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Contextualizing Participatory Guarantee Systems (PGS) in Peru:

Two case studies in Lima and Apurímac

Master Thesis

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Abstract

Organic agricultural standards and certification are powerful tools that ensure the integrity of organic products. The dominant certification system, Third Party Certification (TPC), is an inextricable element of most organic farming standards currently. Nevertheless, in the Global South TPC has been subject to critique. Participatory Guarantee Systems (PGS) were proposed as alternative. Ideally they emerge from grassroots initiatives and are characterized by a broad and diverse participation of actors in the guarantee process based on trust, peer review and mutual learning. Studies about the principles and theoretical implications of PGS in their respective environments exist, but rather few empirical evidence is available on the actual functioning of PGS in practice.

This research aims at contextualizing two PGS initiatives in Peru in the regions of Lima and Apurímac. Integrating the perspectives of stakeholders involved in PGS on the national, regional and local level shall provide a more profound understanding of the functioning of PGS there and the context in which the two initiatives are embedded in. Qualitative and quantitative approaches have been used for data collection. PGS in Peru show a rather centralized pyramid structure, characterized by a close relationship of regional and local, but a loose one between national and regional or rather local level. Legal non-recognition of PGS nationally is both among regional and national actors considered a major factor hampering the positive development of PGS in Peru. Better commercialization and access to markets are major motivation factors for farmers to participate in PGS, but still need to be strengthened in both regions. Technical trainings in the area of PGS and organic agriculture are crucial for a sustainable implementation of PGS and strongly required by farmers. Farmers acting as internal evaluators play a special role in their local nuclei (NL), are crucial in the PGS process and are potential multipliers of knowledge. PGS in Lima and Apurímac are an important tool in the agro-ecological movement in Peru and have a great potential to support small-scale farmers. Official recognition and support as well as improvements in the internal organization and communication are needed though to ensure the fulfilment of its own principles.

Zusammenfassung

Standards in der biologischen Landwirtschaft und Zertifizierung sind ein bedeutendes Instrument um die Integrität biologischer Produkte zu wahren. Das derzeit vorherrschende Zertifizierungssystem, die Zertifizierung durch Dritte (TPC), ist meist untrennbar mit den gegenwärtigen biologischen Standards verbunden. TPC wird jedoch, besonders in Ländern des Globalen Südens, kritisiert und Partizipative Garantiesysteme (PGS) wurden als Alternative zu TPC propagiert. Idealerweise entstehen PGS aus organisierten Basisbewegungen und sind gekennzeichnet von der Partizpation diverser Akteure im Garantieprozess. PGS basieren auf Vertrauen, gegenseitiger Kontrolle und gemeinsamen Lernprozessen und Austausch. Auch wenn Studien zu PGS, ihren Prinzipien und ihren möglichen Aus- und Wechselwirkungen auf und in den Kontexten, in denen sie eingebettet sind vorhanden sind, gibt es relativ wenige empirische Fallstudien, die PGS in der Praxis thematisieren.

Diese Masterarbeit kontextualisiert PGS Initiativen in zwei Regionen Perus, Lima und Apurímac. Durch das Zusammenführen der Sichtweisen nationaler, regionaler und lokaler Akteure auf PGS, soll ein tiefgreifendes Verständnis für die jeweiligen PGS Initiativen und ihr

