

The Qorichacra Project in Cusco

- An Impact Analysis -



Nora Hurcik

Master's Thesis submitted as part of the requirements for the MA in Business Administration, Major Public and Nonprofit Management at the Lucerne University of Applied Sciences and Arts.

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syngenta foundation
for sustainable
agriculture



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Photo 1: Juan's Greenhouse (own photo)

Logos: <https://www.syngentafoundation.org>; <https://www.arcosdorados.com>

Management Summary

Often Non-Governmental Organisations carry out projects and do not go on site after the end of the project to measure the impact of their activities, although this could lead to important learnings that could be helpful for further projects. This is because impact evaluation is highly complex and controversial. Especially the attribution of impact to a specific project is a big challenge since numerous external factors can influence the outcome.

Between 2009 and 2015, the Syngenta Foundation for Sustainable Agriculture carried out the Qorichacra development project in Peru in cooperation with Arcos Dorados (the world's largest McDonald's franchise group) to help small farmers in the Cusco region build greenhouses, provide them with the necessary know-how and skills and to integrate them into the supply chain of McDonald's vegetables and chains of other restaurants and hotels. During the project a housing competition took place with the aim to improve the houses of the farmers. After the end of the project, the Syngenta Foundation has no longer been on site. The aim of the master's thesis was therefore to examine the impact of the project on the participating farmers, farming families and communities and to analyse the farmers' cooperation with restaurants and hotels in more detail.

To get to the bottom of the question, whether the project has had a sustainable impact on the farmers and their communities, the researcher started her research by doing desk research. Thereafter, in August 2018, she undertook a research trip to Cusco, Peru, where she conducted interviews with experts and farmers from the Huillcapata and Chita Pampa communities and carried out a survey in Huillcapata. She then evaluated the results with the help of a thematic analysis.

The researcher concluded that the project had many positive aspects. Especially the technical part was successful. Most farmers today know the advantages of greenhouses and have the skills to handle them. With the help of the new technology, they have been able to increase their productivity and income in recent year and, thus, to improve their quality of life. Since the conclusion of the project, greenhouses have spread widely in the Cusco region. The housing competition has enabled farmers to further improve their housing situation. The cooperation with hotels and restaurants has been less successful. The McDonald's Restaurant in Cusco is still supplied today by four farmers of the Qorichacra project. However, many farmers have ended their collaboration with the company. There is also no more cooperation between the farmers of the Qorichacra project and other restaurants and hotels such as Novotel or Greens. The main reason for the failure of the cooperation is the payment policy of the commercial partners. In addition, there were further discrepancies regarding the price and quantity of the products. Today the farmers of the Huillcapata community sell their products exclusively on the local market. This was already the case before the start of the project in 2013. Also, the idea of Arcos Dorados to replicate the project in other Latin American countries has failed. In a next project, it is important to carefully select the commercial partners and in particular to ensure that they take into account the particularities of the communities. In addition, the possibility of a Global G.A.P. certification of farmers could be examined. It is also crucial to select the intermediary carefully in order to avoid conflicts and to consider the problem of the disposal of the plastic of the greenhouses.

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Carola Amézaga	Project Coordinator, first at Intercooperation and then at SFSA
Delcy Zamalloa	Agronomist (former employee of CBC)
Hugo Quisped	Agronomist & anthropologist (former employee of CBC)
Jorge Barrantes	Manager of the McDonald's Restaurant in Cusco
Leonardo Lima	Corporate Sustainability Director of Arcos Dorados
Valério Paucarmayta	Director of CBC
Carlos	Farmer, Chita Pampa
Juan	Farmer, Huillcapata
Luis	Farmer, Chita Pampa

List of Abbreviations

AD	Arcos Dorados
APOMIPE	Programa de Apoyo a la Micro y Pequeña Empresa
CBC	Centro Bartolomé de las Casas
G.A.P.	Good Agricultural Practices
HRBA	Human Rights-Based Approach
IC	Intercooperation
McD	McDonald's
NGO	Non-Governmental Organisation
SFSA	Syngenta Foundation for Sustainable Agriculture
ToR	Terms of Reference
UN	United Nations Organisation

1. Introduction

Once a project is running well, the Syngenta Foundation for Sustainable Agriculture (SFSA) must withdraw at some point. But what happens when the foundation is no longer on site?

Often Non-Governmental Organisations (NGOs) carry out development projects without going back years after the end of the project. However, it would be important to measure the impact of such a project and to use the lessons learned for further projects. The same happened with the Qorichacra project, which was carried out by SFSA in Cusco, Peru, between 2011 and 2015. Since the end of the project, the foundation has not been there, and the question arises, whether McDonald's (McD) Cusco still buys its iceberg lettuce from the farmers involved in the project today. To get to the bottom of this question, the researcher has undertaken a research trip to Peru.

1.1. Starting Point

The following subchapter is intended to give a brief introduction to the foundation's approach and activities. In addition, the Qorichacra project will be explained shortly. More details of SFSA's initiative in Cusco are given in chapter 4, where desk research was conducted.

1.1.1. The SFSA and Its Activities

SFSA is an independent non-profit organisation that focuses on small-scale farmers. Its overarching goals are food security for all, sustainability, and agricultural transformation. The foundation aims to close with its activities the gap between rural and urban incomes (SFSA (a), online; SFSA (b), online).

The foundation was established by the agribusiness Syngenta under Swiss law and receives its core funding from the Syngenta Group. Moreover, Syngenta provides the SFSA access to company expertise with regard to the implementation of its projects. However, the SFSA is a separate legal entity and has its own board (SFSA (c), 2018). Although Syngenta and the SFSA are both committed to sustainable agriculture, they serve different target groups. While the SFSA focuses on pre-commercial farmers (i.e. smallholders in developing countries), the Syngenta Group concentrates on commercial growers operating large or medium-sized farms. Also, the two organisations focus partly on different fields of action (e.g. unlike Syngenta, the SFSA promotes organic farming in some projects). While Syngenta works in approximately 90 countries, the SFSA focuses on a dozen countries worldwide (Syngenta (c), 2018). For the implementation of joint projects, the SFSA also receives funds from other organisations, such as the Swiss Agency for Development and Cooperation, the Swiss Capacity Building Facility and the International Maize and Wheat Improvement Centre (SFSA (d), 2001).

Since SFSA's foundation, the organisation has implemented various projects through local employees (principle of locality) in cooperation with local partners in developing countries and emerging markets. It runs projects in Asia, Africa, and Latin America, has about 75 employees worldwide and has its largest teams in India and Kenya. Its office in Basel, Switzerland, has 12 employees and is responsible for international coordination (SFSA (e), 2018).

The SFSA operates in the following five areas (SFSA (f), 2018):

- Agriservices (e.g. access to training, technologies, commercial markets)

- Risk Management and Financial Inclusion (e.g. agricultural insurance solutions)
- Access to Seeds (e.g. access to high-quality and affordable seeds of improved varieties)
- Research and Development (e.g. reduction of greenhouse gases, improvement of crops)
- Policy (e.g. food quality and safety regulations, regional seed regulations)

The SFSA's mission is to create value for resource-poor small farmers in developing countries through innovation in sustainable agriculture and the activation of value chains. The operational strategy of the foundation is to concentrate on smallholders, productivity, and markets. Its main objective is to support small farmers in becoming more professional growers by extending scientific know-how, facilitating access to quality inputs, and linking smallholders to markets in profitable ways. At the same time, the SFSA aims to create value within rural communities and improve food security in a sustainable way. The organisation usually starts with a pilot project and then emphasis on scaling up (SFSA (f), 2018).

1.1.2. The Qorichacra Project in Cusco

The Qorichacra project marked the first stage of an international partnership between the SFSA and Arcos Dorados (AD). The latter is the world's largest McD franchise group, with the exclusive right to own, operate, and grant franchises for McD restaurants in 20 countries and territories throughout Latin America and the Caribbean (SFSA (g), 2013, p. 1). The project was implemented locally by Centro Bartolomé de las Casas (CBC) and Intercooperation (IC) that later merged with Helvetas to Helvetas Swiss Intercooperation to support various farming communities on the River Quesermayo's micro-basin between 2010 and 2015 (SFSA (g), 2013, p. 1).

The word 'Qorichacra' means golden farm in Quechua, the native language of the people of the Peruvian Andes (SFSA (g), 2013, p. 1). The objective of the Qorichacra project was to link smallholders in the vegetable supply chain for the AD and other buyers that offer good income opportunities for the farmers but have rigorous production standards. The protocols cover aspects such as hygiene, quality, quantity, and delivery frequency. Before the implementation of the project, local production didn't meet quality standards. For this reason, most vegetables for McD came by air from Lima, although the Cusco region is characterized by agriculture (SFSA (g), 2013, p. 1).

In 2015, the SFSA commissioned a study of the project to provide information about its impact on the supported farming communities. The study confirmed the success of the production model. Since 2014, SFSA and AD have shared the vision of developing a concept that can be scaled to the needs of several Latin American countries to meet the growing demand for quality vegetables (SFSA (h), 2016, p. 3).

1.2. Problem Definition

NGOs often conduct a final evaluation of a project, directly after withdrawing from a project. They usually do this through an external evaluator to assess the project's outcome and impact. As already described in the introduction they seldom go back years after the termination of the project to evaluate the sustainability of their intervention. However, it is known that impact often takes a long time to appear (Rogers, 2012, p. 2). In order to obtain a meaningful result as to whether the project has had a sustainable impact, it is, therefore, necessary to carry out an impact evaluation years after

the end of the project. Impact assessments can be of interest to NGOs. For example, they can help them to decide whether to continue or expand an intervention, whether to replicate or scale up a pilot, or even whether or not to reassure sponsors that their money is being wisely invested (Rogers, 2012, p. 3).

There are different explanations as to why organisations avoid returning to a project. On the one hand, impact analysis is very cost-intensive, which can discourage organisations from carrying them out. On the other hand, such evaluations have been strongly disputed, the attribution of development outcomes to a specific NGO is seen as especially difficult to assess. In addition, there are various approaches to measure the impact of a project, and organisations often hesitate to choose one of them (CIMA, 2017, p. 2).

The same thing happened with the Qorichacra project in Peru (see section 1.3.2.). In 2015 and 2016, the SFSA conducted two final evaluations of the project to provide information about its impact on the involved farmers and communities. However, the SFSA never went back after its withdrawal from the project. Therefore, there is no information about how the situation may have changed in the meantime. Nevertheless, it can be very useful for the foundation to carry out such an evaluation three years after the end of the project in order to examine the sustainability of its intervention and to highlight the strengths and weaknesses of the project. Such information may be used in particular for replication in other Latin American countries.

1.3. Goal-Setting and Delimitation

The objective of the master's thesis is to analyse whether the Qorichacra project has had a sustainable impact on the farmers, farming families and communities involved in the project. Therefore, the work focuses on the period from the end of the project in 2015 until today.

The work also aims to shed more light on the cooperation between farmers and restaurants and hotels. The focus here is on the AD, which has bought the most products in the communities and was, therefore, the farmers' most important institutional partner. The AD was also the initiator of the project together with SFSA. The cooperation with other hotels and restaurants is only considered marginally.

To investigate the questions above, the researcher undertook a research trip to Peru in August 2018, where she visited two communities that participated in the project .

As AD intended to replicate the project in other Latin American countries, the master's thesis will also analyse whether this objective has been achieved. However, the replication in other countries will be only briefly discussed in the paper.

1.4. Research Question

The master's thesis focuses on the following research question:

Did the Qorichacra project have a sustainable impact on the involved farmers, farming families and their communities?

To answer the research question, the following subsidiary questions must be considered in detail:

- Could the initial goals be sustained after the SFSA's official withdrawal from the project?
 - Development of an integrated supply chain of high-quality vegetables for the McD restaurant and other hotels and restaurants in Cusco.
 - Improvement of homes and livelihoods
 - Creation of a business case that can be applied in other Latin American countries
- What has been the impact of the project on the involved farmers, households, and communities?
- How has the cooperation between the farmers involved and AD developed since the SFSA's withdrawal?
- Has the project sparked any unintended changes, positive or negative, among the farmers, households and communities since 2015?

To answer the research question, different levels at which impact can occur should be considered:

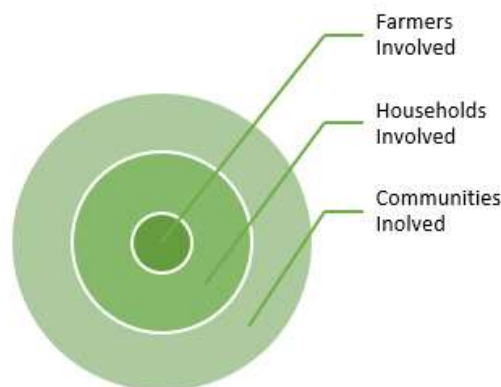


Figure 1: Different Levels of Investigation (own representation)

How exactly the researcher can respond to the different levels depends on her research on site.

2. Theoretical Framework

The following chapter is devoted to the theoretical foundations of the work. It starts with the topic of agriculture and the problems facing the sector. Subsequently, the topic of impact evaluation will be examined in more detail. In particular, the planning and methodology of such evaluations will be discussed in detail. This is intended to help the researcher in the process of her evaluation. Then the topic of field research, which is relevant for research in the communities in Peru, will be considered.

2.1. Agriculture as a Development Tool

2.1.1. World Agriculture

Sustainable agriculture is seen as a fundamental development tool for achieving the Sustainable Development Goals of the United Nations (UN). Two of these goals call for halving, by the year 2030, the number of people suffering from extreme poverty and ending hunger (United Nations, online).

In developing countries, the agricultural sector is the largest source of income, jobs, and food security. According to the World Development Report that was published in 2008, three out of every four poor people in developing countries live in rural areas and most of them depend on agriculture for their livelihood. This means approximately 600 million smallholders live in developing countries (The World Bank, 2008, foreword). To improve their living conditions, sustainable and inclusive growth in both the agriculture and food sectors is essential since this will increase employment on farms as well as in villages and in the food production and consumption chain (The World Bank (a), 2017, Foreword).

By 2050, the world population is expected to reach nine billion. The most affected by this rapid growth will be regions such as Sub-Saharan Africa, East Asia, and South Asia. It is estimated that this rapid increase in population will raise the demand for food by at least 20 percent globally over the next 15 years. Therefore, it is imperative to boost productivity, profitability, and sustainability of agriculture. (The World Bank (a), 2017, Foreword)

Today, a huge number of smallholders still lack access to appropriate farming knowledge, technologies, and commercial markets. Nevertheless, farmers will play a significant role in achieving the Sustainable Development Goals of the UN. Their success will depend on investments, technological innovation, and other aspects of modernization that enable them to raise productivity and incomes (SFSA, CABI, 2017, p. 2).

2.1.2. Agricultural Sector in Peru

Peru's economy has grown rapidly over the last few decades. This growth has been accompanied by structural transformation. While the industry and service sectors have gained in importance, the share of agriculture in the economy and the share of agricultural workers in total employment have both declined in recent years. Economic activity in other sectors has grown more rapidly, but the volume and value of agricultural production have seen steady growth. Between 2000 and 2015, Peru's agricultural gross domestic product (GDP) showed an average growth of 3.3 percent per year. Today, the sector contributes approximately seven percent to Peru's GDP (The World Bank (b), 2017, Executive Summary).

Although agricultural productivity has been rising in Peru, significant differences persist between regions. The coastal area has benefited the most from the agricultural growth, and it features dynamic and highly productive agricultural systems that are well integrated into the domestic and international value chains. Consequently, the agricultural sector has provided the farmers of this region with satisfactory livelihoods. In contrast, large areas of the Sierra (the Andes) and Selva (Amazonas) regions have not profited from the agricultural growth. They are characterized instead by unproductive and subsistence-oriented agricultural systems which are poorly integrated into the market. In these regions, the poverty of smallholders remains a big issue (The World Bank (b), 2017, Executive Summary).

The Andean Highlands, located in the Sierra region, are particularly affected by these problems. There, growth in agriculture has largely been stagnant in the last years (Dudenhoefer, 2018, online). The Andean region has the highest poverty rate in the whole country and is home to a large majority of the indigenous Quechua and Aymara people, who live in remote and isolated communities. The mountainous terrain of this region makes road construction very expensive. Therefore, some of the villages are still difficult to access, and inhabitants have to walk for hours to reach a larger town where they can sell their food on the market, or where they can find a health centre or a public school (The World Bank (a), 2007, p. 59). A big problem for small-scale farmers living in the Andean regions is access to the market. Furthermore, they often do not have access to improved technologies, productive assets, or social capital. Owing to the distance to the market, many farmers concentrate on subsistence farming and use only a few purchased inputs (The World Bank (a), 2007, p. 59).

The number of companies operating in the agri-food sector has increased in recent years. This is due to economic growth, urbanisation and increased demand for food, quality and diversity (Pozo-Vergnes & Vorley, p. 17). However, most of the land is still in the hands of small-scale farmers. They own farms that account for 82 percent of the total agricultural units and produce 70 per cent of the country's food (CENAGRO, 2012). Therefore, it is important to support family farming as a key component of food security and social development (Oxfam, 2013, p. 1).

In Peru, agricultural products are usually sold on local open-air markets or wholesale markets through a series of intermediaries (Pozo-Vergnes & Vorley, p. 17). These informal markets provide access to food to the poorest in low-income neighbourhoods and are also preferred by many people of the middle class. They are deeply rooted in the Peruvian culture (Pozo-Vergnes & Vorley, p. 25). Although the number of supermarkets has increased significantly in the last 15 years, traditional markets are still of much greater importance, as they have a market share of 80 percent (Pozo-Vergnes & Vorley, p. 17).

2.2. Impact Evaluation

2.2.1. Introduction to Impact Evaluation

Evaluation

“Evaluations are periodic, objective assessments of a planned, ongoing, or completed project, programme, or policy” (Gertler, Martinez, Premand, Rawlings, Vermeersch, 2016, p. 7). They are used to answer specific questions which are often related to the project's design, implementation, or

results. Evaluations are carried out at specific points in time and often seek an outside perspective from technical experts (Gertler et al., 2016, p. 7). In contrast to evaluation, monitoring is defined as a continuing function that uses a systematic collection of data on specified indicators. Monitoring provides information about the performance of a programme, including implementation and costs and usually tracks inputs, activities, outputs and sometimes outcomes (Austrian Development Cooperation, 2009, p. 1).

A distinction can be made between prospective and retrospective evaluation. The former is developed at the same time as the programme is being designed and is built into the programme implementation. The latter assesses the programme's impact after the programme has been implemented (Gertler et al., 2016, p. 9).

Impact Evaluation

There are various types of evaluations; one of them is the impact evaluation. This type of evaluation is an assessment of the impact of an intervention on final welfare outcomes (IEG, 2006, p. 1). It does seek to answer the following cause-and-effect question: "What is the impact of a programme on an outcome?" (Gertler et al., 2016, p.8).

The term 'impact' refers to a change that is directly attributable to a programme, programme modality, or design innovation. Thus, causality and attribution are of major relevance when conducting an impact evaluation, since every impact evaluation method addresses some form of a cause-and-effect question (Gertler et al., 2016, p. 8). The OECD-DAC Criteria for Evaluating Development Assistance defines impact as positive and negative changes that are produced by a development intervention. These changes can be caused directly or indirectly, intended or unintended. It is important to analyse intended and unintended results and to include the positive and negative impacts of external factors (e.g. financial conditions, terms of trade) (OECD, 2000, p.2).

Reasons on Why to Conduct an Impact Evaluation

There has been a shift in focus from inputs to outcomes and results in the public sector, as national and international targets must be set, but also to enhance accountability, to determine budget allocation, and to guide programme design and policy decisions. Thus, evidence-based policy-making becomes more and more essential and project evaluation and monitoring are gaining in importance, as it provides stakeholders a set of tools to verify and improve the quality, effectiveness, and efficiency of policies and programmes at different stages of implementation (Gertler et al., 2016, p. 3).

Evidence-based financing also gains importance in NGOs. Another increasingly used term is result-based financing. The World Bank defines the term as "any programme that rewards the delivery of one or more outputs or outcomes by one or more incentives, financial or otherwise, upon verification that the agreed-upon result has actually been delivered" (The World Bank, online). Thus, the principal must verify that the agent has delivered the agreed goals and targets before providing the funding. Early evidence suggests that result-based financing improves programme performance (Instiglio, 2018).

There are many other reasons for conducting an impact evaluation as already explained in chapter 1.2. An impact evaluation facilitates the decision as to whether an intervention should be continued or extended, and it leads to learning what works and what doesn't work that can be considered when

extending a pilot or replicating a project. With the help of an impact evaluation, donors can be reassured by showing that the money has been wisely invested (Rogers, 2012, p. 3).

The Attribution Problem

The attribution problem is the core issue of every impact evaluation. It focuses on the question, whether a change in outcome is attributable to an intervention or not. Answering this question often is highly complex, as multiple factors can influence the outcome of an intervention. Thus, other internal or external factors can have an impact of an evaluation's outcome. Also, other unplanned events or general change processes can affect the result, such as wars, natural catastrophes, growing economies or long-term climate change. Attribution refers to isolating and estimating the contribution of an intervention to the outcome, but also to analyse the causality from the intervention to the outcome (Leeuw & Vaessen, 2009, p. 21-22).

To analyse the attribution of an intervention to an outcome, it is important to estimate the counterfactual and to answer the question, what would have happened in the absence of the intervention. There are different approaches that can be used to analyse the counterfactual. It can be distinguished between experimental (e.g. randomized controlled trials) and quasi-experimental (e.g. propensity score matching) counterfactual analysis. They both have the objective to reduce selection effects and to eliminate unobserved variables that would lead to biased estimates (Leeuw & Vaessen, 2009, p. 23; Gertler et al., 2016, p. 8 & 49). If an impact evaluation doesn't consider the question of attribution, this may increase the risk of incorrect findings (Leeuw & Vaessen, 2009, p. 23).

2.2.2. Planning of an Impact Evaluation

An impact evaluation is complex and demanding and should, therefore, be carefully planned. This requires the development of the theory of change, the formulation of evaluation questions and the definition of indicators which are relevant to measure the impact. The planning phase is concluded with the formulation of Terms of Reference (ToR).

Theory-Based Approach

Within the theory-based approach impact analysis is conducted along the length of the causal chain from inputs to impacts (IEG, 2006, p. 7). Different steps must be considered during the preparation of a theory-based impact evaluation. As illustrated in the following graphic, the preparation starts by constructing a theory of change. This can be done by developing a result chain.

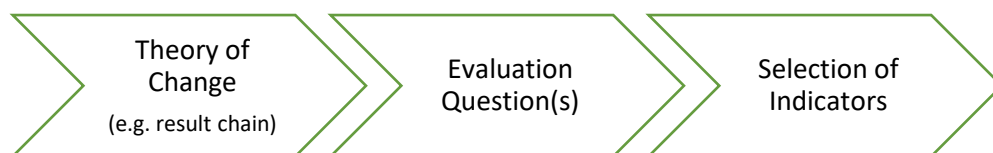


Figure 2: Preparing for an Evaluation (own representation based on Gertler et al., 2016, p. 31)

A result chain contains inputs and activities at the front and long-term outcomes (=results) at the end (Funnel & Rogers, 2011, p. 387). It is useful for recognizing cause and effect, for identifying relationships among programme components (internal relationships), for clarifying programme objectives and long-term goals, and for visualizing a programme in context by considering external factors that may affect the programme (The World Bank (b), 2007, p. 1-6).

Other approaches can be theoretical models, logic models, logical frameworks or outcome models (Gertler et al., 2016, p. 34). All these models help to identify and clarify evaluation questions and to consider the purpose of the evaluation. The present master's thesis will concentrate on the first approach.

After analysing the result chain, evaluation question(s) must be defined and then refined. Refining questions means moving from general to specific and, thus, breaking down broad questions into sub-questions that can be answered more easily (The World Bank (b), 2007, p. 9). It can be distinguished between descriptive questions, normative questions and outcome/impact or cause-effect questions. The latter examine the effect of a programme and focus on the outcome and impact. The objective is to find out, whether the change is directly attributable to a programme or not (=attribution) (The World Bank (b), 2007, p. 11). It is important to clarify the evaluation questions that will be examined, before looking at how the evaluation will be conducted. The result chain can create a good basis for this. The evaluation questions need to be well-defined and testable hypothesis and allow framing the question in such a way that the difference between the results of the treatment and comparison groups can be demonstrated (Gertler et al., 2016, p. 36).

An evaluation question must be accompanied by selecting outcome and performance indicators that allow assessing the results. As in the last step, it is also important here to consider the result chain, as it provides a useful map for selecting the indicators that will be measured along the chain. Good indicators are SMART (specific, measurable, attributable, realistic, and targeted) (Gertler et al., 2016, p. 41-42).

Development of Terms of Reference

At the end of the planning process, the evaluator should formulate ToR, which is a key document in the evaluation. It defines all aspects of how an evaluation will be conducted and provides an overview of the evaluation's purpose and scope, the key evaluation questions, and available resources (Better Evaluation, online).

The ToR usually has a length of 5-10 pages and should include the following sections (European Commission, p. 3):

- Background and context
- Evaluation purpose and target audience
- Evaluation objective and scope
- Evaluation questions and tasks
- Approach and methodology
- Timing and deliverables
- Composition of the evaluation team
- Management arrangements
- Budget and payment
- Proposal submission

Such a document, on the one hand, helps to guide the evaluation and on the other hand forms the basis for communicating with other people about it (Better Evaluation, online).

2.2.3. Methods of Impact Evaluation

Once the ToR has been formulated, the next step is to select the evaluation design. This involves the question of how data is collected, analysed and reported in order to answer the key evaluations questions (Better Evaluation, online).

In the following, the difference between non-experimental and experimental evaluation is explained. Afterward, evaluation methods which could be relevant for the master's thesis are discussed. Quantitative approaches are not discussed in more detail as they require a large amount of data which is not available to the evaluator.

Non-experimental and Experimental Evaluation

Methods of impact evaluation can be divided into the two broad categories non-experimental and experimental. The non-experimental approach doesn't have any clear assignment rules that explain why some individuals are enrolled in a programme and others not. In this situation, it is difficult to find a comparison group. The matching method uses large data sets and statistical techniques to construct an artificial comparison group that has the most similar characteristics to the treatment group. However, it can be hard to find a comparison group if a characteristic that was observed in the treatment group takes on many values or if the list of observed characteristics is large. In this case, it can happen that the database used to analyse the comparison group may not contain a good match for most of the participants of the programme (Gertler et al., 2016, p. 144). The non-experimental approach, for example, includes before-after, with-without comparisons, cross-sectional regression, matching, difference-in-differences, regression discontinuity design, and instrumental variables.

In contrast to the non-experimental method, the experimental approach typically evaluates programme impact through Randomized Controlled Trials (Asian Development Bank, 2011, p. 4). This method selects the intervention group and control group randomly from the same eligible population before the experiment starts. Both groups have similar average characteristics and selection effects can be avoided. Within this approach, a simple comparison (see below) of average outcomes can adequately resolve the attribution problem and can estimate the impact of the intervention (Leeuw & Vaessen, 2009, p. 24).

Methods of Impact Evaluation

Before-After Comparison

The Before-After Comparison analyses how an indicator has changed during the intervention. This method only considers individuals involved in the project and tells us the factual and not the counterfactual, and therefore often refers to monitoring and not evaluation (White, Sinha & Flanagan, online, p. 4). The average effect on the participants can be calculated by subtracting the pre-programme mean from the post-programme mean. The before-after method often doesn't lead to reliable estimates of programme impacts, since the method doesn't consider factors that can occur over time during programme implementation or even in the absence of the programme, such as trends over time, economic changes or interventions during the programme implementation. Thus, it is incorrect to attribute the changes during the implementation entirely to a programme, as several other factors can influence the outcome (Asian Development Bank, 2011, p. 5-6).

With-Without Comparison

This method compares indicators among the treatment group (=group enrolled in a program) and a comparison group (=group not enrolled in a programme). The difference in outcomes between the two groups is seen as the treatment effect of the programme (Asian Development Bank, 2011, p. 5-6). This method is also referred to as the Single Difference Comparison Method (White, Sinha & Flanagan, online, p. 5). With-Without Comparison assumes that there are no unobserved factors. This assumption can be problematic, as two sets of units may have had different characteristics (=unobserved differences) that explain the difference in outcome between the groups, and unobserved reasons may exist for why some people are enrolled in a programme and others are not (=selection bias) (Gertler et al., 2016, p. 130; 134).

Difference-in-Differences Method

The Difference-in-Differences Method takes into account the problems encountered by the methods described above. It combines the Before-and-After Comparison and With-Without Comparison by comparing the changes in outcomes over time between the treatment and a comparison group. This approach can eliminate time-varying differences between the two groups, but not exclude differences that change over time. Therefore, it is important to select a comparison group, which is exposed to the same set of environmental conditions as the treatment group.

Thus, in comparison to the other methods, the Difference-in-Differences Method allows the treatment and comparison groups to be different from the beginning. The differences over time in the comparison group capture the impacts of factors that are not associated with the programme but do affect both groups, for example, external shocks or interventions (Asian Development Bank, 2011, p. 7).

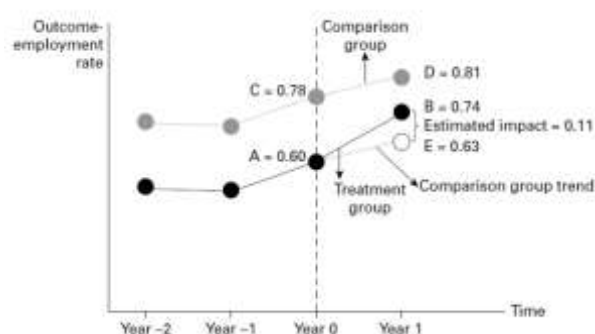


Figure 3: Difference-in-Differences Method (Gertler et al., 2016, p. 132)

By using the Difference-in-Differences Method we estimate the change of outcome that would have been experienced by the treatment group in the absence of the treatment (Gertler et al., 2016, p. 130-131).

The impact can be calculated as follows:

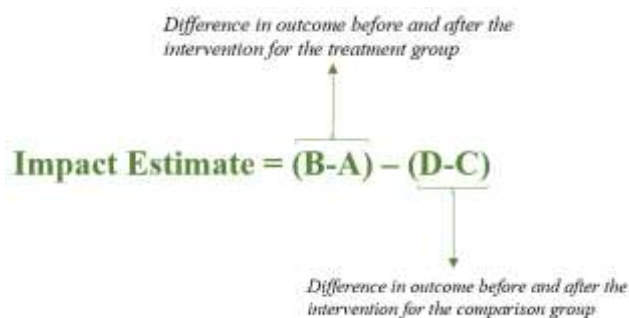


Figure 4: Calculating Impact (own representation based on Gertler et al., 2016, p. 132)

Thus, the impact estimate of the programme is the difference between two differences. On the one hand, the difference in outcomes before and after the intervention for the treatment group must be calculated (B-A) and, on the other hand, the difference in outcome before and after the intervention for the comparison group (D-C). Finally, the latter must be subtracted from the former (Gertler et al., 2016, p. 133).

2.2.4. International Evaluation Principles and Standards

To judge the merit of a development intervention, it is important to consider evaluative criteria during impact evaluation, since evaluation relies on a combination of facts and values (i.e. principles, qualities, attributes). Such criteria are “concepts” that specify the values which will be relevant in an evaluation. There is a wide range of evaluative criteria that can be used to guide an evaluation. However, some are appropriate to certain interventions only. Therefore, it is important to specify the relevant evaluative criteria in the ToR (Peersman, 2014, p. 1).

