa gathering and marketing, production and post-harvest were not quality-oriented - for example, there was no selection of cocoa clones, which guarantee better productivity and quality. The strong support of the PDA heavily promoted the improvement of production, but the SPOs have been the ones which guided this production towards quality. They were supported in this by NGO's working with them (e.g. the Progreso project in the case of PO 2), and also by demands from existing clients (such as coffee clients of PO 2) who trusted the focus on quality SPOs were showing.

In the case of PO 2, the following actions aimed at improving the quality of cocoa were implemented:

Installation of clonal nurseries enabling the training of producers and technicians and promotion of
cooperative cultivars with high productivity and organoleptic quality, in addition to providing genetic
material for the expanding areas of cocoa;

 Implementation of three centralized cocoa collection and processing modules with high capacity, and eleven smaller capacity modules, which has allowed them to standardize quality (origin, grade I and II).

These actions were financed mostly through cooperation project funding via NGOs, as well as state funded projects (Ministry of Agriculture), although Fairtrade Premium funds have also made a contribution, serving as matched funding to these projects. The focus on quality was not initiated by Fairtrade, but Premium investments have made a contribution and have been used for quality investments (e.g. processing infrastructure).

Table 31: Cocoa quality parameters, PO 2

Quality parameters	Origin	Grade I	Grade II
Calibre	100 Grains/ 100 g	100 Grains/ 100 g	100 Grains/ 100 g
Maximum moisture	7%	7%	7%
Defects	3% Max	5% Max	5% Max
"Pizarros" grains	0%	3% Max	5% Max.
"Violetas" grains	10% Max	15% Max.	20% Max.
Fermented grains	90%	82%	75%
Scents	Special features highlights	Total absence of strange odours and tastes.	Total absence of strange odours and tastes.
Acidity	1% Max	1% Max	1% Max

Source: PO 2 records

## Box 14: Conclusions on the plausible outcomes and impacts of Fairtrade on quality

The USAID programme supported expansion of production and the SPOs have guided this towards quality improvements, which are demanded by the markets. Fairtrade Premium investments in processing equipment have led to quality improvements, as has the investment in technical assistance. 15.8 per cent has been spent on technical assistance, which translates into higher productivity and product quality. 38.1 per cent of the Fairtrade Premium was spent on infrastructure to ensure high quality cocoa, which has contributed to better prices for farmers.

# 7.8 Diversification of products

PO 2 began as a coffee production and marketing oriented cooperative. In 2005 the cooperative moved into the production and marketing of sugar cane, which lasted until 2009. In 2006 the cooperative began production, processing and marketing of cocoa. Table 31 shows the distribution of members by type of product in 2009.

Table 32: Number of members, area and volume by type of product PO 2 2009

Product	Number of members	hectares	Volume 2009 <sup>60</sup>
Coffee (MT) <sup>61</sup>	736	1,840	1,360
Cocoa (MT)	427	500	354
Panela (MT)	37	80	80
Total	1,200	2,420	

Source: PO 2 records

(While there is little overlap between coffee and cocoa producers, which are normally grown at different altitudes, sugar cane is often grown on coffee farms, and some members may be part of the two groups).

PO 2 sought to export sugar cane, for which 24,800 PEN (about USD 9000) were invested in infrastructure. However, this could not be accomplished, because the group broke away and formed its own cooperative. Meanwhile, PO 1 has consolidated its focus on the marketing of cocoa, but in recent years has begun to also diversify its products, currently collecting and selling raw sugar for the local market and grated coconut product that is sold to clients in the U.S. and Europe.

Both organizations have strong diversification policies. This corresponds both to a demand from members to find a market for other products already growing on their farms (such as coconuts in the case of PO 1), as well as a strategy for the SPOs themselves to be more resilient to market trends and volatility and thus to be more sustainable over the long term, while at the same time involving more farmers from the region. Arabica coffee, for example, is grown at altitude, and producing zones are scattered around the region where there are mountains, while cocoa is grown at lower altitudes, around the mountains growing coffee, so it makes sense from a logistics point of view to consider the two products.

## Box 15: Conclusions on the plausible outcomes and impacts of Fairtrade on product diversification

Both organizations have strong diversification policies, and are more able to implement these because of their increased capacity due to Fairtrade support, amongst other factors. Diversification is demanded by members. PO 1 is diversifying from its main focus on cocoa to grated coconut for export markets and raw sugar for the local market. PO 2 began with coffee, diversifying into cocoa, but attempts to diversify into sugar cane production have not been successful.

## 7.9 Number and diversity of buyers

Table 33: Main buyers purchasing cocoa from the case study cooperatives

Name of Buyer	PRONATEC
Type of Buyer	Importer / manufacturer
Country	Switzerland
Commitment to	The company was one of the first to buy Fairtrade and organic cocoa
Fairtrade	from Peru. It works closely with SPOs, in particular on quality issues.
Name of Buyer	Barry Callebaut
Type of Buyer	Chocolate manufacturer

<sup>&</sup>lt;sup>60</sup> This figures corresponds to the productive potential of farms, reported in organic certification, which differs from the traded volume in that year

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<sup>&</sup>lt;sup>61</sup> qq = 1 quintal = 46 kgs

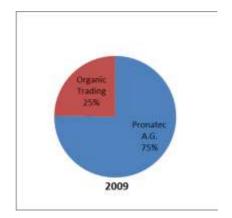
Country		based in Zurich, Switzerland
Commitment	to	
Fairtrade		
Name of Buyer		ICAM
Type of Buyer		Chocolate maker
Country		Based in Lecco, Italia
		Since 2010 ICAM Chocolate Latinoamerica SAC was created in Peru to
		export cocoa.
Commitment	to	
Fairtrade		
Name of Buyer		ТСНО
Type of Buyer		Chocolate maker
Country		Based in San Francisco, California
Commitment	to	
Fairtrade		

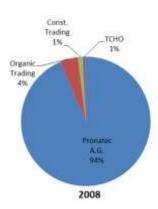
Since PO 1 gained Fairtrade certification, Pronatec has been the largest customer of PO 1. In 2005 and 2006 it bought 100 per cent of Fairtrade exports and in 2008 Pronatec represented 94 per cent of the cooperatives' exports. PO 1 has gradually diversified its customer base and in 2009 75 per cent of sales were destined for Pronatec and 25 per cent to Organic Trading. In 2010, a new client, Icam Italy, began buying cocoa from PO 1. Sales are now more diversified, so that Pronatec accounts for 41 per cent, Icam 34 per cent and Organic Trading 25 per cent.

In the local market, there are many buyers, such as Romero Trading, buying an average of 12 MT per year, and several other buyers with small volumes. It should be noted that between 2009 and 2010, Amazon Trading Peru has made important purchases of about 365 MT and Machu Picchu Trading with 20 MT in 2010. These last two companies are certified as Peruvian Fairtrade exporters.

Figure 34: PO 1 export buyers







Source: PO 1 records

PO 2 does not yet have long-term customers, perhaps because it is in the first four years of cocoa sales and Fairtrade certification, and it is still looking for clients with whom a long-term alliance can be developed (a longer term relationship would enable PO 2 to have a greater ability to plan ahead). In 2007 and 2008, the most important buyer was PRONATEC, buying 16 MT in the first year and 76.32 MT in the second year (56 per cent and 85 per cent respectively of total exports), while in 2009 and 2010 the most important customer was Eco Trading which bought 135 MT in the last year, representing 90 per cent of exports.

160 135 140 120 100 76 80 50 50 60 40 16 <sub>12</sub> 15 13 20 2007 2008

■ Pronatec
■ Efico
■ Tcho
■ Eco Trading
■ Barry Callebaut

Figure 35: Changes in PO 2 cocoa buyers

Source: PO 2 records

It is difficult to determine the impact of Fairtrade on the securing and diversifying of buyers for cocoa, because PO 2 did not market any cocoa before being Fairtrade certified, and after certification has exported 100 per cent of its product to that market. Two other cooperatives without Fairtrade certification in the region provide a potential point of comparison: These cooperatives are called "Cooperativa Gran Saposoa" and "Cooperativa Agraria y de Servicios El Dorado" in the town of Sisa. Both cooperatives are relatively new and generally offer services to their members, most of which are similar to those provided by the Fairtrade certified organizations, but on a more basic level.

2009

2010

However, the Fairtrade SPOs have more direct international market access. While the Fairtrade certified organizations have the opportunity to diversify markets and more opportunities to look for better alternatives, organizations without Fairtrade certification depend solely on a national buyer (Amazon Trading in the case of the cooperative Gran Saposoa, and Sumacao in the case of the cooperative "El Dorado". Both exporters have Fairtrade certification).

The two non-Fairtrade cooperatives operating in San Martin reported that in the coming months they will begin the application process for Fairtrade certification, sponsored by the companies they work with. This represents a threat to the SPOs that are currently Fairtrade certified – an issue already identified in the case study SPOs strategic plans. The private exporting companies have greater capacity to finance the marketing of cocoa and can easily attract producers. While it is an opportunity to bring additional (currently non-Fairtrade) producers to the system, the fact that they are very young SPOs, currently reliant on exclusive relations with experienced exporters, and thus with different patterns of value addition, needs to be recognised by and responded to by Fairtrade International.

The fact that exporters seem to be able to easily find a space in Fairtrade supply chains, without any limit to the control they might exert on producer organizations, could be considered a weakness of the Fairtrade system. This issue was raised by several stakeholders, for example, Appcacao and Avsf, amongst others. The strong presence in the market of private Peruvian companies that are exporting, and which have control over several Fairtrade-certified and non-certified cooperatives (as they manage market contacts and sales), will challenge the current position of the earlier entrant Fairtrade organizations. Because private exporters in cocoa producing countries have significant influence over the local market, this generates dependency amongst the SPOs with whom they work. The private export companies tend to have lower costs (higher volumes and fewer costs related to the social organization of producers).

PO 2 and PO 1 have served as an example for new organizations seeking Fairtrade certification, attracting new members into the system and increasing the number of organized producers who will have the opportunity to access credit, stable prices, secure market and especially improve their farm, their own living conditions and the community to which they belong.

Both of the case study SPOs view the presence of Fairtrade certified domestic companies (exporters) as a significant risk, representing strong competition. Until now PO 1 and PO 2 have chosen to sell cocoa to these companies to try and avoid the exporters from developing direct relations with farmers or committees, but this may be short-lived because the demand from these companies is growing rapidly. Further the exporters are actively encouraging the non-Fairtrade SPOs to seek Fairtrade certification in areas where PO 1 and PO 2 are active.

It is vitally important that Fairtrade benefits can be extended to a larger number of farmers But there are also questions as to how far the farmers may benefit in the national exporter value chain, given that they may well be dependent upon a single buyer. Although the exporters may offer more benefits on occasion to producers compared to the Fairtrade cooperatives – and we have limited information on what benefits are offered – it is also the case that the exporters are:

- not accountable to the farmers and therefore do necessarily have to act in their interests as a cooperative should do according to its constitution, and;
- where new SPOs adopt Fairtrade, it is far from clear that this will enable them to escape dependency on the exporter company,
- there is new pressure and risks for the existing Fairtrade SPOs that feel they cannot compete as easily as the new entrants.

More analysis is required to track whether the sales of the existing Fairtrade cooperatives are in fact reduced significantly by the new entrants in the coming seasons or whether overall Fairtrade sales increase and are absorbed by international market demand.

It will also be important to monitor whether the new Fairtrade farmers are benefiting as much as the existing certified farmers, both in terms of immediate material benefits, but also in terms of longer term economic and political empowerment, organizational strengthening and ability to export directly internationally etc.

There is thus a decision that Fairtrade International must make – whether to give greater protection to existing smallholders and to protect key aspects of empowerment, or whether to accept that scaling up may involve more flexible rules of entry, and would require significant additional levels of support to existing smallholders (e.g. in this case through support for a coordinated fine aromatic smallholder cocoa marketing strategy). This topic is further discussed in the overall conclusion.

# Box 16: Conclusions on the plausible outcomes and impacts of Fairtrade on the number and diversity of buyers

Business growth in PO 2 and PO 1 over the past 5 years has been strong and Fairtrade has supported this by enabling both organizations to reach new markets, which would have been much more difficult to achieve if they had not been Fairtrade certified. It is most evident in PO 1 where a 'before and after' certification comparison is possible for cocoa sales to buyers. Initially, volumes were low, but following Fairtrade certification there has been a period of rapid growth. In PO 2 growth has been rapid as they began with little volume and market and have been selling 100 per cent Fairtrade. In 2009, the global crisis seemed to affect the Fairtrade segment more than conventional sales, as Fairtrade sales for both organizations fell sharply, although total sales increased. Being in a particular market segment has allowed organizations to focus strongly on the issue of quality, investing in infrastructure, training, clonal gardens, etc., ensuring that their product has a position in the market and creating new trade opportunities for cocoa and other products.

PO 1 demonstrates a concentration of sales from a relatively small number of customers, which would generate dependency and certain risks, but according to the manager they are opening new market opportunities. Both of the case study SPOs view the presence of Fairtrade certified domestic companies (exporters) as a significant risk, representing strong competition. Until now PO 1 and PO 2 have chosen to sell their product to these companies to try and avoid the exporters from developing a direct relationship with farmers or committees, but this may be short-lived because the demand from these companies is growing rapidly and they are encouraging the non-Fairtrade SPOs to seek Fairtrade certification in areas where PO 1 and PO 2 are active. The Fairtrade SPOs that are the focus of this study expressed considerable concern that this would have implications for their position.

### 7.11 Negotiation, advocacy and networking capacity

Access to finance is one of the fundamental differences to be found when comparing Fairtrade certified organizations with non-certified ones, although the non-Fairtrade SPOs are also improving their access to credit. While non-certified SPOs rely primarily on resources provided by a private export company, limiting their ability to negotiate, in PO 2 and PO 1, there has been a continuous improvement in access to credit.

PO 2 has partnerships with international financial institutions such as Rabobank, Alterfin, Root Capital, Responsibility, Shared Interest, Oiko Credit, Progreso, and Caixa Catalunya. They have also made alliances with local financial institutions such as Norandino, Caja Maynas and Agrobanco, which were used by approximately 45 per cent of members, without difference in gender or culture, and gave access to credit for maintenance, harvesting and composting62. Credits are awarded after an evaluation, first by the base committee and then by the credit committee of the cooperative, based on the approved credit manual.

The pre-financing obtained by PO 2 in the last 5 years (2006 - 2010), amounting to USD 546,000, is detailed below.

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<sup>&</sup>lt;sup>62</sup> Strategic Plan PO 2 2011 – 2014, December 2010.

Table 34: Amounts and sources of financing PO 2 (2006 – 2010)

Year	Amount in USD	Finance source
2006	30,000	Crédito café – Progreso
2007	80,000	COOPAC. San Martín and Pronatec
2008	150,000	ResponsAbility
2009	200,000	Root Capital
2010	86,000	Progreso and PRONATEC
Total	546,000	

Source: PO 2 records

In terms of pre-financing, much is sourced from those financial institutions that accept export contracts as collateral for the amount pre-financed. The interest rate fluctuates between 8 and 11 per cent. PRONATEC is the only funder which has given pre-financing.

PO 1 funding comes from Rabobank in the Netherlands, Triodos and Alterfin in Belgium, with a total of USD 2.1 million provided as a revolving fund, which the organization accesses according to its capital requirements for the collection of cocoa and then reimburses the providers as it exports. The interest rate varies according to the bank, but on average is at 9.5 per cent (see table 35 below). All these institutions demand the export contracts with customers as collateral.

Table 35: Amounts and sources of financing PO 1 (2011)

Finance Source	Amount in USD	Rate	Conditions
Rabobank - Netherlands	1,500,000	9.5% annual	4 years, sales contracts as guarantee
Triodos - Belgium	500,000	5% annual + libor each month	sales contracts as guarantee
ResponsAbility - Switzerland	800,000		sales contracts as guarantee
Alterfin - Belgium	100,000	9% annual	sales contracts as guarantee
Banco Continental - Peru	578,000 (1,500,000 PEN)	10% annual	Short-term credit used to meet needs in the process of collection and export, payments every 4 months, guarantee with Mortgage.
Banco continental - Peru	385,000 (1,000,000 PEN)	12% annual	Mortgage credit, 5 years term

Source: PO 1 records

A very important indicator of the management of cooperatives of PO 2 and PO 1, as well as the confidence generated at the regional level, are the agreements reached with local financial institutions to provide credit lines for the marketing of cocoa, especially with Continental Bank which provides short term lines of credit which the cooperative can access, especially in times of increased harvest, when they need more liquidity to collect cocoa.

