The dairy sector in El Salvador is characterized by relative low productivity levels; this is mostly because the sector is based on smallholder farming (with 73% of producers owning less than 20 units of cattle), a lack of adequate grazing areas, a low number of cattle adjusted to local climate conditions, and high costs of inputs for commercial production. Therefore, current local production does not meet the needs of the industrial milk processing sector. This means that there is potential to improve, but investments are needed.

The Petacones Cheese Factory is a family business leading national cheese production and receives high demand from local and international markets. But although Petacones experiences steady growth, several barriers are hindering an increase in production volumes and improvement of quality, such as a low level of technology, ineffective practices and difficulties to cool the milk for producers. Through the 4P partnership, Petacones will invest in technical assistance to improve the producers’ practices, while establishing a long-term commitment to buy their milk under good commercial conditions. Amanecer Rural, as the public partner, will provide additional infrastructure and machinery to further improve quality and quantity. Together, the 4P partners strive to produce good quality cheese for the market, creating a win-win business case benefiting all partners.
1. Introduction

This case study forms part of a series of case studies developed for the knowledge component of the IFAD funded "Partnering for Value/4P" project, which is implemented by SNV Netherlands Development Organisation between 2015-2018 in El Salvador, Senegal, Uganda, Mozambique and Vietnam. The objective of the Partnering for Value project is to broker mutually beneficial partnerships between the public sector, the private sector and small-scale rural producers (4Ps) within the framework of IFAD-funded Value Chain Development Projects in the five selected countries. The grant has provided SNV the opportunity to pilot a 4P brokerage mechanism in order to assess and validate the viability of this approach in various contexts, and maximise the scope for learning for all country stakeholders. The knowledge component sits within the wider aim of IFAD to increase engagement with the private sector in their programs and policies for value chain development.

The aim of the case studies is to support (future) 4P stakeholders (government, business, donor agencies, NGO, farmers’ organisations) to build more effective 4Ps that bring about positive sustainable development outcomes. The case studies are based on SNV’s experience and identify key lessons in 4P brokering by exploring the following questions:

- What constraints/bottlenecks in the concerned value chain was the 4P meant to overcome and how was the 4P going to address this?
- How was the 4P brokered, designed and implemented?
- What have been the outcomes for all partners in the 4P and how have these been influenced by the 4P brokering process?

It will be interesting to look at the 4P brokering process and results so far. Capturing lessons learned from an early stage will facilitate:

- Using the first lessons learned as early as possible within the Partnering for Value project, but also for wider 4P practice and discussions among practitioners and other stakeholders
- Raising awareness and facilitating wider visibility on 4Ps

Of course, lessons from later stages of the 4P process will still be added later. In this sense, this case study can be considered as a ‘living document’ that SNV will keep enriching. Information on this case study is now mainly based on document analysis and key informant interviews with the 4P stakeholders, such as representatives of Petacones and the Los Fonchanos cooperative.

This study starts with a section on the rationale and design of the 4P. It describes the bottlenecks and opportunities for the dairy value chain in El Salvador and how Petacones is planning to address these challenges through a 4P partnership. This is followed by a more historical account on the 4P brokering process itself; how the partners were found, how the 4P business model was developed and how implementation worked out. The next section elaborates on the first results, challenges and lessons learned. The case study ends with personal stories of the 4P stakeholders on how they have experienced participation in the 4P.
2. Case description

2.1 Case details

Location: Department of San Vicente, El Salvador  
Value Chain: Dairy  
IFAD-funded program: Amanecer Rural  
Introduction by: SNV  
Funding: US $62,500 by Amanecer Rural / US $31,673 by Los Fonchanos cooperative and US $15,000 by Petacones  
Name lead company: Petacones  
Phase: Growth

2.2 The business model before 4P

Dairy is one of the most important agricultural sectors in El Salvador. In 2011, the dairy sector was accountable for 17.7% of the agricultural GNP, equivalent to 2.15% of the total national GNP. During the last decade, national milk production increased to 21.5% in volume as compared to earlier registered annual yield figures (which comes down to 18.4 million additional liters of milk). Most growth has been registered in the eastern part of the country, where most small and medium producers reside and 43.9% of the milk producing cattle is located. Here, the total production volume in 2011 was 85.7 million liters (with the total national production being 485 million liters).