One set of principles that is widely used in the impact evaluation of development projects is the DAC Principles for Evaluation of Development Assistance (OECD, 2000, p. 1-2). It consists of the following five criteria:

Relevance	<ul style="list-style-type: none"> • The extent to which the development intervention is suited to the priorities and policies of the target group, recipients and donors. • Are the objectives of the project still valid? Are the activities and outputs consistent with the overall goal and with the intended effects and impacts?
Effectiveness	<ul style="list-style-type: none"> • A measure of the extent to which a intervention attains its objectives. • To what extent were the objectives achieved? Which major factors did influence the achievement/non-achievement?
Efficiency	<ul style="list-style-type: none"> • A measure of the outputs (qualitative and quantitative) in relation to the inputs. • Were the activities cost-efficient? Were the objectives achieved on time? Was the project implemented in the most efficient way?
Impact	<ul style="list-style-type: none"> • The positive and negative changes produced by an intervention (directly or indirectly, intended or unintended). • How is the result of the intervention? What difference has the activity made to the beneficiaries? How many people have been affected in total?
Sustainability	<ul style="list-style-type: none"> • Answers the question whether the benefits of an activity are likely to continue after donor funding has been stopped. • Did the benefits of the project continue? What were the major factors which influenced the achievement/non achievement of sustainability?

Figure 5: The DAC Principles (own representation based on OECD, 2000, p. 1-2; Austrian Development Cooperation, 2009, p. 2)

Evaluation questions should be framed around the OECD-DAC criteria. Apart from this set of criteria, there are other criteria about equity, gender equality and taking a human rights-based approach (HRBA). The HRBA framework consists of the five core guiding principles: normativity, non-discrimination, participation, transparency, and accountability. Moreover, there exists a set of evaluative criteria for humanitarian assistance that contains the criteria coverage, coordination, protection and coherence (Peersman, 2014, p. 2).

However, the evaluative criteria described above can't be applied systematically and in a transparent manner, as they are insufficiently defined. Therefore, Greet Peersman recommends qualifying the criteria with more specific detail in the ToR of an evaluation in order to facilitate evaluative judgments about the intervention. The specification should be done in collaboration with key stakeholders (Peersman, 2014, p. 2-3).

2.3. Field Research

2.3.1. Introduction to Field Research

Field Research is a qualitative method of data collection that aims to interact with people in their natural setting, observe them and gain a better understanding of their way of life. Sometimes the terms ethnography or participant observation are used instead of field research, the former being used in particular in anthropology. The latter is usually used in sociology. According to Amy Blackstone, the term field research is understood as a kind of generic term that includes numerous activities that a researcher carries out when he is in the field collecting data. This includes observing, conducting interviews, and analysing documents or artifacts (Blackstone, online, chapter 10). The following diagram illustrates what has been said:



Figure 6: Field Research (Blackstone, online, chapter 10)

2.3.2. Strengths and Weaknesses of Field Research

Field Research contains many strengths. It can provide very detailed data; it considers the social context and can uncover social facts that are not immediately visible to the viewer.

One of the weaknesses of field research is that it is only in-depth and not broad. Field Research can be emotionally demanding, since the researcher not only experiences the highs, but also the lows of daily life and interactions, and he can get easily into ethical conflicts. In addition, it can be challenging for the researcher to document the observations made during fieldwork as it may be not possible to take notes during observation and it can be difficult to decide which details to document and which not (Blackstone, online, chapter 10).

3. Research Methodology

This chapter will provide an overview of the methodology that was used in the master's thesis for the impact analysis of the Qorichacra project in Peru.

3.1. Conversation with an Evaluator

During the pre-study of the master's thesis, the researcher of this paper conducted a conversation with an experienced evaluator and partner at KEK-CDC Consultants. He provided helpful inputs for evaluating the Qorichacra project in Peru, especially with regard to the methodology.

Prior to the researcher's conversation with the consultant, the plan had been to focus on qualitative research and to analyse one specific community (i.e. single case study approach) in an in-depth manner through participant observation and interviews with small-holders who were involved (i.e. treatment group) and not involved (i.e. comparison group) in the project. The intention was to apply the difference-in-difference method, which compares the change in outcomes over time between a treatment group and a comparison group (Gertler et al., 2016, pp. 130). Thus, farmers involved in the project should be compared with farmers not involved in the project in a specific community, using a case study approach. Also, it was planned to conduct expert interviews with several stakeholders of the SFSA.

The consultant that was interviewed was supportive of the plan to use the difference-in-difference-method. However, he emphasized that it would be interesting to collect data in more than one community, for example in two communities, and to compare the findings. Moreover, he recommended the use of focus groups. This method is very efficient, as the data of four to five farmers can be collected at the same time. Also, focus groups could result in interesting discussions that might not occur during interviews. He highlighted that it is important to prepare a set of open-ended questions for the focus groups in advance. As answering questions in a focus group takes a lot of time, only around eight questions should be considered.

Apart from qualitative data, the consultant suggested that it may help to collect quantitative data, such as income, distribution channels, or self-consumption of vegetables that had already been measured at the beginning of the project or during SFSA's evaluation right after the termination of the project in 2015. Such data can be collected through the focus group sessions, for example by means of surveys, including rating scales. The quantification would help to assess the impact and sustainability of the project by observing the figures.

The conversation also veered to the ethical aspects. The consultant highly recommended engaging an independent translator, who is fluent in Quechua, the indigenous language of the Andes. Moreover, he mentioned the importance of respecting cultural differences, especially when speaking with indigenous people. In this context, he advised not to record the conversations during the interviews and focus group sessions and to take handwritten notes.

The conversation with the evaluator helped the researcher to establish the research strategy and research design that will be presented in the following subchapters.

3.2. Research Strategy

A distinction can be made between qualitative and quantitative research. The former seeks to analyse the subjective meaning or the social production of issues, events, or practices by collecting non-standardized data (Flick, 2014, p. 542). In contrast, quantitative research focuses on frequencies and the distribution of issues, events or practices by collecting standardized data and using numbers and statistics to analyse them (Flick, 2014, p. 542).

A third approach combines qualitative and quantitative research (i.e. mixed method approach) and is widely used in impact evaluations. The objective here is to draw on the strengths of the qualitative and quantitative approaches and to integrate them in order to overcome their weaknesses (Bamberger, 2012, p. 4). This approach strengthens the reliability of data and the validity of findings. Moreover, it helps to broaden and deepen the understanding of the processes through which programme outcomes and impacts are achieved (Bamberger, 2012, p. 1).

Conclusion

The objective of the master's thesis was to assess the impact of the Qorichacra project, focusing on the period after the SFSA's withdrawal in 2015. The researcher decided to apply a mixed-method approach, as this is the most effective way to measure the sustainability of a project. However, qualitative research dominated the research and mainly non-standardized data were collected and analysed in depth. Nevertheless, some quantitative data were collected through a survey which was carried out in one of the involved communities and compared to previous surveys (see subchapter 5.4.).

3.3. Research Design

There are various types of research design. Alan Bryman and Emma Bell distinguish between experimental design, cross-sectional design, longitudinal design, case study design and comparative design (Bryman & Bell, 2015, p. 48). The present master's thesis follows a case study design, which will be explained below.

3.3.1. Case Study Design

In contrast to the cross-sectional design, a case study entails the detailed and intensive analysis of a single case. This type of research is concerned with the complexity and nature of the respective case. The researcher here focuses on a bounded situation or system and intensively examines one setting. The subject for a case study can be a single organisation, a single location, a person, or a single event, for example (Bryman & Bell, 2015, p. 67). Case studies are often associated with qualitative research, as this type of research is helpful for conducting an intensive, and a detailed examination of a case. However, quantitative research can also be used here (Bryman & Bell, 2015, p. 68). Through an intensive examination of a single case, case studies help to understand the uniqueness of the case and to develop a deep understanding of its complexity (Bryman & Bell, 2015, p. 69).

In contrast to other methods, case studies focus on answering the questions how and why, and they mainly analyse contemporary events. Thus, they focus on the cases and their unique contexts (Bryman & Bell, 2015, p. 72). During case study the researcher has access to actual behavioral events but doesn't

have control over them. Research methods such as interviews, focus groups, and participant observation are often used in case studies (Yin, 2009, p. 8).

Conclusion

A case study design was applied in the master's thesis and, thus, the impact of the Qorichacra project on two specific communities involved in the project was analysed. The aim was to focus on the cases and their uniqueness and not on producing general findings.

The researcher excluded to apply a cross-sectional research design, as this approach would require collecting huge amounts of data in several communities involved in the project in order to produce general findings on the impact of the project. This approach would go beyond the scope of the master's thesis, as no new data have been obtained since the conclusion of the project in 2015. Therefore, it was more appropriate to apply the case-study approach.

3.3.2. The Subject of the Investigation

As described in the previous chapter, a case-study design was followed, and research was done in the two communities Huillcapata and Chita Pampa, both being part of the second phase of the Qorichacra project. These communities were the most suitable for research since they were both part of the evaluation carried out in 2015 and CBC could arrange contacts for the researcher there.

3.4. Research Methods

3.4.1. Triangulation

Data triangulation enables researchers to adopt different perspectives in answering research questions. Triangulation can be done by using several qualitative methods in combination or by combining qualitative and quantitative methods. Thus, in the first case, several qualitative methods are combined to strengthen the quality of the research and to design and conduct qualitative research in an appropriate way (Flick, 2014, p. 182). In the second case, qualitative and quantitative research complements each other in the study of an issue (Flick, 2014, p. 30).

Conclusion

In the master's thesis, different research methods, as well as qualitative and quantitative approaches, were combined to increase research quality (data triangulation). On the one hand, desk research was conducted, and interviews were held with experts and farmers involved and not involved in the Qorichacra project in Peru (see chapter 4, subchapters 5.2. and 5.3.). On the other hand, a survey was conducted in Huillcapata (see subchapter 5.4.). Since the researcher was only on site for 2 weeks, participant observation could be conducted only marginally and in addition to the other methods (subchapter 3.4.5.). Therefore, it is not seen as one of the key methods of the master's thesis illustrated in the graphic that follows:

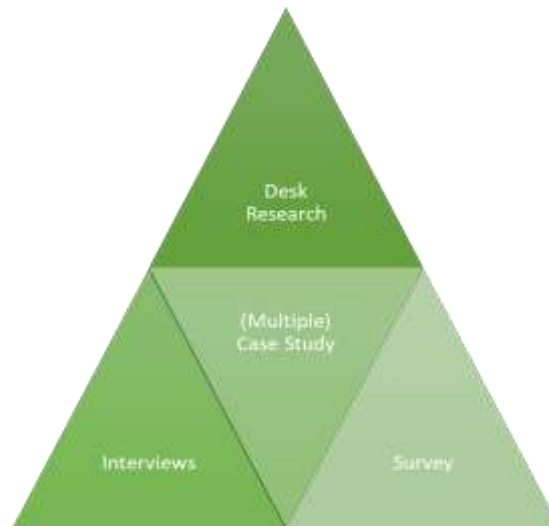


Figure 7: Data Triangulation (own representation)

3.4.2. Desk Research

Desk research is a research method that utilizes existing data which was collected by someone else for another primary purpose. Therefore, it is also known as secondary data analysis (Johnston, 2014, p. 1). Document analysis can be used as a complementary strategy to other methods or it can be used as a stand-alone method. Documents are defined as standardized artifacts. They typically occur as notes, case reports, contracts, drafts, diaries, statistics, annual reports and so on (Flick, 2014, p. 353). Documents can be classified in terms of accessibility. The access can be closed, restricted, open archive or open published. In order to assess the quality of documents, the four criteria of authenticity, credibility, representativeness, and meaning must be taken into account (Flick, 2014, p. 355).

At the beginning of desk research, a corpus of documents must be constructed and the following question about the sampling must be answered: Is it the researcher's objective to have a representative sample of all documents of a certain kind, or does he prefer to select documents to reconstruct a case? (Flick, 2014, p. 356).

Conclusion

In order to get an overview on the Qorichacra project several existing and accessible documents of the project were considered and arranged in a systematic way in order to establish a result chain (see chapter 2.2.2.), taking into account the planning, implementation, and evaluation of the project. As already mentioned in chapter 2, the development of a result chain is an important part of the planning of an evaluation. The desk research helped to identify already available evidence on the impact of the Qorichacra project as well as to fill in gaps of information.

In the master's thesis desk research is seen as a complementary strategy to the interviews and survey. It was conducted at the beginning of the research and has formed the basis to set up the semi-structured interview guidelines. The objective of the desk research was to reconstruct a story of change.

The following table provides an overview of the most important internal and external documents considered during desk research:

Table 1: Internal and External Documents Used for Desk Research (own representation)

Internal Documents	External Documents
Amézaga Rodríguez, M. & Quispe Pérez, H. (2015). Retornado a la agricultura a través de la innovación tecnológica y la combinación de mercados. La experiencia del proyecto Qorichacra con pequeños productores hortofrutícolas en la sub cuena del Quesermayo.	DEZA, Mtp, Minka, Intercooperation (2007). Programa de apoyo a la micro y pequeña empresa en el Perú – APOMIPE Metodología de redes empresariales caso de éxito: Red de productores lácteos tambo real.
Intercooperation (2010). Progress Report For June to August.	Grupo Propuesta Ciudadana (2018). Estudio de Experiencias Exitosas Sobre Diversificación Productiva a Nivel Local (en Cusco y Apurímac).
SFSA (h) (2016). Impact of the Project. Summary.	Vollmar, A. (2014). Caso Ilustrativo APOMIPE Flores - APLICACIÓN DEL ENFOQUE SISTÉMICO (M4P/DSM).
SFSA (i) (2013). Project Description.	
SFSA (j) (2015). Newsletter.	
SFSA (m) (2015). Evaluación de Impacto. Proyecto Qorichacra, Diciembre 2015.	
SFSA (p) (no date). Concurso campesino de familias en viviendas mejoradas.	
SFSA (q) (2016). Evaluación de Impacto Proyecto Qorichacra en Cusco.	
SFSA (r) (no date). Qorichacra. Brochure.	
SFSA, AD, IC, CBC (2010). Proyecto Qorichacra. Inclusión de pequeños productores en la cadena de valor de hortalizas para proveer hoteles y restaurantes de Cusco.	

3.4.3. Interviews

Expert Interviews

Expert interviews are a specific form of semi-structured interviews. They focus on the capacities of interviewees as experts for a certain field of activity (Flick, 2014, p. 227).

To develop an in-depth understanding of the Qorichacra project, interviews with experts of all major project partners, including SFSA, CBC and AD were conducted. The purpose of the interviews with SFSA and CBC was to learn more about the planning and implementation of the project and about the problems that have occurred during and after the project. Also, the cooperation with hotels and restaurants was highlighted. In order to receive a better understanding of the client's perspective, interviews were conducted with AD and McD.

The following table lists the expert interviews carried out during the master's thesis:

Table 2: Interviewed Experts (own representation)

Expert:	Function:
Carola Amezcaga	Project Coordinator, first at Intercooperation and then at SFSA
Valerio Paucarmayta	Director of CBC
Hugo Quispel	Agronomist & anthropologist (former employee of CBC)
Delcy Zamalloa	Agronomist (former employee of CBC)
Jorge Barrantes	Manager of the McDonald's Restaurant in Cusco
Leonardo Lima	Corporate Sustainability Director of Arcos Dorados

As the researcher is not completely fluent in the Spanish language, she engaged for some of the interviews an independent translator.

Problem-Centred Interviews with Farmers Involved

The problem-centred interview focuses on a certain problem by using an interview guide that incorporates questions and narrative stimuli (Flick, 2014, p. 223).

In the master's thesis, problem-centred interviews were conducted with three smallholders living in the communities Chita Pampa and Huillcapata during two field visits. Two of the interviewees were involved in the Qorichacra project. They were both selected as they were part of the second phase of the project and thus participated in the impact evaluation in 2015. The objective was to find out how the lives of the farmers have changed, focusing on the period after the conclusion of the project in 2015. The farmers were visited twice. The third interviewee was met by chance during the field visit. The farmer was not involved in the Qorichacra project and was supported by another programme called APOMIPE. The objective was to obtain information of a person not involved in the project (=comparison group).

The following table shows the farmers interviewed. In order to protect the personal data of the interviewees, pseudonyms were used:

Table 3: Interviewed Farmers (own representation)

Name:	Community:	Project:
Juan	Huillcapata	Qorichacra
Luis	Chita Pampa	APOMIPE
Carlos	Chita Pampa	Qorichacra

As the local language spoken in this community is Quechua, the researcher engaged for both field visits an independent translator.

3.4.4. Survey

There are different types of surveys. It can be distinguished between structured interviews and self-completion questionnaires. A self-completion questionnaire allows respondents to answer questions by completing the questionnaire themselves. In comparison to structured interviews, self-completion questionnaires have fewer open questions, have easy-to-follow designs to minimize the risk that respondents misunderstand the questions, and usually are shorter to reduce the risk of respondent fatigue (Bryman & Bell, 2015, p. 240). An advantage of using closed questions is that they can be pre-coded, what makes data analysis to a simple task (Bryman & Bell, 2015, p. 246).

Self-completion questionnaires can come in several forms, such as mail or postal questionnaires. Another possibility is to hand out questionnaires to a specific group and to collect them after they have been completed ("drop-off and collect" approach) (Bryman & Bell, 2015, p. 239).

Conclusion

In the present master's thesis, a survey was conducted in the community Huillcapata, using self-completion questionnaires. The researcher handed out the questionnaires and collected them after a week. As the farmers had to work in their greenhouses during the day, it was the best way to let them answer the questions in the evening at home when they returned from work and had time. The survey includes answers of six farmers, four of them were involved in the Qorichacra project (=participants),

two of them started to use greenhouses on their own (=control group). In the Huillcapata community in total, eleven families participated in the second phase of the Qorichakra project. The questions of the questionnaire were based on the impact evaluation of 2015 to facilitate the interpretation of the results. Moreover, mainly quantitative data such as income, distribution channels, and self-consumption rate of vegetables were collected, using mainly closed questions, where participants had to tick the appropriate response. The questionnaire can be found in the annex.

3.4.5. Summary

The table below provides a summary of the methodology applied in the research for the master's thesis:

Table 4: Overview of the Methodology of the Master's Thesis (own representation)

	Research Method	Research Strategy
Community Huillcapata	1 × problem-centered interview with a farmer involved in the project.	QUALITATIVE
	Survey	QUALITATIVE/QUANTITATIVE
Community Chita Pampa	1 × problem-centered interview with a farmer involved in the project.	QUALITATIVE
	1 × problem-centered interview with a farmer not involved in the project.	QUALITATIVE
Additional	6 × expert interview	QUALITATIVE
	Desk research	QUALITATIVE
	(Participant observation: Visit of the communities, greenhouses, local markets etc.)	QUALITATIVE

3.5. Data Analysis

3.5.1. Qualitative Analysis

Qualitative data analysis involves the interpretation and classification of data with the objective to make statements about the dimensions (implicit and explicit) and structures of meaning-making in the material and all that it represents (Flick, 2014, p. 370).

Flick defines thematic analysis as a method for identifying, analysing, and reporting patterns (themes) within data (Flick, 2014, p. 421). This method of data analysis is used in case studies (Flick, 2014, p. 376).

Expert Interviews

With regard to the expert interviews, the researcher opted for a thematic analysis. Thus, expert interviews were transcribed and were read several times and the following codes were developed:

- Project Planning
- Project Implementation
- The Outcome of the Project
- Cooperation between Farmers and Restaurants during the Project
- Cooperation between Farmers and Restaurants After the Conclusion of the Project

- Replication of the Project
- Sustainability Strategy of AD
- Agriculture in Peru and Production in Greenhouses

The codes were chosen in such a way that they have certain relevance for answering the research question. Then, the researcher went systematically through the text and tried to assign text passages to the appropriate code. The text passages that could be assigned to a code were transferred to an Excel file. Subsequently, subcodes were defined. In a next step, several codes and subcodes were reviewed and, finally, the results of the data analysis were presented (Flick, 2014, p. 422).

Interviews with Farmers

No voice recordings were made during the field research. The interviews conducted with the farmers were therefore summarised in the form of a report. The researcher then generated codes as in the expert interviews. However, she limited herself to fewer codes. The aim was mainly to look at the different levels at which impact can occur (farmers, farming families, communities).

The codes were as follows:

- Impact on Farmers
- Impact on Farming Families
- Impact on Communities
- Outcome

After that, the same procedure was followed as in the expert interviews.

Desk Research

Documentary analysis was done by collecting several documents of the project which were helpful to establish a result chain. Thereafter, the documents were read and arranged in a systematic way. A summary was written, starting with the project's planning and ending with its conclusion.

3.5.2. Quantitative Data Analysis

Survey

As described in subchapter 3.4.4., a survey was conducted in the community Huillcapata and mainly quantitative data was collected. The results of the survey were first transferred to an Excel file. In a next step, they were analysed by making some calculations in Excel and comparing the results to the impact evaluation in 2015. As the sample size is very small, computer software such as SPSS was not required to evaluate the data. The results of quantitative data analysis were presented in diagrams. They were then interpreted by looking at the different levels on which impact occurs, as in the interviews with the farmers.

3.6. Ethical Aspects of the Research

Research ethics concerns the question of which ethically relevant influences the researcher's intervention could have on the participants of a research. Hence, an appropriate procedure to select the people participating in the research must be used (Flick, p. 49). Numerous codes of ethics

formulate important principles for doing research. They require that researchers should avoid harming participants involved in the process by respecting their needs and interests. Moreover, research should be based on informed consent and the right to privacy of the participants should be protected. Also, participants should not be deceived by the research's aims (Flick, 2014, p.50).

Moreover, there are codes implemented specifically for evaluation, such as the Ethical Guidelines for Evaluation that have been published by the UN Evaluation Group. These guidelines carry a code of conduct for evaluators as well as ethical obligations to participants of the evaluation (United Nations Evaluation Group, 2008, p. 1.). The objective of these guidelines is to ensure respect for the affected people and to protect the rights and welfare of human subjects and the respective communities (Peersman, 2014, p. 10). The obligations to evaluators cover different topics. Obligation 19, for example, emphasizes the importance of respecting people's right to provide information in confidence. Thus, evaluators should make participants aware of the scope and limits of confidentiality. They must also ensure that sensitive information can't be traced to its source. Obligation 20 highlights the importance of respecting cultural differences, local customs, religious beliefs, gender roles, and ethnicity, when planning, carrying out and reporting on evaluations. The guidelines also mention the right to self-determination (United Nations Evaluation Group, 2008, p. 7-8). Transparency and consultation with the stakeholders are further essential features of every evaluation (United Nations Evaluation Group, 2008, p. 7-8)).

Conclusion:

The researcher asked the director of CBC if he could arrange her a contact in Huillcapata so that she could organise her visit to the communities. She then got the phone number of a farmer, called him and informed him about her research for SFSA. She then asked him if she could visit him to conduct an interview. This first contact was crucial to get access to the community but also to win the farmer's trust. If the researcher had spontaneously visited him at home without announcement, he might have been suspicious and would not have got involved in the interview. By choosing this approach, the researcher was also able to ensure that the farmer was at home during her field visit.

The researcher is not completely fluent in Spanish and has not yet gained any experience working in communities. Therefore, she organized a translator for the field visit, who has been living in Peru for many years and has already worked in various NGOs, where he gained experience in fieldwork in the region of Cusco. The researcher subsequently reviewed the findings of the field visits with the translator. This helped her to clarify ambiguities and to gain a second perspective.

The researcher didn't record the interviews with the farmers in the communities as she wanted to create a trustworthy situation and show respect for the farmers. The recording of the interviews would have led to an unnatural situation in which the farmers might have felt too strongly supervised. This might have made it difficult to have honest conversations and to address negative aspects of the project. For the same reason, the researcher has partly refrained from recording the expert interviews.

During all the interviews the researcher took into consideration the Peruvian culture and respected the people's views, even if these differed from her own assessments. To prepare for this, she did some research about Peruvian people and culture before her field visit.

The farmers who participated in the interviews and surveys were made anonymous. The aim was to protect their privacy and identity. This was particularly important since the research was conducted in relatively small communities. Thus, it might have quickly spread who had expressed a positive or negative opinion on the project.

3.7. Classical Criteria in Qualitative Research

The three most important quality criteria for the evaluation of business and management research are reliability, validity, and objectivity (Flick, 2014, p. 481). These concepts are briefly explained in the following and applied to the master's thesis.

Reliability

Reliability deals with the question of whether the results of a study are repeatable. In order for this criterion to be effective, the phenomenon under study in itself may not undergo any changes. However, especially qualitative studies are often not engaged in such unchanging objects. When conducting interviews, the reliability can be increased by testing the interview guideline in advance or by checking it after the first interview. For field observations, the observer can be trained before going into the field. When evaluating data, training, and exchange on the interpretative procedure and on the methods of coding can increase the reliability of the results (Flick, 2014, p. 481-482).

The aim of the researcher was to achieve the highest possible reliability in her master's thesis. For this purpose, she worked out interview guidelines for each interview in advance and revised them after each interview. The researcher spoke to two farmers twice. In the first interview she was able to build trust and in the second interview, she could ask deeper questions, which has increased the reliability of the results. Nevertheless, the farmers are dynamic objects of investigation.

Validity

Validity concerns the question of whether researchers, in fact, see what they think they see. With regard to validity, they may occur three errors. The researcher can see relationships where there are none or identify relationships inaccurately. He can reject relationships even though they are actually correct, and he can ask the wrong questions. In other words, the question arises, how a relationship would look like if it would not be part of the empirical research (Flick, 2014, p. 483).

In order to increase the validity of the research, the researcher used different research methods (= data triangulation). In this way, she was able to ensure that the relationships were correctly identified.

Objectivity

The criterion objectivity means the consistency of meaning when two or more independent researchers analyse the same data or material. When they come to the same conclusion, this indicates that the research is objective (Flick, 2014, p. 487).

The researcher conducted interviews with various people who were involved in the project as experts or as part of the treatment group. Thus, she could gain a deep insight into the project and analyse it from different perspectives and make an objective assessment of the results. Also, the interviews were evaluated very systematically by defining codes that were central to answering the research question. This has made it possible to increase objectivity.

4. The Qorichacra Project (Desk Research)

In chapter 1 a short introduction to the Qorichacra project was given. As described in chapter 2.2.2. it is necessary to get an in-depth understanding of the project and to develop a result chain before evaluating a project.

The present chapter will give a short introduction to small-scale farmers in Peru, the communities involved in the project and the production in greenhouses. Thereafter, the planning and implementation of the project will be described in more detail, and existing evaluations of the project will be considered.

4.1. Overview

The following graph illustrates the result chain of the Qorichacra project, dividing the project into three major parts that will be explained in the subsequent subchapters:



Figure 8: Result Chain of the Qorichacra Project (own representation)

4.2. Introduction

4.2.1. Small Scale Farmers in Latin America

In Latin America, the great majority of small agricultural producers constitute family farming units. They own small pieces of land with very low capitalization, their family members work as unpaid labourers and they usually do not have the capacity to take advantage of information about new market and customer opportunities. The farmers usually do not have access to modern technology and operate informally with very low productivity and low margins. Also, they have a very low level of education. Producers are not organized in networks and therefore have very low bargaining power in the markets or value chains. They consume a significant amount of their products themselves and are not commercially articulated to the modern sector of the economy, which demands products of high-quality. Small-scale farmers often are living in extreme poverty and have income that increasingly comes from a non-agricultural source. This situation makes it impossible for small-scale farmers to compete in markets and value chains and, thus, to improve their incomes (Amézaga & Quispel, 2015, p. 1).

Prior to the Qorichacra project, the agricultural sector was already the subject of policies and programmes that aimed at improving the situation of small-scale farmers in Latin America.

At the regional level, some international organisations have proposed policies on associability strategies. They stand up for policies which facilitate the formation of rural clusters and thus the articulation of microenterprises. In the last 25 years, private and public programmes have been implemented to improve technical capacities of small-scale farmers and to link them to markets and value chains. In Peru, there exist the governmental programme “Mejora de la articulación de los

pequeños productores agropecuarios al mercado” under the responsibility of the Ministry of Agriculture and Irrigation, which was introduced in 2014. The aim of the programme is to organise small farmers into networks and to advise them so that they can become entrepreneurs. In addition, further private and public programmes were started, most of them including the provision of information, training, technical assistance, and advisory services regarding the use of inputs (e.g. improved seeds, marketing, financing). These initiatives often worked with producer’s networks, which legally operated as a non-profit association. However, few results are known for a sustainable articulation of these networks to the markets (Amézaga & Quisped, 2015, p. 1-2).

Since the demand for agricultural products in Peru exists, the failure of such projects can’t be considered as a market problem. According to Carola Amézaga, one reason for their failure is that not enough emphasis has been placed on strengthening the farmer’s organisations so that they can operate once they are completed. In order to have access to the programme’s benefits, farmers had to organise themselves in networks and draw up a business plan. However, often the partners didn’t have a common vision and objective which led to a disintegration of the group. Also, the non-profit association model itself is not adequate, since it is a legal form that has not been designed to do business and farmers were harmed by losing the tax benefits that generally existed for them. Also, within this legal form farmers were not able to distribute profits and fixed assets among their members (Amézaga & Quisped, 2015, p. 1-2; Morales, A., Torres, C., Navarro, I. & Torres, M., 2008).

4.2.2. The Communities of the River Quesermayo Micro-Basin

The communities involved in the Qorichacra project are located 3,700m above sea level and are approximately 22 km away from the city of Cusco, good accessible by road. Despite the limited resources, they have a good development potential, as they have farming land with access to irrigation and clean water (i.e. irrigation infrastructure), electric power, and dynamic markets nearby (SFSA (h),

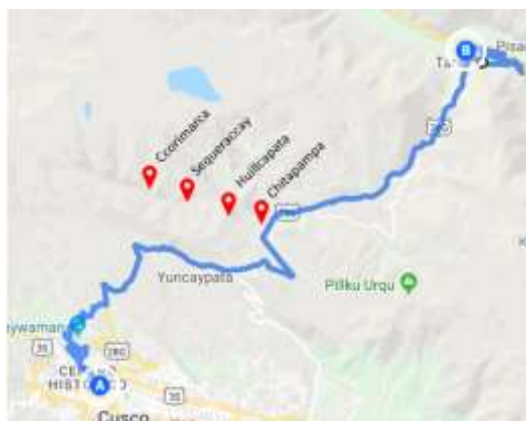


Figure 9: The Communities (Google, online)

p. 2; SFSA (i), p.1). The city of Cusco has 350,000 inhabitants and is a growing tourist destination. Each year, it has been attracting millions of tourists visiting Machu Picchu, one of the most popular tourist destinations in South America and the principal attraction in Peru (Machu Picchu Trek, online). Moreover, the communities have a lot of experience in growing vegetables (SFSA (h), 2016, p. 2; SFSA (i), 2013, p.1).

The climate of the region has two marked seasons: The rainy season with abundant rainfall and strong humidity (December to April) and the dry season (May to November) with the presence of strong sunstrokes during the day and temperatures of up to 18 degrees. During the night the temperatures can drop below -5 degree and frosts can occur and, therefore, during three months farmers can’t grow vegetables, using their traditional cultivation method (SFSA. (m), 2015, p. 3).

4.2.3. Production in Greenhouses

In order to achieve a more efficient use of the land (reduction of cultivation time), and in response to the climatic conditions of the highlands and to achieve an independence of seasonality in production, greenhouses represent added value in the region of Cusco (Grupo Propuesta Ciudadana, 2018, p. 17).

Although protected production in greenhouses is not a technological innovation of the 21st century, its use in the highlands signifies an important technological leap. In the past, a certain rejection has existed regarding the production in greenhouses for financial reasons and cultural factors. In an important learning process, production management in greenhouses has been constantly improved (through soil and water analysis, use of improved seeds, drip irrigation, air circulation, quality control, product packaging etc.). The main reason for most families to start the production in greenhouses was the need to increase their production in order to generate more income (Grupo Propuesta Ciudadana, 2018, p. 17).