geschaffen werden. Dafür wurden gualitative und guantiative näheres Umfeld Forschungsmethoden angewandt. Die zentralisierte pyramidenähnliche PGS Struktur ist gekennzeichnet von einer engen Zusammenarbeit zwischen regionalen und lokalen Akteuren und einer relativ losen Verbindung der nationalen und regionalen bzw. lokalen Ebene. Dass PGS national nicht anerkannt sind, ist in den Augen der nationalen und regionalen Akteure einer der Hauptgründe, der die postive Entwicklung desselben beeinträchtigt. Wesentliche Motivationsfaktoren für Bauern an PGS teilzunehmen, sind die Vermarktung und ein besserer Marktzugang. Beide Faktoren bedürfen jedoch noch mehr Unterstützung und Ausbau in beiden Regionen. Kurse und Weiterbildung im Bereich PGS und biologische Landwirtschaft sind wesentlich für eine nachhaltige Umsetzung von PGS und sind bei Bauern hochfrequentiert und gefragt. Schlüsselpositionen in den lokalen Kernen (NL) nehmen die internen Kontrollpersonen ein, die als potentielle MultiplikatorInnen von Wissen agieren. PGS in Lima und Apurímac sind ein wichtiges Werkzeug der Agroökologiebewegung in Peru und besitzen großes Potential Kleinbauern zu unterstützen. Sowohl offizielle Anerkennung und Unterstützung, als auch Verbesserungen der internen Organisation und Kommunkation sind notwendig, um den eigenen Grundsätzen gerecht zu werden.

List of Abbreviations

AFN – Alternative Food Network ANPE Peru – Asociación Nacional de Productores Ecológicos Peru ASPEC – Asociación Peruana de Consumidores y Usuarios CN – Consejo Nacional (National PGS Council) COREPO – Consejo Regional de Productos Orgánicos CONAPO – Consejo Nacional de Productos Orgánicos CR - Consejo Regional (Regional PGS Council) EU - European Union FAO - Food and Agriculture Organisation ICS - Internal Control System IDMA – Instituto de Desarrollo y Medio Ambiente IFOAM - International Federation of Agriculture Movements INIA – Instituto Nacional de Investigación Agraria Peru MPSGP - Manual de Procedimientos del Sistema de Garantía Participativo NL – Núcleo Local PGS – Participatory Guarantee System RTPO – Reglamento Técnico de Productos Orgánicos SENASA Peru – Servicio Nacional de Sanidad Agraria Peru **TPC – Third Party Certification** UNALM - Universidad Nacional Agraria La Molina USA – United States of America

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1. Introduction and problem description

Participatory Guarantee Systems (PGS) range amongst the three main certification systems in organic agriculture considered and recognized by the *International Foundation for Organic Agricultural Movements (IFOAM)*. The other two systems are namely the *Third Party Certification* (TPC) and *Internal Control Systems (ICS)*. *TPC* is globally the most commonly used one and according to Corsin et al. (2007:2) it "[...] is generally perceived as the highest form of assurance of compliance to a specific set of standards". *TPC* can be defined as the control of the "[...] conformity of the producer's practices to the organic standard [..] by an independent body paid for by the farmer" (Fouileux, Loconto 2016:2), processor or exporter. Countries in the *Global South* (e.g. Latin America, South-East Asia and Africa) are increasingly interested in organic certification, which opens up new possibilities and ways to enter the market of the *Global North* (U.S., Europe). This leads to certification e.g. of produce from Latin America according to the organic standards of Europe (Raynolds 2004: 729).

TPC has been subject to increasing critique though (chapter 0). In many countries throughout the world *Participatory guarantee systems* (PGS) developed either initiated by grassroots movements or private institutions as an alternative to the TPC system. Also in Latin American countries PGS developed in different institutional contexts, partly as a reaction to the high costs of TPC (Eeckhout et al. 2013: 43 ff.). PGS operate differently than TPC. There is no external third party control body involved in the certification process and the inspections are based on the concept of *peer review* (Källander 2008, IFOAM), meaning they are undertaken by fellow farmers and/or other members of the PGS. In their principles PGS strive for a broader participation and inclusion of different stakeholders in the PGS. They are strongly based on trust, support and responsibility within the associations as well as the integrity of the farmer (Källander 2008:15). The actual implementation in practice depends on the stakeholders involved and the regional context.