The national consumption of dairy products per capita surpassed 100 kg/year in 2012, reflecting an 3.1% annual demand increase, which is also ratified by the growth of import; during 2012, dairy import accounted for US $150 million. Part of this increased consumption was caused by a greater demand for fluid milk from the food industry. This industry however operates under its full capacity, which leads to smaller production volumes than possible and missed opportunities for milk export. This is a pity, as in the past decade El Salvador has established a number of free trade agreements with other countries of which it could benefit. Current local production however cannot cover local demand, let alone creating a surplus for export. This means that the import for milk is increasing, while fluid milk might provide an interesting business opportunity for local producers.

The export of dairy products are thus modest, worth US$21 million by the end of 2015. There are however many opportunities for export, such as to ethnic niches in the USA, although requirements for food safety, quality and cold storage management can be restrictive. At the moment, El Salvador does not use the total export amount of the quota assigned by the CAFTA-DR (free trade agreement signed with the US), which increases 5% annually. In 2009, it was estimated that the total value of exports represented only 3% of the GNP.

At the same time, opportunities are provided by modernization of the national milk industry. According to official data from the General Direction of Agricultural Statistics of the Ministry of Agriculture, the national dairy sector has evolved in recent years as a response to private investments in infrastructure for processing, obtaining certifications and implementation of quality management systems by large dairy firms. There has especially been growth and improvements of some medium plants in the Western region of the country, where most plants are concentrated.

The Petacones Cheese Factory is a family business founded in 1935, dedicated to the processing and marketing of cheese. The plant has operations in the department of San Vicente, about 60 km

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2 Idem.

away from San Salvador. The plant processes over 55,000 bottles of milk a day, and almost employs 300 people. Petacones leads the national cheese production, with a high demand from both local and international markets. Demand especially comes from Salvadorans living abroad, the reason why the company exports about 20% of its total production. Milk collection is done daily and directly from small local milk producers.

Currently, Petacones purchases milk of approximately 70 local dairy suppliers. The majority of these suppliers are small-scale producers, on average producing 1,500 bottles of milk per day. Petacones rewards good milk quality from their suppliers (measured by the level of fat in the milk) but also sometimes buys lower quality milk if needed. The company is in a sustained growth phase of about 10% annually, and invests in different productive activities to maintain this growth. At the same time, the company invests in its supply chain to ensure the sustainability of milk supply. Currently, Petacones has a veterinary technician available for the producers, who provides assistance in good production practices. Moreover, Petacones offers standardized prices for the producers throughout the year, but also offers extra benefits when the producers supply premium quality milk.

The Los Fonchanos cooperative was established in August 2012 with support from the Ministry of Agriculture. Its producers received organizational management trainings from PREMODER4 in 2010, which supported the establishment of a formal organization. The cooperative also got access to finance through the Family Agriculture Program (PAF)5 in 2012, which allowed them to construct a livestock feed plant by 2012. Moreover, this led the cooperative to manage a capital fund and to receive technical assistance on cattle management from CENTA during 20146. The Ministry and other local programs continued to help Los Fonchanos with cattle control and agribusiness courses. Since then, the cooperative has started to sell milk to the Petacones Cheese Factory and other companies. So far, they are trying to grow as a cooperative by increasing their cattle and by involving more producers in order to sell milk to the formal market, which better guarantees stability. Currently, Los Fonchanos consists of 20 members, including women and young people. Their vision is to further improve their milk volume and quality, as well as to increase the number of members.

2.3 Key bottlenecks

Currently, there are several bottlenecks in the diary value chain of El Salvador that hamper further development and market growth. These bottlenecks can be distinguished at the national, value chain and producer level:

- In El Salvador in general, productivity of dairy production is low due to a lack of (investment in) research and development of new technologies, increasing costs of production and the use of systems that are highly dependent on the import of inputs (as there is insufficient local production of forage with concentrated feed supplements for cattle). Thus, current local production does not meet the needs of the industrial milk processing sector. This means that there is potential to improve, but investments are needed.
- At the company level, Petacones experiences steady growth, but likes to increase its processed milk volumes to meet the accelerating demand, to reduce its relatively high costs (through economies of scale) and to recover its investments.