4.3. The Planning

The Objectives

With the Qorichacra project, the SFSA and AD pursued three core ideas. First of all, the objective was to develop a commercial production model involving the construction of greenhouses with the appropriate growing technology of vegetable crops that would link small farmers into the supply chain for AD vegetables and other supply chains with rigorous quality standards. Second, the project aimed to improve the lives of farming families and communities. Therefore, a housing competition was carried out in the communities. The third goal was to create a business case that can be applied in other Latin American countries (SFSA (h), 2016, p. 2).

In 2010 IC, who was responsible for the planning of the Qorichacra project, formulated a result framework that consists of three subordinated objectives and ten key result areas (Intercooperation, 2010, p. 3). The overarching objectives of the framework are used as a baseline for the impact analysis. They are illustrated in the following figure:



Figure 10: Framework of the Qorichacra Project (own representation based on Intercooperation, 2010, p. 3)

Pictures: Experfy, online; Freepik, online; OCHA visual, online; Victoria, online

The Methodology of Business Networks

The planning of the Qorichacra project was based on the methodology of business networks used by the Swiss organisation IC for a support programme in Cusco called Programa de Apoyo a la Micro y Pequeña Empresa (APOMIPE) that focused on the production of roses in greenhouses at an altitude of more than 3000 meters between 2005 and 2011. The methodology used originally was developed by UNIDO (United Nations Industrial Development Organisation) and has its core objective in organizing small-scale farmers in entrepreneurial networks (Vollmar, 2014, p. 1).

Thus, the methodology is based on the idea of establishing business networks for production. Such a network is a permanent alliance between a group that collaborates to achieve the common objective of medium and long-term competitiveness. Being part of a network can be a huge benefit for the members. For example, it creates trust and promotes cooperation. Also, it allows small-scale farmers to maintain their production. An entrepreneurial network can satisfy greater needs, as a greater volume of production is achieved. Moreover, it reduces transaction costs and increases bargaining power with customers and suppliers. Furthermore, it creates shared knowledge and facilitates the standardisation of the production process (DEZA, Mtppe, Minka, Intercooperation, 2007, p. 2-3).

The methodology of business networks is shown in the following figure (SFSA, AD, IC, CBC, 2010, p. 8):

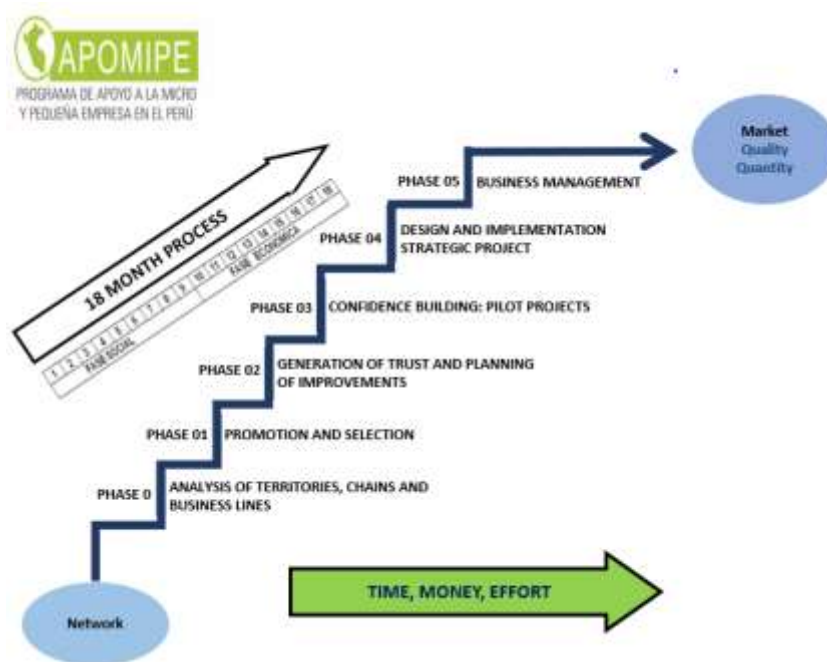


Figure 11: The APOMIPE Methodology (own representation based on SFSA, AD, IC, CBC, 2010, p. 8)

As illustrated in the diagram the methodology includes various phases. The process starts with the analysis of possible territories, chains and business lines (phase 0). Then, potential beneficiaries interested in working in a network of producers are selected. Therefore, they must meet criteria such as interest to invest effort, time and money in their business (phase 1). Phase 2 aims to generate trust between producers. It is important that they visualize the advantages of working as a network. Therefore, it can be helpful to define a common objective which will guide the entire articulation process. Once the members of the network have gained a certain level of confidence, it is time to carry out the joint pilot project in phase 3. Such a project should require a low investment and produce

tangible benefits such as costs, revenues or productivity in a short period of time (e.g. 3 months) so that the participants build confidence based on the positive results. Once trust is consolidated, networks can begin their strategic planning process in phase 4. In order to validate a common long-term objective, it is necessary to analyse in depth the problems and potentialities of the network. The common objective should be considered when designing the business plan and later the strategic project (Vollmar, 2014, p. 2-5).

4.4. The Implementation

The First Phase

The first phase of the Qorichacra project was carried out with a group of 14 farmers from the communities Ccorimarca and Sequeraccay. The aim was to supply the McD restaurant in Cusco between 2010 and 2012. The project was implemented by AD, SFSA and the Energy and Environment Alliance programme. The company AGROPAT CUSCO (of which CBC and AEA are part) provided services in technical assistance and commercial articulation to the markets of highly demanding customers (Grupo Propuesta Ciudadana, 2018, p. 18-19).

The first phase involved developing a commercial production model, including training, construction of greenhouses and use of appropriate growing technology. Moreover, business networks were created, which allowed farmers to sell under better economic conditions to commercial clients (restaurants, hotels, companies) and to manage funds to expand their initiatives. Producers started to apply Good Agricultural Practices (G.A.P.) based on the standards of GLOBAL G.A.P., the worldwide standard for Good Agricultural Practices (Grupo Propuesta Ciudadana, 2018, p.-19).



Figure 12: SUMAC KAUSAY Competition (SFSA (o), 2009, p. 5)

In this phase, a competition called SUMAC KAUSAY was established to improve the quality of housing within the communities involved and, thus, to increase quality of life of the farmers (SFSA (j), 2015, p. 4; SFSA (h), 2016, p. 2). Interested families could register voluntarily to participate in the competition and then received advice and assistance of a “Kamayoc” (expert farmer).

The competition was split into three main phases. First, the families had to create talking maps to present their ideas of how to refurbish their houses. Then the ideas were realized by the “Kamayoc” and/or technicians. In the last phase, the results were evaluated, and prizes were awarded to the best families (SFSA (p), 2010, p. 1-4).

Before the competition families didn’t keep their animals separately what was a trigger for diseases. Also, many people didn’t know how to store food. Therefore, food was not edible for long. The competition has led many families to start keeping their animals separately and to improve their

kitchens. Moreover, walls were painted, bathrooms were built and the rooms for parents and children were separated (SFSA (i), 2013, p. 3).

The Second Phase

The second phase, carried out between May 2013 and March 2016, focused on the consolidation of the model and expanded it to other families in the communities of the pilot project but also to other communities located in the River Quesermayo micro-basin, including Huillcapata and Chita Pampa. Various institutions were involved, such as AGRO RURAL, NGO Heifer International, FONCODES and others (Grupo Propuesta Ciudadana, 2018, p. 19-20).

In this phase, a technical guide was developed for the construction and use of greenhouses in the Andean region that aimed to improve farmers' efficiency. To avoid smallholders' dependence on the AD, the farmers also started working with other customers in the city of Cusco, such as Novotel and Greens. And they continued to sell a big amount of their vegetables at the local market (SFSA (j), 2015, p. 4; SFSA (h), 2016, p. 2).

The direct support of SFSA and AD was reduced gradually from 2013 until the conclusion of the project in 2015. By the end of the project, 24 families were regularly supplying restaurants and hotels in Cusco and 146 families had improved their houses. Moreover, 468 families had started to produce in greenhouses (SFSA (h), 2016, p. 2).

Replication of the Project after 2015

After the conclusion of the Qorichacra project, 18 other communities located in the provinces of Cusco, Paruro, Calca, Urubamba and Quipicanchi replicated the Qorichacra project, building over 800 greenhouses (Grupo Propuesta Ciudadana, 2018, p. 20).

Since 2014 AD and SFSA shared the vision to develop a concept that can be scaled to the needs of several Latin American countries to meet growing demand for quality vegetables. The partners started to replicate the Qorichacra project in Brazil and Puerto Rico. They also aimed to expand the project to Argentina and Guatemala (SFSA (r), online, p. 2; SFSA (h), 2016, p. 5).

A Project Overview

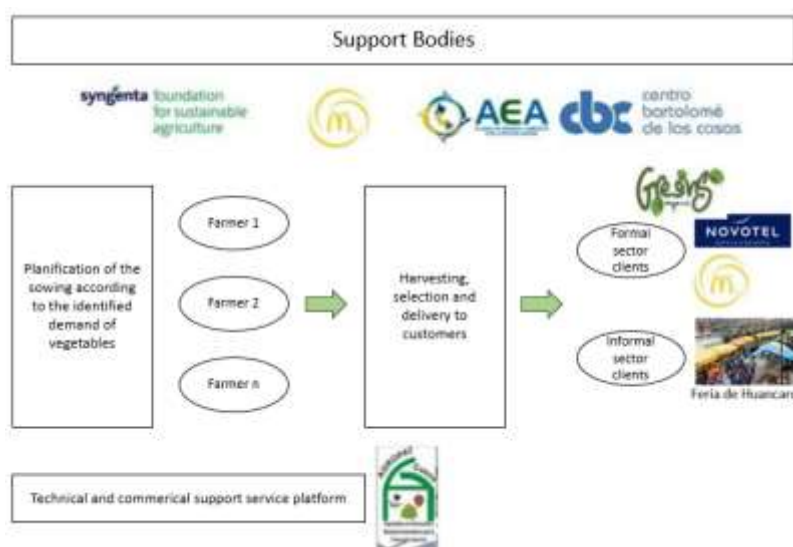


Figure 13: Project Overview (own representation based on SFSA (q), 2016, p.4)

4.5. Review of Existing Studies of the Qorichacra Project

4.5.1. Quantitative Impact Evaluation (2015)

In 2015 CBC and SFSA conducted a quantitative impact evaluation to obtain results on the changes that have been achieved through the Qorichacra project in the involved families. The following points were examined in more detail (SFSA (m), 2015, p. 3; SFSA (h), 2016, p.1 f.):

- Improvement of the production process
- The commercialisation of strawberries and vegetables
- Cultivation of strawberry and vegetable crops (technical aspects)
- Access to strategical markets

It has been established that the number of greenhouses for vegetable, strawberry and flower production in Cusco has increased during and after the project. In 2013 (when the pilot phase finished) the total area covered by greenhouses was 6,500 m², by the end of the project, the number has more than doubled and reached approximately 14,000 m² (SFSA (h), 2016, p. 3).

By the end of the project in 2015, some 24 families were regularly supplying the McD restaurant in Cusco, as well as other restaurants and hotels around Cusco and 468 families had started to plant and grow vegetable seedlings in greenhouses (SFSA (h), 2016, p. 2). Interviews with restaurants and hotels in Cusco confirmed an improvement in the supply and quality of vegetables produced and marketed in the region. Also, the confidence of buyers and consumers about local product quality has been strengthened through the adaption of G.A.P. and the direct presence of farmers in the market. Companies, who traditionally were supplied by products from Arequipa and the coastal areas of the country started to buy their vegetable from local farmers of the Cusco region. (SFSA (h), 2016, p. 3).

The impact evaluation has confirmed the success of greenhouses through increased production volumes and revenues, job creation and the professionalization of small-scale farmers involved in the vegetable production. In interviews, farmer confirmed the link between better incomes on the one hand and the introduction of greenhouses with drip irrigation, the application of G.A.P. and the use of hybrid seeds on the other hand. These changes allowed the farmers to cope with increasing market demands for high quality and quantity of products (SFSA (h), 2016, p. 3). The project has made farmers aware of their potential. The study also shows that employment in farming families has increased from 0.3 jobs per family with traditional production technology (open field) to 1.04 jobs per family producing vegetables in greenhouses. Also, income from other agricultural products such as flowers and strawberries increased between 2013 and 2016 (from USD 454 to USD 770 per year, according to 11 percent of households). In addition, the livelihood contest has improved quality of life in the communities (SFSA (h), 2016, p. 3).

4.5.2. Qualitative Impact Evaluation (2016)

In 2016 CBC and SFSA carried out a qualitative impact evaluation, which is the product of an external analysis based on information from the Qorichacra project and the statements of direct and indirect actors of the vegetable production chain in Cusco (SFSA (q), 2016). Regarding the master's thesis especially the part about the cooperation between farmers and customers must be taken into consideration and will be summarized in the following charter:

Table 5: Cooperation between Farmers and Customers (own representation based on SFSA (q), 2016, p. 12-21)

Customer:	Positive Aspects:	Negative Aspects:
Traditional Market (e.g. Huancaro market)	<ul style="list-style-type: none"> -Immediate liquidity (transaction against cash delivery), p. 12. -Farmers can sell 100% of their products at the market (also those who do not meet quality required by the most demanding buyers), p. 12. -Access to temporary market windows and maximization of income (farmers can produce all kind of vegetables with the new production technology), p.13. 	<ul style="list-style-type: none"> -Dependence on the punctual demand of buyers (farmers must sell their entire production within one day), p. 13.
Formal Market (e.g. Arcos Dorados & Grupo Gastronomico)	<ul style="list-style-type: none"> -Farmers seen as business partners, p. 15: → Arcos Dorados created a new scheme for producers in order to minimize the issue of rejections and provided knowledge of the requirements of selection, quality and dispatch of the products (e.g. Good Agricultural Practices). → New operating system of the McDonald's Restaurant in Cusco that involved actions that were too complicated to transfer to producers. -Arcos Dorados intended to expand the project to three McDonald's Restaurants in Arequipa, p. 16. -Cooperation with the farming communities despite high prices in order to ensure that producers can have a first impulse to enter into the market (Grupo Gastronomico), p. 17. 	<ul style="list-style-type: none"> -High price fluctuations, p. 20: → No contract or agreement has been concluded that fixed prices for at least a period of time. Emphasis of the farmers on comparing the current prices with the alternative market (Grupo Gastronomico). -Definition of prices, p. 17: → Prices were much higher than at the local market what led to conflicts between the partners (Grupo Gastronomico). -The quality of the products is often irrelevant to clients (Grupo Gastronomico), p. 20. -Relationship limited to client-supplier relation (Grupo Gastronomico), p. 21. -No willingness of the farmers, p. 21: → No interest in supplying a company that on the one hand intends to access market prices and only pays the products after one month (producers).

4.5.3. Study of Experiences on Productive Diversification at Local Level (2018)

The study “Experiencias exitosas sobre diversificación productiva a nivel local en Cusco y Apurímac” was carried out in April and May 2018 by the two NGOs Grupo Propuesta Ciudadana and CEDEPAS NORTE and was supported by the Ford Foundation (Grupo Propuesta Ciudadana, 2018, p. 6). The main objective was to systematize, summarize and evaluate the successful experiences on product diversification in the Andean region, considering different projects of the Arariwa Association and the CBC, which included agricultural activities, agro-industry, tourism, and crafts. The evaluation was based on the following 10 criteria (Grupo Propuesta Ciudadana, 2018, p. 8):

- Local and low-cost-inputs
- Generation of local employment
- Utility and stable economic income
- Autonomy and sustainability (no technical and/or financial assistance after 2 years)
- Gender equity
- Stability of food security
- Technological innovation
- logical, functioning and sustainable production chain
- Environmental aspects (promotion of biodiversity, water quality & availability, pollution etc.)
- Replicability

The Qorichakra project was rated as the most successful in the study since the production of vegetables, flowers, and strawberries in greenhouses is marked through high productivity and higher profits. The new technology allows agricultural production in short periods, it increases flexibility and, therefore, adaptation to the demand of the local and national market is given. An intelligent concept of product commercialization guarantees stable incomes and contributes to the food security of every

family. The experience of greenhouses can be replicated in several highlands, considering the demand for products from mining companies (Grupo Propuesta Ciudadana, 2018, p. 46). Another positive aspect of the production in greenhouses is gender equity. In the second phase of the Qorichacra project, 70 percent of the registered business network members were women (Grupo Propuesta Ciudadana, 2018, p. 19).

5. Results

This chapter presents the results of empirical research. After a short introduction, the expert interviews, the interviews with the farmers and the survey are summarised and interpreted.

5.1. Introduction

Chapter 2 of the master's thesis stated that it is important to formulate ToR when planning an evaluation. Chapter 1 of the master's thesis mentions numerous aspects relevant to the ToR, such as the background, the objective and scope as well as the evaluation questions. The methodology, which is also part of the ToR, is discussed in chapter 4. Therefore, the researcher has refrained from writing further ToR.

The researcher decided not to formulate indicators for data collection in the communities. Due to the small sample, this would not have made sense. Instead, the different levels at which impact can occur (farmers, farming families, and communities) were considered.

5.2. Expert Interviews

During her stay in Peru, the researcher conducted interviews with representatives of CBC, SFSA, AD, and McD. The aim was to better understand the planning and implementation of the project and to take a closer look at the farmers' cooperation with restaurants and hotels. Also, some ambiguities were clarified, which appeared during desk research.

In the following subchapter expert interviews are summarized by topic and sub-topic. This is followed by an interpretation of the content (see chapter 5.2.2.).

5.2.1. Content Analysis

Project Planning

Business Networks

The APOMIPE methodology was a key element during the planning process of the Qorichacra project. Carola Amézaga explains that this methodology was developed by the UN. The idea is to promote the cooperation of a small group of producers with a large company (Interview Amézaga, lines 7-10). Carola Amézaga adds that IC adapted the Business Network Methodology to the rural sector. The methodology has different phases. In the Qorichacra project, these phases were mainly the driving force in the development of trust, with a vision of articulating to the market. The methodology started by creating business opportunities and continued by building trust, institutionalisation, social capital and by strengthening groups through, common regulations, quotas, periodic meetings and a number of commitments (Interview Amézaga, lines 16-22). It was important to apply this step-by-step methodology that not only looked at the market share, costs and economy but also at the socio-organisational part. This is essential, as farmers first have to be sure of who they do business with so that they can reduce the mistrust that prevails in the communities (Interview Amézaga, lines 31-35).

Valério Paucarmayta explains that these business networks were created for the following three reasons: First, McD ordered a large number of vegetables, and one farmer alone could not meet this

demand. Second, McD can only buy from registered companies. In order to sell products to the company, a fiscal number is required, which a single farmer can't afford. Thirdly, working in a business network has the advantage that producers can work together in the areas of purchasing and consulting (Interview Paucarmayta, lines 96-99).

Carola Amézaga comments that it was important to organize producers in networks in order to meet the quality standards of McD and other restaurants and hotels (Interview Amézaga, lines 81-86).

Selection of Farmers

Farmers had to fulfill various criteria to participate in the project. They had to be willing to commit themselves and to invest time for activities related to the project. Also, they had to support part of the project financially, as not all materials were 100 percent covered (Interview Paucarmayta, lines 63-87).

Project Planning on the Part of Arcos Dorados

Leonardo says that there have been some critical points during the planning of the project for the AD. The first difficulty for the company was to define who the local partner working with the producers should be. Back then, it was the right decision to work with CBC, as the organisation has already worked in this region and its employees speak Quechua. Therefore, people in the communities had confidence in the organisation. Via CBC AD was able to build a bridge to the producers (Interview Lima, lines 62-68). Leonardo Lima adds that another crucial point was that they needed the patience to win the trust of the producers. Also, it was important to have a logistic operator between the farmers and McD.

Other Important Aspects During Planning

Valério Paucarmayta explains that CBC has already had experience in productive initiatives. Since 2009 the NGO worked in a similar programme that was called APOMIPE. This previous experience was important in order to carry out the Qorichacra project (Interview Paucarmayta, lines 69-70).

He notices that a community must be considered as a territory that answers to a collective question of water, land and other resources. The first thing an organisation has to do when starting a project is to coordinate with the community. It's an identification process (Interview Paucarmayta, lines 61-63).

Implementation of the Project

The Willingness of Farmers to Change

Problems occurred during the implementation of the Qorichacra project. In particular, the first phase of the project didn't proceed as planned in one of the two communities. The problem was that the farmers received too much financial help from the organisation and they didn't have to invest by their own. Also, the farmers could not cope with the changes:

“Esto fue un cambio muy radical para ellos, porque ellos no conocían nada de eso” (Interview Amézaga, lines 93-95).

In the sentence quoted above, Carola Amézaga says that the project was a radical change for the farmers. They didn't know anything about greenhouses before.

The farmers of the community mentioned above were not ready for such a change and preferred their traditional method of farming. CBC has therefore stopped carrying out the project in this community.

The second phase went better. It was first conducted in three communities and was later extended to other communities. The idea of producing in greenhouses was better accepted by the farmers. They had high interests in cooperating with CBC. The families who participated in this phase also received less financial aid. However, there were also difficulties in the second phase. For example, conflicts occurred between the local team of CBC and the families and the whole team had to be replaced. During this period of the project, the iceberg lettuce was affected by a disease at one time, which led to crop failures and a delivery bottleneck (Interview Quashed, lines 31-38).

The MASAL Programme

A parallel housing competition, called MASAL programme, was held during the Qorichacra project. It was created out of collaboration between the governments of Peru and Switzerland. The programme was based on “Kamoyocs” who are specialists in a specific field and train farming families on a certain topic. The programme worked very well. Central aspects were the physical separation of people and animals, the issue of hygiene and the issue of sleeping in one room (Interview Paucarmayta, lines 125-130).

External Project Support

During the project, the farmers were supported by external companies. For example, a company came to advise them on everything related to food handling. Another company came to see how water was handled in the communities. And then, an international company came to evaluate the G.A.P. established by CBC and SFSA (Interview Amézaga, lines 96-100).

Accompanying and Counselling Period

After the conclusion of the project in 2015, there was an accompanying and counselling period. In addition, CBC started a new project with SFSA and the American organisation ICA, which on the one hand included consulting of technology from the Qorichacra project. And on the other hand, a technical guide was created. CBC was still active for a total of 10 to 15 months, after which the cooperation with the farmers was, terminated (Interview Paucarmayta, lines 137-140).

Certification

The project didn't include GLOBAL G.A.P. certification of the farmers. But the project did invest a lot of resources and time in getting farmers to comply with the certification and to build a quality system so that they could get the GLOBAL G.A.P. certification at some point in the future (Interview Amézaga, lines 117-119). The project was concluded with an evaluation. In this way, all critical points could be examined again. The idea was for the farmers to be able to build on this (Interview Amézaga, lines 106-107).

Back when the Qorichacra project was implemented, GLOBAL G.A.P. certification was not required by the buyers. The market didn't ask for it and McD had its own quality standards which had to be fulfilled (Interview Amézaga, line 111).

During the time producers began to combine markets. They continued to sell a small number of their products to restaurants and hotels but most of their production went to the traditional market. There, they stood out for their quality and made a lot of money. There, certification was not an issue at all. Farmers didn't see the need to supply more formal customers such as restaurants and hotels. Those

who did so mostly did it for their image within their communities that they were suppliers of formal companies (Interview Amézaga, 122-127).

Carola Amézaga explains that it would have been a great task to make restaurants and hotels aware that they should ask for certification and that it's more up to the state to deal with such an issue (Interview Amézaga, 139-142).

The Outcome of the Project

Positive Aspects

Carola Amézaga starts to explain that there was no single greenhouse in the region of Cusco when they started the Qorichakra project. Today everything is protected agriculture. In the past, the vegetables sold in Cusco often came from Arequipa, which is the largest and most productive valley near Cusco. But then, a big part of the production of iceberg lettuce that came from Arequipa has been replaced by the farming communities in Cusco (Interview Amézaga, lines 275-280).

Leonardo Lima also comments on the success of the project:

“I think you probably saw the benefits from the project in the Cusco region. Because when we started the project, we built the first greenhouses in that area. Probably nowadays there are thousands of greenhouses” (Interview Leonardo Lima, lines 52-54).

At the beginning of the project, most of the farmers' income came from non-agricultural products. Back then, only 22 percent of their income came from agriculture. At the end of the project, it was exactly the opposite (Interview Amézaga, lines 160-162).

The Qorichakra project has improved the family's income and increased the production of their land. Agriculture is a great opportunity for the farmers involved and their communities, as they live very close to the centre of Cusco. So, they can produce what the people in the city need and they can sell the products in the centre (Interview Amézaga, lines 163-165).

Many families took part in the housing competition and renovated and redesigned their homes. This led to an improved quality of life. As a result, many farmers are considering doing tourism. They have realised that it could be an additional source of income in their future (Interview Amézaga, lines 172-175).

Delcy Zamalloa explains that the farmers started to diversify their production in the last years. In 2011 they only cultivated green vegetables. Over the years, they've stopped planting iceberg lettuce and started to produce flowers and strawberries. There is a great demand for these products at the local market in Cusco and farmers can sell them to a good price (Interview Zamalloa, lines 28-31).

The Qorichakra project demonstrated how relevant the technology of greenhouses in the highlands is in order to produce vegetables, fruits, and flowers. Today the farmers apply the G.A.P. (Interview Amézaga, lines 154-157).

Delcy Zamalloa adds that the Qorichakra project started to reform agriculture in Cusco. The project was replicated in many other communities. Today, most of the families use greenhouses for their production (Interview Zamalloa, lines 38-39). Carola Amézaga agrees and explains that there is a lot of

imitation of the Qorichacra project within Peru (Interview Amézaga, line 241). 16 communities took the project as a model and started to build greenhouses (Interview Amézaga, lines 157-159).

Negative Aspects and Learnings

Delcy Zamalloa agrees that many families stopped cultivating their products in greenhouses. However, she clarifies that this only happened to farmers who constructed a greenhouse on their own. These farmers partly got financial support from the municipality. But no one explained to them how to use the greenhouse. They lacked the know-how to operate the greenhouse successfully (Interview Zamalloa, lines 44-48).

Carola Amézaga admits that it is a big problem for the farmers that McD only pays the bills after 30 days. She says that they didn't pay enough attention to the payment chain when planning the project, which was one of their learning's (Interview Amézaga, lines 224-226). She continues that, in her opinion, there were two other critical points in which the project could not achieve what was planned, the certification and the intermediary (Interview Amézaga, lines 153-157). In general Carola Amézaga seems to be happy with the outcome of the Qorichacra project but she remains critical. During the interview she makes the following statement about her surprise visit to the communities she made 1.5 years ago:

“Veo que no es como el modelo que se quiso inplantar, pero es algo ha dado frutos y que ha continuado. No es todo ideal, no es que todos los que pongan invernaderos sepan de buenas técnicas agrícolas y sus estudios de mercado pero por lo menos ya saben que con eso ganar productividad y ellos mismos van viendo como van siendo exitosos y hay mucha imitación” (Interview Carola Amézaga, lines 237-241).

Thus, during her visit, she saw that the production in greenhouses today is not identical to the planned model. However, farmers continued to use this new technology for their production. Not everyone who sets up a greenhouse today knows about G.A.P. But at least farmers know that they can gain productivity and be successful by using greenhouses in the highlands of Peru. Also, there is a lot of imitation in the region (Interview Carola Amézaga, lines 237-241).

During the interview, Leonardo Lima mentioned the learnings AD would like to consider in a next project. He says that next time the company would not start with iceberg lettuce, as its production is complex and demanding. For example, farmers could start with another type of salad that McD uses in its salads (Interview Leonardo Lima, lines 180-183). According to Leonardo Lima, it was a mistake to directly consult the producers and not to start having a local logistic operator (Interview Leonardo Lima, lines 161-161). Such an operator is crucial:

“Without this type of organisation, we can't balance the production and demand” (Interview Leonardo Lima, lines 166-267).

Another learning for Leonardo Lima was to work with other companies in order to have more participants. He recommends working with four or five buyers or different stakeholders to minimize the efforts and costs and to increase leverage (Interview Leonardo Lima, lines 156-157).

Cooperation Between Farmers and Restaurants During the Project

Cooperation Between Farmers and Arcos Dorados During the Project:

Carola comments on the farmers' cooperation with an AD during the Qorichacra project as follows:

“Toda la primera etapa fue espectacular, en tiempo récord, en 8 meses los productores sacaron las lechugas que McDonalds pedía, todo estaba muy bien, pero de ahí hubo un vacío, una existencia técnica y entró un hongo a la lechuga que tuvo que cortarse el abastecimiento” (Interview Amézaga, lines 199-202).

Thus, the cooperation between the farmers and AD worked very well until the iceberg lettuce was once attacked by a fungus. This led to a delivery stop. However, the problem was solved, and the farmers were able to supply the McD restaurant again. Nevertheless, the farmers always needed technical support to grow iceberg lettuce in their greenhouses. Even after the end of the project, the farmers continued paying someone to do monitoring (Interview Amézaga, lines 205-208).

Leonardo Lima says it took McD two years to get iceberg lettuce from the farmers:

“And when we started to receive products from the producers it is unbelievable that we didn't have big problems” (Interview Lima, lines 76-77).

Afterward, like Carola Amézaga, he talks about the delivery failure, which was an exception. He adds that, apart from that, they never had problems regarding the quality of the products during the project (Interview Lima, lines 77-82).

Even though the farmers delivered their products on time and in good quality, disputes arose during the project. One of the triggers was McD's payment policy. The company only paid its bills after 30 days. This is a big problem for families with low income. They often don't have savings and need the money as soon as possible (Interview Zamalloa, lines 20-25).

According to Delcy Zamalloa, another critical point was that McD did buy a very small amount of iceberg lettuce from the farmers (around 40-60 kg per week) (Interview Zamalloa, lines 64-68). All the other products came from Lima, where the company works with the big supplier “Country Home” (Interview Zamalloa, lines 71-73). McD could also buy tomatoes or other vegetables from the farmers, but in a smaller quantity (Delcy Zamalloa, lines 74-75).

Valério Paucarmaya explains that another problem is the high standards and requirements of McD and the other restaurants and hotels. Meeting these standards means more effort for farmers. Nevertheless, they can't sell the products to a much better price than at the local market. Thus, during the Qorichacra project farmers, for example, wondered why they should make such beautiful tomatoes, although they don't receive more money for them. As a result, some farmers started selling their vegetables exclusively on the market again (Interview Paucarmaya, lines 101-103).

Hugo Quisped realized early in the project that the cooperation with McD can't work under these circumstances and tried to convince his co-workers. He is skeptical that the cooperation can work in the future, as the demand by restaurants and hotels in Cusco is too small (Interview Quisped, lines 170-174).

Hugo Quisped explains that conflicts between the farmers and McD occurred as they started to work with an intermediary called Grupo Gastronomico (Interview Quisped, lines 62-63). The farmers found out that Grupo Gastronomico sold the products to a much higher price (3 soles/kg) than they received for their products (2.2 soles/kg) and felt treated unfairly (Interview Quisped, lines 65-67).

Carola Amézaga condemns the intermediary's prices:

“(…) los precios que estaban dispuestos a pagar no se ajustaban a los de una empresa en el medio” (Interview Carola Amézaga, lines 131-133).

Cooperation Between Farmers and Restaurants During the Project in General:

Valério Paucamaya explains that the cooperation between restaurants and small farmers is complex since two completely different organisational cultures meet. On the one side the economic perspective of the companies, and on the other side the chronological one of the communities. The latter mainly produce for themselves (auto consumption) and sell a little of their products, logistics and time thinking are often lacking (Interview Paucamaya, lines 112-116).

On the part of the restaurants, there is a lot of mistrust towards the communities and this is partly justified. For example, farmers don't always deliver on time (Interview Paucamaya, lines 110-112)

Carola Amézaga notices that all major restaurants have the same payment policy as McD. They only pay after 30 days. It is difficult for farmers to accept this. They may have only accepted this because it was part of the project. On the market they can sell all their products within one day and receive the money in cash what is much better for them (Interview Amézaga, lines 217-220):

“(…) siempre les costó aceptarlo pero lo hacían porque era parte del proyecto y a su vez recibían otras cosas, pero imagino que desde que eso termina” (Interview Amézaga, lines 217-220).