The first PGS initiatives in Peru were initiated by a NGO and a farmer's association in 2005 in the two regions Huánuco and Huancayo. Since then various other regions of the country also started with PGS. In 2016 PGS initiatives were operating in ten regions of Peru in different stages of development (ANPE et al. 2016).

Scientific literature dealing with PGS mostly roots in the field of a political, social and economic discourse, discussing PGS and its interactions with and the effects on its environment and vice versa. Actual case studies looking at the functionality of PGS and the perceptions of its stakeholders are scarce. Hence there is a big knowledge gap about how PGS actually operate

in different contexts, how the different actors shape PGS and the environment in which they're embedded in respectively and what the driving factors in the functionality of a PGS are. This is also the case for Peru.

To understand what role PGS currently play and can play in the future in the area of ensuring the integrity of organic products, a better understanding of the internal structures and dynamics, the different organization forms and their interaction with the environment is necessary. Assessing Peruvian farmer's demographic characteristics and their perceptions about their PGS is, in combination with perceptions of PGS actors on the national and regional scale, an essential part in gaining knowledge about the previous mentioned matters. This master thesis tries to make a start at this point and contribute to better understanding of PGS in their practical implementation.

2. Personal Approach

Since I was a kid the Amazonas an the countries sharing a part of it fascinated me and I promised to myself that one day I will experience this rich biodiversity. Peru is considered a mega-diverse country and ranks amongst the ten countries worldwide having the highest number of species of flora and fauna. Its territory contains approximately 10 % of the worldwide species of flora (Worldbank 2013) and shows the second highest number of bird species worldwide. But Peru's diversity is not limited to its nature, but also the cultural and ethincs composition of the Andean state is fascinating. Farming and cultivating land has a major impact on the environment, although the severity of the consequences depends on the way of farming. I'm personally convinced that sustainable organic agriculture is a key factor in nature and culture conservation.

Throughout my studies on organic agriculture and my work for a small farmer in Vienna, I spent a lot of time reading and writing about the structural change in organic agriculture over time and experiencing the problems small scale farmers face due to certain developments. Working on a farmers market in Vienna I noticed that some small farmers in Austria struggle with the TPC system in Austria. Amongst other topics money issues and feelings of not being able to participate or being asked sufficiently in the process of certification dominated the debate. When I first heard about *Participatory Guarantee Systems* my interest was raised immediately. This concept touches most of the concerns and problems of farmers here in Austria and is already applied in many countries in Latin America. My personal and scientific interest was awakened. I wanted to learn about the principles and beliefs of the PGS and its members, as well as its functioning and embeddedness in their environment.

3. Certification in organic agriculture

Certification has become a crucial part of organic agriculture around the world, since through different ways of ensuring a certain mode of production, organic products can differentiate themselves from the so-called conventional production systems and stand out. Veldstra et al. (2014: 429) underline this by saying that the decision to certify ones organic production or not is a "marketing decision", whereas the decision to use organic practices is a "production decision". According to the neoclassical economical model all actors on the market (buyers and sellers) are fully informed about all commodities. In practice this is hardly the case. Jahn et al. (2005) consider certification as an instrument to diminish a general information asymmetry along the organic food chain (Jahn et al. 2005:45). Unlike taste and appearance, two qualities that can be assessed by the consumers themselves, there are certain qualities that are not visible to the consumer when buying a product. Those qualities are mostly processoriented qualities, like animal welfare and working conditions. Following Jahn et al. (2005) and Corsin et al. (2007: 5), food quality can be defined as the sum of product-oriented quality (texture, nutritional attribute) and process-oriented quality. Current organic agriculture standards regulate the process oriented qualities mostly, whereas the Codex Alimentarius is mostly defining product oriented qualities. Combining the understanding of quality control with Van der Kamp's (2013: 109 f.) understanding of certification, we can define certification as the process of an (independent) actor verifying the claims of a producer that the production processes comply with a certain set of sustainability standards in the food and agricultural sector.