The non-Fairtrade organizations do not have the same opportunities to access credit, according to the managers of the cooperative Gran Saposoa and El Dorado, who at the time of cocoa collection depend solely on the financing that the exporter company will provide, so they can only buy cocoa while they have resources from the exporter. These non-Fairtrade organizations have made agreements with local banks, but only to provide direct production loans to farmers and the organization guarantees the payment of the debt once the cocoa is delivered.

The two Fairtrade organizations are more credible in the eyes of banks (especially local ones) because of their years of experience as business entities and on the cocoa market. The fact that they are able to forecast markets and sales increases their credibility as business partners. Fairtrade buyers tend to give longer term commitment and the relationship with the provider (SPO) is more stable. This gives stability to the sales (and most of these sales are Fairtrade). The level of turnover has also been increasing regularly, and the SPO economic ratios are good (they are profitable organizations). This all contributes to credibility in the eyes of a bank, and Fairtrade is a part of that mix.

The ability of farmer organizations to network with other key stakeholders is an important aspect of organizational development and a means of increasing their influence. The different organizations of cocoa in Peru, including PO 2 and PO 1, have all actively participated in the formation of different networks of producers. These networks have enabled them to develop public-private partnerships and hence to improve the competitiveness of the sector, strengthening their organizations, and improving the living conditions of farmers. Three key networks can be identified: i) the Asociación Peruana de Productores de Cacao – APPCACAO; ii) Coordinadora de Pequeños Productores de Comercio Justo – CNCJ, and iii) Cámara Peruana de Café y Cacao. These are discussed in more detail below.

Asociación Peruana de Productores de Cacao – APPCACAO.

Both PO 2 and PO 1 are members of the Peruvian Association of Cocoa Producers – APPCACAO. It was created to promote the image and quality of Peruvian cocoa around the world and to help strengthen the cocoa producer organizations. The former manager of PO 2, Hiderico Bocangel, is the former president of this organization. APPCACAO represents about 15,000 cocoa farmers spread over twenty SPOs nationwide. Through this organization, cocoa farmers have been involved in a number of public-private partnerships that have enabled them to implement numerous projects and trainings for the benefit of small farmers in the cocoa chain. Some of the major projects implemented are outlined in table 36 below.

## Table 36: Public-private partnerships facilitated by APPCACAO

With VSF-CICDA<sup>63</sup>, APPCACAO has executed a project named PROCACAO. This project sought to promote the competitiveness of the cocoa sector in Peru, through the implementation of centralized fermentation facilities, the training of farmers in quality cocoa farms, organic and Fairtrade certifications (certification costs and standards compliance training), improved administrative and accounting, and access to better sources of prefinancing. PROCACAO supported the work of twelve cocoa organizations in Peru and the creation and strengthening of APPCACAO.

Alternative Development Program - PDA, funded by USAID, has strongly supported the planting of cocoa in San Martin, in order to eradicate illegal coca crops in Peru and to support the development of business cooperatives.

The Ministry of Agriculture - MINAG, through the Directorate General of Agricultural Competitiveness has become the main government department supporting the Peruvian cocoa sector. This institution has become the facilitator of various public-private partnerships that have enabled the development of farmers and their cooperatives. In early 2011, the MINAG decided to promote the creation of the Technical Committee of the Cocoa and Chocolate chain for coordinating efforts in the sector.

Universidad San Ignacio de Loyola: "USIL" has joined forces to launch the National Training Cocoa and Chocolate Tasters Programme and thus form the first level promotions of specialist tasters of cocoa.

The APPCACAO in coordination with various support organizations is organizing the second fair of Cocoa and Chocolate Peru 2011. Within APPCACAO, there is also a National Women's Network and the National Cocoa Tasters network.

APPCACAO is seeking to position Peruvian cocoa in the quality markets and ensure the active participation of producers in the generation of development policies in the cocoa sector. See section 8 for more on APPCACAO.

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<sup>&</sup>lt;sup>63</sup> Agronomos y Veterinarios sin Fronteras – Centro Internacional de Cooperación para el Desarrollo Agrícola

• Coordinadora de Pequeños Productores de Comercio Justo (CNCJ).

The CNCJ is an institution that brings together small producers working within the Fairtrade system in Peru. The Coordination represents more than 60,000 farmers spread over thirty six national Fairtrade certified organizations. It aims to ensure a fairer deal for small farmers in Peru, supporting their livelihoods and local development. Fairtrade International did not have any role in creating and establishing the CNCJ, but responded to the initiative of several Fairtrade certified SPOs in Latin America, which formed the Latin American Coordination of Fairtrade and were supporting the appointment of national coordinators. Through this organization, producers have made efforts to provide feedback to Fairtrade International for the improvement of the Fairtrade system (e.g. in reviewing the latest version of minimum prices for cocoa, together with APPCACAO, so that a proposal is made to Fairtrade International on this subject). The CNCJ is financed by contributions from its members, but also receives support from partner institutions and development agencies such as the "Junta Nacional del Café", APPCACAO, VSF-CICDA and Central Coffee and Cocoa in Peru

Consorcio Cacao Amazónico (CCA).

CCA was formed by several cooperatives, Tocache, Divisoria, PO 1, PO 2 and "Industria Mayo", (producer of the chocolate brand "La Orquidea") in 2008 to give added value to the cocoa produced by the cooperatives beginning with production of liquor and cocoa mass, butter and powder. In September 2010 the CCA launched a new brand of chocolates made with cocoa from the region of San Martin.

Through this consortium, the cooperatives have proposed encouraging and developing agricultural and agribusiness diversification of cocoa, plus strengthening trade and production lines of the five member organizations. They also promote the production of fine cocoas and implement modern techniques of fermentation and economic operations, financing, marketing and industrialization of cocoa and other products of its members.

# Box 17: Conclusions on the plausible outcomes and impacts of Fairtrade on negotiation, advocacy, and networking

Fairtrade has provided the opportunity for the Fairtrade SPO cooperatives to access credit for the cocoa harvest, through international organizations such as Progreso, Alterfin, Rabobank, Root Capital, among others. Many of these companies pre-finance Fairtrade cocoa contracts. Today, thanks to the confidence of local financial institutions, the SPOs have managed to make arrangements to receive credit lines from private banks which allow them to meet their capital needs, especially during harvest periods. This is a clear difference with the non-Fairtrade SPO's, which have limited or no working capital - they do not have not access to either national or international credit and are capital-dependent on the exporting companies.

PO 1 and PO 2 have helped to form and lead producer networks associated with the Fairtrade system and dedicated to the development of cocoa sector in Peru, such as APPCACAO, the National Coordinator of Fairtrade (CNCJ), and the Consorcio Cacao Amazonico (CCA). These networks have worked alongside international and national agencies to implement programmes aimed at improving production and quality cocoa in Peru, and increasing international competitiveness. Fairtrade has had a very indirect influence in this sphere, rather contributing to developing markets, levels of sales and profitability of the SPOs. Dedicated Fairtrade networks have been formed largely with the aim of influencing the strategic direction of Fairtrade International itself, rather than for advocacy within Peru.

#### **7.12 Producer Organization services**

One of the main strengths identified by the managers of the two Fairtrade SPOs are the services they provide to members, which have evolved in quality and quantity over the years, as they have become more consolidated in the market and have participated in public-private partnerships that invested in production and the formation of the committees. According to the Fairtrade Premium investment report of PO 1, it is

evident that the Fairtrade Premium has been a major source of funding for the organization enabling it to provide services to members.

According to interviews with the cooperative manager, directors and focus groups, PO 1 currently provides the following services to its partners:

- *Income*: Improving the income of the members through higher prices than the conventional market through the 'reintegro' mechanism, which is determined by sales and profits of the cooperative, through the 15 per cent annual return on bonds of contributions from members, and from bonus accumulated earnings (every 5 years). Although, individual producers do not know in detail the mechanism for calculating these payments, their delegates are well informed because they form part of the decision-making process. To inform producers about these issues, there are 2 mechanisms that are: "Comites de fortalecimiento" or strengthening committees<sup>64</sup> and cooperative annual meetings<sup>65</sup>. According to the focus groups, the 'reintegro' payment is one of the services most valued by members. In the non-Fairtrade organizations, according to their managers, there are no bonus payments, only single payments at the time of delivery of the cocoa. Members are not really aware of the comparison between bank interest rates and the level of annual return on cooperative shares but the former is currently higher<sup>66</sup>.
- Technical assistance: Programmes of technical assistance and training to improve production have been provided (see section 6 for details on technical assistance). The cooperative has managed projects to fund a team of technicians, and the focus of the training has been on improving quality.

Although there are technical assistance programs of other institutions that reach all cocoa farmers in the region (members and non-members), as the focus groups reports, these programs are geared more to increasing production and productivity, rather than raising quality. These include:

- Income generating projects: Productive projects to diversify income include, for example, the construction of a plant for the production and export of grated coconut. Another project is the production of raw sugar, buying sugar cane from the members in small quantities for processing and sale in the local market. Other major projects are reforestation and planting of rubber. All members have the opportunity to participate in these productive projects;
- *Investment in infrastructure and equipment:* PO 1 invests 50 per cent of profits in the construction of infrastructure and acquisition of equipment (motorbikes, trucks, etc.);
- *Medical services*: Sometimes medical services are provided when cooperative meetings are held to take advantage of the members being brought together in one location. For example, a doctor might be brought to provide care, in partnership with mobile hospitals (private or state);
- *Credit:* The contribution fund is used to make loans to members, for which the strengthening committee (see note on previous page) makes assessment of ability to pay. The maximum is 10,000 PEN with a 3-month grace period, 1.7 per cent of interest rate monthly and a maximum payment

<sup>&</sup>lt;sup>64</sup> It is the highest authority of the central committees formed by the president of the board of the Central Committee, the delegate of the central committee at the general assembly, members of the central committee belonging to any of the organs of government of the cooperative, responsible collection of the committee and the technical responsible of PO 1 for the area.

<sup>&</sup>lt;sup>65</sup> Cooperative meetings attended by the leaders and the manager to report in detail the commercial, economic and financial situation of the cooperative, as well as on-going projects and future prospects.

<sup>&</sup>lt;sup>66</sup> At the time of writing, inflation in Peru is below 3 per cent, and interbank interest rate below 5 per cent (Central reserve bank of Peru). In other words, shares in the cooperative accrue an income more than 3 times superior to that which would be achieved by savings in the bank.

period of 15 months. If the partner has a good credit record the interest rate is reduced. Between 2006 and 2010, loan volume increased 11 times, i.e., increasing from USD46 million from USD 534 000.

324,542 95,314

2008

Figure 36: Change in credit volume, PO 1 (USD) 2006 - 2010

Source: PO 1 records

2006

46,226

2007

- Funeral insurance: The producer receives 1,500 PEN in the event of death of the member or his/her spouse (the cost is 30 PEN/year);

2010

2009

- Collection and marketing of cocoa: This is operated with funding from Rabobank and Continental Bank. In 2010, for all crops, PO 1 spent 8 million PEN;
- *Investment in tree planting:* Project "My Retirement", provides members with timber and medicinal trees, so that in future years they can benefit from the sale of the timber;
- Prizes and gifts: At Christmas all producers benefit from the Christmas bag, which includes products such as Christmas cake, chicken and other items which are important at this time of year. Also raffle prizes to recognize and encourage the efforts of members, depending on the quantity and quality of cocoa delivered to the cooperative.

The cooperative gives an endorsement of members to have access to the purchase of certain equipment in the local commercial houses or loans at regional financial institutions.

#### PO 2 offers its members the following services:

- Technical assistance and training: Provided to all its members, through its technical team, which has allowed the development of members' skills in managing production, improving quality, and conducting harvesting and post-harvest management of coffee and cocoa;
- Cultural centre: PO 2 has an Ecological centre, built with funds of the Fairtrade Premium, whose auditorium has a capacity for 100 people. The centre has been used for the cooperative General Assemblies, trainings, meetings, various events, cultural exchanges, internship services, food and lodging (with a capacity to accommodate 20 people). As of 2011, the SPO intends to create an agricultural cooperative institute using this infrastructure (its purpose would be to train extension workers specialised in coffee and cocoa);
- Seeds: Provision of quality seeds and clones. They have two gardens for producing clones;
- Quality: Marketing of cocoa on high quality markets helps to improve income for producers
- *Processing of cocoa:* producers deliver cocoa beans in "baba" in the fermenting centres and the cooperative is the responsible for fermenting the beans to guarantee quality;
- Advances for harvest and fertilising: with funds from the pre-financing of Fairtrade sales contracts, and agreements with the national bank loans;
- Participation in organic and Fairtrade certification programs, and access to markets;
- "Reintegro": the bonus payment at the end of the harvest, according to the volume delivered;
- Partnerships: Various partnerships with agencies and international cooperation for the implementation of projects that benefit members;

- Revolving fund: This revolving fund is used to provide loans to farmers for composting and post-harvest activities;
- Diversification of crops and income of the partners.

The services provided by cooperatives to their members (especially the ones linked to the final quality of the cocoa) seem to have had a positive impact, because these SPOs have managed to get their members' cocoa into very competitive retail chains and it is valued as a high quality product (in a short time <sup>67</sup>), achieving top awards. Some of these services are directly linked to Fairtrade: part of the means for the construction of the processing infrastructure and part of the technical assistance service are financed through the Fairtrade Premium. Access to finance is also facilitated by the fact that the SPOs are Fairtrade certified and have advance contracts from their clients.

It should be noted that many of the services provided by cooperatives, especially the technical assistance offered, do not yet reach 100 per cent of the members (communication from the manager of PO 1). Further, this assistance relies partly upon external financing, so there is a sustainability issue: if these external funds are no longer provided, there could be a substantial decrease in the level of assistance provided. The Fairtrade Premium provides for some of the technical assistance, but it is not sufficient to cover training and advisory needs. The manager of PO 1 insisted on the fact that, to try and lower the risks associated with a possible reduced level of technical assistance, the organization has been working on increasing the knowledge base of some farmers within each committee on quality issues in production, harvesting and post-harvest, so that they could take on this responsibility, without necessarily being supported by a technician.

A high degree of satisfaction is perceived amongst members at both Acopgro and PO 2 with the services received from their organizations. Most members are very committed to and value the cooperative to which they belong (focus group discussions).

The focus groups of Alto del Sol, Saposoa and Bagazan of PO 1 recognize and highly value the services offered by their SPO. For example, in the case of the committees of Alto del Sol and Saposoa, where producers mentioned the delivery of forest plants (timber and medicinal trees under the umbrella of the project called "my retirement"), the farmers said that although they do not yet represent great economic benefit, they will in the future be an important benefit to their family and the environment. For producers of Bagazan, the SPO services are also perceived to be good. Through technical assistance they have been able to improve production and quality and all of them have access to timely credit services, as well as funeral insurance. Most farmers clearly associate Fairtrade with markets, and the 'reintegro' payment with the Fairtrade Premium, but only delegates and board members have a more complete overview of the interaction between Fairtrade and their SPO.

In the focus group discussion with Fairtrade producers from Saposoa, access to agricultural insurance was mentioned as a possible new service which would be helpful to provide them with cover for periods of crop losses when the climate is not favourable and yields are low (it does not seem to exist in the area). They propose that part of the Fairtrade Premium could be placed in a contingency fund to be used as agricultural insurance.