In general, buyers placed more value on a good price than on the quality of the products:

“Ni los productores estaban dispuestos a recibir menos dinero de lo que ellos vendían en el mercado tradicional, ni los otros estaban dispuestos a pagar más porque ellos también podían acceder al mercado tradicional, y eso fue un intento que falló” (Interview Amézaga, lines 134-137).

Thus, neither the farmers nor the restaurants were willing to compromise on price. The farmers wanted to demand higher prices from the restaurants because of the quality of their products. However, the restaurants didn't want to pay more than on the local market, where they had any time access to the products.

Another problem was that restaurants and hotels only bought very small quantities of vegetables and fruits. Therefore, most of the farmer's products continued to be sold at the local market. The AD was the biggest partner in the project. The company bought in its peak approximately between 60 and 80 kg of iceberg lettuce per week. The other hotels bought smaller amounts of vegetables and fruits. For example, Novotel bought 6 kg of strawberries from the farmers per week. According to Hugo Quisped, that's very little, since a farmer produces up to 700 kg of vegetables or 240 kg of strawberries per month (in a greenhouse of 200 m²) (Interview Quisped, lines 43-49):

“It is not worthwhile to supply such small quantities. For farmers, this only leads to high transport costs and a high expenditure of time” (Interview Quisped, lines 51-53).

Delcy Zamalloa explains that local markets such as the Huancaro market play an important role in Cusco. The Huancaro market takes place once a week. Intermediaries go to the market and buy huge quantities of vegetables and fruits that they then sell to restaurants, hotels, and end-consumers.

Besides, end-consumers go to the market to do their weekly shopping. At the Huancaro market, farmers can sell their whole products in a few hours and they got paid directly by the buyer (Interview Zamalloa, lines 58-64).

Cooperation Between Farmers and Restaurants After the Conclusion of the Project

Cooperation Between Farmers and Arcos Dorados After the Project

The manager of the McD restaurant in Cusco seems to be satisfied with the cooperation with the farmers of the Qorichacra project:

“The cooperation works very well. One year the farmers could not deliver their iceberg lettuce, because it was contaminated. But this was an exception. We also go to the communities once a year and try to help them. One year we brought them presents for Christmas. Another year we helped them to renovate the school” (Interview Barrantes, lines 19-22).

Jorge Barrantes has only been running the restaurant for three months. He doesn't know the names of the farmers or communities that supply them today. He explains that they have their coordinator, Delcy Zamalloa. She stays in contact with the farmers. When problems arise, he talks to her and not directly to the farmers (Interview Barrantes, lines 13-14). Delcy Zamalloa explains that the restaurant in Cusco is supplied by four families from the community Sequeraccay (Interview Zamalloa, lines 14-15).

Jorge Barrantes continues that the McD restaurant in Cusco buys between 40 and 80 kg of iceberg lettuce from the communities per month (Interview Barrantes, lines 13-14). All other vegetables come from the supplier “Country Home” in Lima. It is a huge supplier who also supplies the other McD restaurants in Peru (Interview Barrantes, lines 26-27). For some time, there has been a collaboration between the farmers and the McD Restaurants in Arequipa but today these restaurant are also supplied by “Country Home” (Interview Barrantes, lines 39-40).

Jorge Barrantes confirms that the 30-day payment period still applies. He is aware that this is too late for the farmers. However, the AD is a huge company and has many strict rules and predetermined conditions of payment (Interview Barrantes, lines 34-36).

Leonardo Lima is shocked by the fact that they pay the farmers after 30 days:

“No that's mean, they can't do this. I heard these one or two years ago. And our decision was to provide an exception because the amount of money is so low. It is unbelievable that we pay after this number of days” (Interview Lima, lines 15-17).

Leonardo Lima hasn't heard from the project for one or two years. The last thing he heard about the project was that at one point in time the lettuce was affected by a disease and that the cooperation continued afterward (Interview lima, lines 30-34).

Cooperation Between Farmers and Other Restaurants and Hotels After the Project

During the interview, Delcy Zamalloa explains that for cost reasons Novotel and Greens, two other restaurants involved in the project, have terminated the cooperation with the farmers after the conclusion of the pilot project. They have received a better offer from other producers (Interview Zamalloa, lines 83-84).

Replication of the Project

Replication in Peru

The Qorichacra project was repeated within Peru. For example, CBC now operates in the neighbouring region of Cocabambas (Interview Paucarmayta, lines 140-141).

Replication by Arcos Dorados

In the interview Leonardo Lima admits that AD is not currently carrying out any similar projects to Qorichacra:

“Unfortunately, I would say that we don’t put a lot of attention nowadays. Because this is a long-term project which would not be feasible in a short time. It needs a lot of investments in time. Because we need to educate the producers” (Interview Lima, lines 48-51).

Today, there is no one in the company who carries out such kind of projects. At that time, he was responsible for the Qorichacra project. But today he has no more time for such projects (Interview Lima, lines 102-105):

“That’s very sad because I am so confident about such kind of projects” (Interview Lima, lines 102-105).

Leonardo explains that it is much more comfortable for the AD to buy products from big producers. But he adds:

“In fact, the society needs companies to break the current system and to include more producers. We can use our size and our scale to improve other producers” (Interview Lima, lines 151-154).

Projects like Qorichacra are very complex for the AD, as the company has to look at numerous aspects. For example, the AD has very high-quality standards and a strict procedure regarding the way the producers work. Also, logistics must be well organised. Therefore, it is difficult to carry out similar projects.

“The average between where they are today and what we need to buy from them is quite large” (Interview Lima, lines 148-149).

Leonardo Lima starts to talk about the replication of the Qorichacra project. The AD has started a similar project in Buenos Aires. He explains that the city of Buenos Aires is supplied by immigrants from Bolivia, Uruguay, and Paraguay who live about 60 km outside the city. They are producing under very poor conditions. The company started a project with these farmers, but after the first assessment, they decided to stop since the challenge was too big. Then they started the project in another city in Argentina called Mendoza. The conditions in this area were much better. But at one point they couldn’t continue the project since they didn’t have enough staff (Interview Lima, lines 112-116).

In Brazil AD’s supplier, which is very big, is conducting a project like Qorichacra and supports small-scale farmers with technique and procedures that they need to meet AD’s quality standards. Small-scale farmers there are poor, but they have much better conditions than those in Cusco (Interview Lima, lines 86-91).

The AD also tried to replicate the project in Puerto Rico but there they had difficulties with the production of iceberg lettuce. The temperatures in Puerto Rico are too high to produce it. Unfortunately, the company hasn't continued the project. There too, the company didn't have enough staff (Interview Lima, lines 91-95).

At the end of the interview Leonardo Lima emphasises:

"I need to convince the company that we start such kind of project because I am totally convinced that we can do a lot. But we need to learn from our mistakes" (Interview Lima, lines 159-161).

Sustainability Strategy of Arcos Dorados

Leonardo Lima explains that nowadays AD works very closely with its suppliers. For example, they require certifications of them (Interview Lima, lines 127-128).

In general, most of AD's producers in Latin America are small producers. The company has only one huge producer in Mexico who exports products to the USA. In Costa Rica, Brazil and Argentina AD has a mix of big and small producers. In Chile, Ecuador, Paraguay, Bolivia, and Colombia the company works exclusively with small producers. These farmers work in clusters and a company supports them by providing know-how and technology. The farmers need to follow very strict procedures and the AD also requires global G.A.P. certification (Interview Lima, lines 136-141).

Agriculture in Peru and Production in Greenhouses

Carola Amézaga explains that before the project, greenhouses were unknown in the region of Cusco. There used to be something similar called "Citotolbo". It was a mud brick construction that provided shelter for the farmer's vegetables. These "Citotolbos" were small and were only used for personal consumption. In contrast to greenhouses, air circulation, temperature, and other aspects could not be controlled (Interview Amézaga, lines 292-298).

Greenhouses help to fight climate change. They are kind of frost protection. Before farmers could only grow vegetables nine months a year. Thanks to the greenhouses, they could extend production throughout the year (Interview Zamalloa, lines 34-37).

Hugo Quisped comments that before 2006 only 10 percent of the farmers cultivated their vegetables and fruits in greenhouses. Today this has turned around and 90 percent use this technology. In the region of Cusco, approximately 2000 families are growing their products in greenhouses. He continues:

"The Qorichacra project was the beginning of an agricultural reform in Peru. Today the idea of greenhouses is applied all over the world and is part of every governmental programme" (Interview Quisped, lines 88-90).

Hugo Quisped explains that nowadays the construction of greenhouses is no longer expensive, and most families can afford to build one. A family approximately must work one year to cover the construction costs of their greenhouse (Interview Quisped, lines 24-25). He notices that he has his own company which sells materials for the construction of greenhouses. He sells his goods to 13 communities (Interview Quisped, lines 6-7). This shows how greenhouses have spread in the whole region (Interview Quisped, lines 15-16).

There are also negative aspects of the use of greenhouses. For example, the disposal of plastic is a major problem. Hugo Quisped says that there are companies that have taken care of this problem. They recycle plastic and other materials in Cusco and send them to Lima. There they produce hoses, washing machines, and containers (Interview Quisped, lines 78-80). Delcy Zamalloa agrees with Hugo Quisped's statement, but adds the following:

"They usually don't go to small communities to pick up plastic. Therefore, the removal of plastic remains a big issue in many communities. We must find a solution to that problem to protect the environment" (Interview Zamalloa, lines 52-55).

5.2.2. Interpretation

Project Planning

The APOMIPE methodology was an important part of the Qorichacra project. The idea was to organize the farmers in business networks. This facilitates cooperation with restaurants and hotels since a farmer alone can't meet the demand of a restaurant and doesn't have a fiscal number that he needs to supply larger companies. A network enables cooperation of the farmers in the areas of purchasing and consulting and strengthens their mutual trust. It also ensures that farmers adhered to uniform quality standards, which is important for the cooperation with restaurants and hotels.

It was important to work with a local partner who knows the region and speaks Quechua. This strengthened the farmers' confidence in the project.

Implementation of the Project

For a project to be successful, it is important that the people involved are ready for a change. This was not the case in one community which participated in the first phase of the Qorichacra project. There, farmers were not prepared to give up their traditional cultivation methods and to grow vegetables in greenhouses in the future. The lack of will is partly due to the fact that the farmers received too much financial support. As a result, the project was not a risk to them and they had no incentive to commit themselves to it.

GLOBAL G.A.P. certification only makes sense if the market asks for it. This was not the case with the Qorichacra project. McD had its own quality standards and on the local market, where most products were sold, certification was not an issue. Other participating restaurants and hotels didn't demand such certification either. It is the task of the state to sensitize the market to such certification.

The housing competition has led to an improvement of the quality of life in the communities. In the future, the farmers in Huillcapata would also like to engage in tourism, which is partly attributable to their improved housing situation.

The Outcome of the Project

The project has resulted in farmers around Cusco increasingly using greenhouses for production. In contrast to the past, most of their income now comes from agricultural products. The farmers of the communities involved in the project have thus recognised the potential of agriculture. Nevertheless, production in greenhouses is a major change for farmers. In particular, some of them who were not

involved in the project failed because they didn't receive professional support after the construction of the greenhouse, on how to operate it.

In addition, a diversification of products has taken place in recent years. The farmers have recognized that the demand for strawberries and flowers in Cusco is high and that they can sell these products on the local market at good prices. This shows that the farmers are always observing the current demand of the market and adapting to changing circumstances with the aim of achieving a better income.

Since the end of the project, several other communities and families have started planting their vegetables, fruits, and flowers in greenhouses. This suggests that the project has made many farming families aware that greenhouses are a great opportunity in the highlands of Peru to increase production and to fight climate change.

In the past, a large part of the iceberg lettuce and other products came from Arequipa, which is 460 kilometres away from Cusco. Today the supply side in Cusco has increased. Thus, there has been a regional shift in supply which leads to shorter transport distances and to a higher level of employment for the farmers of Cusco.

A project always leads to learning. The learnings can be considered in the next project. Next time Carola Amézaga would take a closer look at the payment chain. She would also no longer work with the same intermediary and look more closely at the subject of certification. Leonardo Lima would no longer start with iceberg lettuce and would engage a local logistic operator. He would also work with more buyers to minimize risk and cost. The latest statements by Leonardo Lima lead to the assumption that AD has other priorities than carrying out such projects, as for a large company like AD these costs should be bearable.

Cooperation Between Farmers and Hotels and Restaurants

Cooperation Between Farmers and Arcos Dorados

Cooperation between farmers and AD generally works well. There was only once the problem that the farmers could not deliver because the iceberg lettuce was infested by a fungus.

Nevertheless, there have been conflicts that have led many farmers to end their cooperation with McD. Many farmers could not accept the fact that McD only paid the bills after 30 days and have ended the cooperation with the company. According to the researcher, this shows that AD doesn't take the special circumstances of the farmers into account, namely that farmers with low incomes are dependent on the money and need the money earlier than in 30 days. A company like AD has many rigid processes that can't be easily adapted. This raises the question of whether the AD was the right partner for such a project. Leonardo Lima said that he had approved a payment within a shorter time. In the conversation with the restaurant manager in Cusco, however, it emerged that the terms of payment had not changed. This shows that McD has no interest in paying attention to the particularities of small-scale farmers.

It is also critical that AD buys a very small amount of iceberg lettuce from the farmers. Already four farmers can cover this demand. The remaining products still come by air from Lima to Cusco. The AD could benefit more from the project, which was very time-consuming and costly for the company, by buying other products such as tomatoes in the communities. For the farmers, it would also be an

advantage to supply McD more products, as it would increase their income on the one hand and lower transport costs on the other hand. If the situation remains the same as it is now, farmers will concentrate more and more on the local market, where they can sell all their products in one day and get paid directly.

It would be important for the AD and the farmers to negotiate the prices of the products again. Today, farmers can't charge McD much higher prices than they get on the local market. The quality standards of the AD, however, lead to a considerable additional effort for the farmers. This should influence prices. With today's circumstances, it is not worth it for the farmers to continue producing for McD.

If farmers were to work more with restaurants and hotels again in the future, it would make sense to involve an intermediary which coordinates supply and demand. However, the intermediary would have to be carefully selected to avoid conflicts, as it was the case with the Qorichacra project.

Cooperation Between Farmers and Other Restaurants and Hotels

The cooperation between restaurants and hotels and small farmers is complex, as different organisational cultures meet. In particular, it takes a lot of time to build trust between the parties.

There have also been disputes with other restaurants and hotels than McD due to the 30-day payment period. The buyers have to pay more attention to the communities and their peculiarities. In addition, there is no great demand for quality products in Cusco. Most restaurants and hotels are not willing to pay more for the products than on the local market. The farmers, however, demand higher prices for quality reasons and because of higher transport costs. This is why many restaurants have ended their cooperation with the farmers.

In this respect, the question arises as to whether it makes sense to establish a direct link between restaurants and hotels and farmers. Isn't it easier for them to sell their products directly at the local market? There they can sell their entire production in a few hours and they get paid directly. In addition, they score with the quality of their products and can charge slightly higher prices than the other sellers. The local market has a very important function in Cusco and most restaurants, hotels, and intermediary also buy their products there.

Replication of the Project

It is not easy to replicate the Qorichacra project because in every country AD encounters different conditions. The company started a project in various Latin American countries but stopped them after a while, since the challenge was too big. It also seems that it is not the company's top priority to carry out such kind of projects. Apart from Brazil, where AD implemented a similar project to Qorichacra, the company is not carrying out such kind of project anywhere in Latin America. Therefore, the goal of replicating the project has failed. Leonardo Lima stresses, however, that he wants to convince AD to carry out similar projects in the future.

Sustainability Strategy of Arcos Dorados

AD's strategy is to work closely with suppliers and to cooperate with small producers. The company is partly successful in this. Nevertheless, the company still has a few large suppliers, as it is much easier for them to buy products from them.

Agriculture in Peru and Production in Greenhouses

The Qorichacra project has reformed agriculture in Peru. While production in greenhouses was hardly known before the Qorichacra project, today most farmers produce with this technology. Thus, the farmers have recognized the potential of this cultivation method. Nevertheless, some communities have problems with the plastic. They do not know how to dispose of it. This could be the subject of another development project in the region.

5.3. Field Visit

The following report will give a summary about the researcher's field visits in the communities Huillcapata and Chita Pampa in Peru. To protect people's privacy and to show respect to their different cultural background as well as to create a situation of trust the interviews were not recorded. The report intends to reproduce the conversations conducted in the field. The names of the interviewees were changed.

5.3.1. Field Report

First visit

Before visiting the communities, Valério Paucarmayta, director at CBC, links me with Juan, a farmer living in Huillcapata who was involved in the Qorichacra project. He tells me that it is important that I have a local like Juan with me during my field visit who speaks Quechua as well as Spanish and knows the communities well to create a trustworthy situation.

For my field visit, I organized a translator, Thomas Steeb, a German who has been living in Peru for over 20 years and today officially is Cusceno (inhabitant of Cusco).

Thomas picks me up with his car and we set off for Huillcapata. On the way, we stop at a viewpoint from where we can already see many greenhouses.

During the trip, I ask Thomas if he has already heard of the Qorichacra project. He tells me that he used to work for CBC in the past, but not in this project. A few months ago, however, he conducted a study on various types of production in Peru, where he also got to know the Qorichacra project. The project scored best in the study, especially because greenhouses are very gender-sensitive. Women can work in greenhouses without any problems. In addition, production in greenhouses is a great opportunity to combat



Photo 2: Partial View of the Quesermayo River Basin (own photo)

temperature differences in the region. Thomas offers to send me the study and other documents about the Qorichacra project. I gladly accept the offer and say thank you.

Interview with Juan (Community: Huillcapata, QORICHACRA)

After a wild ride with many potholes, we arrive in Huillcapata, where Juan welcomes us friendly. He heads straight for the greenhouses and shows us the vegetables, fruits, and flowers his family grows. He seems to be very proud. He says that today the family mainly grows broccoli, spring onions, lettuce, strawberries, and flowers. They sell all their products on the local market.

Juan mentions that they only grow organic vegetables, fruits and flowers. The plants are rarely affected by diseases or insects.



Photo 3: Greenhouse (own photo)



Photo 4: House (own photo)



Photo 5: Lettuce (own photo)



Photo 6: Flowers (own photo)



Photo 7: Strawberry Greenhouse (own photo)



Photo 8: Strawberries (own photos)

Juan adds that he and his family consume approximately 20 percent of their vegetables and fruits by themselves and that they achieve a monthly income of 2000 soles (=CHF 600). Juan tells us that the construction of the greenhouse was not expensive. The family was able to cover the costs after one year of production. I ask him if his family also sells vegetables to McD. He shakes his head and explains that all the farmers in Huillcapata have ended the cooperation with the company and that people in

the community are sensitive when they hear the name McD. One of the main problems was that McD only paid his bills after 45 days and many families who supplied McD were dependant on the money.

Even today, Juan's family is on the market to sell products. His father has already left with the car. Juan will take a taxi to the market after our visit and help his father to sell the vegetables, fruits, and flowers. After visiting the greenhouses Juan takes us to the animals. The family owns cows and guinea pigs, so-called “cuys”, which are considered delicate in Peru. Juan mentions that I could try a “cuy” on my next visit. I tell him that I am not sure if I am brave enough and try to explain him, that we do not eat guinea pigs in Switzerland, we keep them as pets, such as cats and dogs.

We both laugh. He takes us to the stable. From outside we could already hear a mix of music and squeaking noises. Juan says that music makes the animals dance. The “cuys” are more like a hobby for the family. They only sell one “cuy” a month for 40 soles.

Juan explains that his father is responsible for the animals. He himself has a passion for plants and not for animals. This becomes clear as he leads us into another greenhouse, where we can admire his private succulent collection.

After visiting the greenhouses and animals we ask Juan to fill in the questionnaire, but Juan doesn't have time anymore. He needs to go to the market to help his father. We do not want to stop him and therefore decide to give him six questionnaires for him and his neighbours and to pick them up next Tuesday. Then we say goodbye to him.



Photo 9: Guinea Pig Stable (own photo)



Photo 10: Juan's Private Succulent Collection (own photo)

Juan gives us the impression that the Qorichakra project was a success. He and his family took the chance to become successful producers with the help of greenhouses. However, we stay critical and want to visit other farmers. Spontaneously, we decide to stop at a greenhouse in the neighbouring community Chita Pampa.

Interview with Luis (Community: Chita Pampa, APOMIPE)

We ask the owner Luis if we can visit his greenhouse. He hesitates first and wants to send us to his neighbour. After a while, we can convince him of our idea. We enter the greenhouse and Luis explains that the greenhouse currently is out of order and that he is renovating it. He and his family cultivate their vegetables and fruits in another greenhouse that they share with other families.

The greenhouse that Luis shows us was built eight years ago by APOMIPE. He tells us, that beside CBC two other NGOs were involved in the construction of greenhouses, one of them APOMIPE. Moreover, the municipality has funded some greenhouses in the last years. However, a lottery decides who gets help building a greenhouse and, therefore, often the wrong families are chosen. Juan tells us that originally 50 greenhouses were built. Today only seven are left. We ask him about the reasons, why many people stopped producing in greenhouses. He responds that they don't have the technical know-how on how to use greenhouses. Also, greenhouses must be renewed every five years, what is expensive. Luis starts to talk about another problem. The renewal of the greenhouses produces a lot of waste and people do not know how to get rid of it. He says that it would need another project to solve this issue.



Photo 11: Greenhouse in Renovation (own photo)

We ask Luis if he knows anyone in his community who was involved in the Qorichakra project. He takes us to the house of Carlos, who had a key role during the implementation of the Qorichakra project.

Interview with Carlos (Community: Chita Pampa, CHORICHACRA)

Carlos opens the door very friendly. We ask him if he has time for a short interview and to show us his greenhouses. He agrees and takes us to the living room, where we talk for a while. Carlos starts the conversation by saying thank you. The Qorichakra project would not have been possible without the SFSa. For him, a dream came true.

Since the start of the project, Carlos has diversified his production. Today he only produces roses because the business is very lucrative. He explains that growing roses is difficult and that the flower is susceptible to disease. To protect the roses from it, he uses pesticides. He explains that he can harvest his roses three times a year. Moreover, a plant has to grow 80 days to get its first flower. Carlos mainly sells the roses on public holidays, as on those days there is a big demand for roses. He explains that the demand for roses is high. However, the market for roses will soon be exhausted.

We ask Carlos about the negative aspects of greenhouses. He starts to talk about the same issue as Juan and Luis mentioned before, namely the plastic that has to be disposed of after 5 years when renovating the greenhouses.

After the short interview with Carlos, he takes us to one of his three greenhouses. On the way to the greenhouse, we get to know his wife who is working in the courtyard. She makes me a bouquet of flowers and gives it to me. While walking to the greenhouse Carlos starts to tell us about his son who is studying economics with a major in international business.



Photo 12: Carlos, his wife and researcher (own photo)

Carlos opens the door of the greenhouse. He seems to be very proud and says that he has a passion for flowers. He tells me that I can take a picture of him and his flowers. As we heard from Luis that many farmers of Carlos's community stopped growing with greenhouses, we ask Carlos about how people of his community deal with his success. He says that people, in general, would not have a problem with him and his success. But some of them would say that he uses too much water for his plants. Carlos adds that his greenhouses would not use a lot of water. Moreover, he would pay a commission for the water he uses.

At the end of our visit, I give Carlos a questionnaire and ask him to answer the questions. He says that it would be better if he could answer the questions in the evening since he has to work now. I agree with this idea and give him three questionnaires. I tell him that it would be helpful if other people in his community could answer the questions as well. Thomas and I say goodbye to Carlos and head home.

Second visit

A few days later I go back to the communities to pick up the questionnaires. Fabian Simeon, a Swiss who has lived in Cusco for 10 years, accompanies me and helps me out as a translator.

Conversation with Carlos (Chita Pampa)

When we arrive in Chita Pampa Carlos is working with some other workers at the construction of his new greenhouse. He comes over to us to say hello and explains that he didn't have time to complete the questionnaire but that he could answer the questions now. He confesses that he didn't distribute the questionnaires around the neighbourhood. We sit down and go through the questions.



Photo 14: Greenhouse in Construction (own photo)

Carlos owns four greenhouses. In total there would be around 100 to 150 greenhouses in his community. In comparison to Juan and Luis, Carlos only sells 5 percent of his roses at the local market. The other 95 percent he sells to intermediaries. Since 2015 Carlos has built 3 new greenhouses. However, he mentions, that he had to replace two of his old once. In the last years, Carlos also bought a car and he renovated his house (plastering). He explains that he would invest most of his money in the education of his five children. In this context, he asks me for my e-mail address, as his son would plan to come to Europe for his studies and would need some advice. In the future, Carlos wants to diversify his production and grow different types of flowers. Another objective is to search for new markets. For example, Lima would be an interesting market, as he could sell his roses there at a higher price. Moreover, Carlos thinks about founding a company that can solve the problem of the plastic caused by the greenhouses. He says that there might



Photo 13: Interview with Carlos (own photo)

be a more environmentally friendly plastic that could be used. Another option would be to reuse the plastics in the community in another way.

After the interview with Carlos, we want to talk to other farmers in Chita Pampa, but there is nobody on the street we can talk to. Therefore, we decide to make our way to Juan.

Conversation with Juan (Huillcapata and local market)

When we arrive at Juan's house, he opens the door very friendly and immediately returns me the answered questionnaires. He has managed to ask five other farmers of his community for their help.

After talking for a while, we visit his greenhouses again to take some more pictures. Then Juan is up to the market to sell his vegetable and fruits. He asks us if we would like to accompany him. We say that it would be a pleasure to join him. On the way to the market, we talk about the cooperation with restaurants and hotels. Juan says that his community has strong interests in working with restaurants and hotels. In the past, one of the big challenges of working with them was the high quality they demand. Many communities, therefore, started to mix organic and non-organic products to achieve better quality. However, his community continued to grow exclusively organic vegetable and fruits. Another problem with the cooperation was trust, as the farmers didn't always deliver on time. Also, restaurants such as McD paid the bills only after 40 days. However, many farmers are dependent on the money. Therefore, they recommenced selling most of their products at the local market, where they get paid directly. Juan mentions that it would be helpful to have a GLOBAL G.A.P. certification to establish new partnerships with hotels and restaurants. However, such a certification would be very



Photo 15: Local Market (own photo)

expensive and would only be possible in a group.

After a fifteen minutes' drive, we arrive at the local market. The local market is smaller as I have expected. It only has a view stands where farmers sell their vegetables and fruits. Also, it is possible to buy sheep (which are slaughtered directly around the corner) and "guys" (guinea pigs). There is an area with small restaurants, where people are eating and drinking.

First, we say hello to Juan's father. Then we ask Juan if he would like to share a bottle of beer with us. Then we sit down. Juan drinks a glass and passes it on in a circle, as it is usual in Peru. During the beer, we mainly talk about the Huillcapata community. Juan seems to have a big sense for the community. He says that he is thinking about how the community could work more with restaurants and hotels. Also, he wants to build a library in order to animate people in his community to read. He himself has a passion for books. He explains that he could teach himself many theories about agriculture and business through books. However, it is important to apply these theories in practice and to adapt them when necessary.

Currently, the community is building a new street. I am asking if the street is financed by the municipality. Juan answers that the families have collected money and that they finance the project

on their own. Sometimes the municipality finances infrastructure projects. However, the construction can then take 10 years. Since the road is important for the community, they decided to finance the project themselves.

Juan wants to be an entrepreneur. He often visits events to connect with other people that could be useful for his community. In the evening he will attend an event in Cusco to talk to restaurants and hotels. Juan tells us that the Qorichacra project was the beginning of an agricultural transformation. Since its implementation, greenhouses spread throughout the region. Although some of the farmers involved in the Qorichacra project do not cultivate in greenhouses anymore, the number of greenhouses in his community has increased since the conclusion of the project.

Then we ask Juan if he could imagine to establish ecotourism in his community. He says that ecotourism would be a big chance for the community. He also sees great potential for it, as the area is very nice for hiking and the community is well located, just 30 minutes away from the city centre of Cusco.

We start talking about the community life again. Before, it was not possible to buy land as a foreigner, as the municipality allocated land to its community members and members could only sell their land to another community member with permission of the whole community. Juan explains that they started to privatise land a few years ago.

After finishing the beer, we don't want to hold Juan back any longer. We decided to say goodbye and take a minibus back to Cusco.

5.3.2. Interpretation

Impact on the Farmers

Today, farmers such as Juan and Carlos diversify their products and plant strawberries and flowers in addition to vegetables, as these products generate a good income. This shows that they are adapting to the market.

Carlos and Juan appear to be businessmen. They both have objectives as farmers. While Carlos wants to find new markets to sell his roses, Juan is aiming at working with hotels and restaurants again. This shows that the two farmers still want to improve their current situation. While Juan wants his community to evolve, Carlos puts his own interests first. This shows two different patterns of how the farmers deal with their success.

Today, most families can afford to build a greenhouse. Juan confirms that he has covered the construction costs of his family's greenhouse after one year of production. The same has already been said in the expert interviews. This is a big difference to the past, where hardly anyone could afford to build a greenhouse. Nowadays farmers can use greenhouses to combat temperature fluctuations and increase production.

Impact on the Farming Families

Juan's family consumes 20 percent of the vegetables themselves. The rest of the vegetables they sell at the local market. This shows that there is a great demand for vegetables, fruits, and flowers at the market in the city of Cusco and the family doesn't lack access to the market.

Juan's family keeps animals in addition to the greenhouses. Besides agriculture, they are an additional income for the family and the hobby of Juan's father. Juan owns a succulent collection, which he runs for fun. This shows that the family is doing well financially.

Since the end of the project, Carlos has bought a car and renovated the house of his family (i.e. repaired the plaster). Juan has also carried out renovations on his family's house since 2015. Thus, the quality of life of both families has improved.

Carlos well as Juan attach great importance to education. Carlos wants to send his son to Europe to study. It is also important for Juan to educate himself by reading books.

Impact on the Communities

In the Huillcapata community, a road is currently being built on the farmers' own initiative. This makes it easier for farmers to transport their products to the market. The community members bear the construction costs themselves. This shows that they value the development of the infrastructure. It is difficult to assess, whether the construction can be attributed to the Qorichacra project. However, it is possible that the farmers are building the road due to their improved financial situation brought about by the Qorichacra project.

As one of the leaders of the community, Juan wants to build relationships with restaurants and hotels. This shows that the community spirit is still present in his community. He also wants to build a library so that the people of the community can educate themselves.

The project has led some municipalities to start providing financial support to farmers for the construction of greenhouses. However, in the Chita Pampa community, it a lottery decides who is supported, and often the wrong families benefit.

All three farmers mention the problem of plastic. People do not know where to dispose of it. This large amount of plastic has an impact on the quality of life in the communities and affects the environment. Another project is needed to solve this problem. One expert said that there are companies that recycle the plastic. However, they don't seem to cooperate with the two communities Chita Pampa and Huillcapata. It could be that it is too time-consuming and complicated for the companies and associated with high costs to collect the plastic also in small communities.

Juan says that ecotourism would be a great opportunity for Huillcapata. It's a good sign that tourism is already a topic for discussion in the community today. This shows that the community is developing. Nevertheless, it will still take a while until the idea can be implemented. Moreover, farmers have improved their housing situation in recent years.

Outcome

The idea of greenhouses shows great potential, like Thomas, as an outsider, confirms. The method is very gender-appropriate and suitable for compensating temperature fluctuations.

All farmers of the Huillcapata community have ended their collaboration with McD. This was in particular due to the company's payment policy, which was also denounced in the expert interviews. Despite bad experiences with McD, the community is very interested in a future collaboration with

hotels and restaurants. Juan, who is a good leader in his community, tries to establish helpful contacts with hotels and restaurants in order to achieve cooperation.