Certification systems in organic agriculture

First Party Standards set & controlled by individual business/farmers	Second Party Standards set & controlled by an association (e.g.farmers associations)	Third Party (TPC) Externally set standards & control by independent businesses. 2 Forms: Group	Fourth Party Multi-lateral association sets rules on how to certify → <u>accreditation</u> e.g. ISO, IFOAM	PGS Standards set by stakeholders involved. Control based on peer review, trust and mutual
		(ICS) individual	e.g. ISO, IFOAM accreditation	learning
1920s	1970/80s	1990s	2	2004
0	0	0		0

Figure 1: Certification systems in organic agriculture and time of their development. [ICS=Internal Control System, PGS = Participatory Guarantee System, ISO=International Standards Organization, IFOAM=International Federation of Organic Agriculture Movements] (adapted from Gonzalez/Nigh 2005, Arbenz et al. 2016)

Certification systems can be classified into four general types according to who creates the standards and who verifies them (Figure 1).

First-party systems occur when an individual business develops its own standards and applies them to the products it sells. Second-party certification, starting in the 1970s, is conducted by an association of businesses, which agree to adopt a set of standards and a method for verifying compliance, like for example the Organic Crop Improvement Association International (OCIA) from the US (Gonzalez/Nigh 2005: 450 f.).

TPC is carried out by an organization that is ostensibly independent of the activity it certifies, such as all aspects of production, marketing, sales and technical assistance. This organization, the certification body again needs to be accredited by an external party. TPC can either be carried out by a private certification body or a public certification agency.

Fourth-party certification would be the case of a multi-lateral agency or an association of thirdparty organizations that creates rules and agrees on a verification method like the International Standards Organization (ISO) does. The ISO 17065 for example defines the requirements for certification bodies. This performance assessment is required for all the operating certification bodies and in Europe it is carried out by the responsible national authority (Gonzalez/Nigh 2015).

Although the different certification systems developed at different times, still all of them coexist nowadays with certain dominance of TPC though. Certification systems in organic farming were initially motivated and created by farmers themselves in order to distinguish their product, complying with a certain set of quality standards, others didn't (first party). These were the pioneers of certification in organic agriculture. With the increasing global demand for organic products, organic agricultural standards emerged to ensure process quality. Developing on different regulatory levels (regulatory fragmentation), standards started to compete with each other often causing debates about the effects of this competition on credibility and reliability. In response to the increasing regulatory fragmentation, attempts to set standards on the global level have been taken. IFOAM published its Basic Standards in 1980 and the WHO and FAO jointly released the Codex Alimentarius in 1999 (Schwindenhammer 2016:106). With the increasing codification of the organic farming principles also on the regional level, like in Europe, the TPC arose to be the dominant certification system. In the course of this development especially small-scale farmers experienced certain financial barriers trying to certify their product through TPC. In countries like Peru, small producers not only face barriers in terms of the certification cost, but also in terms of the minimum quantity required by the buyer (Lemeilleur 2012:2). In order to facilitate access of small-scale farmers to global markets, IFOAM promoted an alternative to the mainstream TPC, which is the group certification or Internal Control System (ICS). In group certifications farmers are organized in associations, in which they conduct an annual internal control of all group members and based on the reports of this internal control, the external accredited control body assesses the proper functioning of the group. This through controls of the documentation and control visits to farmers on a random basis.

Movements "beyond organic", as Nelson et al. (2009) call it, have been emerging as a response to the increasing critique of TPC. Participatory Guarantee Systems (PGS) can be considered part of this movement. They are based on trust, a mutual learning process and the participation of as many actors as possible in their implementation. Legally PGS are neither recognized in the EU organic regulation EC 834/2007 or its commission regulation EC No 889/2008 (EC 889/2008) nor the US – National Organic Program (NOP) nor Japan and also in Peru it is not permitted to label PGS- products as organic (there are exceptions discussed in chapter 6.3). In the definition of the FAO PGS are automatically excluded and not considered as a certification system: "Certification is always done by a third party. The verification is done and the assurance is provided by a party without direct interest in the economic relationship between the supplier and buyer." (Dankers 2003). PGS, based on peer review, are considered to be partial following this definition.