To visualize the impact of Fairtrade on the SPOs on this issue, we have to compare with non-Fairtrade organizations, and according to interviews with managers of these organizations, the services offered to its members include the following:

- commercialization of cocoa, limited to the volumes required by the exporter and the capital that they will provide to the cooperative;

<sup>&</sup>lt;sup>67</sup> PO 2 started working on cocoa in 2006, and in 2009 one of its sample won a prize at the Chocolate fair of Paris; the same year, PO 1's cocoa (Alter Eco "Noir intense force brute" dark chocolate), won the 1<sup>st</sup> place in a blind tasting of 24 dark chocolates bars organized by Que choisir magazine in France.

- the non-Fairtrade SPOs do not have centres of fermentation, so producers deliver the dry (more or less) fermented cocoa;
- non-Fairtrade SPOs have agreements with credit organizations so that members have access to personal credit and the association guarantees payment with the delivery of cocoa;
- non-Fairtrade SPOs do not have their own technical team, but their members benefit from the technical assistance programme of the PDA (which will end in 2012). The management at both the non-Fairtrade SPOs manage an organic certification programme (with support from NGOs).

Fairtrade impact has been achieved in terms of the improvement in the quantity and quality of services provided by the Fairtrade SPOs, because they have a greater opportunity to access and manage external resources and have funds of the Fairtrade Premium to invest, which has enhanced services provided and increased the recognition and trust of the members in the SPOs. The non-Fairtrade SPOs, despite having access to various services through the PDA, have more limited financial and human resources and have not been able to increase their services to members to the extent that the Fairtrade ones have.

#### Box 18: Conclusion on the plausible outcomes and impacts of Fairtrade on SPO services

The services provided by the SPOs to their members have evolved in quality and quantity over the years, as they have been increased their market access and participated in partnerships, which in turn have enabled them to invest in production and in their committees. In PO 2 and PO 1 the most important service provided by the organization is the marketing of cocoa to the Fairtrade market, which has increased member incomes. The payment of the 'reintegro' and credit services is also appreciated by members. Technical assistance programmes, financed in part by the Fairtrade Premium, have increased productivity and have contributed to improved product quality according to managers. Investment in infrastructure for the fermentation of cocoa ensures product quality and reduces the work at the farm level. Fairtrade has helped to improve the SPO services, many of which have received Fairtrade Premium investment. All of the services provided by the cooperatives have served to strongly position the SPO to achieve recognition and trust from their members. In addition, most of the services are fairly sustainable except for the technical assistance, as they are an investment (and not an expense) for the SPOs, ensuring sustained growth in the supply of cocoa and should lead to increased sales and the maintenance of adequate levels of profitability for the cooperative. Climate change may make the demand for technical assistance greater in the future.

## Box 19: Summary of conclusions on the plausible outcomes and impacts of Fairtrade on producer organizations

Cocoa production in Peru has grown very sharply in recent years, especially in the region of San Martín, which has allowed private organizations and companies to increase their capacity for collecting the product and offering it to the market. Fairtrade has had positive impacts on producer organizations. Firstly, producers in Fairtrade SPOs seem to have increased their productivity more than those of other producers in the region. Secondly, the Fairtrade SPOs are growing rapidly in terms of the number of producers who benefit from Fairtrade sales. Five years ago this was only 5 per cent. In 2011, 7 per cent of cocoa farmers in the region are participating in Fairtrade. In terms of volume sales, in 2005 sales of the Fairtrade SPOs represented only 9.7 per cent of regional production, but in 2011 this figure had risen up to 15.1 per cent. A reason for this increase in volume sales is because more producers want to be part of Fairtrade SPOs, which gives them the opportunity to access reliable markets; another reason is that members have increased their cocoa production. Over the past 6 years, over 2,000 families of these organizations have benefited from marketing their products through the SPOs and are getting prices on average 15 per cent higher in 2010 than those producers who are not in the Fairtrade SPOs (see paragraph 6.1).

PO 1 invested USD 381,240 of the Fairtrade Premium between 2007 and 2010 of in activities and services to its members, which has given greater credibility and confidence to the organization in eyes of its members. 28.1 per cent was spent on direct payments to the producer as a part of the 'reintegro' at the end of the year. 15.8 per cent has been spent on technical assistance, which translates into higher productivity and

product quality. 38.1 per cent of the Fairtrade Premium was spent on infrastructure to ensure high quality cocoa, which has contributed to better prices for farmers. 7.3 per cent was spent on achieving certifications and 10.6 per cent was spent on productive projects to diversify the income of the producer. The amount invested of the Fairtrade Premium between 2007 and 2010 represents 30.3 per cent of the profits earned by PO 1 in the same period. Between 2005 and 2009, PO 2 increased its capital to USD 104,561, while PO 1 increased its capital to USD 1.5 million. Most of this capitalization is attributable to Fairtrade, which corresponds to the profits generated by cocoa exports. This evidences the confidence of the members in the cooperative who understand that having a financially strong organization provides them with a stable marketing channel and a long-term market. Fairtrade has enabled the case study SPOs to have solid structures - financially, administratively and organizationally - as they have statutes, regulations and comply with regular audits, which gives them more credibility with the members.

Between 2005 and 2010, both organizations have sold more than 4,000 MT of cocoa beans on the Fairtrade market, which is over USD 11 million. Fairtrade has given both organizations the opportunity to reach markets, which would have been much more difficult to achieve if they had not been Fairtrade certified. However, the case study SPOs perceive a significant challenge to their position from the activities of Fairtrade certified Peruvian private exporters that are beginning to sponsor Fairtrade group certification of small farmers. The existing Fairtrade SPOs have worked hard to develop a presence and recognition in the market, but have fewer resources with which to compete for trade. There may be benefits in extending Fairtrade access to a larger number of producers via the private Fairtrade certified exporter companies, but it is not clear if the existing certified producers would lose significant sales, or whether the new entrants would be overly dependent on the exporter buyer. Fairtrade has provided the opportunity for the Fairtrade SPO cooperatives to access credit for the cocoa harvest, through international organizations. This is a very visible difference with the non-Fairtrade SPO's, because they have limited or no working capital, they do not have access to either national or international credit and are capital-dependent on the exporting companies. Fairtrade has helped the producer organizations to improve their services to members. Much of the Fairtrade Premium is invested in these services and they seem to be provided efficiently by the SPO managers. All of the services provided by the cooperatives increased their legitimacy in the eyes of their members.

## 8. IMPACT OF FAIRTRADE ON LOCAL AND NATIONAL DEVELOPMENT

#### 8.1 Fairtrade and local cocoa prices

As discussed in section 6, SPOs tend to exert an upward influence on local prices in the communities where they have established committees. This was confirmed by all of the producers interviewed. However, the reach of both SPOs is not sufficient yet to influence prices regionally and we could not gather information on communities where there is no Fairtrade committee regarding the impact on prices paid to farmers.

### Box 20: Conclusions on the plausible outcomes and impacts of Fairtrade on local cocoa prices

Fairtrade does have an upward influence on local cocoa prices within the communities where there is a Fairtrade SPO committee – which benefits both members and non-members – but information is not available on the variation in prices paid by intermediaries in other locales. It appears unlikely that the reach of both of these SPOs is sufficient yet to influence prices on a regional scale.

#### 8.2 The global reputation of Peruvian cocoa

Appcacao, the umbrella organization of cocoa producer organizations, has a central mission of promoting the image and quality of Peruvian cocoa abroad and supporting the representation and strengthening of its members. It was created in 2004 with nine members. Out of its current twenty-one members, thirteen are

Fairtrade organizations<sup>68</sup>, and of these, nine are also producing Fairtrade coffee. All Fairtrade cocoa organizations (except Cocla) are part of Appcacao. The Appcacao executive secretary believes that Fairtrade has contributed to its mission of promoting quality cocoa, because a substantial part of the Fairtrade Premium in the case study SPOs has been invested in infrastructure to improve quality. The president of Appcacao from 2008 to 2011 was the general manager of PO 2, and many of the persons active in Appcacao activities are staff from the member organizations.

Samples were selected from several Fairtrade producer organizations for submission in the Paris Professional chocolate fair cocoa competition in 2009. In the Latin America section of the competition, of the forty prizes available in total, six went to samples from Peru, and all six came from Fairtrade producer organizations (2 from PO 2, and 1 from PO 1). Although this has not yet led to new orders, it has definitely put Peru on the map of producers of quality cocoa. Fairtrade SPOs have been pioneers in this movement to produce higher quality cocoa and in building a reputation amongst the chocolate industry.

# Box 21: Conclusions on the plausible outcomes and impacts of Fairtrade on the global reputation of Peruvian cocoa

Fairtrade SPOs – the case study SPOs and others – have played a key role in the cocoa umbrella producing organization in promoting the quality of Peruvian cocoa on global markets. The investments from the Fairtrade Premium in infrastructure which has led to quality improvements is also an important mechanism by which Fairtrade is contributing to the profiling of Peruvian cocoa for quality markets.

### 8.3 Sub-regional and national economy

Both SPOs are major economic actors of the sector and the region. They employ personnel, buy goods and services, and bring in important funds from overseas. Turnover between 2008 and 2010 (million USD) is presented in table 38 below. Fairtrade is an integral part of the strategies of both SPOs for the next few years. The managers from both SPOs report that Fairtrade has contributed to their level of sales and activity, and has helped to strengthen them as economic actors.

Table 37: Turnover of PO 2 and PO 1, in million USD

	2008	2009	2010
PO 2*		2.5	
PO 1	4.1	4.2	6.1
Total		6.7	

Source: PO 1/PO 2

\*For PO 2, the turnover comprises its coffee activity, which is also Fairtrade for the most part.

In 2009, the combined turnovers represented just below 1 per cent of the regional GDP, which means that both SPOs are sizable local enterprises<sup>69</sup>.

<sup>&</sup>lt;sup>68</sup> Cepicafé (Cepicafé itself and 2 of its members), Ceproap, Aprocao, PO 2, PO 1, Tocache, Divisoria, Naranjillo, Pangoa, Satipo, Quinacho, Cacvra, coop. Alto Urubamba (which is part of Cocla)

<sup>&</sup>lt;sup>69</sup> Regional GDP of 2,257.26 PEN, according to "Carpeta Estadística Georeferencial Departamento de San Martín", Direccion general parlamentaria, March 2011

# Box 22: Conclusions on the plausible outcomes and impacts of Fairtrade on the sub-regional and national economy

The case study SPOs are both sizeable local enterprises, accounting for just below 1 per cent of regional GDP with their combined turnovers. Fairtrade contributes to their success by supporting their capacity building as organizations.

### 8.4 Producer organizations and public and private investment

Because of their dynamism, experience and presence in the area, both SPOs attract public funds, either to finance projects or to finance investment. Fairtrade brings greater credibility in the eyes of investors and partners: giving the SPOs capacity to co-invest (often from Fairtrade Premium funds), making it a more stable and profitable commercial entity (with relatively stable markets), and giving it an indication of good management. For example, in the community of Saposoa, the regional government invested 300,000 PEN (over 100 000 USD) to build a processing centre. PO 2 had a three year agreement with INCAGRO for a project called "Producción de café de alto valor en Roque" (production of high value coffee in Roque, which is one of the areas where PO 2 is present). Funds for projects often materialize only on the condition that the SPO cofinances the project or investment, and often this co-finance comes from Fairtrade Premium funds. For example, in the INCAGRO project, PO 2 co-invested 57,000 USD from Fairtrade Premium funds between 2008 and 2010.

PO 2's 2011 plan for the use of its Fairtrade Premium earmarks almost 30 per cent of the funds available for co-financing projects. The amount of co-finance is usually 20 per cent, meaning that each dollar of Fairtrade Premium invested by PO 2 is matched by an additional four dollars. One of the projects co-financed by PO 2 is the building of a coffee processing plant: 34,000 USD are invested by PO 2 representing 20 per cent of the total cost of 170,000 USD.

Currently, PO 2 sub-contracts the processing of its coffee to Cepicafé, another producer organization in Northern Peru (prior to 2011, it was subcontracted to a coffee exporter in Lima). The processing plant is in Piura, a full days' travel from Tarapoto/Lamas. Being able to process locally will enable PO 2 to monitor quality more closely, which is not necessarily easy when sub-contracting (there is actually a strong lack of trust in this regard, with fears of high quality coffee bags exchanged for others, *percentage* of waste being overstated to increase margins, etc.). Even if there may sometimes be a "pride to build" motivation, i.e. each organization wanting to have its own facilities, precisely controlling coffee processing can be a profitable operation for a SPO

Private investment also exists, although on a smaller scale. It less often requires a co-investment from the SPO. Private investors will often be NGOs or clients. For instance, in PO 1, Tcho, one of its clients, set up a system to remotely monitor the fermentation of its cocoa beans, in a dedicated processing centre.

Many NGOs choose the SPOs to execute projects. Sometimes the SPO itself is a target of the NGO's activity (i.e. projects to strengthen the SPO itself), but often the SPO is used as a vehicle to target other populations (other local farmers in the case of some PDA projects, or indigenous communities in the case of part of the Pur Projet reforestation project), as the SPO is best placed to implement the project.

Table 38: Funds collected by PO 2 from 2008-2010

Organization	Year	Amount	Object
Progresso (Netherlands)	2007-2010	200 000 USD	Consolidate diversification activities
			with organic cocoa in agro-forestry
			systems
Pur projet (France)	No data	No data	No data
Transfair Minka	2010		Improvement of technical
(Luxemburg)			infrastructure for cocoa in Sisa valley

# Box 23: Conclusions on the plausible outcomes and impacts of Fairtrade on the sub-regional and national economy

Because of their dynamism, experience and presence in the area, both SPOs attract public funds, either to finance projects or to finance investment. Private investment also exists on a smaller scale. Fairtrade brings greater credibility in the eyes of investors in terms of their stability and management capacity.

### 8.5 Territorial development

PO 2 and PO 1 are both less formally engaged in territorial development than other Fairtrade organizations in other parts of the world. This is partly due to the relative efficiency of the state: schools exist in almost all of the communities that they cover and they also have electricity, education is free, roads are being built, etc. There is also a system of participatory budgeting within local authorities. Although it is not perfect, it allows citizens and the civil society to point to specific needs within a community, and to address them. However, in the more isolated areas, such as Alto Huallaga where PO 1 is present, the SPOs play a particular role. By linking them better to the sub-regional capital and to outside partners, these communities are better integrated and more visible at a local level.

PO 2 is very involved in supporting farmer-to-farmer exchanges. The cooperative regularly receives visits from groups of farmers from other regions of the country, who come to learn specific methods, in particular in cocoa cultivation or processing. The cooperative is also trying to position itself as a tourist destination. A centre which can accommodate visitors (as well as conferences, etc.) has been built from Premium funds. It is regularly used by international visitors (groups of students from the USA, for instance). The SPO is trying to develop other activities based on agro-tourism (e.g. visits to coffee and cocoa farms) using the opportunity of proximity to an airport and natural parks.

## Box 24: Conclusions on the plausible outcomes and impacts of Fairtrade on territorial development

The state is relatively efficient in San Martin in terms of provision of services and infrastructure and participatory budgeting exists within local authorities. While not perfect, this situation means that the SPOs might not be as active in territorial development compared to Fairtrade certified SPOs elsewhere in the world. However in more remote regions they are helping to link producers to sub-regional capitals and external partners. PO 2 plays a strong role in farmer-to-farmer peer learning, facilitating visits from farmers from elsewhere in Peru and is building a role as host to international visitors and tourists.

## 8.6 Local and national policies

Because of its activity and presence, Appcacao has become a recognized partner by the Peruvian authorities (Ministry of Agriculture, Ministry of Commerce). It was not possible to attribute particular policy changes to this relationship within the course of this study, but the former president of Appcacao reported that when policies concerning cocoa are discussed, there is a mechanism by which cocoa producers are informed and represented, which would not have been the case in the past.