According to Juan, GLOBAL G.A.P. certification would be an advantage in this respect. At present, however, farmers can't afford such a certification. Juan's statements show that certification is more in demand today than during the implementation of the project.

According to Luis, there are many families who have stopped using greenhouses. Today there are only 7 such greenhouses in Chita Pampa. This contradicts Carlos, who claims that there are over 100 greenhouses in his community today. However, during the field visit, the researcher observed that many greenhouses are under construction. This is an indication that the technology is still in use today.

5.4. Survey

During the field visit to Peru, the researcher carried out a survey in the community of Huilcapata. In this community in total, 11 families participated in the second phase of the Qorichacra project (SFSA, 2014, p. 14). The survey includes four families involved and two families not involved in the project (n=6). The participants answered questions about the production and sale of their products and about their private lives. The original questionnaire and the Excel file with the collected data can be found in the Appendix. Most of the survey questions were taken over by the 2015 evaluation so that comparison could be made (SFSA (m), 2015).

Since the number of respondents is small, it doesn't make sense to consider the results of the families involved and not involved in the project separately. Due to the small number of participants, the survey is not representative and should be considered with caution. It should only be seen as complementary to the on-site interviews and should confirm some of the findings.

The following subchapter shows the results of the survey, analysing the six families as a group. Some of the results are compared with the evaluation in 2015 and the baseline of 2013. The data for 2013 and 2015 are taken from the impact evaluation 2015 (SFSA (m), 2015). This comparison should also be considered with caution, as the 2015 sample size is larger (n=17) than the 2018 sample size (n = 6), only considers farmers involved and does also include other communities of the Qorichacra project.

Some questions of the questionnaire are not discussed here, as the answers are not meaningful. The answers to these questions can be found in the appendix.

5.4.1. Results of the Survey

Cultivation of Products

1) What kind of fruits and vegetables do you cultivate? Do you grow less, the same or more kilos of the respective variety than in 2015?

Table 6: Cultivation of Vegetables and Fruits (own representation)

	Strawberries	Mangold	Lettuce	Radishes
Farmer 1	✓ (++)	✓ (-)	✓ (-)	
Farmer 2			✓ (-)	
Farmer 3				✓ (+)
Farmer 4		✓ (-)	✓ (-)	✓ (-)
Farmer 5	✓ (n.a.)			
Farmer 6	✓ (n.a.)			

*(--)= much less; (-)= less; (=)= equal; (+)= more; (++)= much more; (n.a.)= no answer

The table shows that the study participants now grow strawberries, mangold, lettuce, and radishes. They produce less to much less of most vegetables than in 2015. Two of the farmers produce more or much more of one of the products than in 2015 and two do not comment on the number of strawberries they cultivate.

2) At what price do you sell the vegetables and fruits?

Table 7: Prices per Kilogram (own representation based on SFSA (m), 2015, p. 53)

	Baseline 2013	Evaluation 2015	Evaluation 2018 (n=6)	Diff.
Strawberries	S/. 12.0	S/. 10.4	S/. 10.0	-3.85%
Mangold	S/. 4.0	S/. 3.1	S/. 3.7	+19.35%
Lettuce	S/. 1.0	S/. 2.3	S/. 2.5	+8.70%
Radishes	S/. 4.0	S/. 4.0	S/. 2.0	-50.00%

The table above shows how prices per kilo have developed in the last years. Since 2015, the price of strawberries has fallen slightly (-3.85%). Mangold and lettuce prices have risen by 19.35% and 8.70% respectively and the price of radish collapsed by 50 percent.

3) Do you cultivate your products in greenhouses? Are you satisfied with the technology of the greenhouse?

Table 8: Production in Greenhouses (own representation)

n=6	Yes	No
Use of greenhouses	100%	0%
Satisfaction	100%	0%

As illustrated in the table all study participants grow their vegetables in greenhouses. They are satisfied with the use of the new cultivation technology.

4) Have you had any technical problems with your greenhouses since 2015?

Table 9: Technical Problems with Greenhouses (own representation)

"Plagas en lechuga" (farmer 1).
"Enfermedades" (farmer 2).
"Enfermedades" (farmer 3).
"Deterioro en el invernadero" (farmer 4).
"Manejo de plagas y enfermedades" (farmer 5).
"Manejo de la planta" (farmer 6).

All farmers state that they have had problems with greenhouse cultivation since 2015. Five of them say that their plants have been affected by diseases. One says that he has had problems with the management of the plants (farmer 6). Since he makes no further explanations, it is unclear whether the problems are also related to infested plants.

Sale of Vegetables and Fruits

5) Who do you sell the products to?

Table 10: The Farmer's Customers (own representation based on SFSA (m), 2015, p. 54)

	Baseline 2013	Evaluation 2015	Evaluation 2018 (n=6)
Main Buyers of Strawberries	End-consumers, restaurants	End-consumers, hotels, restaurants, intermediaries	End-consumers
Main Buyers of Mangold	End-consumers	End-consumers, companies, hotels, restaurants	End-consumers
Main Buyers of Lettuce	End-consumers	End-consumers, companies, hotels, restaurants	End-consumers
Main Buyers of Radish	End-consumers	End-consumers	End-consumers

Today, the families surveyed sell their products exclusively to end-consumers. The cooperation with hotels, restaurants or companies, which existed in 2015, no longer exists. Today's situation is, therefore, comparable to 2013, where all products were sold to end-consumers.

6) Do you sell vegetables and fruits to hotels and/or restaurants? Would you like to increase working with hotels and restaurants?

Table 11: Cooperation with Hotels and Restaurants (own representation)

n=6	Yes	No
Do you sell your products to hotels or restaurants?	0%	100%
Would you like to work more with hotels or restaurants?	100%	0%

Today, none of the farmers sell vegetables and fruits to hotels and restaurants. However, all respondents would like to start working with them again in the future.

7) Where do you sell your products (distribution channels)?

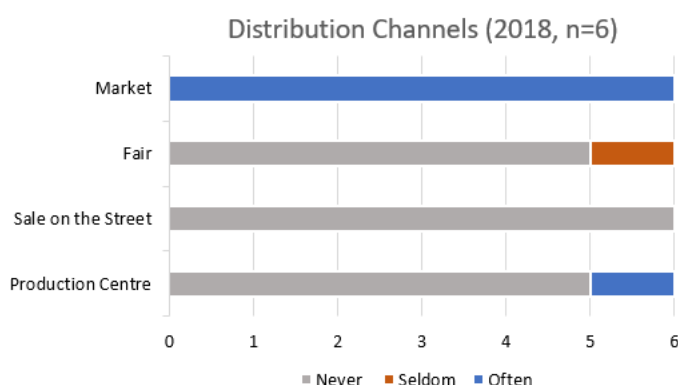


Figure 14: Distribution Channels (own representation based on SFSA (m), 2015, p. 64)

The diagram shows that the local market is the most important distribution channel for farmers. One of the farmers says that he goes to fairs from time to time and one of them often sells his products in production centres.

8) Do there exist barriers that make it difficult to sell the products?

Table 12: Barriers to the Sale of Products (own representation, figures of 2015: SFSA (m), 2015, p. 66)

	Evaluation 2015	Evaluation 2018 (n=5)
Lack of Mobility	0%	0%
Lack of Points of Sale	28%	20%
Lack of Markets	33%	20%
Lack of Formalization	30%	40%
High Transportation Costs	4%	20%

Lack of formalization seems to be the highest barrier for the farmers to sell their products. They would like to cooperate with restaurants and hotels in the future.

Other Agricultural Products

9) Do you cultivate other agricultural products besides vegetables and fruits (e.g. flowers)?

Table 13: Other Agricultural Products (own representation)

n=6	Yes	No
Other agricultural products	50%	50%

Half of the farmers produce other agricultural products. They started to grow different types of flowers such as roses, alstroemeria, and lilies.

10) Do you have any non-agricultural income besides agriculture?

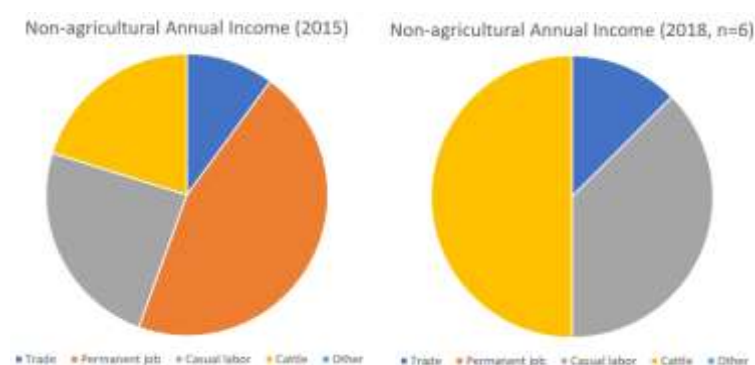


Figure 15: Non-agricultural Income (left figure: SFSA (m), 2015, p. 58; right figure: own representation)

In 2018, the respondents mainly work as farmers. They do not have another permanent job in contrast to 2015, where almost half of the farmers had a permanent job besides farming. In the last years, casual labour has increased. In 2018 cattle breeding is twice as widespread as in 2015. Increasing cattle breeding was also one of the objectives set by farmers in the 2015 evaluation (SFSA (m), 2015, p. 58).

Private Life

11) How has your income changed since 2015?

Table 14: Change of Income (own representation)

n=6	Declined	Equal	Improved
Income	16.67%	16.67%	66.67%

In the survey, two-thirds of respondents say that their income has improved since 2015. One person's income has declined, and one has remained the same. Three of the respondents state their income (2000 soles, 200 soles, 1500 soles). As these incomes vary considerably, it makes no sense to take a closer look at these numbers. It should be mentioned that the income of two farmers of the Qorichacra project has improved since 2015. The income of the other two farmers has remained the same or decreased.

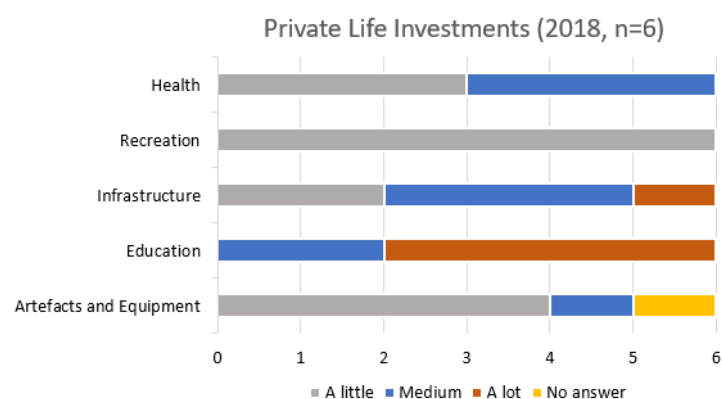
12) Have you made any investments since 2015 (e.g. greenhouses, machines, vehicles, etc.)? Have you renovated your house since 2015?

Table 15: Investments and Renovations (own representation)

n=6	Yes	No
Have you made an investment since 2015 (greenhouses, machines, vehicles)	66.67%	33.33%
Have you renovated your house since 2015?	83.33%	16.67%

Two-thirds of the farmers surveyed have made new investments since 2015. They have indicated that they have built new greenhouses. In addition, 83.33% of families have renovated their houses in the last three years.

13) In which areas of your private life do you invest the most?

*Figure 16: Private Life Investments (own representation based on SFSA (m), 2015, p. 63)*

The diagram shows that education is particularly important to farmers. But they also spend moderate money for infrastructure and health. Areas such as artifacts and equipment or recreation are less important to them.

The data from the evaluation in 2015 and 2018 show similarities and differences in 2015, farmers invested the most in education and infrastructure. These areas remain the most important. In contrast to 2018, farmers invested significantly more in recreation (SFSA (m), 2015, p. 63).

14) What objectives do you have in agriculture?

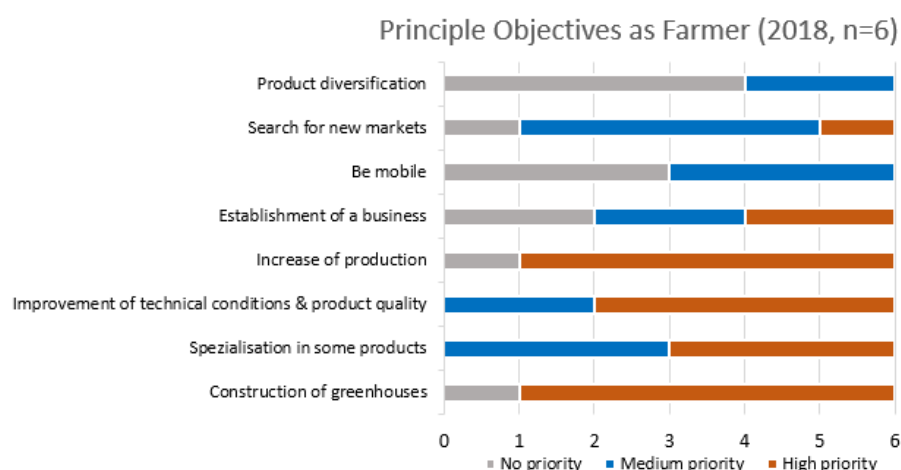


Figure 17: Principle Objectives as Farmer (own representation based on SFSA (m), 2015, p. 67)

Five out of six farmers have indicated that the construction of greenhouses and the increase of their products have the highest priority. More than half of those surveyed also attach great importance to specialize in some products and to improve technological conditions and product quality. Only two out of six farmers want to diversify their products.

15) What are your personal future goals?

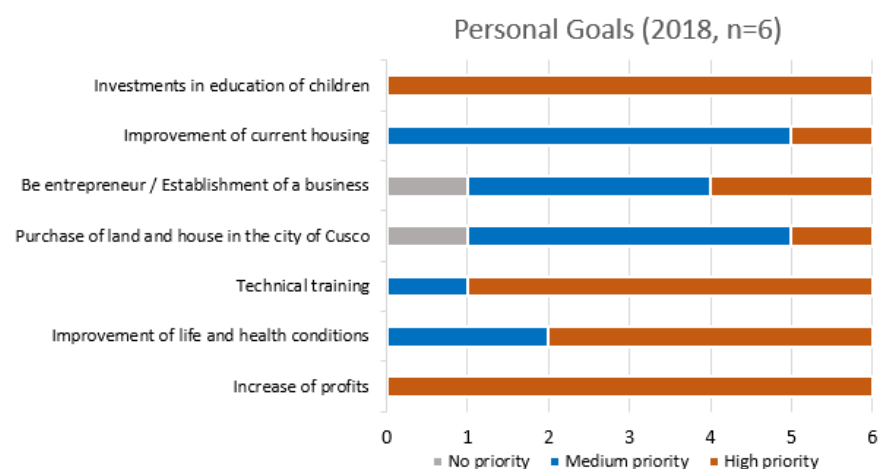


Figure 18: Personal Goals of the Farming Families (own representation based on SFSA (m), 2015, p. 67)

It is noticeable that the highest priority for farmers is to increase profits and to invest in the education of their children. In addition, five out of six farmers consider it very important to improve their quality of life and health conditions and to invest in technical training. More than half of the farmers have the objective (medium priority) to buy land and to build a house in the city of Cusco, to be an entrepreneur or to constitute a business, and to improve current housing.

In the year 2015, the education of the children was not as important as it is in 2018, where this goal is given top priority. Improving the quality of life and health conditions was not one of the most important goals either (SFSA (m), 2015, p. 67).

16) How has your life changed through the Qorichacra Project?

Table 16: Change of Life (own representation)

n=6	Declined	Equal	Improved	Much improved	No answer
Change of Life	0%	0%	50%	16.67%	33.33%

All farmers involved in the Qorichacra project say that their lives have changed through the project. The two farmers who were not involved did not answer the question.

5.4.2. Interpretation

Impact on the Farmers

All study participants state that they currently grow their vegetables in greenhouses. Before the project started, this technology was unknown in Huillcapata. Today, the farmers have the necessary know-how to handle the greenhouses. The farmers have already had problems with the greenhouses (infested plants, etc.), but everyone says that he's satisfied with the new technology. 66.67 percent of farmers have expanded their greenhouses or built new ones since 2015 which speaks for the new technology.

Cooperation with restaurants and hotels doesn't seem to work. As before the project, the farmers sell most of their products at the local market. Nevertheless, farmers have a great interest in future cooperation. The survey doesn't reveal why there is no longer any cooperation between the restaurants and hotels. In question 8, two farmers also stated that lack of formalization represents a barrier to the sale of products.

Since 2015 farmers have increasingly started to grow other agricultural products. Especially flowers are a good source of income. In addition, many farmers have started cattle breeding. In contrast to 2015, farmers don't have a permanent job besides farming today. This indicates that their income, which they achieved in agriculture, is sufficient. If this is temporarily not the case, they do casual work.

The farmers want to increase their production in the future. They also want to specialise and optimise their production in the greenhouses and improve product quality.

Impact on the Farming Families

More than three-quarters of the participants state that their income has improved since 2015. This certainly has a connection with the new technology of greenhouses. Another reason could be that the farmers started to diversify their products and today grow flowers and strawberries, as they can sell them at a high price. The higher income has an influence on the quality of life of farming families, as, since 2015, most farmers have renovated their accommodation.

In their private lives farming families invest the most in infrastructure and education of their children. For all farmers, improving the quality of life and health conditions have medium to high priority, which was not yet the case in 2015.

All farmers involved in the project say that their lives have improved through the Qorichacra project. This is certainly related to the new cultivation method and the increased income, but also to the fact that many families have renovated their houses.

Impact on the Community

The survey contains little information about how the project has affected the community level. However, four of the six participants say that they invest medium too much in infrastructure. A better infrastructure affects the quality of life in the community.

6. Discussion/Conclusions

The detailed research work performed in Cusco has shown that the Qorichacra project has both positive and negative aspects. Those will be addressed in the following subchapter, where the research question of whether the project has had a sustainable impact on the farmers, farming families and communities will be answered.

Therefore, several subordinate questions formulated in chapter 1.4. will be answered. This is followed by a short chapter in which the researcher expresses her personal opinion on the project. In chapter 6.3. the researcher makes recommendations and suggestions for further projects. In the last subchapter the limitations of the master's thesis are explained.

6.1. Answering the Research Question

At the beginning of the master's thesis, the following research question and subordinate questions were formulated:

Did the Qorichacra project have a sustainable impact on the involved farmers, farming families and their communities?

- Could the initial goals be sustained after the SFSA's official withdrawal from the project?
 - Development of an integrated supply chain of high-quality vegetables for the McDonald's restaurant and other hotels and restaurants in Cusco.
 - Improvement of Homes and Livelihoods
 - Creation of a business case that can be applied in other Latin American countries
- What has been the impact of the project on the involved farmers, households, and communities?
- How has the cooperation between the farmers involved and AD developed since the SFSA's withdrawal?
- Has the project sparked any unintended changes, positive or negative, among the farmers, households and communities since 2015?

In the following, the researcher tries to approach these questions and answer them. Since the subordinate questions partly overlap, repetitions may occur in the respective answers.

Sustainability of the Initial Project Goals

Development of an integrated supply chain of high-quality vegetables for the McDonald's restaurant and other hotels and restaurants in Cusco

During the Qorichacra project, an integrated supply chain of high-quality vegetables could be developed for McD Restaurant and other hotels and restaurants in Cusco. Today, McD is still supplied by farmers involved in the Qorichacra project and is satisfied with the quality of the iceberg lettuce. However, it should be mentioned that many farmers have ended their collaboration with McD.

The other hotels and restaurants subsequently discontinued their cooperation after the pilot project. However, the decisive criterion was not the lack of quality of the products, but other conflicts between farmers and hotels and restaurants, namely a disagreement on prices. The restaurants and hotels

placed little value on the quality of the products. They were therefore no longer willing to pay higher prices than on the local market. For the farmers, the supply of hotels and restaurants was more complicated. Therefore, they demanded higher prices. They also disagreed with the terms of payment (30-days period).

Due to the fact that only four farmers still work with McD, most farmers today no longer work in business networks. They sell their products independently on the local market. However, thanks to the project, they know today the possibility of group enterprise and will be able to use this model again in the future when they resume cooperation with hotels and restaurants.

The project has led the farmers of the project today having the know-how to grow their vegetables, fruits, and flowers in greenhouses. Thanks to the new technology, many of them have been able to significantly increase their production. In addition, they have diversified their products and are now mainly growing strawberries and flowers because they are very profitable. Since the conclusion of the project, greenhouses have been widespread in the Cusco region.

Improvement of homes and livelihoods of small-scale farmers in the Andean communities of Cusco

The Qorichacra project improved the housing quality of the farmers in the participating communities. Even after 2015, five of the six farmers surveyed carried out renovations on their houses. The project has created awareness for the improvement of housing quality. This is also due to their income, which has improved as a result of the project. Some farmers are already thinking about ecotourism, but it will take time for them to put it into practice.

The project has resulted in the farmers involved in the project today having the know-how how to grow their products in greenhouses and how to achieve high quality. The new technology has allowed them to increase their production considerably and to increase income.

However, some farmers still struggle with production in greenhouses and have stopped using them because they lacked the know-how or because they could not afford the cost of renovating their greenhouse. However, these are farmers who were not involved in the project and built the greenhouse on their own initiative.

Creation of a business case that can be applied in other Latin American countries

The goal of replicating the Qorichacra project in other Latin American countries has failed. The AD has tried to carry out the Qorichacra project in several countries, but the company has abandoned the projects after a while due to lack of resources (staff and money). This shows that such projects play a subordinate role for the AD.

Impact of the Project on the Involved Farmers, Households, and Communities since 2015

Many farmers now know how to successfully use the new greenhouse technology. They were able to massively increase their production with the help of greenhouses. Most farmers no longer work with hotels and restaurants. This doesn't seem to be a problem, because the demand on the local market is big enough that the farmers can sell all their products there. However, they would like to resume cooperation with the hotels and restaurants.

The higher productivity of farmers has led to an increase in their income. As a result, many farmers have renovated their houses in recent years. This has improved the quality of life of the whole family. Two-third of the study participants report that their quality of life has improved since 2015. In addition, many farming families have been able to build new greenhouses or extend existing ones. In this way, they were able to maintain or increase their production.

It is difficult to estimate the impact of the Qorichacra project on the community level. However, there have been some changes in the community that may be related to the project. For example, a road is currently being built in Huillcapata. People in the community also talk about ecotourism. This shows that the community is evolving. In Chita Pampa, some new greenhouses have already been financed by the municipality. Thus, the farmers receive financial support from the state for the construction of the greenhouses. This shows that the new technology is more and more recognized. In the Huillcapata community today, a farmer shows himself to be a "leader". He is committed to ensuring that the community can develop further. He wants to build a library in order to raise the educational level of the farmers. Another objective he has is to resume cooperation with restaurants and hotels.

The project doesn't only have positive effects on the communities. The old plastic of the greenhouses is a big problem for them. Farmers don't know how to dispose of it. This has an impact on the quality of life in the community and leads to environmental pollution.

Cooperation Between the Farmers Involved and Arcos Dorados since 2015

McD is still supplied by four farmers of the project. However, many farmers have ended their cooperation. Overall, it must, therefore, be said that most of the cooperation has failed. The reason for this is that the company only pays for the deliveries after 30 days. McD also buys a very small amount of vegetables in the communities and it is not worth it for the farmers to supply such a small quantity, as this is associated with high transport costs. If they sell the products on the local market, they can transport them all at once, sell them in a day in a few hours and get paid directly. Conflicts have also arisen over prices, as the farmers couldn't sell their iceberg lettuce to McD at a much better price than they could demand at the local market. However, the company's quality requirements were associated with massively higher costs.

Unintended Changes Among the Farmers, Households and Communities since 2015

Since 2015 there have been unexpected changes. As mentioned earlier, many farmers have stopped working with McD after the conclusion of the project. As a result, they also stopped working in a business network and started selling all their production on the local market again. Moreover, other hotels and restaurants such as Greens and Novotel have ended their cooperation with the farmers. Since 2015, farmers have diversified their products. Today, they mainly grow flowers and strawberries since they can sell them at a good price.

6.2. Personal Assessment of the Qorichacra Project

The technical part of the project has changed agriculture in Cusco. It has led many farmers to grow their vegetables and fruits in greenhouses. Also, certain municipalities have started to finance greenhouses. With greenhouses, farmers have been able to increase their productivity in recent years. Due to the higher income, they were able to renovate their homes and improve their quality of life.

Cooperation between farmers and AD represents a major challenge, as the divergences between the two partners are too great. A company that aims to cooperate with farming communities should take their particularities into account. Especially the payment period of 30 days is too long for the farmers since they are dependent on the money. It is questionable whether the cooperation between farmers and such a highly regulated restaurant as McD makes sense.

Also, the amount of products AD buys in the communities is very small. Apart from iceberg lettuce, the products AD needs for its restaurants continue to come by air from Lima to Cusco, where the company cooperates with a large supplier. Therefore, the supply chain has not changed significantly through the Qorichacra project. In the future, the company could buy more vegetables in the communities and further promote local production. However, the researcher wonders how strong AD's interest is in working with local communities.

With regard to the other restaurants and hotels, the question arises whether they are willing to pay for the high quality of the products or whether the price is the decisive criterion for them, which was the case with Greens and Novotel. If the situation is similar to that of the two restaurants, then sustainable cooperation is difficult. In order to achieve cooperation in the future, the partners would have to sit around a table and take a closer look at many aspects of cooperation such as prices, terms of payment, transport costs, etc.

In the course of the research, the researcher wondered whether direct cooperation between restaurants and hotels and the farming communities would bring any added value to the two partners at this point in time since market culture is strongly anchored in Cusco. Demand is high enough to allow farmers to sell their entire production at the local market. Also, most restaurants, hotels, and intermediaries buy their products directly there. Under the given circumstances, it is easiest for farmers, restaurants and hotels to go to the local market to sell and buy their products.

However, it is a matter of time until this situation changes. Peru is currently undergoing a gastronomic revolution promoting indigenous cuisine where local products are used (Pozo-Vergnes & Vorley, 2015, p. 7). Peru's gastronomic movement, civil society and state agencies are promoting healthy cuisine based on local products. They use the slogan: "come rico, come sano, come Peruano" (=eat delicious, eat healthy, eat Peruvian). In a few years the demand for high quality and organic products will probably be greater and restaurants may be willing to pay a higher price than on the local market. In addition, the deeply rooted market culture will likely to decline in the future. As a result, restaurants may increasingly seek direct cooperation with farmers. To ensure that the cooperation works, an intermediary must be involved.

It should also be in the government's interest to promote cooperation between small farmers and hotels and restaurants in order to keep the farmers from migrating to coastal towns, as has been the case in recent years, since the coastal areas are already very densely populated today.

Even though cooperation with commercial partners has largely failed in the Qorichacra project, the farmers gained the theoretical knowledge of supplying the hotels and restaurants as a business network. They will be able to use this know-how in the future when they resume cooperation with the restaurants and hotels.

6.3. Recommendations and Suggestions for Further Research

As mentioned in the introduction, a project always leads to learnings that an organisation can take into account when implementing further projects. These are summarized below:

- It is important that hotels and restaurants in a next project are carefully selected. In this respect it is essential to ensure that they take into account the peculiarities of the communities and, for example, adjust their terms of payment from the outset. It is also important that they are interested in high-quality vegetables or fruits and are willing to pay a higher price than at the local market and that they buy relatively large quantities so that the transport costs are reasonable for the farmers.
- If an intermediary is to be involved between the farmers and the commercial partners in the next project, he should be carefully selected, and it should be ensured that the farmers are in agreement. In this respect, it is important that sufficient communication takes place between both parties.
- Before the next project, it might be advisable to clarify whether a Global G.A.P. certification would make sense.
- It would be important to take up the topic of plastic and to include the problem in a next project. Perhaps there is a more environmentally friendly plastic or cooperation could be sought with companies that collect and recycle plastic.
- In one of the communities the project failed. It would be interesting to take a closer look at the reasons for the failure and make a second attempt.
- In general, it would be advisable for SFSA to go on-site a few years after the conclusion of a project to measure its impact.

The aim of the master's thesis was to make a qualitative evaluation of the Qorichacra project. It would be interesting to carry out a quantitative study in a next step and compare the results with the present evaluation and the evaluation carried out in 2015. This would allow statements about the impact of the Qorichacra project at a larger scale.

Several farmers mentioned in the interviews that the plastic of the greenhouses is a problem for the communities. People don't know how to dispose of it. There are companies that have tackled this problem. However, it seems that they are not working with smaller communities like Huillcapata or Chita Pampa. This problem could be addressed in another project.

6.4. Limitations

Before starting her research trip, the researcher tried to establish contact with people in Peru who were involved in the Qorichacra project. However, she received few answers, which is why she had to organize herself spontaneously after her arrival in Cusco.

The initial aim would have been to talk to more farmers and to organise focus groups in the communities. Unfortunately, this was not possible, because the farmers had to work through the day in their greenhouses and had no time to participate. Therefore, only three interviews could be carried out in total. Two of the three interviewees were visited twice. This allowed to build trust and to ask deeper questions at the second visit.

The researcher has heard from people in Cusco working in the NGO sector that it is indeed a problem to conduct interviews during the day. Therefore, many organisations doing research in the field stay overnight in the communities, with the aim of talking to the farmers in the evening and early in the morning when they have more time. Since the researcher was independent of any organisation in the field and was not yet familiar with the farmers, this was not an option for her. In order to receive more information, the researcher decided to conduct a survey in Huillcapata. Also, she decided to conduct more expert interviews than planned, which could provide her with more information about the impact of the project.

The survey that was carried out consists of a small sample. Due to organisational reasons, the researcher was unable to find a larger number of participants for her survey. Therefore, the survey is not representative and should only be considered as additional information to the qualitative findings.

The researcher would have liked to talk to more restaurants. She was assured that this would be organised for her on the last day of her stay in Cusco. Unfortunately, the promise was not kept. The researcher then tried to contact the hotels and restaurants involved via e-mail but never received an answer. Nevertheless, the researcher was able to learn more about the farmers' cooperation with hotels and restaurants from the experts.

The evaluation methods described in the theoretical part of the paper could not be applied, as they require sufficient data, ideally of the treatment group as well as the control group. Unfortunately, not enough data could be collected for this purpose during the field research.

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Appendices

A) Transcribed Interviews

Codes

Project Planning

Replication of the Project

Project Implementation

Sustainability Strategy of AD

The outcome of the Project

Agriculture in Peru

Cooperation between Farmers and Restaurants during the Project

Production in Greenhouses

Cooperation between Farmers and Restaurants Today

Interview with Valério Paucarmayta

Entrevistado: Valério Paucarmayta, Director de Centro Bartolomé de las Casas

Intérprete: Nuria Frey, Consultora de Centro Bartolomé de las Casas

Entrevistador: Nora Hurcik, estudiante

23.08.18, 09.00-10.00 a.m., Cusco

- 1 Entrevistador (Nora): Muchas gracias por darme un poco de tu tiempo para este entrevista. Mi amiga
- 2 Nuria va a ayudarme con el espanol porque no hablo espanol con fluidez. Primero tengo una pregunta.
- 3 Hay un problema cuando grabo la conversacion?
- 4 Entrevistado (Valério): No, esta bien. Para compenar quiero saber si tienes contactos en las
- 5 comunidades. Es muy importante porque podria ser que encuentras a nadie quando llegas. La gente
- 6 tiene su propia agenda. Entonces si llegas sin avisar priviamente puedes encontrarlos como no
- 7 tambien.
- 8 Intérprete (Nuria): Ella esta preguntando si tiene un contacto y si es mejor que ella los llamamos sin
- 9 conocer los personas ou si alguien qui conoscas a las personas.
- 10 Entrevistado: Puedo llamar a una persona y voy a dir que una estudiante de suiza voy a llamar. Es
- 11 importante para poder cordinar.
- 12 Entrevistador: Muchas gracias.
- 13 Entrevistado: Las comunidades estan cerca de aca. Estamos como a 20 minutos pero igual es mejor
- 14 todavia.
- 15 Entrevistador: Seria muy interesante a visitar unos comunidades si esta posible.
- 16 Entrevistado: *Llama a una persona de una comunidad involucrado en el proyecto.* Esperamos si nos
- 17 conteste (...) Como van las flores? (...) Si, es con las fresas y todo tambien? Excelente (...) Juan tengo
- 18 una pregunta. Hay una senorita que llega aca de suiza. Es de suiza junto con la fundacion de Syngenta

19 y queria hacer una evaluation sobre el proyecto "Qorichacra". Entonces, queria cordinar contigo si
 20 estes disponible y que te vaya llamar. Su espanol todavia no esta muy fluido pero ella queria
 21 comunicar contigo (...) Genial, entonces puedo darle tu numero de celular y seguramente va a
 22 contactarlo en los proximas dias para cordinar. (...) Listo Juan. Gracias. Nos comunicamos. Ya. Ciao.
 23 Gracias.