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4 The Modernization and Reconstruction Program (PREMODER) consisted of a joint initiative developed by IFAD and MAG between 2003-2009, to improve income generation capabilities of certain target populations (in this case, small cattle owners who produce milk) through a productive investment fund, SME development, market intelligence, technical assistance, as well as vocational and labor training in order to transform the agricultural sector and link producers with different market segments.

5 PAF was a government policy carried out between 2010-2014 which stimulated the agricultural sector through 10 key value chains. It focused on the reduction of import from nearby countries and on the inclusion of women and youth through grassroots initiatives.

6 CENTA is a sister agency of the Ministry of Agriculture focused on research and technology in agriculture.
• At the producer level, several barriers are hindering an increase in production volumes and improvement of quality, such as a low level of technology, ineffective practices and difficulties to cool the milk.
• At the market level, there is strong competition from traditional buyers who aim for local demand segments which do not require high quality products, and who do not need to recover from investments in advanced equipment. The presence of such buyers reduces incentives for farmers to produce high quality milk.

2.4 The business opportunity

To overcome these barriers, a long-term commercial partnership between the Petacones Cheese Factory and producers, including significant investments by Petacones and Amanecer Rural\(^7\), would enable the producers to develop an improved and adequate production capacity. The objective of such a partnership would be to sustainably include small dairy farmers in the supply chain of Petacones, so they can become part of the formal national (and even international) market. Such a partnership would lead to an increase in producers’ productivity through the adoption of good agricultural practices and better milking procedures, an improvement in their production quality through an investment in a collection facility with more storage capacity and a cooling system, and an income increase as a result of sales at a more constant and better price\(^8\). In this way, the farmers of Los Fonchanos can improve their living standards.

Consequently, a 4P partnership generates shared value as follows:

A) For Petacones, greater product quality through an improved supply chain, improved competitive position, and better ability to meet the demand for dairy.

B) Productivity and quality improvements for the producers of Los Fonchanos, thereby enabling them to meet the quality and safety standards of milk of the formal market and raising their incomes.

2.5 The Public Private Producer Partnership (4P) Model

The suggested 4P model consists of the following roles:

Petacones:
• Providing frequent technical assistance on cattle nutrition, milking procedures, product handling and knowledge on good agricultural practices (such as discontinuing the use of antibiotics for livestock and control of mastitis) to dairy producers;
• Providing the installation and training of personnel to use a small laboratory for quality analysis of the milk by the cooperative itself;
• Establishing a long-term commitment to purchase a minimum of 5,000 litres of milk under good commercial conditions for milk producers.

Ministry of Agriculture (Amanecer Rural):

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\(^7\) The Rural Territory Competitiveness Program (Amanecer Rural) is an IFAD-funded program executed by the Ministry of Agriculture and Livestock to contribute to the reduction of poverty, economic inequality, and social exclusion in El Salvador, by means of supporting producers’ associations, rural communities and municipalities. The program is focused on improving their productive capacities and assuring access to formal competitive markets through value chain development.

\(^8\) For more details on the categorization of milk quality and investments necessary to reach those levels, see Annex II.
• Providing milk collection infrastructure (along with an emergency power generator) and cooling and storage equipment for the producers to improve their milk production and production management;
• Providing comprehensive technical services for adoption of good agricultural practices (GAPs) by the producers.

The Los Fonchanos cooperative:
• Improving their productive capacities, quality standards and production volumes; and application of good agricultural practices which are supported by Petacones;
• Payment of the ground levelling process for the construction of a collection facility;
• Using production methods that limit negative environmental impact (use of water and land) as much as possible.

3. The 4P Brokering Cycle

3.1 Scoping & Matchmaking

The scoping and matchmaking phase of the 4P consisted of several steps:

1. The identification of priority sectors and value chains

The identification of sectors and value chains for the Partnering for Value program was based on the ten priority sectors already identified for the programs of the Ministry of Agriculture in El Salvador and IFAD, in terms of its contribution to the GNP. Additionally, each sector and value chain was validated for the 4P project using criteria such as the value chain’s contribution to the agricultural GNP, its potential for employment opportunities, potential opportunities for youth and women, and the presence of more than two large firms seeking to invest in the value chain. The milk value chain was eventually chosen as one of the priority sectors for 4P, also because a production increase was needed for a national education program. Furthermore, before choosing specific 4P cases, minimum criteria were developed for potential partners, such as the private firm’s commitment to work with producers, managerial experience from the cooperative, the partners’ financial capacity to invest, willingness to adopt new technology and know-how, logistical links and an interest by producers to improve food safety conditions and post-harvest handling of their production.