One particular critical issue which had been on the agenda of the cooperative movement in Peru for a couple of years was the cooperative law (the piece of legislation defining how cooperatives may function). An ongoing dispute existed between the national tax authority (Sunat) and several important cooperatives in which they disagreed over the interpretation of the cooperative law, and how cooperatives should be taxed. The tax authority viewed cooperatives as regular businesses, which should pay income taxes on their profits, while most cooperatives considered that their activity is rather a collective activity of economic actors too small to undertake on their own the sort of business that cooperatives undertake on their behalf (so that farmers should be the ones the income tax was claimed from, if their income reached sufficient levels, but not the cooperatives). After the dispute continued for some time, the tax authority began claiming arrear taxes from several well-known big cooperatives, which could not pay and were on the verge of bankruptcy. This law was amended last May, and cooperatives are now no longer liable for income tax or sales tax (GST/VAT) on business undertaken with their members<sup>70</sup>. This decision was strongly lobbied for by the JNC (Junta Nacional del Café), which represents over 40 coffee SPOs, amongst them a majority of Fairtrade SPOs (including PO 2). This dimension of impact is very indirect, and not directly related to cocoa, but it is important to mention because Fairtrade has played an important role in the Peruvian coffee sector (in 2007, close to one third of all Fairtrade coffee sold in the world came from Peru)<sup>71</sup>, and this law will now have a much larger impact for smallholder cooperative members beyond those who lobbied for it.

### Box 25: Conclusions on the plausible outcomes and impacts of Fairtrade on local and national policies

Coffee sector cooperatives lobbied to change a particular tax law to the benefit not only of coffee cooperatives, but also other cooperatives, including cocoa producer cooperatives. Fairtrade has been very active in the Peruvian coffee sector and so indirectly, has supported cocoa cooperatives and their members. Approaca is a recognised partner for the Peruvian authorities and as explained earlier, the case study SPOs are strong members of this network, their own strength improved by engagement with Fairtrade.

# Box 26: Summary of conclusions on the plausible outcomes and impacts of Fairtrade on local and national development

At a territorial level, any development impact of Fairtrade happens through the SPO. Fairtrade contributes to strengthening the SPOs, which can in turn contribute to: i) controlling local prices; ii) promoting an image of quality internationally; iii) enabling the SPOs to be leading actors in the regional economy; iv) encouraging investment into the SPO and the communities they work with due to enhanced credibility. Both of the SPOs studied are attracting projects and partnerships, in part because of the confidence their history with Fairtrade gives to potential partners ('the honeypot effect'). Fairtrade assesses these organizations and contributes to their positive external image, which is very important for attracting the kind of partnerships or financing described. With the additional resources brought (directly or indirectly) by Fairtrade, SPOs can also invest time and (human) resources in structures such as unions or representative organizations, work together to be able to propose policies, and influence the legal context in which they are operating, as could be witnessed with the cooperative law. This in turn contributes to development, regionally or in some cases nationally given the network of Fairtrade SPOs in the country.

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<sup>&</sup>lt;sup>70</sup> http://www.juntadelcafe.org.pe/documentos/jem/NL.jpg

<sup>&</sup>lt;sup>71</sup> L'impact du commerce équitable labellisé auprès des petits producteurs : bilan des premières études réalisées, Max Havelaar France, April 2009

#### 9. THE IMPACT OF FAIRTRADE ON ECOSYSTEMS AND NATURAL RESOURCES MANAGEMENT

It has not been possible to explore in great depth the impact of Fairtrade on ecosystems in Peru, and the scale effects that could exist. But the research team has explored reported changes in terms of a number of dimensions likely to have an impact upon ecosystems and natural resources: smallholder practices, areas of cocoa cultivated, organic production, reforestation and sustainable agriculture, pollution and health risks, vulnerability and hazards, and water quality.

The cultivation of cocoa and many other agricultural products in Peru and much of Latin America is led by the smallholder sector. Smallholders have traditionally managed agro-forestry production systems with a variety of crops for their own consumption and for sale. Many small producers have traditional local knowledge about conservation agriculture, but many of these methods have been lost and often agricultural export models have been promoted as the development pathway in Latin America. In many ways the SPOs are seeking to promote sustainable agriculture in their communities by promoting agricultural practices that increase productivity, while also preserving natural resources and the environment. Organic, Fairtrade and other certifications have criteria and standards that seek changes in agricultural practices with the aim of increasing sustainability.

## 9.1 Fairtrade standards and producer practices

The cooperative PO 2 developed an environmental plan and environmental policies in 2009 as part of compliance with the standards for Fairtrade certification. An individual was appointed responsible for the following functions:

- Develop the environmental plan
- Execute the plan-level environmental committees
- Track and monitor the environmental compliance plan annually
- Report annually to the board and management on progress in implementing the plan

Through the environmental plan, the cooperative wants to implement an Environmental Management System (EMS), which creates an efficient process for the processing of coffee, cocoa and sugar cane, minimizing and preventing environmental impacts related to productive activity.

Increasing climate variability is widely reported in the region, and has already affected the coffee and cocoa crops. For example, in 2010 in the region of Lamas, coffee yields have reduced by up to 55 per cent. PO 2 has implemented the following actions to try to mitigate the effects of climatic and environmental change:

- Ecological zoning of crops (coffee, cocoa and sugar cane);
- Identification of protected areas;
- Implementation of production practices that promote soil conservation;
- Improvement of soil fertility with application of organic matter;
- Training of technical and ecological community promoters, who are responsible for following up on farms for compliance with production standards;
- Reforestation campaigns;
- Implementation of a module for the production of organic fertilizers to improve production and farm productivity.

The implementation of an environmental policy in the cooperative has increased the awareness of producers and encouraged them to adopt practices that favour conservation of natural resources. Short-term results are still difficult to see (or to differentiate from practices linked to organic production), but the fact is that with each new environmental programme put in place (organic production, reforestation, EMS) driven by a client/market or donor, environmental issues gain a higher profile within the SPO.

### 9.2 Area of cocoa cultivation

Over the past 5 years, 71 per cent of the Fairtrade producers of the two case study organizations have increased their cocoa growing areas. 28 per cent have retained the same production area and just 1 per cent has decreased the area of cocoa cultivated. The average cocoa growing area is 3 hectares per producer (household questionnaire survey data).

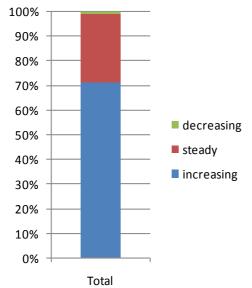


Figure 37: Change in areas of cocoa cultivation over last 10 years, PO 1 and PO 2

Source: Data from household survey

Conventional systems involve production practices that contribute to the erosion of soils, deforestation and pollution of natural resources. Most producers within the two SPOs are within the organic certification programmes, and new producers on entering these SPOs commit to changing their practices (for which they receive training and follow-up).

Conventional practices imply:

- Slash and burn for planting
- Cutting forests to expand the agricultural frontier,
- Cocoa monoculture,
- Some use of chemical inputs to control pests and diseases,
- Little or no fertilization

Producers who are certified organic and Fairtrade have incorporated recovery-oriented and soil conservation practices, reforestation, and crop improvement. Among the most common practices required by organic certification are:

- Production of organic fertilizers,
- Compost and liquid fertilizers,
- Implementation of live and dead barriers for soil conservation,
- Waste management.

The good practices required by Fairtrade certification are:

- Integrated pest management
- Safe use and handling of pesticides and other hazardous chemicals
- Soil and water sustainable management
- Conservation and protection of watersheds and streams
- To avoid negative impacts on protected areas and in areas with high conservation value

When implementing these practices, producers and technicians do not differentiate whether a particular practice corresponds to one or other certification, but a management plan is developed based on the requirements of the farm and the mitigation of environmental impacts that may be occurring in the area.

The implementation of best practices has served as motivation and example for non-Fairtrade SPOs, who also promote these practices. The international demand for organic cocoa has directed the support of the PDA to implement training and organic certification programmes in these non-Fairtrade SPOs.

The main method of promoting production practices is through the technical assistance programme, which is available to cooperatives. In both case study SPOs, the Fairtrade Premium has financed part of the technical assistance team, the rest of the funding has been provided by different NGO programmes. The methodology used by the technical teams of both SPOs is that of "Farmer Field Schools" through which they train promoters in every committee, who are responsible for disseminating the production practices and supporting the producers in their area. In the case of PO 2, until 2010, technical assistance was funded from an agreement with the PDA, but in 2011 they are planning to look for other funding sources. Within non-Fairtrade organizations, the mechanism for disseminating good production practices is similar, since most of these organizations have agreements with the PDA programme for technical assistance. In PO 1, in addition to the technical team, another mechanism for dissemination of good practices on production has been the issuance and dissemination of booklets, which are detailed and didactic on Fairtrade and organic production practices.

If a producer who is not a member decides to join the organization, after applying and paying the registration fee, there is a probation year, during which the technical assistance team of the cooperative provides training and monitoring work on the farm. During this first year the new member sells his/her product as conventional cocoa, and receives the same price as others, but not the 'reintegro'. After this first year the new member enters the organic certificate and sells his/her production as organic Fairtrade, and is entitled to the 'reintegro' payment as well. In this process, there must be commitment from the producer to comply with the new production practices.

### Box 27: Conclusions on plausible outcomes and impacts of Fairtrade on farming practices

In 2009 as part of the corrective measures for Fairtrade certification the PO 2 Cooperative prepared an environmental management plan, which proposes an Environmental Management System. This promotes an efficient process for the processing of coffee, cocoa and cane sugar, preventing and minimizing the environmental impacts related to productive activity and climate change issues. The implementation of an environmental policy in the cooperative has increased the awareness of producers to adopt practices that favour conservation of natural resources. It is still too early to establish concrete results from this policy. There was a 15 per cent difference (in 2010) in the price paid to producers between the prices paid by Fairtrade organizations and the prices paid in local market, which encourages producers to meet the standards of organic and Fairtrade.

Over the past 5 years, there has been an expansion of cocoa farms for members of the two SPOs, in which organic production practices and environmental preservation measures are put in place. More and more producers take on these best practices with greater responsibility and environmental awareness, as was evident in all discussion with SPO members (board members, focus group discussions). Producers who are certified organic and Fairtrade have incorporated recovery-oriented and soil conservation practices, reforestation, and crop improvement measures. The implementation of best practices has served as motivation to and an example for non-Fairtrade SPOs, which also promote these practices. The international demand for organic cocoa has directed the support of NGOs (Solidaridad) and exporters (Amazon Trading) to implement training and organic certification programs in these non-Fairtrade SPOs.

It is difficult to precisely state how far Fairtrade has created environmental impacts, because many of the changes came from the implementation of organic certification. Fairtrade has encouraged the SPOs to promote and disseminate these more environmentally-friendly farming practices, since both cooperatives have invested some of the resources of the Fairtrade Premium in technical team and certification compliance programmes.

Dual certification (organic and Fairtrade) is a strategy which provides greater scope in the market for SPOs. PO 1 is Fairtrade certified since January 2005 and because their customers have demanded dual certification, they also achieved organic certification the same year, so as to enter the European market. On the other hand, PO 2 obtained Fairtrade and organic certification in 2002 for coffee, but only achieved this for cocoa in 2005 (when they began buying members' cocoa).

The market segment for dual certified (organic + Fairtrade) product is the one that attracts better prices and it is also the one with greater volumes. So the link between Fairtrade and organic is articulated through the market: there is demand (and price) for both, and they work hand in hand. Both case study SPOs have sought organic certification for all their members, although not all members are yet certified organic, due to the strong growth of both SPOs. Each new member joining the organization enters a transition process and after one year becomes part of the certification programme.

All organic production practices have been disseminated in the communities and are conducted by certified and conventional producers, as well as some producers who are not members, because in many communities they are invited to participate in the trainings. Many of these practices are used by conventional farmers, but not with the same technical level of expertise as producer members (focus group discussions).

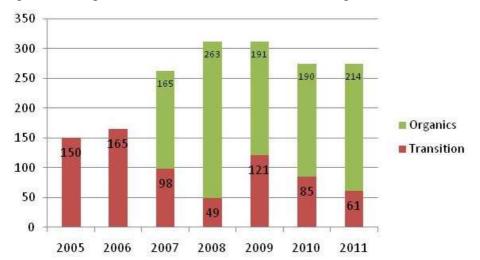
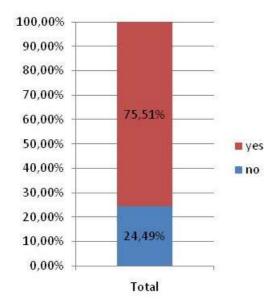


Figure 38: Changes in number of smallholder farmers with organic certification in PO 2

Source: PO 2 records

PO 2 began with 150 farms in transition in 2005 and by 2007 there were 165 certified organic farms and 98 in transition. Currently it has 214 certified organic farms and 61 in transition. According to the individual household survey, 75.5 per cent of members of both organizations are certified organic. The other producers are in transition or are new producers.

Figure 39: Certified organic producers 2010, PO 1 and PO 2

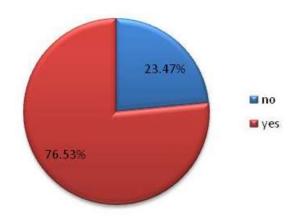


Source: Data from household survey

In addition to changes in the number of producers certified as organic, it is critical to assess how far conversion to organic production has led to changes in farming practices. All members of PO 2 and PO 1 have been properly trained to carry out practices that help to improve the production, conservation and regeneration of soils, and to preserve forests and water sources. Many of these practices were introduced to comply with organic certification, as well as Fairtrade. Before that, producers did not practice them because of a lack of awareness.

One of the most common practices is the use of live and dead barriers to prevent soil erosion. According to the household survey, 76.5 per cent of Fairtrade SPO producers in the case study use this practice because their crops are on slopes. Producers who do not follow this practice are usually those who have their crops on flat land or in certain cases are new producers. The soil conservation practices are generally attributed to the producers that are certified Fairtrade and/or organic. As the case study SPOs have increased new members to the system, the soil conservation practices have been increasing in the region. To directly measure ecosystem health would require more in-depth ecological monitoring, but management practices are an important indicator of the direction of travelin terms of environmental impact.

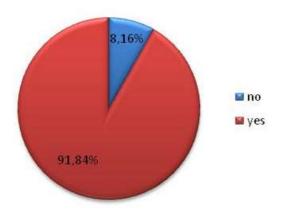
Figure 40: Construction of retention walls on slopes by producers PO 1 and PO 2



Source: Data from household survey

One of the most important and significant changes in farming practices by producers in PO 2 and PO 1 is the planting of forest trees as a strategy for reforestation and for future income generation through the sale of timber. According to the household questionnaire survey data from producers, 91.8 per cent have planted forest trees on their farms.

Figure 41: Tree planting for selling wood in the future by producers in PO 1 and PO 2



Source: Data from household survey

PO 1, through its project of reforestation and carbon capture, commonly called "My Retirement", which has been underway since mid-2008 in alliance with the French company Pur Project, provides native forest plants such as cedar, mahogany, capirona, and shaina, as well as exotic teak and pink cedar, which will generate future income to producers. Through this project PO 1 wants to recover degraded areas and to promote the diversification of production and income through the sale of carbon credits to offset emissions of greenhouse gases (GHG) from European countries. The project goal is to install 1.5 million trees by 2013. From 2008 to 2010, 471,737 trees have been planted on 2,100 hectares. This is not a change directly attributable to Faitrade, except possibly for some technical assistance funded by the Fairtrade Premium, although this Pur Project company was founded by former managers and the former president of Fairtrade company Alter Eco, which is one of the clients of PO 1 (through Pronatec).

250.000 900 800 200.000 700 **Frees installed** 600 150.000 500 400 100.000 300 200 50.000 100 0 0 feb-10 dic-08 jun-09 dic-09 jun-10 dic-10 -Trees installed 18.603 32.390 56.080 149.848 214.216 -Hectares 274 167,6 291,1 838,8 527,9

Figure 42: Numbers of Trees installed with the Project "My Retirement" - PO 1

Source: PO 1.com.pe/

In PO 2, between 2007 and 2010, 181,550 trees have been planted – an average of 43,300 plants per year. This has been achieved through the project 'Consolidation of diversification activities through the cultivation of organic cocoa in agroforestry systems and environmental recovery of watersheds of Sisa Valley and of Cerro Escalera in the mountain blue, San Martín Region', which has been funded by the Progreso Fund and the Doen Foundation (both from the Netherlands).