24 Entrevistado: Juan es un technicista. Es profesional en animales. Su numero es X.

25 Entrevistador: Muchas gracias Valério.

26 Entrevistado: Si quieres ver los bien experiencias del proyecto puedes visitar las comunidades
 27 Huillcapata, Chita Pampa ySequeraccay que marquaste. En el otro comunidad no functiono. No sé si
 28 tu comunicaran en suiza. Aca fue dificil. Pero fue complicado.

29 Entrevistador: Porque fue complicado?

30 Entrevistado: Sigualmente porque la gente estaba costrumbada de la estradegia de la existencialismo
 31 (...).

32 Intérprete: Also sie haben viel Hilfe bekommen und mussten selbst nicht viel dazu beitragen.

33 Entrevistado: Juan conosco todo los comunidades y fue la persona que operaba a un equipo tecnico.
 34 Va a ser buen ayuda.

35 Intérprete: Valério hat noch angemerkt, dass du dann mit ihm vor Ort schauen kannst, ob du die Zeit,
 36 welche er für dich investiert, kompensieren möchtest.

37 Entrevistador: Y las agricultores hablan espanol ou solo Quecha?

38 Entrevistado: Algunos, pero mas fluido hablan Quecha. Pero si te va entender en espanol sobre todo
 39 de la ayuda de Juan. El habla Quequa y espanol.

40 Intérprete: Ella dice que va a llevar una persona que puede ayudar con el espanol.

41 Entrevistado: Mira. Yo te consegeria cordinar tambien con Juan (....) La gente igual van a mirar con
 42 extranjeros que conocen poco el lugar. Entonces si tienes muy poco tiempo para levantar informacion
 43 de que necesitas en el lugar mi conejo seria que te acompanan tus amigos pero tambien que te ayude
 44 Juan.

45 Entrevistador: Si claro.

46 Entrevistado: Y una otra cosa. En estas comunidades tenemos mucho mas familias. Entonces seria
 47 dificil de buscar para ti a las familias correctas. No?

48 Entrevistador: Si, pero creo que seria tambien interesante de halbar con personas no involucrados en
 49 el proyecto "Qorichacra".

50 Entrevistado: Si claro. Por supuesto. De acuerda. Pero es dificil de encontrar las familias de esto
 51 proyecto basicamente. (...) Entonces podemos hablar a tu disposicion.

52 Entrevistador: Tengo unas preguntas sobre el proyecto. Has estado involucrado en los dos fases del
 53 proyecto?

54 Entrevistado: Si, claro. Es el function que tengo como director de CBC.

55 Entrevistador: Como fueron seleccionados los agricultores para el proyecto?

56 Entrevistado: No tengo informationas tan especificas por la function que tengo. Era un equipo tecnico
57 que selecciono las agricultores. Sin embargo comentarte que se ha planteado una routa tecnologica
58 para secarse a la comunidad. (...)

59 Intérprete: Also er hat gesagt, dass es sich um verschiedene Dörfer gehandelt hat, die ihre Ressourcen
60 verwalten, das Wasser, der Boden usw.

61 Entrevistado: Entonces te comentaba que una comunidad es un territorio que responde en una
62 question colectiva del agua, de las tierras etc. Entonces una primera cosa de hacer en un proyecto es
63 de cordinar con la comunidad. Es un procecion de identification (...). Un primera criteria era que las
64 familias y productores quieren destinar sobre todo tiempo para las actividades y tambien para invertir.

65 Intérprete: Tradusco. Er hat gemeint, dass die Communities ihre Ressourcen kollektiv verwalten. Und
66 deshalb verhandelt man mit dem Kollektiven. Und das andere ist, dass es Material gegeben hat im
67 Projekt. Die Bauern mussten sich aber auch dazu verpflichten, dass sie Zeit in das Projekt investieren
68 und es wurden nicht alle Materialien 100 Prozent abgedeckt.

69 Entrevistado: Para arangar este proyecto Qorichacra nosotros hemos tenido experiencias previos en
70 iniciativas productivas. Desde 2009 nosotros trabajaban en la programa que se llamo APOMIPE (...).
71 Entonces este proyecto se termino 2011. En esta programa la cordinadora era Carola Amazaga.

72 Entrevistador: Das war also wie das Vorläuferprojekt, habe ich das richtig verstanden?

73 Intérprete: Ja genau. Aber das Projekt wurde auch in anderen Regionen umgesetzt.

74 Entrevistado: Hay diferentes iniciativas. En Cusco trabajamos la iniciativa de guies, de artesanias,
75 flores, hortalizas etc. En el proyecto Qorichacra trabajamos principalmente con el tema de hortalizas.
76 (...) Y la implementacion de esto habia tres criterias principales. Lo que te comentaba no? (...).

77 Entrevistador: Las agricultores trabajaban en una red. Puedes explicar un poco mas como funciona una
78 red?

79 Entrevistado: Si, bueno. En una comunidad normalmente viven mas o menos 80 comunieros. Es como
80 funciona en Peru. Pero por orto lado hay familias diferentes en los comunidades. Hay familias que
81 tienen ganados como cuy, avejas etc. Y hay familias que se dedican mas a la agricultura. Esto es una
82 primera destincion. (...) Entonces quando inicio el proyecto todas las familias querian ser parte de la
83 red. Porque siempre esta spectatifa (...) Pero en la segunda reunion solo aparecen 50 de los 100
84 familias.(...)

85 Intérprete: Es sind relativ kleine Gemeinden mit 200 bis 250 Einwohner. Am Anfang wollten alle
86 teilnehmen. Es gab aber die drei Kriterien, dass sie bereit sind, sich zu engagieren, dass sie einen Teil
87 finanziell mittragen und dass sie mitmachen. Es sind alles traditionelle indigene Gemeinden. Die Leute
88 waren alle sehr begeistert, viele Projekte implizieren, dass sie etwas gratis bekommen. Das war hier
89 schon auch der Fall. Aber sie mussten auch etwas dazu beitragen. "

90 Intérprete: Pero las familias se organizaban en una red?

91 Entrevistado: Si puedo explicar. No esta automatico una construcion de una red. No era en la primera
92 y segunda reunion. Finalmente una red era mas o menos de 10 familias. Entonces una red que esta
93 unidad intereses comunidades. Vamos a producir por ejemplo hortalizas. (...). Y porque es importante
94 organizar de la red? Hay dos razones. (...)

95 Intérprete: Am Schluss sind pro Gemeinde 10 bis 15 Personen übrig geblieben. Diese Netze sind aus
96 folgenden Gründen entstanden: McDonald's hat z.B. teilweise eine grosse Menge an Gemüse bestellt.
97 Dies ist für einen Kleinbauer nicht möglich. Zweitens braucht man für die Rechnung eine
98 Fiskalnummer, das ist nicht möglich als Kleinbauer. McDonalds kann nur bei gemeldeten «Firmen»
99 einkaufen. Drittens kann man in einem Netzwerk Einkauf und Beratung gemeinsam machen.

100 Entrevistador: Fue difícil de encontrar restaurantes y hoteles que participaron en el proyecto?

101 Entrevistado: Bueno. No esta tan difícil. En Cusco lo mas complejo es cumplir con los standards.
102 Pero tambien habia complicaciones. La politica de McDonald's era 45 dias. Y para una familia que tiene
103 un ingreso muy bajo esperar 45 dias por su productos no le parece. (...)

104 Intérprete: Er hat gemeint, es sei prinzipiell sehr einfach, Restaurants zu finden, da Cusco sehr
105 touristisch sei. Im Fall von McDonald's sei es schwierig, dass dieser erst nach 45 Tagen bezahle. Dies
106 ist teils schwierig, da die Leute angewiesen sind auf das Geld und es sogleich benötigen. Ein weiteres
107 Problem sind die Standards und Anforderungen der Restaurants und man bekommt als Bauer
108 trotzdem nicht sehr viel mehr bezahlt. Daher gab es Fälle, in denen die Bauern wieder auf dem lokalen
109 Markt ihr Gemüse verkauft haben. Sie haben sich gefragt, wieso sie so schöne Tomaten herstellen
110 sollen, obwohl sie diese zu einem nicht viel höheren Preis verkaufen können. Von Seiten der
111 Restaurants gibt es viel Misstrauen gegenüber der Comunidades und dies teils berechtigt. Es wird z.B.
112 nicht immer pünktlich geliefert. Es treffen zwei völlig unterschiedliche Organisationskulturen
113 aufeinander. Die wirtschaftliche und chronologische Sichtweise der Firmen und die Communities
114 andererseits haben ihre Logik, produzieren zuerst einmal für sich und verkaufen ein bisschen. Oft fehlt
115 die Logistik. Und auch das Zeitdenken. Die eine Kultur denkt mehr zyklisch. Die beiden Modelle müssen
116 sich zuerst finden. Es kann gut funktionieren, aber es sind zwei Modelle.

117 Entrevistador: Que hoteles y restaurantes estuvieron involucrados aparte de Arcos Dorados y Cusco
118 Restaurantes?

119 Entrevistado: Novhotel comprando fresas.

120 Entrevistador: Tienes un contacto en Novhotel?

121 Entrevistado: Hui no, pero esta muy cerca, en el calle de San Augustin. Son bastante accesibles.

122 Entrevistador: Puedes decirme mas sobre el concurso en las comunidades?

123 Entrevistador: Si, era el concurso viviendos saludables. Si el proyecto tenia dos componentes.
124 Trabajaban con la metodologia MASAL. (...)

125 Interpréte: Das Programm MASAL war eine Zusammenarbeit zwischen den Regierungen von Peru und
126 der Schweiz. Sie haben mit "Kamayoc" gearbeitet. Solche benutzt man hier häufig. Das heisst man bildet

127 Leute aus den Gemeinden zu einem bestimmten Thema aus. Die Leute geben ihr Wissen an die
128 Communities weiter. Das Projekt funktionierte sehr gut. Die physische Trennung von Menschen und
129 Tieren, das Thema Hygiene und das Thema, in einem Raum zu schlafen waren hier zentral. Die Idee
130 war es, die Wohnqualität zu erhöhen. In einem Fall hat eine Familie sogar ein Rohr in ihren Herd
131 eingebaut, damit konnten sie das Wasser wärmen, in einem Tank speichern und es reichte dann für
132 zwei Personen um je fünf Minuten zu duschen. Und die Familie hat 2 Hähne in der Küche, was es sonst
133 in Peru kaum gibt.

134 Entrevistador: Tengo una ultima pregunta. Como completo el proyecto en 2015. Hubo una cooperacion
135 entre CBC y las comunidades despues de la termination?

136 Entrevistador: Si, cuando se concluyo, todavia teina una period de accampioemento (...).

137 Interprete: Es gab eine Begleit- und Beratungszeit und ein neues Projekt mit dem ICA (amerikanisch),
138 das einerseits die Beratung von Technik aus dem Qorichacra Projekt beinhaltet hat. Und andererseits
139 hat man einen Guide erstellt. CBC war noch 10-15 Monate begleitend tätig, danach hat man die
140 Zusammenarbeit beendet. CBC arbeitet mittlerweile in der Nachbarsregion in Cocabambas. Dort
141 wiederholt man das Projekt.

142 Entrevistador: Muchas gracias Valério.

143 Entrevistado: Ah si, si tienes otras preguntas en algun momento con mucho gusto.

144 Entrevistador: Muy amable. Gracias.

Interview with Carola Amézaga

Entrevistado: Carola Amézaga, economista y ex empleado de SFSA

Intérprete: Harald Ort, agronomo

Entrevistador: Nora Hurcik, estudiante

13.09.18, 10.00-11.00 a.m., Lima

1 Le entrevistador, el entrevistado y el intérprete se presentan (...).

2 Entrevistadora: Muchas gracias para darme un poco de tu tiempo para esta entrevista. Tengo unas
3 preguntas sobre el proyecto Qorichacra. Estuviste involucrado en la planificación y también en la
4 implementación del proyecto. Para la planificación usaron la metodología APOMIPE.

5 Entrevistada: Sí, una parte de la estrategia venía de de lo que usamos en apomipe

6 Entrevistadora: Puedes explicar esta metodología?

7 Entrevistado: Sí, esta es una metodología que se adaptó al medio rural de una metodología que había
8 trabajado para naciones unidas y sepal y que lo que busca es fomentar la sociabilidad entre pequeñas
9 empresas. La sociabilidad horizontal pero también de la vertical, es decir la probeduría de un grupo de
10 pequeñas micro empresas a una empresa mas grande. Entonces nosotros en ampolumpe tuvimos el
11 mandato de la la de la cooperacion suiza de llegar a zonas de mayor pobreza, y la mayor pobreza está
12 en las zonas rurales. Lo que hicimos fue tomar la esencia y la metodología y buscar como con pequeños
13 productores podíamos hacer algo similar, y eso fue lo que hicimos en Apomipe. Esas metodologías
14 tenían unas fases, y estas fases eran principalmente el eje conductor en el desarrollo de la confianza,
15 con una visión de articularse al mercado. Esto partía por crear oportunidades de negocio, y teniendo
16 esto como un marco de referencia de lo que ellos podían hacer juntos, empezar a construir confianza,
17 institucionalidad, capital social, fortalecer grupos que pudieran, a traves de herramientas, tener un
18 reglamento, tener cuotas, reuniones periódicas, a través de una serie de compromisos que se irían
19 asumiendo para que estos grupos se fortalecieran e hicieran algunas acciones conjuntas, que las
20 llamábamos proyectos piloto, en los cuales quedara claro que les convenía estar juntos que estando
21 juntos podrían ahorrar en compras y acceder a clientes. Haciendo estas pequeñas acciones pilotos se
22 metieran en objetivos a más a largo plazo, que era el plan estratégico. Era un plan de negocios. Y así,
23 poder decidir cuánto tiempo iban a estar juntos. Muchos de estos redes empresariales, no necesitaban
24 formalizarse como grupos, porque simplemente era comprar juntos y no necesariamente vender
25 juntos. En la mayoría sí, pero en otros por su producto o su ubicación sí les era conveniente enpezar a
26 pensar en una venta en conjunto y en incorporar más servicios. Por ejemplo se llevaron a formar dos
27 cooperativas, una de productos lácteos, y otro de crianza y ventas de cuyes. Esto tuvo mucho éxito en
28 el norte. Entonces, en algunos casos si se llevó a consolidar más empresarialmente, pero otros no. Lo
29 importante era esta metodología paso a paso que no solo se fijaba en la parte de mercado, de costesy
30 economia sino en la parte socio-organizatoria, es decir, en la parte como las personas antes que nada
31 tienen que estar seguros de con quien hacen negocios, y eso es muy importante porque hay mucha
32 desconfianza. Los grupos pueden estar seguros de hacer paetas, pero no de arriesgar su dinero, sus

33 siembras de forma conjunta, para comprometerse con alguna venta, o para comprar juntos para
34 invertir.

35 Tu ya has visitado Cuzco? Has visto ya el campo?

36 Entrevistadora: Si visité las comunidades Huillcapampa y Chita Pampa.

37 Entrevistada: Y ya has visto invernaderos?

38 Entrevistadora: Si, muchos.

39 Entrevistada: Eso es una de las inversiones que más se hacían. Para ponerse a invertir, para lo cual
40 sabían que tenían que depender del conjunto, tenía que haber esa confinaza, y esa es la metodología
41 apomipe. Lo que hicimos fue adaptar la metodología redes empresariales al sector rural e
42 implementarla, y unos elaboramos unos manuales. Cuando Qorichacra conoció este proyecto le
43 interesa y decide que en el proyecto que ellos querían apoyar en cuzco en la alianza con McDonald's
44 se utilizara esa metodología.

45 Interpréte: Also es war die Pilotphase. Dann ist der Businessplan erstellt worden. Ursprünglich geht
46 das ganze hervor aus einem Netz von Einkaufskooperativen in 2 Bereichen und dann ging man über
47 auf die gemeinsame Vermarktung.

48 Entrevistador: Cuales fueron los dificultades durante la planificación del proyecto Qorichacra?

49 Entrevistada: La planificación en realidad se hizo sobre la base de un estudio de mercado, porque lo
50 que quería Qorichacra era entrar en la cadena de hortalizas, porque el aliado era McDonald's y este lo
51 que ofrecía era comprar las hortalizas en Cusco para su restaurante

52 Interpréte: Man hat als erstes versucht, mit McDonald's zusammenzuarbeiten, im Gemüsesektor.

53 Entrevistadora: Y fue difícil de colaborar con McDonalds?

54 Entrevistada: No, no. Este parte no la he visto yo, pero lo que yo he escuchado es que originalmente
55 la fundación se acercó al área de responsabilidad social de McDonald's, pero no tenía mucha apogía,
56 entonces lo que hizo fue ir directamente a la parte de operaciones. Cuando se sensibilizó y pudo
57 levantar el interés de la parte de operaciones de McDonald's entonces ahí sí, porque la idea era que
58 pudieran comprar, y para eso tenía que estar convencida el área.

59 Interpréte: Man hat zuerst versucht mit McDonald's zusammenzuarbeiten im Bereich der sozialen
60 Unternehmensverantwortung. Man ist dann aber übergegangen in den kooperativen Bereich.

61 Entrevistada: Eso fue al inicio, la primera visita que nosotros recibimos aquí en Perú, cuando yo
62 trabajaba en intrercooperacion justamente de las dos partes de Argentina, donde está la sede de Arcos
63 Dorados de América latina y de la fundación. Los dos llegan y piden a través de Suiza, ya que
64 contactaron con Basel con la fundación singenica y quieren conocer aquí este proyecto. Ahí es donde
65 les parece interesante además conocen qe ya se estaban haciendo invernaderos, y se dan cuenta de
66 que pueden ser utilizados también para hortalizas, en ese momento se hacian invernaderos para flores.
67 Eran varios elementos, no solo la parte de la estrategia social, sino la parte de tecnología ya que a esa

68 altura puedes hacer algo de hortalizas pero en un periodo de tiempo muy corto, y con los invernaderos
69 se podía extender la producción a lo largo de todo el año.

70 Interpréte: Vor der Intervention hatte man sehr kurze Produktionszyklen.

71 Entrevistada: Eh, ahora las dificultades. Como te decía se elaboró un estudio de mercado para ver la
72 demanda de hortalizas en la ciudad de Cusco, además de la demanda de McDonald's que ya se conocía,
73 y se estimó que era una demanda muy alta, incluso los restaurantes, y los hoteles de más nivel llevaban
74 por avión algunas hortalizas

75 Interpréte: Es gab eine sehr hohe Nachfrage nach Pflanzen/Kräutern. Im Falle des Projektes hatte
76 McDonald's sowie andere Hotels und Restaurants eine hohe Nachfrage. Daher mussten die Pflanzen
77 teils per Flugzeug eingeflogen werden vor dem Projekt.

78 Entrevistada: Entonces, lo que se dijo es, si la demanda está lo que tenemos que hacer es preparar a
79 los pequeños productores para que puedan sacar un nivel de calidad de su productos, que cumplan
80 con los requisitos de la demanda. Y eso es lo que se empezó a trabajar con la metodología de redes,
81 se organizaron los productores pero un aspecto clave del proyecto Qorichacra fue que además de la
82 parte organizativa se transfirió mucha tecnología. Entonces se empezó a capacitar en buenas practicas
83 a las escuelas, empezaron a aprender lo que era la aplicación de consumos químicos, distinguiendo
84 cuales eran dañinos cuales podían ser aptos para las hortalizas, a trabajar sobre la higiene, tanto de
85 ellos como dentro del local, o sea todo lo que son buenas prácticas agrícolas.

86 Interpréte: Es war eine sozioorganisatorische Ausbildung der Bauern notwendig aber auch eine im
87 Bereich der Technologie. Es wurde ein Handbuch «buenos practicas» erstellt. Gerade bei der
88 Handhabung von Chemikalien musste man aufpassen und schauen, welche jetzt nützlich sind und
89 welche nicht.

90 Entrevistada: Esto fue un cambio muy radical para ellos, porque ellos no conocían nada de eso y ellos
91 interiorizaron perfectamente el uso de copas, mandiles, de los elementos de cosecha, a esterilizarlos,
92 a lavarse las manos y para todo eso se tuvo asesoría a través de McDonald's de proveedores de
93 ellos. Por ejemplo vino una empresa de Colap para asesorarlos en todo lo que era el manejo de
94 alimentos. Otra empresa de Brasil, precio ambiental, que vino para ver el manejo agua, de las fuentes,
95 como se venía incubando, de donde se captaba y como se hacía el monitoreo de la calidad del agua...
96 Y luego también con una empresa internacional, se recibió la evaluación de las buenas propias
97 agrícolas, puntos de control para poder saber qué se estaba cumpliendo. No me acuerdo ahora del
98 nombre pero en los informes está.

99 Interpréte: Die Zulieferer von McDonald's sind dann auch gekommen, u.A. aus Argentinien und
100 Brasilien. Aus Brasilien kam ein Unternehmen, um zu schauen, wie man den Wasserverbrauch am
101 besten «handeln» kann. Ein weiteres Unternehmen ist gekommen, um das Projekt zu evaluieren.
102 Dabei wurden die kritischen Punkte beleuchtet.

103 Entrevistada: No se llevó a certificar, fue un proceso. Ellos estuvieron recapacitando, y ellos solo
104 hicieron la primera evaluación para ver todos los puntos críticos y la idea era seguir con ellos. Ahí fue
105 un punto que estaba agarrado al mercado, en Cuzco cuando se hizo el estudio de la demanda, no se

106 preguntó por la exigencia de alguna certificación de la calidad de las hortalizas. El proyecto invirtió
107 mucho tiempo en eso. Entonces al productor le interesaba cumplir con McDonald's porque era un
108 cliente que sí les compraba y McDonald's tiene sus propios estándares de calidad, y ellos una vez al
109 mes mandaban sus productos a Lima y hacían un análisis y si todo estaba bien seguía comprando. No
110 necesitaban un certificados, sino que por el tamaño que tiene McDonald's ellos mismos hacían su
111 propio control de calidad.

112 Interpreté: In Cusco hat damals niemand ein Zertifikat verlangt. Daher ist es nie zu einer Zertifizierung
113 gekommen. McDonald's hatte ein eigenes Kontrollsystem, das es angewendet hat.

114 Entrevistada: Pero el proyecto sí que invirtió bastantes recursos y tiempo en lograr que ellos
115 empezaran a cumplir y se armara el sistema de calidad y pudieran en algún momento sacar este
116 certificado de Global G.A.P. incluso se hizo un acuerdo con Global G.A.P.

117 Interpreté: Es wurden sehr viele Gelder eingesetzt, um eine hohe Qualität zu erreichen. Es kam zum
118 Schluss sogar zu einer Vereinbarung mit Global G.A.P.

119 Entrevistada: Pero el mercado no lo pedía. Los pequeños productores empezaron a combinar
120 mercados. Captaron 5-6 Hoteles y restaurantes a los cuales también vendían pero eran prodctos muy
121 chicos. Entonces la mayor parte de su producción se iban al mercado tradicional, y en ese mercado
122 tradicional ellos destacaban por su calidad, y ganaban mucho dinero ahí. No veían la necesidad de
123 abastecer a más clientes como restaurantes u hoteles, los que lo hacían era más por estar, porque eso
124 les daba una imagen dentro de sus comunidades de que eran proveedores de una empresa
125 formal. Estos hoteles/restaurantes que les compraban a los productores de Qorichacra eran pocos y
126 eran los que tenían más sensibilidad con la calidad del producto, pero la mayor parte de restaurantes
127 solo se fijaban en el precio. Ahí viene otra parte, que se invirtió mucho tiempo y recursos, porque se
128 intentó que hubiera un operador que pudiera organizar la demanda y comprarle los productores como
129 una empresa intermediaria, pero los precios que estaban dispuestos a pagar no se ajustaban a los de
130 una empresa en el medio. Se invirtió mucho tiempo en intentar que esta empresa hiciera el sondeo de
131 mercado de los restaurantes y pudiera motivarnos para que ellos compren. Pero ni los productores
132 estaban dispuestos a recibir menos dinero de lo que ellos vendían en el mercado tradicional, ni los
133 otros estaban dispuestos a pagar más porque ellos también podían acceder al mercado tradicional, y
134 eso fue un intento que falló. Esa inversión en la práctica fue muy buena, en recapacitar y cambiarle la
135 forma de ver al pequeño productor en que tenía que invertir en calidad e invertir buenas prácticas eso
136 fue perfecto, pero ya la certificación es algo que tiene que haber alguien que quiera comprar eso en el
137 mercado, y eso no había. Así que se tendía que haber hecho un trabajo muy grande para sensibilizar a
138 los restaurantes y a las empresas para que empiecen a exigir, pero eso no es un trabajo que le compete
139 a un proyecto, sino es un trabajo que le compete más al estado.

140 Interpreté: Aufgrund des hohen Niveaus der Bauern gelang es dann auch, mit 6 Restaurants/Hotels in
141 Verbindung zu treten und an diese Produkte zu verkaufen. Es wurde aber eine ganz kleine Menge
142 eingekauft. Der Hauptteil der Produkte verkauften die Bauern auf dem traditionellen Markt. Aufgrund
143 der guten Qualität der Produkte konnten dort gute Verkaufspreise erzielt werden. Die Kontakte zu den
144 bestehenden Restaurants/Hotels wurden gepflegt. Es wurden jedoch keine weiteren Abnehmer

145 gesucht. Für die Bauern war es innerhalb der Communities ein hohes Prestige an Restaurants/Hotels
146 zu verkaufen. Es gab nur wenige Restaurants/Hotels, die auf eine hohe Qualität Anspruch gelegt
147 haben. Die meisten waren nur interessiert an einem guten Einkaufspreis. Mit der Zeit gab es ein
148 Zwischenhändler, der die ganze Nachfrage der Hotels/Restaurants gebündelt hat. Dies hat viel Geld
149 und Zeit gekostet und verursachte Reibereien. Es kam zu Konflikten der Anbieter und Nachfrager. Das
150 global G.A.P. wurde auf Seiten der Produzenten gut umgesetzt. Auf Seite der Nachfrager gab es kein
151 Bewusstsein, dass ein global G.A.P. notwendig ist. Das ist eigentlich Aufgabe des Staates, dass ein
152 Bewusstsein besteht, dies zu verlangen und nicht Aufgabe des Projekts.

153 Entrevistada: Esos son los dos puntos más importantes en los cuales el proyecto no pudo lograr lo que
154 planificó, la certificación y la empresa operadora que tendía que articular oferta y demanda. Los
155 resultados fueron muy positivos porque muchos pequeños productores conocieron a buenas prácticas
156 agrícolas, las aplican hoy en día, se demostró lo pertinente que era el uso de invernaderos en esas
157 zonas altas para poder producir hortalizas además de flores, que ya se conocía. Esto es tan importante
158 que cuando acabó el proyecto había como (en el informe está puesto) 16 municipios, que habían
159 apoyado para que los productores de sus territorios también construyeran invernaderos. Y lo otro,
160 digamos claramente de impacto, es que los productores cuando empezaron, la fuente de sus ingresos
161 eran no agrícolas. Un 22% era lo agrícola, y lo otro, la mayoría era lo no agrícola, y cuando termina el
162 proyecto es exactamente al revés, es decir, la gran mayoría eran ingresos agrícolas. Eso es lo que
163 pensamos, que es una forma de que ellos pudieran aprovechar la localización que ellos tienen, porque
164 son una localización privilegiada, por estar tan cerca de una ciudad como Cusco, para producir lo que
165 esa ciudad consume. Tú has visitado Urubamba? Urubamba es una ciudad que está totalmente copada
166 por el turismo, es un valle más bajo, es más grande y más atractivo pero esta zona también tiene su
167 atractivo, está muy cerca de Cusco, si no hubiera habido esta vuelta a que se den cuenta de que esa
168 tierra tiene un valor para producir la despensa de Cusco, probablemente ya se hubiera empezado un
169 inicio de compra de esas tierras para hacer lo mismo, hoteles, restaurantes... Y creo, que de esta
170 manera, estas familias empiezan a tener más ingresos, han elebado la producción de su tierra y
171 también están abiertos al turismo, porque ya hay experiencias, en las cuales, justamente como este
172 proyecto también se acompañó de todo un cambio. Esa parte la has visto también, que hubo un
173 concurso para mejorar sus viviendas, que remodelaban sus casas, les cambiaban el suelo, o sea el
174 proyecto tuvo un componente de mejora de viviendas. Muchos ya han visto la posibilidad de que
175 también ellos pueden hacer turismo convivencial, que pueden complementar sus ingresos de la
176 agricultura con ingresos de turismo. Se va quedando la propiedad en familias que pueden crecer y que
177 de otra manera hubieran terminado en Cusco o trabajando vendiendo pañoletas.

178 Interprete: Die Resultate sind sehr positiv. Es hab zwei Schwachstellen. Einerseits die Zertifizierung und
179 andererseits, die Reibereien zwischen Angebot und Nachfrage. Letztendlich kann das Projekt aber als
180 sehr erfolgreich betrachtet werden. Es ist gelungen, auf der Anbieterseite sehr viel umzusetzen. Es
181 kann auch als Erfolg betrachtet werden, dass das Projekt jetzt in 16 Comunidades umgesetzt wurde.
182 Zudem hat die landwirtschaftliche Produktion zugenommen. Früher machte die Landwirtschaft nur 22
183 Prozent des Einkommens aus. Die Bauern erzielen heute ein höheres Einkommen. Die
184 Projektkomponente gutes Wohnen kann auch als Erfolg betrachtet werden. Nun können die Bauern

185 im Tourismussektor tätig werden. Dadurch wollen die Leute nicht als Tagelöhner in die Städte
186 abwandern, sondern auf dem Land bleiben.

187 Entrevistadora: Como funcionó la cooperación con los campesinos. Fue difícil trabajar con ellos?

188 Entrevistada: No, porque es una estrategia muy buena de la cooperación suiza que trabaja ONG
189 locales, es decir organizaciones sin ánimos de lucro locales. El proyecto lo implementaba el centro
190 Bartolomé de las casas que es de Cusco, CBC tiene un trabajo de 40 años en la zona, sus profesionales
191 hablan Quechua, son de ahí, entonces ellos tienen mucha llegada, entonces es como en cascada, el
192 fundación exige mucho al consulado, pero luego con colaboración y el CBC hace que no sean los suizos
193 los que llegan, sino el centro de cusco, la ong de cusco la que tiene el contacto directo, y eso lo hace
194 mucho más factible.

195 Entrevistadora: Y como funcionó la cooperación entre Arcos Dorados y los campesinos?

196 Entrevistada: Ah sí eso es otra parte. Hubieron varios problemas. Toda la primera etapa fue
197 espectacular, en tiempo récord, en 8 meses los productores sacaron las lechugas que McDonald's
198 pedía, todo estaba muy bien, pero de ahí hubo un vacío, una existencia técnica y entró un hongo a la
199 lechuga que tuvo que cortarse el abastecimiento.

200 Intérprete: Die ersten acht Monate ist es hervorragend gelaufen. Dann ist ein Pilz gekommen, der das
201 Gemüse befallen hat und da kam es zu Unterbrechungen.