2. The identification of a lead company and its commercial needs

For this particular case, the selection of Petacones and the identification of its needs was supported by PROLECHE, the national milk producers association. SNV explained the 4P project to several companies, and Petacones was the most interested. PROLECHE and Petacones applied the Minimum Standard Tool (which, amongst others, looks at the company’s governance and organizational strategy, its contribution to economic development, its capacity building capacity and its environmental sustainability) to identify Petacones’ needs and bottlenecks in their part of the value chain. Petacones also participated in workshops to define its objectives and to start developing the 4P business case.
3. Selection of the government program

Through IFAD, SNV met the management of the Ministry of Agriculture programs that are financed by IFAD (Amanecer Rural and PRODEMOR). After a series of meetings, SNV and the Ministry signed a memorandum of understanding to develop joint activities in specific chains. The Amanecer Rural program manages programs in the eastern zone of the country. IFAD suggested to bring Amanecer Rural into the 4P case as the public partner, as Petacones is located in this area.

4. Selection of producers

Petacones, through PROLECHE, provided the 4P project a list of cooperatives in which they were interested to work with. This list was compared to the cooperative profile of the Amanecer Rural program, which uses criteria such as level of integration among members, participation of women and youth, financial capacity, business experience, market demand for its product and government priority sector. Two cooperatives were nominated, of which Los Fonchanos was finally selected because of its better qualification in terms of tax compliance, legal status, larger cattle numbers, prior experience with Petacones and willingness to improve quality of the milk.

5. Identifying other 4P partners and opportunities

As mentioned, SNV also contacted PROLECHE. PROLECHE is a private platform that represents and brings together milk producers in El Salvador to defend their interests, in order to strengthen the competitiveness of the sector. PROLECHE showed interest in being a partner in the development of 4Ps, as their objective is to further promote and develop the milk value chain by providing technical, legal and market support. For this case, PROLECHE serves as an advisor to both producers and the lead enterprise to facilitate the partnership, contributes to improving good agricultural and food

6. Selection of 4P and other partners

To conclude, the partners in the 4P business case are:

Financial partner
IFAD loan to the Salvadoran government

Public sector
Agricultural Rural (Ministry of Agriculture) provides direct capacity building, dairy equipment and organizational strengthening

Dairy producers
Cooperative Los Fonchinos sells raw fluid milk for industrial dairy products and artisan cheese

Private sector
Buying, processing and selling of dairy products by Pefacoop. Also provides logistical support and quality assessments for the milk producers.

The market
Domestic market consisting of households, supermarkets, restaurants, international market (40% of the revenues); Salvadoran communities in the US, Canada and Central America.

Milk Producers' Association
Private national milk producers association. Prolacto provides services for better sanitary control, inputs, veterinary assessment, improved milking practices, industry analysis and mentoring.
3.2 4P Business case development

Next, the 4P business plan was jointly developed. Petacones was first visited by SNV during which they discussed Petacones’ production process and the weaknesses in their supply linkages.

Then, with support from the Ministry of Agriculture and PROLECHE, three recommended dairy cooperatives were visited. SNV explained the 4P concept and together with these cooperatives did an assessment of their strengths, needs and key bottlenecks in the production process. The final profiles were then presented to Petacones, and in the end Los Fonchanos turned out to be the most suitable cooperative to become a partner in the 4P.

Having the needs and expectations of all stakeholders assessed as a basis, all partners were then brought together to discuss and negotiate a business plan. From the beginning, all partners agreed on the objectives. However, working out the details took a bit longer than expected, mostly due to misunderstandings and a lack of communication between Petacones and the Ministry of Agriculture. Factors such as timing of investment and certain technical criteria took some time to get an agreement on, but with help of SNV as a facilitator, the final 4P business plan was written.