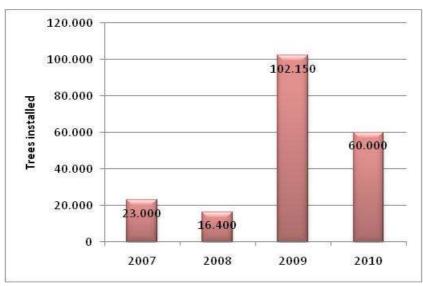


Figure 43: Trees planted 2007 - 2010, PO 2

Source: Report of environmental plan PO 2

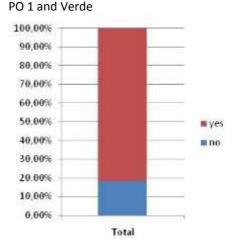
Fairtrade has no direct involvement in the reforestation projects, such as Pur Project in PO 1 and the project funded by the Doen Foundation Progress in PO 2. But Fairtrade has promoted environmental management

plans within its standards, which have served as a guiding framework to manage and implement these projects. Most producers of PO 1 and PO 2 practice composting, as a soil improvement measure and to raise the productivity of cocoa and other crops. Initial soil tests are made to determine the requirements and deficiencies in soils. Depending on the results, jointly with technicians from the cooperative, a plan for fertilization and composting is made and the cooperative provides them with the inputs required at low prices. Currently 55.1 per cent of producers buy and use some form of organic input for improving production, while other organic and non-organic producers do not conduct soil tests or are awaiting the results of purchase inputs. On the other hand, 92 per cent of farmers on their farms produce and use compost, biol72 and other organic fertilizers. These practices are very rare outside the two Fairtrade SPOs, and fertilization of cocoa in general (organic or chemical) is very rare in the region, according to the cocoa manager at PO 2.

Figure 44: Purchase and use of organic fertilizers, PO 1 and PO 2

yes 55,10%

Figure 45: Producers using compost,



Source: Data base of individual household survey

Source: Data base of individual household survey

PO 2 constructed a small plant for the production of bocashi and bioferments (two types of organic fertilisers). To date it has produced 5 MT of bocashi and more than 2,500 litres of bioferment using microorganisms: this has been applied in demonstration plots of coffee and cocoa. Fertilization practices on farms are part of the strategy of SPOs promoting organic agriculture amongst their members and above all to improve levels of productivity and profitability of farms. Members of the non-Fairtrade SPOs with organic certification also undertake fertilization practices, but to a lesser extent, as they lack the appropriate control mechanisms or resources to follow up. Therefore, the contribution of Fairtrade in this aspect has been to promote the association of Fairtrade and organic through its standards (and in particular through the price differential).

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<sup>&</sup>lt;sup>72</sup> A liquid organic fertilizer.

## Box 28: Conclusion on the Fairtrade outcomes on reforestation and sustainable agriculture

In both organizations there is evidence of a strong orientation and awareness of producers, board members and technicians of organic production and conservation of natural resources. All organic production practices have been disseminated in the communities and are conducted by certified and conventional producers, even some producers who are not members, because in many communities they are invited to participate in the trainings. Many of these practices are used by conventional farmers, but not to the same technical level as producer members. The soil conservation practices have been taken up by the certified Fairtrade and / or organic producers, and as the SPOs have grown in terms of membership, it is possible to conclude that soil conservation practices have been increasing in the region. Fairtrade has no direct involvement in the reforestation projects, but it has encouraged the SPOs to develop environmental management plans which have served as a guiding framework to manage and implement these proposals. The contribution of Fairtrade has been to promote the principles and practices of organic production through its standards and economic incentives, which did not happen in non-Fairtrade SPOs.

#### 9.4 Pollution and health risks

Among the plans for organic production at each farm, producers should determine the manner in which they will manage waste to avoid contamination. All Fairtrade members have been trained in the following practices:

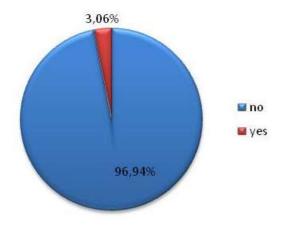
- Bio-degradable waste (e.g. household kitchen waste, coffee and cocoa husk) is made into compost: the waste is decomposed and then with appropriate treatment can be used as fertilizer for improving productivity.
- Non-biodegradable waste such as glass, plastic, cans and papers, is deposited in a small on farm "landfill".

Most producers interviewed in the focus group discussions report following these practices. PO 1 has also promoted the construction of latrines on all of its members' farms. According to members of the SPO, these practices were undertaken after the SPO obtained organic and Fairtrade certification. Focus group discussions indicated that the farmers found the first years of certification to be difficult, in terms of complying with the required standards, because of the increase in labour required on the farm, and also because the standards were seen as an imposition. However, after several years of implementation, they now value these practices and effects.

Producers interviewed in focus group discussions remained vague on the existence and characteristics of any health risks from production and its effects, and it is probable they only referred to potential disease risks from a lack of proper sanitation. The construction of latrines on farms as part of improved waste management may be associated with Fairtrade standards (although the standards provide guidance on how waste should be managed, but do not specify, for example, that latrines must be constructed, but the SPOs have interpreted them in this way), because it is not a common practice of non-Fairtrade producers. For producers in both the case study SPOs, it was clear that there is a high degree of awareness in the use of latrines in the farm.

In terms of the usage of agro-chemicals, according to the household producer survey, in PO 1 and PO 2, only 3 per cent of producers currently use some type of chemical input or pesticide - the other producers use organic products.

Figure 46: Use of chemical pesticides PO 1 and PO 2



Source: Household survey

According to the producers of San Juan Salado, before beginning the Fairtrade certification and organic production of cocoa, they used chemical inputs for maize, but since they started producing organic cocoa, they have stopped using chemicals and only use organic inputs on their farms. In some areas, such as Bagazan in the province of Mariscal Cáceres, producers have never used chemical inputs, as their lands are very productive and so organic Fairtrade certification has not had an impact and in some cases they receive organic inputs from PO 1. In the community of Ledoy, producers said that the large majority of members have never used chemical inputs, because they lacked the economic resources to purchase them and because they have now become aware of potential damage to the environment and people. The use of chemicals has not been a common practice in the area of Ledoy, especially for cocoa cultivation, mainly due to their high costs. Farmers who applied chemical fertilizers did so for short-cycle crops.

In the committee of Alto del Sol, the producers mentioned that before the cultivation of cocoa, at the time of cultivation of coca, many chemicals were used, so many people were affected by the chemicals. There was also a permanent risk for the children of farmers, their families and animals, as there were many cases of intoxication and poisoning. Farmers reported that although they have reduced their pesticide use, a large percentage of producers who are not associated with the SPO continue to use pesticides for short-cycle crops.

We do not have data on the health effects of these changes, other than the findings of the focus group discussions with Fairtrade farmers.

## Box 29: Conclusion on the plausible outcomes and impacts on pollution and health risks

The construction of latrines on the farm as part of proper management of waste is partly attributable to the Fairtrade standards, because it is not a common practice among non-Faitrade producers, and improved waste management is a Fairtrade requirement which the SPOs have interpreted at quite a high level. Producers of both case study SPOs demonstrated a high degree of awareness in the use of latrines in the farm. In both case study SPOs, only 3 per cent of producers currently use some type of chemical input or pesticide - the other producers use organic products. The use of chemicals has not been a common practice in the area, especially for cocoa cultivation, mainly due to their high costs, and those who did or are using them apply them on short-cycle crops. The Fairtrade SPOs have increased the awareness of producers about how to avoid agrochemical use, which may be reducing the negative health impacts of pesticides and other agrochemicals.

Any improvement in health conditions and living environment will mainly be due to producers who have a gained several years of experience in organic production practices, such as proper waste management, production of organic fertilizers, conservation practices of soil, watershed protection and streams etc. More detailed ecological monitoring is needed to assess the actual environmental impact of training and changes in agricultural practices.

### 9.5 Vulnerability to natural hazards

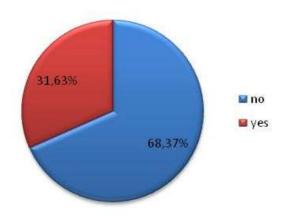
Natural hazards are significant in San Martin. One of the most important problems affecting crops in the region is the common occurrence of severe drought, which farmers report is becoming more intense each year. Cutting down forests has been a very common activity in the area, which exacerbates vulnerability to drought, and contributes to soil erosion and landslides on steep land. According to the producers of Bagazan, forest clearance has declined in the area of influence of this committee, because now the producers are dedicated to the production of cocoa, and have a good income, and are seeking to reforest the area to counteract erosion and drought. This includes many producers who are not Fairtrade SPO members, but who have become aware through other various training programmes and reforestation projects in the region.

PO 2 and PO 1 have their environmental management plans as part of corrective measures for Fairtrade certification. In these plans they identify protected areas, areas of vulnerability and areas requiring reforestation. Non-Fairtrade organizations do not have any such plans; so they cannot implement such projects. Therefore, Fairtrade has contributed to the SPO organizational focus on reforestation projects in sensitive areas and to mitigating the impacts of severe drought and advancing deforestation.

In times of drought another common problem is forest fires, due to burning by producers to make new plantings. Within the zones of influence of the PO 1 and PO 2 committees, this problem has decreased substantially. 68.4 per cent of the Fairtrade SPO producers interviewed say they do not practice slash and burn, but we do not have other data to compare with this figure for non-Fairtrade farmers.

For producers who are not certified organic or Fairtrade, slash and burn is a common practice for planting short-cycle crops, because it requires less labour than manual clearance of overgrown weeds and provides fertilization (from the ashes) – but it can cause fires and increase soil erosion. Producers of certified Fairtrade and organic SPOs have permanent training in these subjects, which raises the level of consciousness about such practices and risk of large fires – although more detailed ecological monitoring would be needed to establish whether burning has reduced.

Figure 47: Slash and burn practices PO 1 and PO 2



Source: Producer survey

Box 30: Conclusion on the plausible outcomes and impacts of Fairtrade on vulnerability to natural hazards

Fairtrade has contributed to SPO environmental performance by guiding them to focus their reforestation projects in sensitive areas and encouraging a focus on mitigation of the impacts of severe drought and advancing deforestation. Producers of certified Fairtrade/organic SPOs have regular training on these, and other environmental subjects, which raises their level of consciousness and may be reducing burning.

## 9.6 Water quality

In most of the towns where Fairtrade SPO committees are located, there is already access to potable water. Some communities, for example Saposoa, San Juan Salado and Huicungo, have good quality drinking water. In other villages such as Bagazan, Alto del Sol and Ledoy, the tap water is only chlorinated. In years when the winter is very strong (i.e. the rainy season), water sources and/or pipes can be damaged, but in dry years, water sources can dry up and decrease the amount of water available, so there are problems of temporary shortage. In areas where the cocoa farms are located, there is no drinking water for human consumption, so farmers usually carry water from the village to the farm, or use water from springs or streams that they boil and drink. It is not evident that Fairtrade has had any impact in the access to good quality water for Fairtrade producers or wider communities.

### Box 31: Conclusions on the outcomes of Fairtrade on water quality

Access to potable drinking water in Fairtrade SPO villages varies. In cocoa growing farm areas drinking water is not available. Fairtrade has not had any particular impact on access to good quality water.

Box 32 below provides a synthesis of the findings from this section relating to natural resources management, ecosystems and Fairtrade.

# Box 32: Summary of conclusions on the plausible outcomes and impacts of Fairtrade on ecosystems and natural resources management

Both PO 1 and PO 2 have invested in training producers to improve the quality of the cocoa they produce, and also in training them to conserve the environment through the uptake of more environmentally friendly farming techniques. Both organizations have several years of experience with organic certification and therefore producers, technicians and leaders are well trained in organic production systems. There are positive impacts and changes in production systems and environment in the areas of influence of Fairtrade cooperatives, due to the implementation of different practices, but many factors have contributed to these positive developments.

The implementation of environmental management plans in SPOs as part of compliance with Fairtrade environmental requirements serves as a guiding framework for organizations to direct their efforts to manage projects for reforestation and protection of natural areas. Fairtrade standards have also strengthened the awareness of producers to implement environmentally friendly production practices. As more members are joining the Fairtrade SPOs it seems likely that these practices are increasing in the region. The promotion and dissemination of good production practices have largely been accomplished through technical assistance teams, which are in small part funded by the Fairtrade Premium. The Fairtrade Premium has also helped producer organizations to leverage resources from other organizations to implement various programmes aimed at reforestation, crop improvement, etc. The implementation of good practices by Fairtrade producers has served as motivation and an example for non-Fairtrade SPOs, because they also promote such practices on their farms. Demand for organic cocoa in the world has directed the support of the PDA to support training and organic certification programs in these non-Fairtrade SPOs.

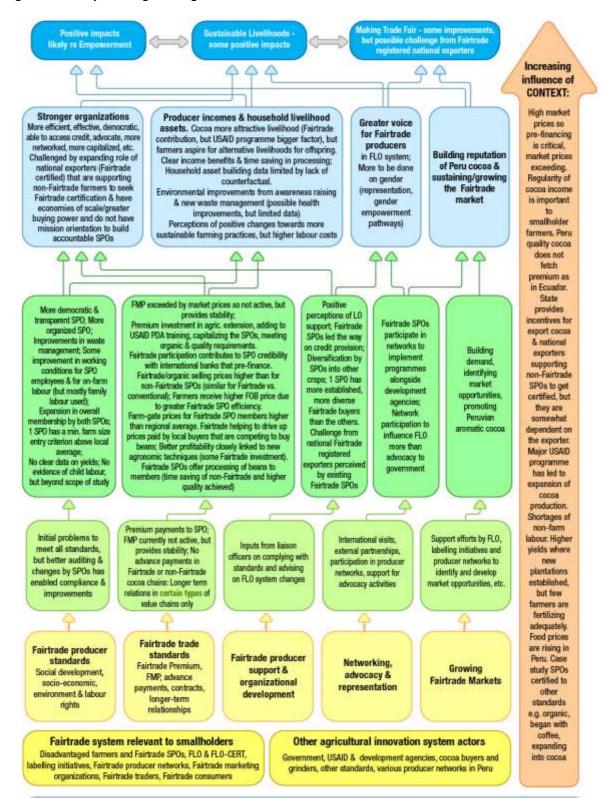
Regarding the use of the Fairtrade Premium in activities that generate impacts on ecosystems and natural resources, we can only highlight the promotion and dissemination of good production practices that they have largely been accomplished through the technical assistance teams. In preparing the investment plans of the Premium, Fairtrade SPOs have not prioritized environmental issues, perhaps because to some extent they are cooperating with other agencies in this arena.

#### 10. CONCLUSIONS ON THE THEORY OF CHANGE AND FINDINGS ON THE ACTUAL PATHWAY OF IMPACT

Earlier in the report, we presented a hypothetical theory of change for Fairtrade. We now return to this diagram in order to explore our findings, teasing out how Fairtrade inputs have contributed to outputs, outcomes and impacts in a causal relationship. Please see figure 48 below – the findings on the actual pathway of impact in Peruvian cocoa for Fairtrade. We also refer the reader to the more complex TOC produced in a participatory manner with one of the case study SPOs – see annex 2.

Figure 48 attempts to provide a visual summary of the findings of this in-depth study. Below we discuss each particular input. It is worth noting that the producer and trader standards remain fairly uniform across different contexts, but can still be interpreted differently by SPOs. However, the producer and organizational support and networking/advocacy/representation inputs are much more variable, not least because they are tailored to the specific context and the demands/interests of those involved. In terms of networking, advocacy and representation it is also perhaps more in the control of the SPO managers themselves, rather than Fairtrade International as to what takes place. However, this may be changing with the development of and support for the Fairtrade producer networks and with recent changes in Fairtrade International governance. The Fairtrade system also invests considerable resources in sustaining and growing Fairtrade markets.

Figure 48 Theory of change findings



Findings: Actual impact pathway for Fairtrade cocoa smallholders in Peru

#### 10.1 Producer standards, audits and liaison officer support for compliance

In general, the system of standards/audits/organizational support was perceived positively by those interviewed at management level, as an approach which allows improvement on the farm and consolidation of the organization.