202 Entrevistada: Entonces hubo un momento en el que no hubo abastecimiento, pero después se retomó
203 eso. Lo que quedó claro es que los productores no podían producir sin un apoyo técnico, o sea siempre
204 necesitaban a alguien, y cuando ya el proyecto termina con la fundación Syngenta Arcos Dorados le
205 sigue pagando a una persona para que haga un cierto monitoreo y también esté vigilando el
206 abastecimiento. Se necesitaba una persona externa siempre que fue contratada por horas para que
207 apoyara esto y sobre esto no he vuelto a averiguar. Eso quería preguntar si en Cusco has hablado con la
208 tienda de McDonald's?

209 Intérprete: Es war immer technische Beratung notwendig. Nach Projektende war es nötig, ein
210 Monitoringsystem einzuführen. Jetzt ist die Frage an Dich, ob du mit McDonald's in Kontakt getreten
211 bist und ob er Stellung zum Monitoring System genommen hat, ob dieses funktioniert oder nicht.

212 Entrevistadora: Voy a hablar con McDonald's la próxima semana en Cusco. Pero cuando fui a las
213 comunidades Juan me dijo que ya no trabajan con McDonald's porque solo paga después de 40 días.

214 Entrevistada: Sí, eso ha pasado desde el principio, que como es la política de todas estas empresas de
215 pagar con cierto retraso, y eso los productores cuando tienen el mercado, todos los domingos van y
216 venden todo, cada vez les cuesta más aceptar, siempre les costó aceptarlo pero lo hacían porque era
217 parte del proyecto y a su vez recibían otras cosas, pero imagino que desde que eso termina, eso se
218 acaba. Todos los pagos salen de Buenos Aires.

219 Intérprete: Es waren von Anfang an diese 40 Tage. Die Kleinbauern haben andere Vorzüge genossen
220 und haben dies deshalb akzeptiert. Aber nachdem diese Vorzüge jetzt weggefallen sind, ist es klar,
221 dass es so herausgekommen hat. Dies ist leider in diesem Sektor immer so mit den 40 Tagen. Das

222 Problem ist auch, dass eine Genehmigung in Buenos Aires eingeholt werden muss, bevor die Bezahlung
223 getätigt werden kann.

224 Entrevistada: Eso no lo hemos evaluado lo suficiente, también debió verse en la planificación esa
225 cadena de pagos y saber si eso se iba a soportar, y nunca se ha puesto el foco en eso especialmente,
226 creo que había muchas lecciones más que sacar de esta experiencia.

227 Entrevistadora: Juan también me dijo que tiene mucho interés en el futuro de promover la
228 cooperación con los restaurantes.

229 Entrevistada: Esto tiene que salir de ello. Juan es un buen líder porque es profesional, porque está
230 haciendo muchas actividades. Entonces son personas como él, los que van a capitalizar todo lo que se
231 aprendió. Tienen que ser ellos, no la cooperación, la cooperación ya mostró lo que se puede hacer.

232 Intérprete: Juan ist ein sehr fähiger Mann. Es kann nicht Aufgabe der Entwicklungszusammenarbeit
233 sein, sondern es muss ihre Eigeninitiative sein, da etwas voranzutreiben.

234 Entrevistadora: Has estado en contacto con unos campesinos después del proyecto?

235 Entrevistada: Sí, hablé con Carlos y con otros. Tengo contacto con algunos y me fui un año y medio
236 después de acabar el proyecto a la zona sin avisar a nadie y vi como estaban haciendo nuevos
237 invernaderos. Me pareció increíble. Y vi que uno de ellos me estaba observando y me reconoció. Veo
238 que no es como el modelo que se quiso implantar, pero es algo ha dado frutos y que ha continuado.
239 No es todo ideal, no es que todos los que pongan invernaderos sepan de buenas técnicas agrícolas y
240 sus estudios de mercado pero por lo menos ya saben que con eso ganar productividad y ellos mismos
241 van viendo como van siendo exitosos y hay mucha imitación. Una persona importante aquí es Hugo
242 Quisped. ¿No lo llegaste a visitar? Él fue el coordinador del proyecto aquí en Cuzco. Yo lo dirigía aquí y
243 Hugo era el que lo coordinaba en Cuzco. Yo podría tratar de contactarte con Hugo, porque sería bien
244 importante que hables con él. Él trabajó conmigo desde Apomipe y él ya tenía un invernadero con
245 rosas, con flores de España, y él fue quien tuvo la idea de poner invernaderos en el proyecto, por su
246 experiencia familiar. Él es el que más ha desarrollado la producción de plásticos, de todos los
247 materiales necesarios. Él tiene su empresa de flores, que ha seguido creciendo con sus propios
248 invernaderos, y además tiene una empresa de comercialización de insumos para los invernaderos,
249 entonces él está metido ya como empresario en el mundo, por eso es que ya no trabaja para el CBC,
250 pero ha trabajado. Con él hemos hecho todo lo que ordena, o sea, él es el que ha estado en el campo
251 todos los días. Te voy a enseñar su Facebook. Ahora está de candidato regidor para el municipio. Esta
252 es su empresa, se llama Naiba, su esposa se dedica a la venta al por menor de las flores. Él es el que se
253 dice el patrón, el que comercializa los consumos, y produce flores. Todo para la construcción de
254 invernaderos es al por mayor, o sea él abastece

255 Entrevistadora: Y él vive en Quinapaua?

256 Entrevistada: Él vive en Santiago. Otra de las cosas que deberías visitar es mercado de Guancaro, los
257 sábados, porque ahí están todos los productores de Onicapata y echicapampa vendiendo. Para que los
258 veas en plena venta de sus hortalizas los sábados. El mercado se llama Huancaro. Bueno, él es el que

259 más sabe. Él es de McDonald's, el que llevó adelante el proyecto, el que impulsó dentro de McDonald's,
 260 Leonardo Limas. Él vive en San Paulo.

261 Entrevistadora: Si, esto seria muy interesante. Muchas gracias.

262 Intérprete: Er wäre die Schlüsselperson für dich. Er hat für CBC gearbeitet und alles in Bewegung
 263 gesetzt. Er hat heute ein eigenes Unternehmen (NAIBA), das Lösungen für den Agrarsektor anbietet,
 264 und ist heute zudem in der Politik tätig. Sie empfiehlt dir auch, auf den Markt zu gehen in Huamcapato
 265 und mit den Leuten zu sprechen. Hugo ist derjenige, der am meisten weiss. Er lebt in der Region
 266 Santiago.

267 Entrevistada: Tenias contacto von Arcos Dorados? El director hoy vive en Sao Paulo.

268 Entrevistadora: No, tengo su correo pero no me ha respondido.

269 Entrevistada: Yo le voy a escribir. Le voy a decir que te responda. Es muy ocupado pero le voy a decir
 270 que haga un alto.

271 Entrevistadora: Muchas gracias.

272 Entrevistadora: Tengo una última pregunta. Como ha cambiado la agricultura en los ultimos años en
 273 Cusco?

274 Entrevistada: Bueno esto de las hortalizas no he visto una devaluación a nivel de la región, pero
 275 definitivamente eso ha cambiado el panorama de toda esa cuenca, porque cuando nosotros llegamos
 276 no había ni un solo invernadero y hoy día todo es agricultura protegida. Las hortalizas se traían de
 277 Arequipa y traté de hacer un estimado y definitivamente ha desplazado parte de la lechuga que venía
 278 de Arequipa la lechuga que se produce en Cusco. No tenemos estadísticas contundentes y bien
 279 elaboradas pero los estimados que hicimos era que claramente se estaba desplazando la oferta que
 280 venía desde Arequipa, que es el valle más grande y más productivo que hay cerca de Cusco. No tan
 281 cerca, por lo menos 8 horas. Pero no tenemos cifras exactas

282 Intérprete: Es gab eine Angebotsverlagerung von Arequipa direkt nach Cusco. Es gibt aber keine
 283 Statistiken dazu.

284 Entrevistadora: Y cuando surgieron los invernaderos en la region?

285 Entrevistada: El primero invernadero que se hace con APOMIPE es en 2006 y se hace con flores y con
 286 Félix. Félix puso el primer invernadero en la zona.

287 Entrevistadora: De la región?

288 Entrevistada: A ver Hugo Quisped tenía su invernadero, pero lo tenía en Santiago, casi en la ciudad,
 289 pero era aislado y luego habían muchos intentos de lo que la cooperación había hecho de Citotolbos.
 290 Los Citotolbos eran unas construcciones de adobe para sembrar para autoconsumo, o sea, lo que se
 291 había hecho era ayudarles a proteger sus 4 o 5 rayas de hortalizas para que de ahí pudieran mejorar
 292 su nutrición. Comer las hortalizas que ellos mismos producían. Pero no eran invernaderos, porque un
 293 invernadero ya es hecho técnicamente donde hay un manejo de la temperatura, del viento, de cómo
 294 circula el aire en el interior del invernadero y por lo tanto la temperatura no puede pasar de ciertos

295 máximos y mínimos. Entonces el invernadero es una agricultura protegida, pero que tú tienes que
296 manejar una serie de variables y el citotoldo era simplemente una protección, para que no helara en
297 la noche las hortalizas y pudieran comer de su propio huerto. De eso había mucho. Pero el primer
298 invernadero con pretensiones técnicas y criterios técnicos y comercial es este que se hace en la parcela
299 de Félix.

300 Intérprete: Es hab bereits vor 2006 eine Art Zelte. Diese waren nur für Autokonsum gedacht. Damals
301 war es nicht notwendig, die Temperatur zu regeln, die Lüftung zu regulieren etc. Daher war es eine
302 grosse Umstellung für die Bauern.

303 Entrevistadora: Muchas gracias por la entrevista. Era muy interesante hablar contigo.

304 Entrevistadora: De nada. Ojalá te sirva.

Interview with Leonardo Lima

Interviewee: Leonardo Lima, Sustainability Director, Arcos Dorados

Interviewer: Nora Hurcik

26.09.18, 15.30-16.15 p.m., Skype

1 Interviewer: Hello Leonardo, thanks a lot for taking your time for this interview.

2 Interviewee: Hi Nora, it is a pleasure to talk to you. It's very nice that you are writing your master's
3 thesis about the Qorichacra project. Have you already visited the communities?

4 Interviewer: Yes, I visited them a few weeks ago. I think they benefited a lot from the project. Today
5 they know how to produce their vegetables in greenhouses.

6 Interviewee: Yes, it was a very interesting project. You must imagine, before the project they didn't
7 know anything about McDonald's. They have not been in our restaurants. They didn't know regarding
8 hamburger, because they do not eat them. They are very poor. There is a very bad condition. I don't
9 know if you have visited the houses. They have improved a lot their houses.

10 Interviewer: Yes, that's true. It is nice to see, how their quality of life has improved. I think they only
11 have one problem. The cooperation with the hotels and restaurants doesn't work well. One farmer,
12 for example, told me that they do not work with Arcos Dorados and other restaurants anymore,
13 because these companies only pay after 40 days. That's a big problem for them, as they need the
14 money as soon as possible.

15 Interviewee: Oh my gosh. No that's mean, they can't do this. I heard these one or two years ago. And
16 our decision was to provide an exception because the amount of money is so low. It is unbelievable
17 that we pay after this number of days. There is no reason for this. I will send an email to Peru because
18 no, this can't happen.

19 Interviewer: I think this is generally a big problem, also with other larger restaurants and hotels, which
20 they pay very late. That's one reason why some farmers stopped working with Arcos Dorados and
21 other hotels. It is much easier for them to sell their products on the market. There they receive their
22 money directly on the same day.

23 Interviewee: Yeah absolutely, we have a lot of restrictions, procedures, and specifications. And if we
24 are not paying there is no reason that they can supply us.

25 Interviewer: Leonardo do you know if the McDonald's restaurants in Cusco and Arequipa still buy
26 lettuce from the farmers who have been involved in the Qorichacra project?

27 Interviewee: Yes, I have been working with these guys during two or three years directly.

28 Interviewer: And have you heard something from them in the last view years? Or when have you
29 stopped working with them directly?

30 Interviewee: The last news that I heard from this project was about one or two years ago that the
31 farmers had some problems with the lettuce. They lost everything because the lettuce was

32 contaminated by some kind of insects. They lost everything that they had. But after this time their
33 production recovered. And they started to supply us. But I have a question Nora, are they supplying us
34 currently or not?

35 Interviewer: I don't know. I will have some more interviews tomorrow. Probably I will also have the
36 chance to talk to McDonald's. The only thing I know is that the community that I met a view weeks ago
37 does not work with Arcos Dorados anymore. But it could be that some other communities still supply
38 the McDonald's restaurant in Cusco.

39 Interviewee: Maybe I can put you in contact with the supply chain manager of Peru.

40 Interviewer: This would be very interesting.

41 Interviewee: Yeah, I will do this absolutely. The name of the person is Jamie, it's a woman. She is
42 responsible to buy all our needs to operate our restaurants in Peru, including the Cusco restaurant.

43 Interviewer: Okay, that sounds very interesting to me. I think it would help me a lot to talk to her.

44 Interviewee: No problem. And maybe in Cusco, you can have a meeting, or you can visit the restaurants
45 and talk directly to the restaurant manager because in every restaurant we have a manager.

46 Interviewer: Great, I will do that. Thanks a lot.

47 Interviewer: What experience have you had with the Qorichacra project?

48 Interviewee: I think the project was very very interesting and inspiring. Unfortunately, I would say that
49 we don't put a lot of attention nowadays. Because this is a long-term project which would not be
50 feasible in a short time. It needs a lot of investments in time because we need to educate the
51 producers. We work with very poor people of the society. I think we need to work more on this type
52 of project in the future. I think you probably saw the benefits of the project in the Cusco region.
53 Because when we started the project we built the first greenhouses in that area. Probably nowadays
54 there are thousands of greenhouses.

55 Interviewer: Yes, that's true; the agriculture in the region of Cusco has changed a lot in the last years.
56 More and more people cultivate their products in greenhouses. Do you know Hugo Quisped?

57 Interviewee: Yes of course.

58 Interviewer: He told me that today there are about 2000 greenhouses in the Cusco region. That's
59 incredible.

60 Interviewee: Yeah, when we started the project we maybe had 30 greenhouses in the region.

61 Interviewer: What were the challenges for Arcos Dorados during the project?

62 Interviewee: I think it is crucial to have a local partner in such kind of projects. One of the first steps
63 we had was to define who should be the local partner to work with the producers. Then we decided
64 to work with Intercooperation. This was crucial because these people speak the local language and
65 have confidence because most of the farmers do not speak Spanish. To have these guys to make a
66 bridge from us to the producers was very crucial. The second crucial part was that we needed to be

67 patient to achieve confidence from the producers. This was quite hard. The third point is that we
68 needed to have logistic operators between the companies which are buying from the producers. It is
69 impossible to buy directly from each producer. They need to be organized like in a cooperative. They
70 need to work collectively. It is impossible to buy only from one greenhouse. They needed to have a
71 production plan to attend the demand. This is one of the key learning's we had.

72 Interviewer: Okay, that's interesting. How did the cooperation with the farmers work? Did there occur
73 any problems? That they, for example, didn't deliver their products on time or that they didn't meet
74 quality standards?

75 Interviewee: No, it was unbelievable that we didn't have big problems with the quality. But it took us
76 2 years until we started to receive products from them. And when we started to receive products from
77 the producers it is unbelievable that we didn't have big problems. They one time had a problem with
78 a contamination. Because another learning we had from the project was that they only were producing
79 one kind of product, lettuce. And these caused the contamination. In fact, it was a soil contamination.
80 And then they needed to stop the production. But during the first time they were producing for us, we
81 didn't have any quality problem. This was very nice. Another point that is very important is the quality
82 of water. They have a very nice water quality in the communities. This helps a lot.

83 Interviewer: Yeah, I can imagine that water quality is important to grow good quality vegetables. I
84 heard that Arcos Dorados started to replicate the project in other Latin American countries, like
85 Argentina and Brazil. Is that correct?

86 Interviewee: Yeah that's correct. In Brazil, in fact, our supplier, which is a big supplier, is conducting a
87 project like Qorichacra. But they are not naming it Qorichacra. They are supporting producers that are
88 not as poor as they are in Cusco because the economy here is better than in Peru. But also, they are
89 not a medium class producer. They are poor people but have much better conditions than the farmers
90 in Cusco. But in fact, they are small family producers. And our supplier here supports them. He supports
91 them with technique; procedures etc. that they need to meet our standards. We also tried to extend
92 the project in Puerto Rico and we had some difficulties to produce Iceberg lettuce because the
93 temperature there is quite high and they only have a dry season and wet season. And the average
94 temperature between night and day is quite low. Therefore, Iceberg is quite difficult to produce in
95 these conditions. Unfortunately, we have not continued the project.

96 Interviewer: But the farmers in Puerto Rico also worked with greenhouses?

97 Interviewee: Yeah, yeah, yeah, because one of our key learning's was that we have to produce in
98 greenhouses to avoid climate change and some weather conditions. In Cusco, we have heard that
99 before producing in greenhouses the farmers there lost a lot of their products because they had some
100 heavy rain, ice etc. They could not control these weather conditions.

101 Interviewer: Yeah, and the greenhouses solved this kind of problem.

102 Interviewee: Yeah, with greenhouses farmers can much better control the production. I think today
103 we only have this kind of project in Cusco. You need someone who conducts the project. I was

104 conducting it in the past, but today I do have no time to conduct a project like this. That's very sad
105 because I am so confident in such kind of projects.

106 Interviewer: But how about Argentina? I heard that you started a similar project there as well.

107 Interviewee: Yes, in Argentina it is very interesting because the capital Buenos Aires is being supplied
108 for all kind of vegetables by poor people, immigrants from Bolivia, Uruguay, and Paraguay. They are
109 living outside Buenos Aires, around 60 km from downtown. They are producing under very poor
110 conditions. I was there at that time. And all these products they bring to the central market in Buenos
111 Aires. Everybody is buying products from this area, but they don't know the conditions. We started to
112 understand how to apply Qorichacra in this region. But after the first assessment, we have decided to
113 stop because I think the opportunity is huge. To provide technology etc. to these people would be very
114 helpful. But the challenge was too big for us. Then we have decided to stop and started the project in
115 another city, Mendoza. The conditions in this area were much better. But as in Puerto Rico, we didn't
116 have enough staff to conduct the project. Nowadays we are not doing this project in Argentina.

117 Interviewer: It is interesting to see how different the conditions are from country to country to
118 implement such kind of projects.

119 Interviewee: Yeah, and I am absolutely convinced that this is a very nice project because most of the
120 producers are family producers. The opportunity is very high to improve quality, productivity, the
121 number of products they are producing. This means more incomes for these people.

122 Interviewer: Yeah, I think that too. The project had a big impact on the farmers. They cooperation with
123 the restaurants might be difficult. But they produce much more products than before the project and
124 they can sell their products on the market.

125 Interviewee: Yeah, absolutely.

126 Interviewer: What kind of sustainability strategy does Arcos Dorados pursue?

127 Interviewee: Nowadays we are working very closely with our suppliers. Not in this kind of projects. But
128 we are looking for some certifications etc. Our suppliers, in fact, are processors. Some of them are field
129 owner, some of them are producing and some are processing. In Latin America, it is a mixture. There
130 are professors who have their own fields. They are producing in a vertical way and processing. In some
131 case, they are buying from others and they are processing. And after the processing, they are shipping
132 to the distribution centre and then the distribution centre is sending the products to the restaurants.
133 And I would say that most of our producers in Latin America are small producers. We have thousands
134 of producers in Latin America.

135 Interviewer: Yeah, I think it is much more sustainable to work with small producers.

136 Interviewee: Absolutely. We have huge producers in Mexico because they are exporting to the US. This
137 type of production is totally different from the other Latin American countries. In Costa Rica, Brazil and
138 Argentina we have a mixture. We have big and small producers. In countries like Chile, Ecuador,
139 Paraguay, Bolivia, Columbia we have small producers. But they are very organised because they have

140 like a cluster, a company that looks for them and provides knowledge and technology. And also we are
141 requesting global G.A.P. certification. They need to follow very strict procedures.

142 Interviewer: What is important to Arcos Dorados when working with local farmers?

143 Interviewee: The quality is the crucial aspect, but also, we have a very strict procedure regarding how
144 they are producing and how people are working. We have a lot of audits to make sure that we are not
145 having any problems with the workers, that the conditions are okay, that they are following the local
146 regulations, that they are working the normal period of time and we look for the logistic. We are
147 looking for a lot of aspects. Because of this, it is not so easy to develop such kind of projects like the
148 Qorichacra Project with such kind of local producers. Because the average between where they are
149 today and what we need to buy from them is quite large.

150 Interviewer: Yeah, I can imagine that the farmers need a lot of time to achieve these high standards.

151 Interviewee: But on the other hand, I would say for us it is much more comfortable to buy from big
152 guys, very well established. But I fact the society needs companies to break the current system and to
153 include more producers. We can use our size and our scale to improve other producers. I think, one of
154 the learnings should be "work with others" because the Qorichacra Project only had the Syngenta
155 Foundation and us. Probably, if I would start another project like this, my first recommendation should
156 be: work with a council or board of companies with other stakeholders to have more participants, four
157 or five buyers or different stakeholders to minimize the efforts and costs and have more leverage.

158 Interviewer: Would you like to increase working with local farmers in the future?

159 Interviewee: Yes, absolutely. This is a passion for me. I need to convince the company that we start
160 such kind of project because I am totally convinced that we can do a lot. But we need to learn from
161 our mistakes. And one of the mistakes we had was not to consolidate the producers and not to start
162 having a local logistic operator. This is crucial. We need to have this type of instructor, minimum. I am
163 not saying that we need many people and a big company, But one entity that will be in the middle
164 between the producers and buyers.

165 Interviewer: And why is it crucial to have someone between producers and buyers?

166 Interviewee: Because without this type of organisation we can't plan the production. We can't balance
167 the production and demand. This organisation needs to become the income invoice from the buyers,
168 the number of products they are looking to buy and then need to translate this into a production
169 planning. This type of organisation needs to inform them what they have to produce. And also they
170 need to be organized in clusters or in cooperatives because as they are very small they can't attend
171 alone the demand.

172 Interviewer: Do you remember how big the number of vegetables was that Arcos Dorados bought for
173 the McDonald's restaurants in the Qorichacra Project?

174 Interviewee: Yes, I remember. We bought a very small amount if I compare with what we buy in other
175 countries because we only bought for one restaurant. That means 60 kg per week, this was the
176 maximum. This is absolutely nothing; in other countries, we buy around 300 kg per week or more.

177 Interviewer: Where did you buy other vegetables during the project from?

178 Interviewee: Yes. We only bought lettuce from the farmers of the Qorichacra project. Tomatoes,
179 carrots and all the other vegetables we bought from another supplier, that was based in Lima, that is
180 the capital from Peru. (...) And I think, maybe if we start again a project like this, my recommendation
181 would be not to start with the iceberg lettuce. Maybe we can start with another type of lettuce that
182 we use in our salads that is easier to produce. The amount is lower, but the difficulties would be lower
183 than producing Iceberg lettuces.

184 Interviewer: Okay. I think you answered all my questions. It was very interesting to talk to you.

185 Interviewee: Great Nora. Thank you very much for your interests in this project. Can you make me a
186 favour? Can you take some photos from our restaurants and also with the producers and share with
187 me? Because I think I can recognize some of them and for me they are friends and I really like the time
188 that I spent in Cusco. For me, it was a personal experience.

189 Interviewer: Yes, of course. That's very nice. I will send you some pictures soon.

190 Interviewee: And Nora after finishing this call I will send an e-mail to Jamie that you are in Cusco. I will
191 ask her to provide support to you.

192 Interviewer: Thank you very much.

193 Interviewee: Excellent. And feel free to contact me at any time.

Interview with Hugo Quisped

Interviewee: Hugo Quisped, agronomist, anthropologist & entrepreneur

Interviewer: Nora Hurcik

24.09.18, 12.00-13.00 p.m., Cusco

I meet Hugo Quisped at Plaza de Armas in Cusco. We introduce ourselves and walk to a coffee shop close by.

1 Interviewer: What is your job?

2 Interviewee: I am agronomist and anthropologist. I used to work for CBC and was involved in various
3 projects, such as the Qorichacra project. A view years ago I started a business that sells materials to
4 build greenhouses, such as plastic roles and others. Today, we have a huge demand for these materials.
5 I approximately sell 150 rolls of the wooden beam (ósea) a month and 1800 films for greenhouses per
6 year (rollos de plástico agro-film). I sell the materials to 13 communities. Thus, you can see how many
7 families use greenhouses today.

8 Interviewer: Yesterday I visited the local market in Huancaro. What would you say, how many farmers
9 who sell their vegetables and fruits there are using greenhouses for the production?

10 Interviewee: Before 2006 only 10 percent of the farmers cultivated their vegetables and fruits in
11 greenhouses. Today we speak about 90 percent of farmers using this technology. In the region of
12 Cusco, approximately 2000 families are growing their products in greenhouses. Thus, most farmers
13 have realized in the last years that this new technology has a positive effect on their work, as they can
14 grow vegetables the whole year (12 months). The greenhouses protect plants from frost. Before 2006
15 farmers could not grow vegetables in the months between May and September. Since the conclusion
16 of the Qorichacra project greenhouses have spread in the whole region.

17 Interviewer: Last week I visited a community and one farmer told me that many of his neighbours have
18 stopped working with greenhouses as they didn't have money to renew it after five years.

19 Interviewee: Greenhouses used to be expensive. But today almost everyone can afford to build one. I
20 will calculate the costs for you. One greenhouse of 200 m² costs 5000 soles (1500 Dollar). It lasts for 7
21 years. Thereafter, the family must build a new greenhouse. A family that owns a greenhouse of this
22 size and is specialized in vegetables has a monthly income of around 660 soles (200 Dollar) and earns
23 2400 Dollar a year. A family that is specialised in fruits earns 250 Dollar per month and has an annual
24 income of 3000 Dollar. Thus, a family approximately must work one year to cover the construction
25 costs of their greenhouse.

26 Interviewer: All right. Let us talk about the Qorichacra Project. What was your responsibility in the
27 project?

28 Interviewee: Well, I will give you a short overview. The construction of greenhouses already started in
29 2006. Carlos was one of the first farmers that participated. In 2011 CBC started to implement the
30 Qorichacra Project. The project was split into 2 phases. I was only involved in the second phase of the

project. The first phase was implemented in a community with 12 farmers and didn't work well. The problem was that the farmers received too much help from the organisation. They didn't have to invest on their own. Moreover, the families were not ready to change their traditional way of farming. The second phase of the project was first conducted in 3 communities, later in more, and went better. These communities were different. They had high interests in cooperating with CBC and in growing their products in greenhouses. The families of the second phase received less financial aid. However, also in the second phase of the project difficulties occurred. On one point it came to conflicts between the local team and the families. At this point, I started to work for CBC. My responsibility was to solve the problems. What I did first was to build a new team. Thereafter, the cooperation between us and the farmers worked much better than before.

Interviewer: How big is the amount of vegetables and fruits that the farmers sold to restaurants and hotels during the Qorichacra Project?

Interviewee: Well, the farmers still sold most of the products on the local market in Huancaro. The restaurants and hotels only bought a very small amount of vegetables and fruits. Arcos Dorados was the biggest partner we had in the project. The company bought in its peak approximately between 60 and 80 kg of iceberg lettuce per week. The other hotels bought smaller amounts of vegetables and fruits. For example, Novotel bought 6 kg of strawberries from the farmers per week. That's nothing. You must imagine that a farmer produces up to 700 kg of vegetables or 240 kg of strawberries per month (in a greenhouse of 200 m²).

Interviewer: Is it an advantage for the farmers to work with restaurants and hotels?

Interviewee: I would say no. One problem was that the farmers could only sell a very small amount of their products to McDonald's and other restaurants and hotels, as I just explained to you. It's not worth to deliver such small quantities. For the farmers, it means high transportation costs and more time and effort. Another problem was that McDonald's only paid the supplies after 30 days or more. The farmers are dependent on the money and prefer to get paid directly. Thus, it is much easier for the farmers to sell their products at the local market in Huancaro. There, they can sell the whole vegetables and fruits that they produce per week in two or three hours. Moreover, they directly get paid for it.

Interviewer: How did the cooperation with the restaurants and hotels work?

Interviewee: Well, in the beginning, the cooperation went well. But on one point we started to work with an intermediary and difficulties occurred. I will show you the situation on a sketch:



Problems occurred between the farmers and Arcos Dorados as we started to work with Grupo Gastronomico, an intermediary. Grupo Gastronomico had the function to control the «Buenas Practicas» of the farmers. Grupo Gastronomico bought vegetables and fruits from the farmers and sold them to the restaurants and hotels, among McDonald's. Immediately conflicts appeared, as the farmers found out that Grupo Gastronomico can sell the products to a much higher price (3 soles/kg) than they receive from the intermediary (2.2 soles/kg). After a while, we stopped working with Grupo Gastronomico.

Interviewer: Do you think it was a good idea to cooperate with restaurants and hotels?

Interviewee: I think it is better for the farmers to sell their products at the market in Huancaro. I realized early in the project that the cooperation with McDonald's can't work under these circumstances (payment conditions and quantity) and tried to convince my co-workers. And I am skeptical that cooperation can work in the future. The demand by restaurants and hotels in Cusco is too small. They only need a small number of vegetables and fruits and it is much easier for farmers to sell the products at the local market.

Interviewer: Some farmers told me that they do not know how to dispose of the plastics of their greenhouses. Do you have a solution to this problem?

Interviewee: That's no problem. Today there exist view companies that recycle plastic and other materials in Cusco and send it to Lima. There they produce hoses, washing machines and containers of recycled materials.

Interviewer: Do you think the Qorichacra Project was a sustainable project?

82 Interviewee: Yes, indeed. The Qorichacra Project was the beginning of an agricultural reform in Peru.
83 Today, the idea of greenhouses is applied all over the world and part of every governmental
84 programme.

Interview with Delcy Zamalloa

Interviewee: Delcy Zamalloa, agronomist

Interviewer: Nora Hurcik

28.09.18, 14.15-15.00 p.m., Cusco

1 Interviewer: Hello Delcy thanks a lot for taking your time. What was your function in the Qorichacara
2 project?

3 Interviewee: I was part of the CBC team and was responsible to connect restaurants and farmers.
4 Today I still am the contact person for the McDonald's restaurant in Cusco. Additionally, I own a small
5 business where we try to connect farmers and restaurants. But only a few farmers participate in the
6 project.

7 Interviewer: How was the cooperation between Arcos Dorados and the farmers in the Qorichacara
8 project? Did there occur any problems during the project?

9 Interviewee: The cooperation went quite well. But we also had some problems during the project. One
10 problem was that McDonald's only paid after 30 days. This is a big problem for the farmers, as they
11 are dependent on the money. One year the iceberg was infected by some kind of fungi and the farmers
12 could not deliver as usual.

13 Interviewer: Do you know if some of the farmers still are working with Arcos Dorados?

14 Interviewee: Yes, four families from the community Sequeraccay still supply the McDonald's
15 restaurant in Cusco. I am the person who is responsible for the cooperation between the community
16 and McDonald's. When problems arise, I am the contact person for them. But usually, the cooperation
17 works very well.

18 Interviewer: When I visited Huilcapata, Juan told me, that people of his community stopped working
19 with McDonald's.

20 Interviewee: Yes, it is true that many farmers stopped working with McDonald's. One reason is, as I
21 told you before, that McDonald's only pays after 30 days. This is a big problem for the farmers, as they
22 often do not have savings and, thus, need the money as soon as possible. Another reason is, that
23 McDonald's does buy a very small quantity of iceberg from the farmers, maybe 40-60 kg of iceberg
24 lettuce per week. This is nothing in comparison to the total amount of vegetables and fruits the farmers
25 produce.