The following investments in the 4P arrangement were eventually agreed upon:

<table>
<thead>
<tr>
<th>Purpose of investment</th>
<th>Type of investment</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily analysis of quality and collection of milk from producers’ facilities</td>
<td>Working capital</td>
<td>Petacones Cheese Factory</td>
</tr>
<tr>
<td>Purchasing of inputs, hiring of labourers, maintaining land, maintaining infrastructure and taking care of the cows</td>
<td>Working capital</td>
<td>Cooperative</td>
</tr>
<tr>
<td>Offering good veterinarian practices (GVP) to producers</td>
<td>Technical assistance</td>
<td>PROLECHE</td>
</tr>
<tr>
<td>Offering technical staff and agricultural (dairy) knowledge to the producers where needed</td>
<td>Technical and infrastructural services</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>Developing 4P brokering capacity for the development of the 4P business case</td>
<td>Partnership brokering expertise</td>
<td>SNV/IFAD</td>
</tr>
</tbody>
</table>
4. The 4P Results

The results of the 4P partnership so far are:

For producers

The main result for the Los Fonchanos cooperative so far is the construction of a post-harvest facility with more storage capacity, a cooling system and laboratory facilities, located at a strategic location for buyers for a sustainable link to the local formal market. This facility, in combination with the technical assistance of Petacones, PROLECHE and the Ministry of Agriculture has supported the cooperative in reaching and maintaining the high quality (and quantity) standards necessary to maintain their link to the formal market. Since its inception in 2012, the cooperative has been selling its milk to lead companies such as Petacones. Still, it has not been easy to stay in the market due to the required high standards, as well as bad weather conditions in El Salvador that have hampered production. However, the cooperative has managed to stay linked to the formal market thanks to support of the 4P, and even managed to expand their sales. Because of the support through the 4P, they have been confident enough to negotiate and sign a one-year supplying contract of 1,800 litres of milk by themselves, with Cooperativa La Salud – one of the four largest dairy distributors in El Salvador. As part of the brokering process, SNV recommended Los Fonchanos to also look for other buyers – although Los Fonchanos is happy with their partnership with Petacones, they aim to diversify their market to not become too dependent on one buyer.

For Petacones

Because of the 4P partnership, the lead company has been able to obtain steady high quality raw material for the production of its cheese; in 2015, 1.20 million litres of milk were bought which has risen to 1.39 million litres up to June 2017. This is needed because most of their cheese is exported to the United States, where high quality requirements are applied. Moreover, it has a more stable supply base since its strong partnership with Los Fonchanos.

For Amanecer Rural

To Amanecer Rural, the 4P program has mainly provided a window of opportunity to learn and gain experience in cooperating with the private sector to improve the livelihoods of small scale farmers. The 4P program demonstrates that it can be economically feasible to involve poor smallholders from the base of the pyramid to formal business sector initiatives. Its experience with Petacones provides lessons learned and has set a basis for a method of collaboration and joint investment by the Direction for Rural Development with other private sector firms and organized agricultural producers in future.

5. Lessons learned

The main lessons learned from experience with the 4P partnership so far are:

For producers

From engaging in the 4P, the Los Fonchanos cooperative has mainly learned how to respond to the high quantity and quality needs of the formal market, while ensuring good management to be able to address new market challenges. Los Fonchanos also had to adapt to the speed of supplying to formal markets; with Petacones asking for clear timelines, they now know how to plan their production in an efficient way. The major challenge Los Fonchanos was confronted with was to become convinced of the efficiency and profitability of working towards a collective goal rather than working on an individual basis, as they were used to.

For Petacones
Petacones has learned that investing in their supply base does provide a return on investment. By providing technical trainings, both the quality and quantity of the cheese has increased, and continues to make a positive impact on the milk producing communities. Overcoming mistrust and improving communication with their milk suppliers including an acceptable problem solving mechanism like the 4P requires, has been a great gain for the firm – they might also apply this to other partnerships with producers’ organizations in future.

For Amanecer Rural

Amanecer Rural learned that they have an important role in value chain development by partnering with and facilitating the relation between companies and producers. By providing trainings (and in some cases matching grants), they take away risks for companies such as Petacones to invest in small scale producers.