A major outcome at the farm level from compliance with the standards, auditing and from LO support was the action taken to improve waste management, above and beyond what is required by the standards and their effects on the daily lives of producers. Beside the actual improvements resulting from changes in waste management, there is a pride in the fact that habits had been changed and things improved.

Some farmers interviewed in the focus groups mentioned that abiding by the environmental standards imposed by Fairtrade and organic (the two are often seen as synonymous, and the origin of requirements is rarely clearly traced) was a challenge. However, the producers were proud to have achieved the implementation of the environmental standards. This is possibly because it is the main set of standards with a direct impact on their daily activity on the farm.

At SPO level the largest perceived impact from the standards was the impetus given to the organization to adhere to its own rules, rendering it more accountable. Board members of the two SPOs who were interviewed, and the management teams, were appreciative of the fact that the Fairtrade certification system, over the last three or four years, was becoming more of a management tool for the organization and more process oriented, and less of a system of sanctions for unachieved results. While none of the interviewees expressed it as such, it would seem they were referring to the quality and the level of audits. Board members at PO 2 viewed the fact that Fairtrade certification had pushed the organization to become more organized as a positive outcome, with the process helping the SPO to function according to its own rules. During the initial phase of the organization, these rules were already laid down, but were not always followed. These changes have made the organization more transparent and accountable to its members.

The Fairtrade standards have made farmers more aware of their responsibility as employer when they hire casual workers, although it is unclear whether it has led to improvements in working conditions for on-farm labour (or to SPO employees). There is an increasing shortage of farm labour given the expansion of cocoa production, agricultural wages are rising and so mostly family labour is used. More research is needed to understand how these changes have an impact upon different members of the household along lines of gender. No evidence was found of worst forms of child labour.

One of the SPOs has a minimum entry criterion on the size of cocoa plantation, which is higher than the regional average, and this means that some smaller producers may be excluded from participating and from benefitting from Fairtrade, although it is not thought that this represents large numbers of farmers.

No clear data was obtainable on yields and the link to Fairtrade. Because many cocoa plantations have not yet reached maturity, this is a fairly complex task; and also different levels of technical training are provided – to a large extent by the PDA programme, but some training has also been supported by Fairtrade.

The services provided by the SPOs to their members have evolved in quality and quantity over the years that they have been certified, as they have increased their market access and participated in partnerships, which in turn have enabled them to invest in production and in their committees.

Fairtrade has helped to improve the SPO services, many of which have received Fairtrade premium investment. In PO 2 and PO 1 the most important service provided by the organization is the marketing of cocoa to the Fairtrade market, which has increased member incomes. The payment of the 'reintegro' and the provision of credit services are also appreciated by members, although the former can be quite limited. Fairtrade certification has enabled the SPOs to improve their access to credit, because it improves their ability to plan and their reputations in terms of credibility. Technical assistance programmes, financed in part (although particularly by the PDA Programme and other NGOs) by the Fairtrade Premium, have supported some improvements in productivity and product quality. The investment in infrastructure for the fermentation of cocoa ensures product quality and reduces the work at farm level. All of the services provided by the cooperatives have served to strongly position the SPO to achieve recognition and trust from their members —

and so Fairtrade has an indirect impact, through supporting improvements in services which then benefit all members. Most of the services are fairly sustainable except for the technical assistance, which are an investment (and not an expense) for the SPOs, ensuring sustained growth in the supply of cocoa and should lead to increased sales and the maintenance of adequate levels of profitability for the cooperative. Climate change may make the demand for technical assistance greater in the future.

Overall, the system of producer standards, audit and LO support appears functional and is achieving its aim of delivering increasingly efficient and accountable SPOs, which serve their members well. The non-participation of smaller cocoa farmers to one of the SPOs is not considered to be an issue, as it is equivalent to a proof of commitment to cocoa farming rather than a condition of capital, since there is no constraint on landholding locally. Similarly, the request for producers to be part of the organic certificate of the SPO does not appear as a limiting conditions, as it requires little change for the farmers, and the SPO then has more liberty to market its cocoa on various markets.

#### 10.2 Fairtrade Trade standard

#### **10.2.1 Fairtrade Prices**

Fairtrade minimum prices have been below market levels for close to 4 years. Up until 2010, the costs of production were covered by market prices. But with the recent increase of local wages, costs of production are now getting close to market prices.

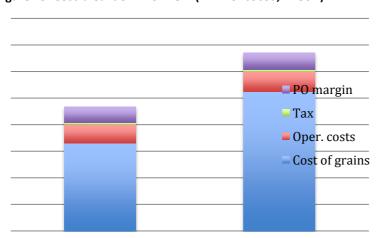


Figure 49: Cost breakdown for PO 1 (1 MT of cocoa, in USD)

Source: From PO 1 end of year balance for 2009; data for 2010 cost of cocoa beans, other costs are those of 2009

NB: These figures differ slightly from others presented earlier, as they are built from 2009 consolidated accounts (so all incomes are taken into consideration, plus stocks, and divided by volume of sales), when other figures are actual selling prices.

At the farmer level, costs of production are, on average, 4 PEN/kg (1.44 USD/kg), so costs have been covered as local prices have been higher for several years. However, it seems that other SPOs in other more marginal cocoa growing regions of Peru, have higher costs of production. One of the issues of Fairtrade pricing when markets are very high is that the Fairtrade reference (the FMP) becomes ineffective, although it will still provide security in case of market prices dropping. Given the rapid evolution of market prices, the principle of a "higher than market" Fairtrade price when market prices are above FMP would only cause greater difficulties in monitoring the application of this principle, and would only go a little way in providing greater security to the SPO. In this particular case, SPOs have little knowledge of trading prices of similar types of cocoa from other origins. SPOs have very little information on actual prices besides the international indicators (New York Board of Trade or London LIFFE indexes). Knowing what other SPOs are able to negotiate could strengthen

their bargaining position, and could help them to re-establish some transparency in actual Fairtrade contract prices.

There is no clear difference between the average selling prices of both SPOs and market prices, but for PO 1 the segment that attracts better prices is the Fairtrade and organic segment. Members of the Fairtrade organizations get a higher *percentage* of the selling export price than non-members (83 per cent against 72 per cent). However, this is not due to Fairtrade Prices, but to the greater efficiency achieved by the SPO, although this is achieved in part with Fairtrade support, and to the relatively stable markets they have access to – market conditions encouraged by Fairtrade, but not guaranteed. Producers thus receive higher prices on average than if they sold to conventional buyers and they have less work to do, because the SPO conducts the fermenting and drying (with infrastructural investment from the Fairtrade Premium in processing facilities). The difference is between approximately 2 and 17 per cent, although intermediaries try to match (or sometimes exceed) SPO prices. Wider impacts are being achieved in villages where Fairtrade SPO communities exist, because intermediaries try to match their prices. This is a similar finding to an earlier study on a fair trade cocoa scheme in Ecuador (Nelson, Collinson and Tallontire, date<sup>73</sup>) which found similar positive local market price impacts.

Farmers are positive about the stabilization of prices and a price regulation effect because of the SPO. Fairtrade contributes to this indirectly through capacity building of the co-operative rather than through direct mechanisms, and it is being highly influenced by the current high market demand and rising prices as well (at the time of study).

Fairtrade SPO members are paid higher prices partly because they sometimes receive money in one or two additional payments at the end of the season, which is decided upon by the cooperative managers and is drawn from Fairtrade Premium and from organizational profits. There has been some discontentment in the past with feedback from FLO-Cert that the Premium should not be used for individual payments, but this is not now considered an issue of major importance within the SPO.

Recommendations in relation to the FMP, Fairtrade International:

- Sets up an information system for Fairtrade contract prices (per origin and quality) which can serve as
  a reference to SPOs when negotiating prices (especially when market prices are higher than FMP).
   Conduct a study to explore how this system could be managed directly by Producer Networks
- Reinforce the existing systems for monitoring costs of sustainable production (COSP). Until recently, COSP data were collected at the demand of the Standards unit at FLO, when a price review was due (or in some cases when producers complain that a FMP is too low). Ideally, the system should not reactively collect this data but be proactive, so that the time necessary for a FMP revision can be substantially decreased, and its necessity can be assessed before SPOs become frustrated at it not appearing high on Fairtrade International's agenda. Under the leadership of the CNCJ and Appcacao, costs were collected from Fairtrade SPOs in the country, to respond to the demand by the standards unit. Therefore these organizations could manage such a monitoring system in the future, as they have permanent communication with all Fairtrade SPOs and already function as a forum to discuss Fairtrade cocoa related issues, on the condition that they can easily communicate with Fairtrade International (and be listened to) on this issue. This would be a new responsibility, and some (modest) funding might need to be allocated to it.
- When international prices are high and the FMP becomes ineffective for long periods of time, relationships between SPOs and their members are tested (members can be tempted to sell to someone else offering a good price, and the SPO cannot collect cocoa, or are least there is discontent over the level of price offered by the SPO). Similarly, the relationships between SPOs and their clients

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<sup>&</sup>lt;sup>73</sup> Nelson, V., Tallontire, A. and Collinson, C. (2002) Assessing the potential of ethical trade schemes for forest dependent people: comparative experiences from Peru and Ecuador. *International Forestry Review* 4, 99-110.

are also stretched (SPOs are struggling to collect cocoa and make enough of a margin; cashflow and credit become an issue; clients can rarely pay more as their own selling prices are based on lower buying prices and can rarely be increased easily), and between SPOs and Fairtrade International (the main "safety net" effect of Fairtrade disappears). Increasing the FTMP is not believed to be the appropriate solution to this problem, but some kind of replacement safety net should be looked into. Improved credit facilities could be an option (to make sure that SPOs can pay farmers at the moment of collection), or a temporary increased premium (possibly from pooled funds set aside for such a situation).

#### 10.2.2 Fairtrade Premium

Few comments were made about the Fairtrade Premium by Fairtrade managers, except that the tightening of accounting rules by FLO-Cert had imposed changes in its use: in the past both SPOs used to distribute part of the Premium to members, they had to stop it at some point (unless they traced the exact use by members, which was too difficult). So, instead, utilities are being redistributed to members (by PO 1), and the Fairtrade Premium is kept for other uses. PO 1 Fairtrade Premium investments totalled USD 526,083 between 2007 and 2010. The Fairtrade Premium amounts have largely increased each year at PO 2 and PO 1, but because of the rapid growth in membership are actually lower per head in 2010 compared to 2007.

In terms of the usage of the Fairtrade Premium funds, between 2007 and 2010 at PO 1 the total of USD 526,083 was split across a number of uses: individual payments to members (34 per cent), technical assistance (14 per cent), infrastructure (37 per cent), productive projects (10 per cent) and payment of various certification fees (5 per cent). At PO 2 no payments are paid to individual members, but there has been investment in cocoa infrastructure, technical assistance, and consolidating assets etc. In 2008 PO 2 spent USD 10,850 on cocoa infrastructure, to facilitate the collection and processing of cocoa. This investment in cocoa infrastructure is important as it helps farmers by reducing their labour. It is important to know more how these changes in labour demands interact with intra-household gender dynamics, to know if women and men are being positively or adversely affected.

In PO 1, when the Premium was redistributed to members, it was done on the basis of volumes of cocoa supplied to the SPO, which meant that bigger producers received a bigger share of Fairtrade benefits (whereas smaller producers may need it more). The current system in place in both SPOs can be considered fairer, as it prioritises needs to be addressed by the Premium funds; these needs are approved by the general assembly and are less biased towards bigger farmers.

#### 10.2.3 Pre-financing

Finance is needed to organize the smooth marketing of cocoa and is very clearly crucial for the SPOs. It is even more crucial in the present situation because of 3 factors:

- high cocoa prices;
- strong market demand for Peruvian cocoa (since the quality is comparable to other origins, such as Ecuador, but without the market premium that other origins fetch74);
- a strong financial incentive from the State to export cocoa: the "draw-back", by which exporters of "non-traditional export products" can claim a reimbursement of 5 per cent of the FOB value of the product exported (this *percentage* is supposed to slowly diminish over the years).

<sup>74</sup> Established fine cocoa origins (such as Ecuador) have had time, over the years, to be recognized on the market, and to value the quality of their cocoa with a (sometimes substantial) premium on top of market price (= quality or origin differential). Peru is a completely new origin of cocoa on the market, which is just starting to establish its credentials as a reliable producer of quality cocoa. This was also the case on the coffee market: despite producing high quality coffee (as was recognized on numerous occasions with prizes in competitions, etc.), Peruvian coffee sellers could not obtain premiums above NY prices (as countries like Guatemala or Colombia have for a long time), until 2011.

These three factors have combined to exacerbate the competition from intermediaries - this was reported by all of the committees interviewed. If the SPOs do not have strong loyalty from their members and ready cash to pay members at the moment they deliver their cocoa, there is a high risk that the cocoa from their members "escapes" or 'leaks' to other buyers, as does happen regularly (but with varying degrees depending on the strength of the SPO).

In both cases, the SPOs have managed to obtain the facilities needed from banks. Fairtrade clients represent a small *percentage* of their credit needs. As such, the Fairtrade standard on pre-finance is not functional, as the "Fairtrade payers" (in this case importers, but also relevant to exporters) do not provide any pre-finance. What SPOs use are the cocoa contracts in a three-way arrangement with international banks, or (only very recently) credits with local banks, guaranteed by mortgage. Consequently, only the sustained trade, and the existence of Fairtrade (as well as non-Fairtrade) contracts enables the SPOs to seek finance with international banks (with the past investment capacity of the SPOs - now materialized in buildings which can be mortgaged - being the most important factor for local banks).

But SPOs report that in times of uncertain high prices, it is very difficult to sign contracts for a year in advance (even without a fixed price in the contract): importers tend to have a "wait and see" attitude, and decide on contracts just before requiring shipment. This is why a mix of finance options (loans guaranteed by contracts, loans with local banks guaranteed by fixed assets, and revolving loans with international banks) is very important. The bigger and older cooperatives like PO 2 and PO 1 tend to have a well-established network of international partners, which were brought by support organizations, so it is easier for them to be identified by and to attract international banks. But the Fairtrade International system has so far been fairly passive on this vital issue for SPOs.

#### Recommendations:

- Set up a set of mechanisms to facilitate credit access for SPOs, with a monitoring of needs, to facilitate cashflow management. This might need to be adapted to country specific situations, but in any case, countries (such as Peru) where substantial volumes of Fairtrade activity takes places (in terms of volumes traded), and where consolidation of Fairtrade success is needed, should be a priority.

### **10.2.4 Export**

Strong concerns were raised by SPOs and other stakeholders about the competition between existing Fairtrade SPOs exporting cocoa, and the national Fairtrade exporters buying cocoa from Fairtrade SPOs and supporting other non-Fairtrade SPOs to seek certification. SPOs are often supported as a direct avenue for organizing and supporting small producers in the Fairtrade system and to enable them to have greater independence from exporters. The PO 2 members were particularly vocal on this point. Many of the SPO members (both PO 1 and PO 2) cannot understand why the exporters can participate in a Fairtrade certified supply chain. The exporters are certified as traders, and they engage with certified SPOs, but they do not have to buy all production from the certified SPO that agrees to work with them. The trader controls most of the market information, and the SPO is locked into a relationship, because they do not have the capacity, knowledge and contacts and perhaps confidence to manage the marketing side of the business. Exporters are primarily private companies which a commercial motivation and thus only likely to implement the bare minimum required by Fairtrade. They are less likely to seek to redistribute profits as a cooperative would seek to do, because a cooperative is accountable to members. Because Fairtrade allows the exporters to enter Fairtrade value chains, and because there has not been significant active efforts at the same time to achieve more equal and transparent relationships, Fairtrade is perceived by the case study SPOs to have 'taken sides'. The cocoa manager at PO 2, asked if anybody had ever seen an exporter build "cement pillars" in communities. In other words, the cooperatives feel that they are fulfilling a mission of local economic development, investing in infrastructure and services in the communities (and buildings), which exporters do not seek to fulfil. A thorough analysis could not be done within this study, but even if the price paid to producers is the same, exporters are very likely to be making slightly higher margins per MT of cocoa, with lower operational costs as their structures are much leaner and probably more efficient. Monitoring of this situation is important in Peru and support given wherever possible to ensure that the earlier pioneers do not lose out as Fairtrade expands and to enable them to be efficient, effective and competitive. A comparative analysis of the value chains in question is set out in the table below.