26 Interviewer: What happened to the farmers who stopped delivering McDonald's, do they still grow
27 Iceberg?

28 Interviewee: No, many of them stopped cultivating iceberg lettuce and started to grow new products.
29 In 2011 the farmers only cultivated green vegetables. Over the years they started to diversify their
30 production. Thus, today most of them produce flowers and strawberries. There is a great demand for
31 strawberries in Cusco and farmers can sell them to a good price. In the past, no strawberries were
32 cultivated in the region of Cusco and the strawberries we bought at the local market came from Lima.

33 Interviewer: What do you think about the outcome of the Qorichacra Project?

34 Interviewee: I think the Qorichacra Project it is one of the best projects we had in agriculture in the
35 last view years. Greenhouses are very useful in the region of Cusco, they are kind of frost protection
36 and help farmers to fight climate change. Before farmers could only cultivate nine months a year.
37 Consequently, their production and income have increased with the use of greenhouses. Moreover,
38 the project started to reform agriculture in Cusco, as it was reproduced in many other communities.
39 Today, most of the families use greenhouses for their production.

40 Interviewer: Two weeks ago, I visited some farmers in Huillcapata and Chita Pampa. One of them told
41 me that many families, who are living in his community, would have stopped growing in greenhouses,
42 as it would be expensive to renovate the greenhouses after 5 years. Also, some people would not have
43 the know-how of how to handle production in greenhouses. What do you think about this statement?

44 Interviewee: It is true that some families stopped cultivating their plants in greenhouses. However,
45 this only happened to farmers who decided to construct greenhouses on their own. They partly got
46 financial support from the municipality. But no one explained to them how to use the greenhouses.
47 The families from the Qorichacra Project didn't have this kind of problem, as they also got technical
48 support from experts.

49 Interviewer: One farmer told me that they have problems with the plastics of the greenhouses and
50 that they do not know how to recycle them. However, Hugo Quisped told me that this would be no
51 problem, as there already existing companies in Lima who are specialized in recycling these plastics.

52 Interviewee: That's true. There already exist companies which recycle the plastics of the greenhouses.
53 However, they usually do not go to small communities to pick up plastics. Therefore, the removal of
54 plastic remains a big issue in many communities. We must find a solution to that problem to protect
55 the environment. This could be another project in the communities.

56 Interviewer: What do you think about the idea of the Qorichacra Project to connect farmers directly
57 to restaurants like McDonald's?

58 Interviewee: I think it rarely has advantages for the farmers to sell their products directly to hotels and
59 restaurants. It is much easier for them to sell the products at the local market Huancaro. This market
60 plays a very important role in Cusco. It takes place once a week and is huge, Intermediariesgoes to the
61 market and buy huge quantities of vegetables and fruits that they then sell to restaurants, hotels, and
62 end-consumers. Besides, end-consumers go to the market to do their weekly shopping. At the
63 Huancaro market, farmers can sell their whole products in a few hours and they got paid directly by
64 the buyer. When directly working with restaurants and hotels the farmers usually only can supply a
65 very small quantity of vegetables and fruits. This is also the case with McDonald's that only buys 60 kg
66 of iceberg lettuce per week. That's nothing. All the other vegetables and products that McDonald's
67 needs for the production still come from Lima. Moreover, the transportation to the city centre costs
68 the farmer around 40 pesos. These costs are too high for 60 kg of iceberg lettuce.

69 Interviewer: McDonald's only buys iceberg lettuce from the farmers. Where does it buy the other
70 vegetables and fruits?

71 Interviewee: Yeah that's true. Since the beginning of the cooperation, McDonald's only buys iceberg
72 lettuce. All the other products come from Lima, where the company works with the supplier "country
73 home.

74 Interviewer: Do you think McDonald's could buy more vegetables and fruits in the communities?

75 Interviewee: Yes, in fact, McDonald's could also buy tomatoes or other vegetables from the farmers,
76 but in a smaller quantity than iceberg lettuce. However, the company does not show interest in doing
77 that.

78 Interviewer: Thanks a lot for the interview. It was very interesting to talk to you.

79 Interviewee: No problem Nora, it was a pleasure. After your next interview I will pick you up and we
80 will go to the market.

81 Interviewer: Do you know if the farmers still supply other restaurants than McDonald's such as
82 Novotel, and Greens?

83 Interviewee: For cost reasons, Novotel and Greens have terminated the cooperation with the farmers
84 after the end of the pilot project. They have received a better offer from other producers.

85 Later I meet Delcy again. We visit the San Pedro market. She shows me the section where farmers
86 prepare orders of restaurants and hotels. Delcy explains to me the importance of local markets in Peru
87 and that most of the restaurants buy their products at the market in San Pedro. In comparison to the
88 weekly market in Huancara, they can buy fresh products more than once a week.

Interview with Jorge Barrantes

Interviewee: Jorge Barrantes, manager of the McDonald's restaurant in Cusco

Interviewer: Nora Hurcik

28.09.18, 15.00-15.45 p.m., Cusco

1 Interviewer: Hello Jorge, thanks a lot for taking your time for the interview.

2 Interviewee: You are welcome. I am the manager of the McDonald's restaurant in Cusco. I started
3 three months ago before I worked for McDonald's in Lima. Today we have an open day and customers
4 can visit our kitchen. To start I will show you the whole process of how we produce hamburgers. Then
5 I will explain to you how we prepare iceberg lettuce. In the end, I can answer your questions.

6 Interviewer: Great, thanks a lot.

7 We walk through the kitchen and Jorge explains to me the whole production process including the
8 preparation of iceberg lettuce.

9 Interviewer: Are you still working with the communities of the Qorichacra Project?

10 Interviewee: Yes, we still receive our Iceberg from them every week.

11 Interviewer: Do you know the names of the communities that supply the McDonald's restaurant in
12 Cusco?

13 Interviewee: No, not exactly, because we have our coordinator, Delcy Zamalloa. She stays in contact
14 with the farmers. If we have any problem with the farmers, we talk to her.

15 Interviewer: All right, I had the chance to talk to her before I came here.

16 Interviewer: How many kilos of iceberg lettuce do you buy from the communities?

17 Interviewee: We buy between 40 and 80 kg every month.

18 Interviewer: How does the cooperation with the farmers work?

19 Interviewee: The cooperation works very well. One year the farmers could not deliver their iceberg
20 lettuce, because it was contaminated. But this was an exception. We also go to the communities once
21 a year and try to help them. One year we brought them presents for Christmas. Another year we
22 helped them to renovate the school. I can send you some pictures of this event that takes place once
23 a year.

24 Interviewer: Yes, this would be great. Thank you, Jorge. One other question: Where do you buy the
25 rest of the vegetables that you need for your restaurant in Cusco?

26 Interviewee: All the other vegetables come from Lima. The name of our supplier there is "Country
27 Home". It is a huge supplier that also supplies the other McDonald's restaurants in Peru.

28 Interviewer: Would you like to work more with local farmers?

29 Interviewer: Yes, I personally would like to work more with local farmers. Agriculture plays an
30 important role in the Cusco region. Many families are dependent on agriculture here. We can help
31 them by buying their products. It would also be easier for us.

32 Interviewer: Some farmers told me that they stopped working with McDonald's because the company
33 only pays after 30 days. Is that true?

34 Interviewee: Yes, that's true, we only pay after 30 days. And that is too late for many farmers. We are
35 a huge company and have many strict rules and predetermined conditions of payment that we can't
36 change.

37 Interviewer: A few years ago, the farmers started to supply the McDonald's restaurant in Arequipa
38 with lettuce. Do you know how it is today?

39 Interviewee: Today, the farmers only supply the McDonald's restaurant in Cusco. Arequipa is supplied
40 by Lima.

41 Interviewer: Thanks a lot for taking your time to show me the kitchen and to answer my questions.

42 Interviewee: You are welcome.

B) Field Reports

Codes

Impact on Farmers

Impact on Communities

Impact on Farming Families

Outcome

First Visit (24.08.18)

Interviewer: Nora Hurcik

Translator: Thomas Steeb

Interviewees: Juan, Luis, Carlos

Before visiting the communities, Valério Paucarmayta, director at CBC, linked me with Juan, a farmer living in Huillcapata who was involved in the Qorichacra project. He said that it would be important to have him on my side during my field visit to create a situation of trust, since Juan speaks both Spanish and Quechua language and is a local, knowing the communities very well. I called Juan and we agreed to meet on 24. of August at his place in Huillcapata. For my field visit, I organized a translator, Thomas Steeb, a German who has been living in Peru for over 20 years and today officially is Custeno.

Thomas picks me up with his car and we are heading to Huillcapata. On the way, we stop at a viewpoint. From there we already can see many greenhouses.

In the car, I ask Thomas if he knows the Qorichacra project. He tells me that he used to work for CBC but not in this project. However, a few months ago he conducted a study about different types of production in Peru and Qorichacra was part of the study as well and was ranked number one. In particular production in greenhouses is very gender equitable. Women can also work in greenhouses without any problems. In addition, production in greenhouses is a great opportunity for farmers, especially because of the temperature differences that prevail in the region. Thomas explains to me that production in greenhouses is nothing new in the region. However, until the Qorichacra project, people lacked the know-how on how to use them. Thomas offers to send me the study and other documents about the Qorichacra project. Of course, I gladly accept the offer and say thank you.

Interview with Juan (Community: Huillcapata, QORICHACRA):

After a wild ride full of potholes and asking many times for the direction we arrive at Juan's house. He welcomes us friendly and directly steers to the greenhouse of his family. He shows us the vegetables, fruits, and flowers that they are growing. He seems to be very proud. He explains that they today mainly grow broccoli, spring onions, salad, strawberries, and flowers. They sell their vegetable at different local markets. Apart from roses, which are difficult and time-consuming to grow, the family grows various flowers. Juan mentions that they only grow organic vegetables, fruits and flowers. The plants are rarely affected by diseases or insects.

Juan adds that they consume approximately 20 percent of their vegetables and fruits by themselves and that they achieve a monthly turnover of 1000 soles. Juan tells us that it cost him 200 000 soles to build the greenhouse. Afterward, it took him approximately one year to amortize the construction costs of the greenhouse through selling his vegetables, fruits, and flowers at the market. I ask him, whether he and his family also sell vegetable to McDonald's. He is shaking his head and says that many families of his community stopped working with McDonald's and are sensitive about this topic. One of the main problems was that McDonald's only paid his bills after 45 days and some families were dependant on getting the money earlier.

Even today the family is on the market to sell their products. Juan's father already left with the car. Juan will take a taxi to the market after our visit and help his father to sell the vegetables, fruits, and flowers.

After visiting the greenhouses Juan takes us to the animals. The family owns cows and guinea pigs, so-called cuys, which are a specialty in Peru. Juan mentions that I could try a "cuy" at my next visit at his place. I tell him that I am not sure if I am brave enough and try to explain him, that we do not eat guinea pigs in Switzerland, we keep them as pets, such as cats and dogs. We both laughed. He takes us to the stable, where we can hear a mix of music and jarring. The music would make the cuys dancing.

The cuys are more like a hobby for the family. They only sell one "cuy" a month for 40 soles.

Juan explains that his father is responsible for the animals. He himself has a passion for plants and not for animals. This becomes clear as he leads us into another greenhouse, where we can take a look at his private cactus collection.

After visiting the greenhouses and animals we ask Juan to fill in the questionnaire, but Juan does not have time anymore. He needs to go to the market to help his father. We do not want to stop him and therefore decide to give him six questionnaires for him and his neighbours and to pick them up next Tuesday. Then we say goodbye to him.

Interview with Luis (Community: Chita Pampa, APOMIPE)

Juan gives us the impression that the Qorichacra project was a success. He and his family took the chance to become successful producers by using greenhouses. However, we stay critical and want to visit other farmers. Spontaneously, we decide to stop at a greenhouse in the neighbouring community Chita Pampa. We ask the owner Juan if we can visit it. Juan first hesitates and wants to send us to his neighbour. After a while, we can convince him of our idea. We enter the greenhouse and Juan explains that the greenhouse currently is out of order and that he is renovating it. He and his family cultivate their vegetables and fruits in another greenhouse that they share with other families.

The greenhouse that Juan shows us was built eight years ago with the help of APOMIPE. He tells us, that beside CBC two other non-profit organisations were involved in the construction of greenhouses, one of them APOMIPE. Moreover, the municipality has funded some greenhouses in the last years. However, the lot decides who gets help and, therefore, often the wrong families are chosen. Juan tells us that originally 50 greenhouses were built. Today only seven are left. We ask him about the reasons, why many people stopped producing in greenhouses. He responds that many people do not have the

62 technical know-how on how to use greenhouses. Also, greenhouses must be renewed every five years,
63 what is expensive. Juan starts to talk about another problem. The renewal of the greenhouses
64 produces a lot of waste and people do not know how to dispose of it. He says that it would need
65 another project to solve this issue.

66 We ask Juan, whether he knows a family in his community which was involved in the Qorichacra
67 project. He takes us to the house of Carlos, who had a key role during the implementation of the
68 Qorichacra project.

Interview with Carlos (Community: Chita Pampa, CHORICHACRA):

69 Carlos opens the door very friendly. We ask him if he has time for a short interview and to show us his
70 greenhouses. He agrees and takes us to the living room, where we talk for a while. Carlos starts the
71 conversation by saying thank you. The Qorichacra project would not have been possible without the
72 Syngenta Foundation. For him, a dream came true.

73 Today Carlos only produces roses, as they are lucrative. A few years ago he and his family also grew
74 vegetables. He explains that growing roses is difficult, as they are vulnerable to bugs. To protect the
75 roses, he uses pesticides. He explains that he can harvest his roses three times a year. Moreover, a
76 plant has to grow 80 days to get its first flower. Carlos mainly sells the roses on public holidays, as on
77 those days there is a big demand for roses. Carlos explains that the demand for roses is high. But the
78 market will soon be exhausted.

79 We ask Carlos about the negative aspects of greenhouses. He starts to talk about the same issue as
80 Juan mentioned before, namely the plastic that has to be disposed of after 5 years when renovating
81 the greenhouses.

82 After the short interview with Carlos, he takes us to one of his three greenhouses. On the way to the
83 greenhouse, we get to know his wife who is working in the garden. She gives me a bouquet of flowers.
84 While walking to the greenhouse Carlos starts to tell us about his son who is studying economics with
85 a major in international business.

86 Carlos opens the door of the greenhouse. He seems to be very proud and says that he has a passion
87 for flowers. He tells me that I can take a picture of him and his flowers.

88 As we heard from Y that many farmers of Carlos's community stopped growing in greenhouses we ask
89 Carlos about how people of his community deal with his success. He says that people, in general, would
90 not have a problem with him and his success. But some of them would say that he uses too much
91 water for his plants. Carlos adds that his greenhouses would not use a lot of water. Moreover, he would
92 pay a commission for the water he uses.

93 At the end of our visit, I give Carlos a questionnaire and ask him to answer the questions. He says, that
94 it would be better if he could answer the questions in the evening since he has to work now. I agree
95 with this idea and give him three questionnaires. I tell him that it would be helpful if other people in
96 his community could answer the questions as well. He says that he was the only person who was
97 involved in the Qorichacra project. However, he would ask his neighbours.

Second Visit (28.08.18)

Interviewer: Nora Hurcik

Translator: Fabian Simeon

Interviewees: Carlos, Juan

Conversation with Carlos (Chita Pampa):

1 When we arrive in Chita Pampa Carlos is working with some other workers at the construction of his
2 new greenhouse. He comes over to us to say hello. I ask him if he had time to answer the questions.
3 He said that he didn't have time but that he could answer the questions now. He says that he gave one
4 of the questionnaires to his neighbour, but he does not know if he did answer the questions.

5 We sit down and go through the questions. Carlos owns four greenhouses. In total there would be
6 around 100 to 150 greenhouses in his community. In comparison to Juan, Carlos only sells 5 percent
7 of his roses at the market. The other 95 percent he sells to intermediaries. Since 2015 Carlos has built
8 3 new greenhouses. However, he mentions, that he had to replace two of his old once. In the last
9 years, Carlos also bought a car and he renovated his house (plastering). Carlos explains that he would
10 invest most of his money in the education of his five children. In this context, he asks me for my e-mail
11 address, as his son would plan to come to Europe for his studies and would need some advice. In the
12 future, Carlos wants to diversify his production and grow different types of flowers. Another objective
13 is to search for new markets. For example, Lima would be an interesting market, as he could sell his
14 roses there for a good price. Moreover, Carlos thinks about founding a company that can solve the
15 problem of the plastic caused by the greenhouses. He says that there might be a more environmentally
16 friendly plastic that could be used. Another option would be to reuse the plastics in the community in
17 another way. Another idea of Carlos is to build a depository.

18 After answering the questionnaire, we walk to the house of his neighbour to collect the questionnaire
19 and knock at the door. But nobody answers the door. We do not see other farmers in the streets,
20 which we could ask for an interview, probably they were all working. Therefore, we decide to head to
21 Juan.

Conversation with Juan (Huillcapata):

22 When we arrive at Juan's house, he opens the door very friendly and immediately returns me the
23 answered questionnaires. He has managed to ask five other farmers of his community for their help.

24 After talking for a while, we visit his greenhouses again to take some more pictures. Then Juan is up to
25 the market to sell his vegetable and fruits. He asks us if we would like to accompany him. We said that
26 it would be a pleasure to join him.

27 On the way to the market, we talk about the cooperation with restaurants and hotels. Juan says that
28 his community has strong interests in working with restaurants and hotels. In the past, one of the big
29 challenges of working with them was the high quality they demand. Many communities, therefore,
30 started to mix organic and non-organic products to achieve better quality. However, his community
31 Huillcapata continued to grow exclusively organic vegetable and fruits. Another problem with the

cooperation was trust, as the farmers didn't always deliver on time. Also, a restaurant such as McDonald's paid the bills only after 40 days. Many farmers are dependent on the money. Therefore, they recommended selling most of their products on the local market, where they get directly their money. Juan mentions that it would be helpful to have a global G.A.P. certification to establish new partnerships with hotels and restaurants. However, such a certification would be very expensive and would only be possible in a group.

After a fifteen minutes' drive, we arrive at the local market. The local market is smaller as I have expected. It only has a few stalls, where farmers sell their vegetables and fruits. Also, it is possible to buy sheep (which are slaughtered directly around the corner) and "guys" (guinea pigs). Also, there is an area with small restaurants, where people are eating and drinking.

We first say hi to Juan's father. Then we ask Juan if he would like to share a bottle of beer with us. Then we sit down and start drinking in a circle. We mainly talk about the Huillcapata community. Juan seems to have a big sense for the community. He says that he is thinking about how the community could work more with restaurants and hotels. Also, he wants to build a library, as people of his community do not like to read. He himself has a passion for books. He says he could teach himself many theories about agriculture and business through books. However, it is important to apply these theories in practice and to adapt them when necessary.

Currently, the community is building a new street. I ask if they get the support of the municipality. Juan answers that they have collected money in the community and that they finance the project on their own. Sometimes the municipality finances infrastructure projects. However, the whole process would take about 10 years and the community does not want to wait anymore, as this street is important to them.

Juan wants to be an entrepreneur. He often visits events to connect with other people that could be useful for his community. In the evening he will attend an event in Cusco to talk to restaurants and hotels.

Juan tells us that the Qorichakra project was the beginning of an agricultural transformation since its implementation greenhouses spread throughout the whole region. Although some of the farmers involved in the project do not cultivate in greenhouses anymore, the number of greenhouses in his community has increased since the beginning of the project.

Then we ask Juan if he could image to establish ecotourism in his community. He says that ecotourism would be a big chance for the community. He sees big potential for such kind of tourism in the future, as the area would be very nice for hiking. Also, the community would be very well located, just 30 minutes away from Cusco.

We start talking about community life again. Juan explains that they started to privatise land a view years ago. Before, it was not possible to buy land as a foreigner. The municipality allocated land to its community members. The members could only sell their land with the permission of the community, but the purchaser had to be part of the community.

69 After finishing the beer, we do not want to keep Juan. We decided to say goodbye and take a minibus
70 back to Cusco.

Visit the local market Huancaro (22.09.18)

1 Juan, as well as Carlos, told me that they sell part of their products at the Huancaro market and that
2 this market is an important selling point to them. Also, Carola Amezaga mentioned the market in the
3 interview and recommended me to visit it. It would provide me an insight into the way how the farmers
4 usually sell their products. Before visiting the market, I asked Juan and Carlos if they will be on the
5 market on the 22. of September. Unfortunately, they both didn't go to the market on that day.

6 The Huancaro market is the biggest market in the region of Cusco and takes place every Saturday. It is
7 located 15 minutes from the city centre and is the place where the farmers sell most of their products.
8 I arrive at the market around 11 a.m. The market is very crowded. It seems that many custenos
9 (inhabitants of Cusco) visit the market to do their weekly shopping. I heard from people in the city
10 centre that you receive products of better quality at the market than in the supermarket. Later I learn
11 from Delcy that not only end-consumers but also intermediary go to the market and sell huge
12 quantities of vegetables and fruits.

13 I am the only tourist in the market. I walk through the different sections of the market (animals, meat,
14 cheese, vegetables, potatoes, fruits, flowers, cloth). Especially the vegetable area of the market is very
15 impressive. The farmers sell large quantities of onions, beans, and another vegetable. I try to talk to
16 some vegetable farmers, but they are only interested in selling me their products. The market also
17 includes some stalls with Chicha (traditional corn beer), juices and food. I have the impression that
18 many people spend the whole day at the market to do their shopping, to have lunch and listen to
19 music.

20 After a while, a man asks me why I am taking pictures. I decide to leave the market and to head back
21 to Cusco.

C) Questionnaire

Evaluación De Impacto:

Nombre:	
Comunidad:	
Involucrado / no involucrado en el proyecto 'Qorichacra'	

1) ¿Qué frutas o verduras cultiva?

Cultivos	Mucho menos que en 2015	Menos que en 2015	Lo mismo que en 2015	Más que en 2015	Mucho más que en 2015	Cantidad de kilos por mes/año
Fresa						
Cebolla						
Acelga						
Lechuga						
Rabanitos						
Brócoli						
Otro vegetal/fruta						
Otro vegetal/fruta						

¿Existe alguna otra variedad que siga cultivando (a partir de 2015)? ¿Hay vegetales o frutas que ya no pueda cultivar?

2) ¿Sigue usando los invernaderos? ¿Está satisfecho con ellos?

Invernaderos	Sí	No
Uso		
Satisfacción		

¿Hubo problemas técnicos (irregularidades) y/o fallas en los cultivos en los últimos años?

3) ¿Qué verduras o frutas vende más o menos a menudo? ¿Qué verduras vende al mejor precio?

Cultivos	Solo auto-consumo	Rara vez	A menudo	Muy a menudo	Precio por kilo
Fresa					
Cebolla					
Acelga					
Lechuga					
Rabanitos					
Brócoli					
Otro vegetal/fruta					
Otro vegetal/fruta					

4) ¿A quién le vende sus verduras y frutas? ¿Quiénes son los principales compradores?
(Consumidor final, hoteles, restaurantes, empresas)

Cultivos	Consumidor final	Hoteles	Restaurantes	Empresas	Otros
Fresa					
Cebolla					
Acelga					
Lechuga					
Rabanitos					
Brócoli					
Otro vegetal					
Otro vegetal					

¿Vende verduras a restaurantes u hoteles? ¿Qué restaurantes y hoteles están involucrados? ¿Sigue trabajando con Arcos Dorados/McDonald's?

¿Te (le) gustaría trabajar con más hoteles y restaurantes?

5) ¿Dónde vende sus productos? (Canales de Comercialización)

Canales / frecuencia	Nunca	Rara vez	A menudo	Muy amenudo	En %
Centro de Producción (acopiadores, restaurantes y hoteles)					
Vía Pública					
Ferías					
Mercados					

6) ¿Cuáles son las barreras para vender los productos? ¿Cómo ha cambiado el acceso al mercado en los últimos años?

	Si	No
Falta de movilidad		
Falta de puntos de venta		
Falta de mercados		
Falta de formalización		
Precios altos de transporte		
Otros		

7) ¿Cultiva otros productos agrícolas además de las verduras y frutas (por ejemplo flores)? ¿Qué tan grande es este ingreso en relación con el ingreso total de los productos agrícolas?

8) ¿Obtiene otros ingresos además de la agricultura durante el año? ¿Qué tan grande es este ingreso en relación con el ingreso total?

	Si	No	Ingresos mensual en soles
Comercio			
Empleo Fijo			
Mano de obra eventual			
Pecuario			
Otros			

9) ¿Cómo ha cambiado su ingreso en los últimos años (desde 2015)?

Ingresos mensuales (desde 2015)	Disminuido	Igual	Mejorado	En Soles/por mes

10) ¿Ha realizado alguna nueva inversión desde 2015 para cultivar frutas y verduras (invernaderos, máquinas, vehículos, etc.)?

11) ¿Ha hecho mejoras a la casa desde el 2015?

12) ¿En qué áreas de la vida privada invierte? ¿Cuánto?

Gastos e inversiones	Poco	Medio	Mucho
Salud			
Recreación			
Infraestructura			
Educación			
Artefactos y Equipos			

13) ¿Cuáles son sus principales objetivos como agricultor?

	sin prioridad	prioridad media	máxima prioridad
Diversificar la producción			
Buscar nuevos mercados			
Contar con movilidad			
Construir una empresa en el rubro			
Incrementar la producción			
Mejorar las condiciones técnicas y la calidad de los productos			
Especialización en algunos productos			
Ampliación y/o construcción del invernadero			

14) ¿Cuáles son sus metas personales para el futuro?

	sin prioridad	prioridad media	máxima prioridad
Apoyo en la educación de sus hijos			
Construcción y mejoramiento de vivienda actual			
Ser empresario y/o constituir un negocio			
Compra de terrenos y/o vivienda en la ciudad del Cusco			
Capacitación técnica			
Mejorar condiciones de calidad de vida y salud			
Incremento de ganancias			

15) ¿Como ha camiado su vida como agricultor a través del proyecto "Qorichacra"?

Muy desmejorada	Desmejorada	Igual	Mejorada	Muy mejorada

16) ¿Tiene otros comentarios?

Muchas gracias por su ayuda!



D) Results of the Survey

	Options	Farmer 1 (involved)	Farmer 2 (involved)	Farmer 3 (involved)	Farmer 4 (involved)	Farmer 5 (not involved)	Farmer 6 (not involved)
1) What kind of fruits and vegetables do you cultivate? Do you grow less, the same or more kilos of the respective variety than in 2005? (-) = much less; (-) = less; (=) = equal; (+) = more; (++) = much more; (n.a.) = no answer	Strawberries Mangold Lettuce Radish	30 Kg (++) 20 Kg (-) 50 Kg (-)	50 Kg (-)	10 Kg (-)	40 Kg (-) 85 Kg (-) 20 Kg (-)	30 Kg (n.a.)	200 Kg (n.a.)
Do there exist varieties which you stopped cultivating?		Yes Spring onions	No	Yes Spring onions, armoiticos, coriander	No	No	No
Have you started to cultivate other varieties since 2005?		No	No	No	No	No	No
Do you cultivate your products in greenhouses?		Yes	Yes	Yes	Yes	Yes	Yes
Are you satisfied with your greenhouses?		Yes	Yes	Yes	Yes	Yes	Yes
Have you had any technical problems with your greenhouses since 2005?		Plagas en lechuga	Enfermedades	Enfermedades	Deterioro en el invernadero	Mucho de plagas y enfermedades	Mucho de la plaga
3) Which fruits and vegetables do you sell? At what price? (-) = seldom; (-) = often; (++) = very often	Strawberries Mangold Lettuce Radish	(++) St. 10 per kilo (-) St. 4 (+) St. 3.5	(++) St. 1	(+) St. 2	(-) St. 4 (-) St. 3 (+) St. 2	(++) St. 10	(++) St. 10
4) Who do you sell the products to? Do you sell vegetables/fruits to restaurants or hotels? Would you like to increase working with restaurants and hotels?		End-consumer No Yes	End-consumer No Yes	End-consumer No Yes	End-consumer No Yes	End-consumer No Yes	End-consumer No Yes
5) Where do you sell your products? (distribution channels)	Production center Via publica Fairs Markets	Often Never Seldom Often	Never Never Never Often (100%)	Never Never Never Often (100%)	Never Never Never Often (100%)	Never Never Never Often (100%)	Never Never Never Often (100%)
6) Do there exist barriers that make it difficult to sell the products?	Lack of mobility Lack of points of sale Lack of markets Lack of formalization High transportation costs	No No No Yes No	No Yes No Yes Yes	- - - - -	No No No No No	No No No No No	No No Yes No No
7) Do you cultivate other agricultural products besides vegetables and fruits? (e.g. flowers)		Astromelias / Lilice (200 sales/month)	Flowers (Astromelias)	Flowers, Astromelias (smaller income than vegetables)	No	No	No
8) Do you have any non-agricultural income besides agriculture?		Pecuario (200 Soles/month)	Mano de obra eventual Pecuario	Mano de obra eventual (200 sales/month), pecuario	Comercio (200 sales/month) Mano de obra eventual (200 sales/month)	Pecuario (1000 sales/month)	Pecuario (500 sales/month)
9) How has your income changed since 2005?		Improved (2000 Soles/month)	Declined	Equal	Improved (200 sales/month)	Improved	Improved (1500 sales/month)
10) Have you made any investments since 2005 (e.g. greenhouses, machines, ...)?		Greenhouse (500 m ²) for fruits	No	Greenhouse (250 m ²)	No	Greenhouse (250 m ²) for fruits	Greenhouse (250 m ²)
11) Have you renovated your house since 2005?		Yes	Yes	Yes	Yes	Yes	No
12) In which areas of your private life do you invest the most? (-) = little; (+) = medium; (++) = a lot; (?) = no answer	Health Recreation Infrastructure Education Amateurs and equipment	(+) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-)	(+) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-)	(-) 100 Soles (-) 100 Soles (-) 200 Soles (++) 300 Soles (?)	(-) (-) (-) (-) (-) (-)
13) What objectives do you have in agriculture? (-) = No priority; (+) = Medium priority; (++) = High priority; (n.a.) = no answer	Product diversification Searching for new markets Be mobile Build a business in the field Increase production Improve tech. cond. and prod. quality Specialization in some products Construction of greenhouse	(-) (-) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-) (-)	(+) (-) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-) (-)	(-) (-) (-) (-) (-) (-) (-)
14) What are your personal future goals? (-) = No priority; (+) = Medium priority; (++) = High priority; (n.a.) = no answer	Invest in the education of children Improvement of current housing Be an entrepreneur or establish a business Buy land and house in the city of Cusco Technical training Improve quality of life and health conditions Increase in profits	(++) (-) (-) (-) (-) (-) (-)	(++) (-) (-) (-) (-) (-) (-)	(++) (-) (-) (-) (-) (-) (-)	(++) (-) (-) (-) (-) (-) (-)	(++) (-) (-) (-) (-) (-) (-)	(++) (-) (-) (-) (-) (-) (-)
15) How has your life changed through the Qorichan project? (-) = declined; (+) = equal; (-) = improved; (++) = much improved; (n.a.) = no answer		(++)	(+)	(+)	(+)	(n.a.)	(n.a.)
16) Do you have other comments?		Mayor capacidad empresarial	El proyecto mejora la calidad de vida de la familia	Más capacidades en manejo de invernaderos y formación empresarial	Tiene poco espacio para inventar	Flexibilizar capacidades	Capacidades en tema fresco para mejorar producción

Declaration of Sole Authorship

I, Nora Hurcik, hereby certify that the attached work, “The Qorichacra Project in Cusco – An Impact Analysis”, is wholly and completely my own and that I have indicated all the sources (printed, electronic, personal, etc.) that I have consulted. Any sections quoted from these sources are clearly indicated in quotation marks or are otherwise so declared. I further attest that I have included acknowledgment of the name(s) of any person(s) consulted in the course of preparing this assignment.¹

Signed: _____

Date: _____

¹Millar, G. (2017). Writing Dissertations: A Guide. Mainly based on the Publication Manual of the American Psychological Association.