The FAO definition of certification represents the general paradigm in the certification landscape and underlines the dominance of TPC worldwide, which started with the adoption of the EU norm 45011 in 1989. From there on TPC was compulsory and the only valid method of conformity assessment (Fouilleux/Locanta 2017: 8). This dominance of TPC is reflected in scientific literature about certification. Although still limited, organic certification in general, its role and relevance in organic commodity chains, as well as its impact on farmers has been subject to more investigations than PGS and hence comprises of more literature (Ayuya et al. 2015, Barham/Weber 2012, Ibanez/Blackman 2016). A lot of this literature also roots in political, sociological or economical related disciplines. Especially in the first two areas critical approaches towards organic standards and certification are frequent (Grünewald 2013, Raynolds 2004, Nelson et al. 2009). Most of the mentioned research focuses on one system of certification though: the TPC.

There are discussions about TPC and its reliability though. The critique of TPC is not only addressed to this certification system, but includes a general critique of the organic agricultural standards. The impartiality of the audit personal and the relationship between the client and the certification body has been subject to investigations already. Silva-Castañeda (2011) gives a good summary of the existing discourse in literature about the potential partiality among audit personal, caused for example by financial dependencies on clients, due to the increasing competition between certification bodies. Another critique is the ongoing institutionalization and its effects on the reliability and quality of standards, through a so-called "cooptation" of organic standards (Howard/Jaffe 2009). This "cooptation", has led to the weakening of the organic standards and an increasing influence on certification bodies by "large commercial players"

(Howard/Jaffe 2009: 3). Allen & Kovach (2000: 224) bring up a similar critique and state that "[i]n the long run, capitalist dynamics will tend to bring about changes in the standards themselves. These changes might be in a positive way (being stricter) or in a negative way (weakening standards). What both publications conclude, is that a possible remedy to reduce the domination and cooptation by large players are alternative agro-food initiatives (Howard/Jaffe 2009, Allen/Kovach 2000). The rapid global expansion of organic standards and the fact that many countries with a big agro-export sector - mostly located in the global south¹ - have been developing their own national organic regulations oriented on the organic standards of the European Union or the USA, needs to be taken into consideration when talking about the standardization of organic agriculture. This is underlined by Fouilleux/Loconto (2017), who observe an increasing global trend towards the harmonization of standards in organic agriculture. If this harmonization of organic standards is beneficial to the farmers and consumers and a goal we should strive at, remains to be seen. Although not explicitly mentioned, PGS could be considered as a movement against this development, through its non-compliance with the ISO 17065, the participation of various actors, including civil society and the rather regional and local focus. Other authors, like Dabbert et al. (2014) criticize the performance of the certification body and their inspection methods and also discuss the certification costs. The latter issue will play a role in the following chapters about PGS.

¹ The term Global South is a term from post-colonial studies and refers to countries, prior called "developing" or "third world"

4. Participatory Guarantee Systems – Status quo of literature

Based on the Global PGS Survey 2015 by IFOAM, there are around 123 PGS initiatives established on all continents. In 72 countries, in 20 of them well established, over 109,000 small operators are involved in PGS out of which 46,945 are considered organic through PGS. The rest is mostly in a transition period from conventional to organic. The number of initiatives, farmers and the area of land cultivated by PGS farmers has been increasind steadily over the recent years (IFOAM/FIBL 2016).