Table 39: Comparing relationships in different Fairtrade value chains in Peruvian cocoa

	SPO value chain	Exporter + SPO value chain				
Initiative of Fairtrade	SPO	Usually exporter				
certification		(often manages the certification on				
		behalf of the SPO, even if the SPO				
		owns the certificate)				
Scope of full Fairtrade	All activities of the SPO – includes	All activities of the SPO – exporter				
standards	export	mostly required to show proof of				
		integrity of payment				
Control of the value chain up to	SPO management (responding to	Exporter management				
export	SPO board)					
Accountability of the decision	To AGM	Exporter direction structure (SPO				
makers		AGM has no say)				
Price	SPO management	Exporter management (SPO rarely				
negotiations/management of		knows much)				
market information						
Capacity to negotiate credit (for	Generally limited	Generally good				
cashflow)						
Value added distribution	100% to SPO	Divided between exporter and SPO				
		<ul> <li>SPO does not have a say in what</li> </ul>				
		share it should get				
Relationship with corporate	Often inexistent (majority of buyers	Main type of client				
buyers	are small to medium companies)	Means that exporters often have				
		access to large markets				

At minimum Fairtrade International should monitor this situation, and commission research to establish how far smallholder cooperatives are being undermined, or whether they can survive the competition, and if others may benefit, with higher volumes being traded overall.

Other recommendations to tackle this issue more efficiently could be to set clear rules:

- checking for potential competition before certifying a new exporter in a producing country;
- seeking cooperation from other SPOs before letting an exporter into a supply chain (so that SPOs who know how to manage export could undertake it on behalf of others);
- designing an exit strategy when an exporter obtains certification, with a timeline (thus keeping exporters as a temporary solution rather than a permanent one)
- ensuring the SPO has direct relationship with the buyers, and that the exporter is transparent in terms of selling prices, etc. (so that the SPO is aware of and able to start a more direct relationship with its clients if it wishes to)
- making the exporter a service provider of the SPO (not a buyer the exporter exports on behalf of the SPO, but the relationship and financial negotiations are directly with the SPO)

See also previous Fairtrade International reports on "Unfair competition" produced by Albert Tucker and Christophe Alliot (presented to the board of Fairtrade International and producer networks in 2009), which include examples of unfair competition in Fairtrade value chains and recommendations.

#### 10.3 Business Facilitation

Fairtrade sales of both SPOs have increased substantially, but there are several contributing factors<sup>75</sup>:

- the growth in the sales of some Fairtrade clients (such as Alter Eco for PO 1)
- the absence of a market price differential for buyers, who can currently buy (and sell) Fairtrade cocoa and benefit from its positive image at a relatively low cost (i.e: they only have to pay the Premium amount, which is relatively low in view of the relatively good quality cocoa)
- the lack of a quality differential for most organic Peruvian cocoa (as opposed to other Fairtrade organic origins of aromatic cocoa such as Ecuador or the Dominican Republic).

More time would have been needed for the study to further detail these points. What can be said is that both Fairtrade SPOs have benefitted from a growth of the Fairtrade cocoa market, mainly in continental Europe, as well as a specialty segment in the US.

What can be observed from the export statistics is that there are few buyers of Fairtrade cocoa (3 in the case of PO 1), and all are importers (as opposed to brands). Commentators at a conference in Lima which the research team attended, said that SPOs had very little visibility amongst the final clients of their Fairtrade cocoa, and the market dynamics affecting it: they have good relations with the importers, but do not feel they understand the market enough to be pro-active on the Fairtrade market (e.g. finding new buyers, working better with existing buyers, having a stronger bargaining position etc.).

One particular issue was the market dynamics of different social and environmental labelling systems. SPOs react to demands from clients, but they do not feel they understand the implications enough. SPOs would appreciate it if the Fairtrade system could supply them with more market information, such as market trends, actors on the cocoa market and their relationships to Fairtrade, quality requirements and volumes traded.

Another area where information could be improved is on the identity and contacts of other potential Fairtrade clients (final users of cocoa as well as importers). It was also suggested that the CNCJ plays a facilitating role in the diffusion of that information so that it is available to all SPOs.

The challenge which the Fairtrade SPOs perceive is coming from Peruvian Fairtrade exporters is quite sensitive, and some importers and brands feel that, if not handled properly, it will only serve to bring prices down, from accrued competition between importers or brands, lowering their selling price, or competing on the market with the same cocoa. They argue that this can be a short-sighted strategy which might increase sales in the short-term, but in the medium term would lead to a more concentrated market. This is because the Fairtrade chocolate market is not yet solid enough to withstand too many actors, and the current trend may weaken the smaller players leading to concentration.

As all these concerns are valid, building a stronger and sustainable market for Fairtrade fine cocoa will require the Fairtrade system to better organize the circulation of information and facilitate the building of a sectoral strategy in which all actors feel empowered. This process has already been initiated by Fairtrade International with the development of expert roundtables to develop product strategies, and it needs to be further encouraged. The main challenge of this process will be to actually ensure that the strategies developed are intimately connected with supply chain actors' preoccupations.

### **Recommendations for Fairtrade International:**

- Set up a mechanism to regularly provide SPOs with information on Fairtrade markets and dynamics;
- Design a Fairtrade marketing strategy with the relevant SPOs;

<sup>&</sup>lt;sup>75</sup> It should also be noted that this growth is disconnected from the growth on the UK Fairtrade cocoa market, which is concentrated on West African origins

- Study how the CNCJ could play a facilitating role in this;
- Review the conditions of participation of exporters to Fairtrade supply chains: in particular, ensure that their participation does not jeopardize the position of existing Fairtrade SPOs, and achieve more transparency in the conditions of their participation in Fairtrade supply chains (so that these conditions are known to other SPOs);
- Study (and support) other mechanisms to ensure that the competition between supply chains with exporters and without are more balanced;
- Support economic research which can assess how far Fairtrade smallholder co-operatives are faring where they face competition from new entrants, which have support from large traders, i.e. comparing Fairtrade cooperative value chain relations with more commercially oriented Fairtrade value chain models. This type of question is a critical issue for Fairtrade International and requires more dedicated analysis, potentially through a longer-term joint research.

#### 10.4 Networks

Both SPOs have been active in national level networking, and have collaborated with development agencies in the implementation of development programmes. These activities have proved beneficial for both SPOs and have also been beneficial for the networks themselves, for example the Peru Fairtrade national producer network. Fairtrade producers are gaining greater voice in the Fairtrade system through the emergence of stronger networks. However, representatives from these Fairtrade SPOs have not been very active in the Latin American Fairtrade Producer Networks to date.

#### 11. STUDY CONCLUSIONS

#### 11.1 Fairtrade Impact

The overall goals of Fairtrade International are producer empowerment, sustainable livelihoods and making trade fair. As one moves along the impact chain or theory of change it becomes more difficult to provide answers without ambiguity, particularly in a study that by necessity focused its resources on Fairtrade producers and thus does not include a counterfactual (except for management level interviews). Further this is a snapshot study and so not able to draw strong comparisons over time, except based on recall of participants. Hence this study has used a methodology aimed at providing as much rigour as possible, given the resources available, and that identifies *plausible* outcomes and impacts.

Producer empowerment has been supported through a number of avenues, particularly the strengthening of the SPOs as well as the services they provide to members and through the support for democratic organization and Fairtrade market expansion. The investments from the Fairtrade Premium have also led to positive outcomes (e.g. investment in processing facilities which reduce the workload for members). The greater efficiency of the SPO, achieved in part with the support of Fairtrade, enables greater returns to producers, and quality improvements have been achieved in a number of ways (e.g. through the centralized processing) – again improving returns. As the FMP has not been active it has not had an effect. It appears that the critical factors which have led to increased producer empowerment are: a) the standard/audit/LO support framework which led to organizational strengthening; b) the growth of Fairtrade (and other) markets, in a context of remunerative market prices.

In terms of sustainable livelihoods, the data is limited on asset building outcomes. The influence of the PDA programme and the expansion of cocoa production due to this external support and high market demand obscure somewhat the influence of Fairtrade and make it difficult to tease out specific Fairtrade impacts, but there are some positive indications of households improving their access to key livelihood assets

In terms of 'making trade fair', Fairtrade is supporting the existing SPOs to participate in Fairtrade and achieve benefits, and their consolidation and dynamism on the market would clearly have been more challenging without Fairtrade. But there is a need for greater access to market information and direct contacts with Fairtrade buyers. The entrance of Peruvian exporters into the Fairtrade value chain presents a significant threat to the existing Fairtrade producers, because of the power inequalities which mean that the support

they provide to SPOs will be at a minimum level, they will not be accountable to the farmers as cooperatives are, and because of their greater buying power. It is important to scale up Fairtrade International operations to extend benefits to more producers, but care needs to be taken so that it does not happen at the expense of the pioneering producers. This is a central mainstreaming challenge for Fairtrade International and this report cannot provide a definitive answer, because much depends upon the overall trajectory of Fairtrade International and the broader Fair Trade movement. But it is important to protect existing small producers in a proactive manner, so as not to undermine progress to date and it is important that the concerns of pioneer Fairtrade co-operatives is adequately responded to.

Finally, some lessons emerging from this study in terms of design and methodology of impact assessments are set out below, including recommendations for Fairtrade International for future work in this field.

#### 11.2 Future Fairtrade impact studies

Balancing and simultaneously meeting learning and accountability functions of impact studies is not always straightforward. Depending on the priorities for each particular study, a different design may be necessary. It is important that Fairtrade International responds robustly to the on-going debate around learning and impact assessment and evaluation, and in particular the rise of the 'evidence agenda' which largely seems synonymous with quasi-experimental designs and questionnaire based methodologies. It is important that the approach adopted by Fairtrade International is based on full understanding of the designs, methods and issues at stake and that these fit with the overall ethos of Fairtrade and with an appropriate spend of resources on such studies.

Allow sufficient time to plan the study, particularly where household questionnaires are envisaged. If an impact assessment is to produce robust statistical data it is important to ensure that there is sufficient time and resources to establish an appropriate design and methods to the particular situation in question. There is no one 'right' design and methodology. Consultation with statisticians is important to ensure a rigorous design, if that is what is required, and to ensure that the correct inferences are drawn from the data.

Critically, for impact assessment it is widely thought that a counterfactual is necessary to draw the comparisons of what might have happened without a particular intervention. It is important to recognize that there may be structural differences between the Fairtrade organizations and the counterfactual ones, but in statistical surveys this cannot be pre-judged. Counterfactuals may not be possible or desirable, but they also do not necessarily imply questionnaire surveys, which are often assumed to be the case. It is also possible to design studies that are based on the participatory generation of numbers. For example, participatory quantification of perceptions of change by SPO members is a neglected approach in Fairtrade monitoring and evaluation and there is scope for innovation. This should be combined with the monitoring of value chain relationships in a more systematic way — again drawing on participatory quantification of perceptions of change by key actors. It is important to provide sufficient time and resources to allow for field research with non-Fairtrade farmers as well as with Fairtrade farmers.

It is important to clarify the reasons for the selection of the Fairtrade SPOs to be included in the study. Usually the commissioning organization identifies which cases are to be studied, and it is important to provide the reasons for the selection. Longitudinal studies rather than snapshots are also important to try and identify how changes are occurring over time and to take adequate account of the changing context.

The use of the theory of change diagram and impact pathway findings in research can be useful in a number of ways. Initial development of generic diagrams which represent the theoretical causal linkages between inputs, outputs, outcomes and impacts (e.g. FLO, and/or in relation to a specific commodity in a particular context) can help to guide researchers in understanding intended impacts, and can be used in participatory discussions in the field as a research tool and for developing common understanding. Finally, in reporting, the TOC can be adapted into a findings impact pathway in which actual changes are summarized. This is a useful

communication tool as it can synthesize large amounts of information and show causal linkages<sup>76</sup>, as well as indicating the key contextual factors at play.

Value chain analysis<sup>77</sup> within such as study is critical, because it is now well recognised that the types of business models and power relations in different value chains shape local outcomes and impacts. But this kind of analysis, particularly where the commodity chain is complex, also requires adequate resourcing. Interviews with value chain players using pre-prepared checklists is an important element of the study, and systematic comparisons should be drawn in any analysis to reveal the factors in value chain relations that are influencing outcomes and impacts.

<sup>&</sup>lt;sup>76</sup> See new NRI working paper on using theories of change in impact evaluation and standards research, 2011, for more details, www.nri.org).

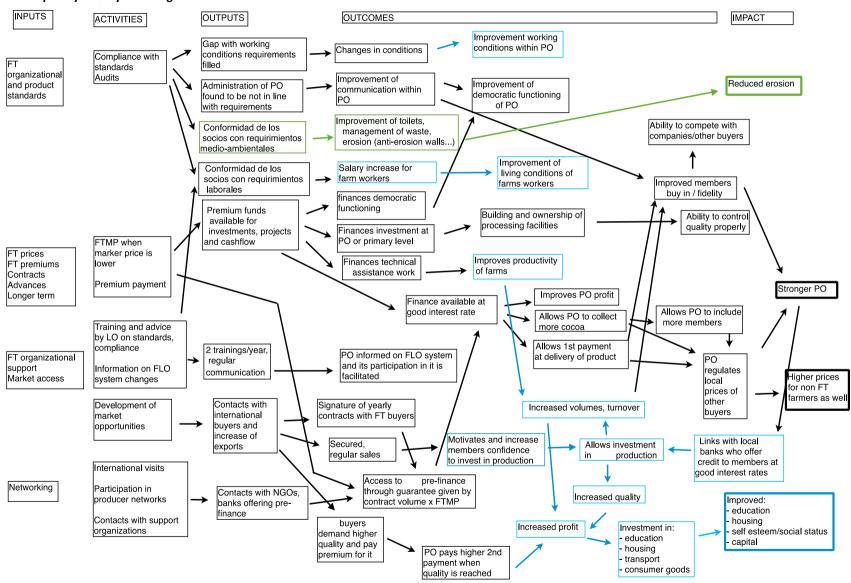
<sup>&</sup>lt;sup>77</sup> Value chain analysis looks at the chain of actors in a value chain, the relationships between them, factors influencing these relationships, and value distribution along the chain.

# **ANNEXES**

Annex 1: Timetable for the field research

Day	Date	Place	Activity
1	20 May	Lamas, PO 2	am: Meeting with PO 2 general manager and technical staff
			pm: Meeting with technical staff
2	21 May	Lamas, PO 2	am: Meeting with Chirapa committee
			pm: Meeting with ex-general manager
	22 May	Lamas, PO 2	
3	23 May	Lamas, PO 2	am: Meeting with Pinto Recodo committee
			pm: Meeting with board members, collection of documents from
			technical staff
4	24 May	Lamas, PO 2	am: Meeting with San Juan Salado committee
			pm: Meeting with Las Palmeras committee
			Closing meeting with study coordinator
5	25 May	Juanjui, PO 1	am: Travel from Tarapoto to Juanjui
			pm: Meetings with enumerators, general manager, and organization
			of community visits with technical staff
6	26 May	Juanjui, PO 1	am: Meeting with Bagazan committee and interviews
			pm: Interviews in Alto El Sol, Meeting with Huicongo committee
7	27 May	Juanjui, PO 1	am: Meeting with Ledoy committee and interviews
			pm: Interviews with Parajillo committee
8	28 May	Juanjui, PO 1	Interviews in Mojaras
	29 May	Juanjui, PO 1	
9	30 May	Juanjui, PO 1	am: Meeting with PO 1 Board members and accountant
			pm: Meeting with Alto El Sol committee, meeting with PO 1 general
			manager
10	31 May	Juanjui, PO 1	am: Meeting with Saposoa committee and interviews, meeting with
			La Gran Saposoa cooperative general manager
			pm: Processing of survey data and preparation of debrief
11	1 June	Tarapoto	am: Travel from Juanjui to Tarapoto
			pm: Meeting with PDA representatives
12	2 June	Lamas, PO 2	am: Meeting with El Dorado cooperative assistant manager
			pm: Debrief meeting with PO 2
13	3 June	Lima	Meetings with Avsf, Fairtrade International liaison officer, and
			Appcacao

**Annex 2: Participatory Theory of Change** 



#### **Annex 3: Farmer Survey Checklist**

### **Production:**

cocoa areas

production volume

other characteristics of producers (total land size, other main activities, size of family, number of seasonal employees)

Number of farmers processing cocoa themselves

Number of farmers who take their cocoa "in baba" to the SPOs processing facilities

Reason why some producer process themselves

Number of employees (permanent, seasonal (in # of months/yr))

**Evolution of farmer yields** 

Evolution of cultivated area (total, cocoa, food crops)

# Farm and family economics:

Level of income

Per cent of income coming from cocoa and evolution

Main other sources of income and evolution

Price received for cocoa (are there categories?) - paid by SPO or others

Per cent of cocoa sold to different buyers

Perception of stability of prices (more/less stable than before)

Perception of level of prices (better/worse than before)

Expenses for agricultural production (cocoa and others)

Producer perception of the evolution of their income level

Producer perception of the evolution of the stability of their income

Equipment of farm (tools, equipment)

Acquisition of land / forest cover cleared to cultivate more

Per cent of producers considering they face cash-flow deficits during the year

seasonal migration

## Education/future:

Level of education of head of family (others as well?)