For the Ministry of Agriculture, it also has become clear that support to producer groups to make them ready for the formal market, is often a longer term process which consists of several phases. The case of Los Fonchanos shows that different types of support by PREMODER (organizational management trainings), PAF (access to finance) and CENTA (cattle management) has led to the point where Los Fonchanos was able to meet the requirements of, and link to, the formal market.

These learning assets will be taken into account for further developing and streamlining 4P practices in rural programs and policies. This streamlining can be done through for example sector platforms where companies and producers get connected when interested in partnering for 4Ps.

Last, as a public sector entity, Amanecer Rural felt that it was difficult to justify their contribution towards one specific producers’ organization compared to similar initiatives that could demand similar support; the development and adoption of further sector, social and business oriented criteria to allocate funds and personnel became then necessary.

For PROLECHE

PROLECHE, the milk producers association, has used its expertise of working with and organizing producers while learning how to link these producers to formal markets. Through the 4P method, PROLECHE learned one method of making those links to the market, and got to know what is needed in order to build long-term, sustainable partnerships with the private sector. By participating, PROLECHE became more convinced that their task in serving dairy producers also involves cooperation with other stakeholders. Additionally, they learned to take up roles such as validating the information exchanged between partners and to take up a conciliatory role when disputes between enterprises and producers occur. In this way, it has strengthened its strategy to contribute to the economic and social development of milk producers in El Salvador.

PROLECHE is also looking into offering a wider package of technical services that supports every aspect of 4P implementation and to ensure quality management in the value chain. In a technical sense, PROLECHE identified that more work should be done in terms of taking health measures for the cattle, to use more modern technology such as the installation of laboratories to carry out several disease analyses (hemograms, hemoparasites, bacteriology) and to further improve milking techniques.

For SNV

As a broker, SNV also learned many lessons from this first 4P case in El Salvador. First of all, as a broker it is important to encourage active participation of all partners, for which a close relationship with each of the partners is necessary. Partners rely on SNV, especially in the beginning of a 4P, and as a broker it should always be open to answer questions and solve issues together with them. With the private sector, it is important to develop a relationship based on trust, which is achieved by a direct relationship with the owners or directors (decision makers) of the companies, as this facilitates the commitment of the company. The support of business associations and platforms also facilitates the relationship with the private sector. For the public sector, it is necessary that the directors of agencies commit to the activities through a memorandum of understanding or letter of commitment signed together with the private sector. All agreements with the 4P actors should be documented and signed to ensure commitment.
SNV also learned that for a successful 4P partnership, the organizational level of producers’ cooperatives should be acceptable, since the requirements of working together with formal companies are high. Producers should be involved in every step of building the partnership to also ensure their commitment and convince them of the benefits.

6. Looking ahead

The 4P partnership has provided better incomes and stability for both Los Fonchanos and Petacones. To facilitate a long-term, sustainable relationship that keeps investing in their business, they have agreed to meet twice a month to solve minor incidents and jointly take decisions on further progress.

The 4P partnership with Petacones could be a stepping stone for further improvements in the value chain. The 4P has shown that stronger linkages in the chain creates trust among key stakeholders, and in doing so motivates for joint investments that improve the overall quality of production.

In the long run, building on the support from the 4P, Los Fonchanos has the ambition to build a pipeline to transport the milk to the processing plant. Having their own means of transport for the milk allows Los Fonchanos to also provide such services to neighboring cooperatives and partners. They would like to reinvest the extra revenues gained from this activity in additional pipelines or in equipment to develop their own type of cheese. Such activities would lead to even better incomes, stability and employment (for the cheese production and marketing). It might be clear that the 4P partnership has instigated a real business mind-set for Los Fonchanos, and that ambitions to improve their milk business are set high.
7. Personal stories

José Manuel Ayala, the youngest member of Los Fonchanos cooperative:

"Before the 4P project I worked on my own and had no guidance in managing my herd which I inherited from my father. Now that I’m part of the cooperative and 4P, I see what we can achieve. I have now a better income and I’m full of hope for the future.”