Education level of producer children

Producer perception on their future strategy regarding specialization/diversification

Per cent of producers who consider their children will continue farming/leave rural areas

# Food security:

Estimate and evolution of food needs covered by auto consumption

Evolution of areas dedicated to auto consumption

Producer perception of the frequency of food deficit periods

Per cent of producers who give Fairtrade (or one of the fields it influences: price, services) as a reason to join the SPO

#### **Annex 4: Farmer Focus Groups**

### Miscellaneous:

mechanisms to share Fairtrade benefits (price and Premium) in the 1st level organizations

survival threshold

costs of production (organic/conv and Fairtrade/non Fairtrade)

Level of membership fees

access to land

isolation: distance and access to market and infrastructures

Specific premium projects activities (to be developed)

Per cent of producers who give Fairtrade (or one of the fields it influences: price, services) as a reason to join the SPO

Education level of producer children/change compared to before/has Fairtrade anything to do with it?

## Farming systems:

Technical itineraries (number of different activities)

Producer perception of the factors influencing the sources of income (overall composition) and their level

Producer perception on the evolution of the quality they produce, and the effect of quality on price

Perception of changes in production systems due to Fairtrade or to FT+organic

Existence of SPO policies to favour diversification and auto-consumption crops

### Family/farm finances:

Are there periods of deficit in the year? Perception of the causes of the deficits/periods of deficit

Solution to cash-flow deficits: advance of cash flow, credit, etc. (what is linked to SPO), interest rate, does being a member make a difference when seeking credit?

Do some producers process themselves? Reason why

Perception of level of prices (better/worse than before)

Producer perception of the evolution of the stability of their income

Perception of changes in living standards of families

# Working conditions (for producers + their employees):

Producer perception on the role of Fairtrade in the evolution of working conditions (amongst others through linkage with organic production)

Perception of the evolution of workforce needs and their actual sources (shared work, family work, wage work) (with and without FT)

Producer perception on the evolution of working conditions/difficulty of the work

Evolution of agricultural wages (level + perks (meals, accommodation, etc.))

# Relations with SPOs (services, satisfaction, etc.)

Per cent of producers who give Fairtrade (or one of the fields it influences: price, services) as a reason to join the SPO Producer support (buy-in) to the SPO's values

Evolution of services offered by the SPO to members (comparison before/after FT)

Producer satisfaction about these services

Satisfaction of 1st grade organization about these services (comparison before/after FT)

## **Environment:**

How is waste managed on farm

Building of toilets/what has been imposed by certification? Is it positive?

Number and type of existing good/bad practices in conventional systems

Changes in the use of inputs and pesticides?

Reduction in health problems due to the use of inputs and pesticides (producer perception)

Reduction of natural catastrophes risks: floods, erosion, landslides, fires, insect invasions, etc.

Evolution of water quality

Transfer of methods used by Fairtrade producers to non Fairtrade producers

# Annex 5: Women's farmer focus group

involvement in cocoa production (which activities)

involvement in SPO management/activities

changes since Fairtrade (make sure it's separate from changes since organic): amount of work, tasks, participation in community, contacts with outside, income

services from SPO: what they consider important

## Annex 6: On-farm worker focus groups

Both workers on farms and employees of SPO (in both cases they will be casual employees for a few months/year)

type of activities they undertake

other jobs they do during the year

changes since Fairtrade (make sure it's separate from changes since organic)

wage level (now and before)

differences in working/employment conditions with other jobs

#### **Annex 7: Key Informant Interview checklists**

### Local agricultural (or environment or other) services (government):

Difference between price paid by SPO to farmers and prices paid by other buyers (non FT)

Variation of SPO selling price compared to variations of market prices

Evolution of farmer yields (comparison in and outside FT)

Difference in access to land and to different types of territories identified

Difference in isolation: distance and access to market and infrastructures

Number of cocoa producers in the region

Total cocoa production in the region

Existence of a leverage effect between Fairtrade SPOs and others

Present and past role of coca regional economy and narcotraffic

Role of cocoa economy in the transition to a legal economy

Role of Fairtrade cocoa economy in this (maybe also discuss coffee)

situation regarding child work

Evolution of water quality

Evolution of natural catastrophes risks: floods, erosion, landslides, fires, insect invasions, etc.

Perceived role of SPO and Fairtrade in these evolutions

Localization of Fairtrade areas compared to sensitive zones in the region: water resources, high conservation value ecosystems (species or habitats), functional value landscape (erosion zones, etc.), cultural or religious, etc.

## NGOs with programs locally (present or past) or official cooperations (USAID or other):

Perception of the role of Fairtrade in evolution of services, improvement of SPO management,

Existence of a leverage effect between Fairtrade SPOs and others

Per cent of external stakeholders who have a positive opinion on the SPO

Existence of a leverage effect between Fairtrade SPOs and others

Present and past role of coca regional economy and narcotraffic

Role of cocoa economy in the transition to a legal economy

Role of Fairtrade cocoa economy in this (maybe also discuss coffee)

situation regarding child work

Transfer of methods used by Fairtrade producers to non Fairtrade producers

Evolution of water quality

Evolution of natural catastrophes risks: floods, erosion, landslides, fires, insect invasions, etc.

Perceived role of SPO and Fairtrade in these evolutions

Existence of a leverage effect between Fairtrade SPOs and others

### **Fairtrade International:**

PSR programme of support since 2005 (number of visits, object of trainings)

List of audits since 2005 and certification decisions

LO: same questions as above (NGOs)

### Representative organizations (APPCacao, CNCJ):

Perceived changes with participation in FT

Existence of a leverage effect between Fairtrade SPOs and others

Perceived influence of Fairtrade on evolution of quality/positioning on quality segment

## Annex 8: Household survey questionnaire

El hogar

Quien en el hogar es socio (titular) de PO 2/PO 1/otra OP:

Socio titular	Nivel de educación	Comité	Desde que año?	

(si varias personas del hogar son socias, asegurarse que la respuestas cobran el hogar entero y no solo la quien responde)

Numero de personas del hogar78 : adultos = niños (menos de 16) =

Cuantos niños tienen edad de ir a escuela primaria = Cuantos van =

Cuantos niños tienen edad de ir a escuela primaria – Cuantos van – Cuantos van e Cuantos van ganan un ingreso ?

Alguna vez ud produzco coca ?

# La finca

# 2.1 Areas cultivadas en 2010

	Total finca	Cacao	Café	Mais	Arroz	Pasto		Bosque natural
Area								
Evolución en	+	+	+	+	+	+	+	+
los 10	-	-	-	-	-	-	-	-
últimos años	estable	estable	estable	estable	estable	estable	estable	estable

otras produccio	nes:
coco: S/N	cuantos arboles:
yuca: S/N	
Sacha inchi	
frijoles	
plátano	
otro:	
¿Esta la finca ce	rtificada orgánica para unos productos: cacao, café, caña de azúcar, nuez de coco, otro?
Tenencia de la t	ierra:
propia con titule	0
propia con com	pra/venta
posesionario	
herencia sin titu	ılo

## 2.2 Volúmenes producidos en 2010

	Cacao (s	seco)	Café		Mais	Arroz	Plátano	Guineo	Sacha inchi
	Orgánic	Convencio	Orgánico:	Convencio					
	o:	nal:		nal:					
		kg	qq	qq	kg	kg			
	kg								
volución	+	+	+	+	+	+	+	+	+
n los 5	-	-	-	-	-	-	-	-	-
iltimos	estable	estable	estable	estable	estable	estable	estable	estable	estable
ıños									

# 2.3 Ingresos de venta

Lis ingresss de venta							
	Cacao	Café	Mais	Arroz	Plátano	Guineo	
Evolución en	+	+	+	+	+	+	+
los 5 últimos	-	-	-	-	-	-	-
años	estable						

2.4 Animales		

 $<sup>^{\</sup>rm 78}$  Live under the same roof and share food.

Animales	Numero	Evolución en los 5 últimos años
Vacas		Incremento /disminución/estable
Cuyes		Incremento /disminución/estable
Cerdos		Incremento /disminución/estable
Pollos		Incremento /disminución/estable
Abejas	colmenas	Incremento /disminución/estable

cuyes		1110101	nento / disin		in Catable					
Cerdos		Incremento /disminución/estable								
Pollos		Incremento /disminución/estable								
Abejas	colmenas	Incre	mento /dism	ninució	n/estable	5				
Venta de animales : Bodega : Actividad manual (ca Sueldo : Remesas/dinero env Venta de madera: Alquiler de terreno:	viado por parientes :		io ofuces 2							
_	del hogar a veces van a busc									
-	están en donde encuentran de ingreso incrementaron, o	-		n esta	hles dura	nte	los últin	nos 5	años	7
2.6 Equipamiento	ac mgreso morementaron, t	aisiiiiiuy	CIOII O IUCIO	ni esta	bies uui a	iii.C	. ios uitili	103	, anos	•
De cual equipamien	to dispone su finca :									
Equipamiento/herra		Propiedad p	ropia	Acceso estructu		través	de	otra	perso	
Burros										
Despulpadoras										
Cajones										
Motosierra										
Herramientas men (machete)	ores para manejar del	cultivo								
Ha vendido ud herra	nmientas durante los 5 últin	nos años	?							
	a incrementado, disminuido zado una(s) de la inversione	o ha sid			ltimos 5 a	año	s? en los	últir	mos 5	años,
Bienes	, ,									
Moto				•						
Celular				•						
Equipo de sonido				•						
Televisión										
DVD				1						
Antena sateliza										
Laptop										
Nueva tierra agrícola	a									
Animales grandes (d	le transporte, vacuno)									
Majorado la casa o a	añadido habitación			1						

Modulo beneficio café

Terreno urbano

Otro equipamiento agrícola	
Otro (precisar)	

## 2.8 Practicas agrícolas Practica une de las siguientes técnicas en su finca:

Producción y uso de compost

Compra y uso de fertilizante químico

Compra y uso de guano

Parcelas de café/cacao bajo sombra

Roce y quema para cultivos alimentarios

Barreras vivas/muertas

Instalación de arboles maderables para vender madera en el futuro

Instalación de nuevas parcelas por corte de bosque

Uso de pesticidas orgánicos

Uso de pesticidas químicos

Practica choba-choba

### 2.9 Cultivación de cacao

Cuantas personas están involucradas en la cultivación y cosecha?

Cuantas personas de la familia?

Cuantas personas por choba-choba?

Cuantos jornaleros?

## 2.10 Gastos agrícolas

Contrataron un crédito el año pasado ? Si es el caso, cuanto se gasto en actividades agrícolas (no contar inversiones) ?

Cuanto se gasto en 2010 por:

pagar jornales:

comprar equipamiento/herramientas:

reparar equipamiento:

vacunaciones de animales:

compra insumos:

• • •

## 2.11 Ventas de cacao

vende ud el cacao fermentado/seco o en baba?

Ud fermenta a parte de su producción ?

Cuantas cantidades vende a quien?

	PO 1/PO 2	Intermediario
Cual % de su producción	NA	
Precio promedio por kg		

### 2.12 Autoconsumo

La producción de la finca cobre las necesidades del hogar :

- Totalmente (no hay compra de comida afuera)
- En gran parte
- En parte
- Muy poco

En los últimos 5 años, la parte de las necesidades de comida del hogar producido en la finca ha :

Aumentado/disminuido/es similar

Hay momentos durante el año cuando es difícil cubrir las necesidades de alimentación del hogar (con producción propia o comprando) ? S/N

En los últimos 5 años, la frecuencia de estos momentos difíciles ha:

Aumentado/disminuido/es similar

### 2.13 El futuro

Piense ud que va a :

Invertir mas en producción de cacao ? Invertir en alguna nueva producción ? Cual ? Diversificar pero quedar buena parte de cacao ? Dejar cacao ?

Dejar agricultura ?

Piense ud que sus hijos van a ser campesinos?

si, toditos

si, unos

si, uno

no, ninguno

Annex 9: Cost of living

	Pinto Recodo	San Juan Salado	Las Palmeras	Ledoy	Bagazan	Huicungo	Alto El Sol	Saposoa	Average	Median
# members	4	5	3	5	6	5	5	4		
Food	6000	3,600	3600	3,500	9,000	5,250	7,200	7,200		
Health										
Schooling in junior high-school or primary	200	170	400	150	300	250	600	350		
schooling in high school		500	500	300	750	350	600	500		
Clothes	500	500	800	400	2500	1000	2,000	1000		
Electricity, water	170	120	153.6	264	48	360	300	336		
Telephone	180	180		420		240	480	300		
Child at university	4000	5000		8,400	1200	6,000	6,000	7,000		
Local tax			36							
Television								180		
Cost in PEN/year (with 1 child at university)	11,050	10,070		13,434	14,098	13,450	17,180	16,366	13,664	13,450
Cost in PEN/year (with no child at university)	7,250	5,240	5,090	5,334	13,648	7,800	11,780	9,866	8,251	7,525

Annex 10: Costs of production

7.	Pinto Recodo		San Juan Salado		Las Palmeras		Bagazan			Ledoy	P	Huicungo			Alto El Sol		4	Saposoa		
	Yield=	1500	Yield=	800	Yield⇒	800	Yield=	1200		Yield=	850	Yield=	1200		Yield=	1200		Yield=	1000	
	Number of	7.5					_	244					240	-						
	days	Cost	dias	Costo	dias	Costo	Days	Inputs (S)	Cost			Days	Inputs (5)	Cost						
Weeding	5	100	20	400	24	480	20		400	24	480	40	114	914	40		800	35		700
Pruning	44	880	22	440	8	160	20		400	30	600	20		400	8		160	30		600
Harvest	44	880	100	2000	100	2000	240	1	4800	125	2500	80		1600	168		3360	40	- 1	800
Fertilizing							25	750	1250			15	620	920	54	1,412	2492	15	1,500	1800
Pest control									9 8			9			44			30		- 9
Transport to	1																			
collection center													51							
Cost/ha =	1	1860		2840		2640		750	6850		3580		785	3834		1412	6812		1500	3900
Cost S/t =		1240		3550		3300		625	5708.33		4211.765	8	654	3195		1177	5676.667		1500	3900
Cost \$/t	1	446		1,278		1,188		225	2,055		1,516		236	1,150		424	2,044		540	1,404
Number work		18 3				50 50		Ø	7.		7						8			
days/t	62		178		165		254			211		137			262			150		

Daily

wage 20 Soles

Exchange

rate 0.36 USD/Sol

Average cost of inputs (USD/t

178 Average number of workdays (/t) 177
Median number of workdays (/t) 171.25

Average cost of production Median cost of production 1,385 USD/t 1,341 USD/t

NB: In Pinto Recodo, San Juan Salado, Las Palmeras, Ledoy, formers did not report any expense for inputs