Mario Nelson Marin, member of Los Fonchanos cooperative:

"In my case, I produce 17 bottles per cow per day. Some members produce up to 20, some producer lower. But now that we are part of 4P, I’m motivated to purchase additional cows, to improve my performance to 20 bottles a day and to contribute to the collection of more fluid milk by the cooperative.”

Eva Siguenza, Executive Director of PROLECHE:

"By collaborating with the 4P project, we learned that there is no real progress without constantly updating the producers’ knowledge and verifying its application on the farms.”
Annex I – Interview questions

1. What was your main motivation to participate in this 4P?
2. What bottleneck/problem was it supposed to solve?
3. Can you explain the background of this problem/bottleneck? Has this been a problem for a long time? What are the main causes for this problem?
4. Did you try other solutions before to solve this problem?
5. How does the 4P business model provide a solution for the problem? What does it change in the current situation?
6. How does the 4P business model solve the problem while other solutions were not able to?
7. Can you explain how you became involved in the 4P arrangement? How did you learn about it? Was it your own idea or did someone introduce you?
8. Can you explain more about the 4P brokering process? Did you know all the 4P partners already? If not, who introduced you? How did that process go?
9. Do you feel that there is enough trust between the 4P partners? Did the 4P brokering help in that?
10. Can you explain more about the process of writing the 4P business plan? Was it difficult to set common goals and divide roles & responsibilities?
11. (if applicable) Was it difficult to find investors for your 4P business case? How did you find them?
12. Do you feel that 4P has brought you the expected results? Why or why not?
13. In what way has the 4P solved your problem/changed the situation?
14. Do you think that the 4P has also brought you (unintended) long term results (such as ongoing trust relationship between partners, improved sustainability of the business model, etc.)?
15. Do you think the 4P is of added value? Do you think it was the best option or do you think the problem also could have been solved otherwise?
16. Would you participate in a 4P again? Why or why not? Do you have concrete plans already?
17. What would you do differently if you would enter a 4P again?
18. What is your main lesson learnt from the 4P brokering process?
19. Do you have any specific feedback for the 4P broker?
### Annex II – Incentives for change in the dairy sector

Below the classification of milk quality in El Salvador is provided. It shows why it pays off for both producers and private enterprises to invest in better milk production systems, as grade A milk leads to more revenues for the farmers and a higher milk-to-cheese conversion for the cheese processing enterprises.

<table>
<thead>
<tr>
<th>Milk category</th>
<th>Description</th>
<th>Price paid to Farmer</th>
<th>Share of the cooperative’s total production volume per category</th>
<th>Milk conversion to cheese (1 kg = n bottles milk)</th>
<th>Level of effort needed to produce the milk category</th>
</tr>
</thead>
</table>
| A             | Fat % = 4.2% or more content  
Bacterial presence = Less than 100,000 per mL  
Drugs = 0%  
Somatic cell count = Less than 750,000 per mL  
Temperature = 4°C or less | US $0.43 | 55% | 6 | In general, to improve the quality, dairy producers must invest in:  
- Cooling systems from the field to the processing plant;  
- Equipment to handle raw milk;  
- Adequate animal feeding;  
- Breed of cattle;  
- Sanitary situation of stables;  
- Level of fatigue by the cattle;  
- Levels of water intake;  
- Control of pesticides in pastures;  
- Veterinary practices;  
- Good milking procedures |
| B             | Fat % = 4.0 – 4.1%  
Bacterial presence = 100,000 per mL  
Drugs = 0%  
Somatic cell count = 750,000 per mL  
Temperature = 4°C | US $0.42 | 30% | 6 | |
| C             | Fat % = 3.6 – 3.9%  
Bacterial presence = More than 100,000 per mL  
Drugs = 0%  
Somatic cell count = More than 750,000 per mL  
Temperature = 5°C - 7°C | US $0.37 | 10% | 8 | |
| D             | Fat % = below 3.6%  
Bacterial presence = More than 100,000 per mL  
Drugs = 0%  
Somatic cell count = More than 750,000 per mL  
Temperature = 8°C - 10°C | US $0.32 | 5% | 10 | |

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9 Information has been validated by field analysis carried out by PROLECHE between August and September 2017


11 Petacones is willing to pay Grade A prices even when this type of milk is scarce.
4P case study
El Salvador