The PGS concept first became a global issue in 2004 after a workshop on existing certification systems around the world organized by the *International Federation of Organic Agriculture Movements (IFOAM)* in joint efforts with the *Agro-ecological Movement for Latin America and the Caribbean (MAELA)* and other institutions and was held in Rio Grande do Sul, Brasil. As one outcome a concept document on PGS was elaborated. In this document the philosophy, the principles and the main values are outlined. As it is with the principles in organic farming they are only guidelines and no formal laws. IFOAM is heavily supporting the concept of PGS and has created a PGS logo that can be obtained by initiatives through a process of recognition. PGS initiatives are recognized if they operate according to the principles of organic agriculture and the key elements and features mentioned above. Hence many PGS initiatives orient their norms towards the IFOAM principles.

The six basic principles that should characterize a PGS according to Källander (2008: 7 f.) are:

- 1. Shared vision among the stakeholders (producers, consultants, consumers, etc.);
- 2. Participation of all stakeholders ;
- 3. Transparency regarding processes and functions in the PGS for all stakeholders;
- Trust especially towards producers and ensuring their integrity through the certification system;
- Learning process by integrating knowledge and experiences from the different stakeholders involved in the elaboration of the principles and rules guiding the certification process;
- 6. Horizontality by distributing the power of certification to many rather than a few.

A PGS is assumed to exceed the mere guarantee of technical standards, as it is the case with TPC, and also encompass aspects of ecology, equality and society (Källander 2008, Torremocha 2011, Rabendo 2011). PGS (until now) are almost exclusively limited to production for certain local and/or national markets and are also considered to be limited to small-scale farmers (Zanasi 2009, Torremocha 2011, Nelson et al. 2008). Since maintaining a relationship of trust between the producer and the consumer is difficult to achieve when the location of production and purchase are far apart (Nelson et al. 2008) PGS products are

supposed to be mainly for the domestic market. This statement, in my opinion, may lead to two different interpretations. PGS are not achieving the level of reliability of TPC and are somehow inferior to it. Second, certification, based on external controls only (as it is in TPC) and no relationship between consumers and farmers is to be viewed critical and can't be reliable. The first interpretation is part of the reason why PGS are not recognized legally in the organic regulations of e.g. Japan, the USA or Eurooe. The latter interpretation is going in line with the socio-political critique of the current food system and organic agricultural standards of various authors (Zanasi 2009, Raynolds 2004, Nelson et al. 2015).

Globally PGS is strongly furthered and promoted by IFOAM and literature about the principles of PGS and it's functions in theory, as well as case studies are easily available on the webpage of IFOAM and also in other publications (Källander 2008, IFOAM 2007 & 2014, Torremocha 2011). Publications in this area mostly draw a very positive picture of PGS and focus on the description of the principles of PGS and how it should function. This "grey literature" will mainly serve to get a basic understanding of PGS, but will only be referred to a few times in the following chapter. Only in cases of contrasting the principles, the "theory", to the findings and results of scientific investigations, this "grey literature" will be used. Although the scientific reliability of some of the conference proceedings, working papers and reports is unclear, many of the guarantee systems in practice refer to the contents or apply the principles outlined in many of those publications (Källander 2008, IFOAM 2007 & 2014). Hence they can't be excluded completely from the following literature review. In the following chapter I will first sum up the current scientific debate about PGS and important related publications. Then I will go on focusing on literature dealing with case studies and empirical evidence from PGS put into practice.

4.1 PGS in the scientific debate

The scientific status-quo of PGS is more or less limited to socio-political debates about its implications for stakeholders, the organic sector and certification at a time (Nelson 2009; 2015), economic discussions about purchasing behavior (Sacchi et al. 2015) or general publications touching PGS on the side only (Nigh et al. 2015). There is also literature available based upon governmental or non-governmental support, aiming at analyzing PGS characteristics to improve existing organic regulations (Moschitz et al. 2011). Before reviewing the available literature in the next chapter, I would like to shortly share my personal observations when going through the articles and publications. The scientific debate about PGS is on a very theoretical basis and mostly from political and social sciences, which focus mainly on PGS's characteristics and possible implications on local food systems, as well as its connection to other concepts of the organic agricultural movement. In the few empirical scientific publications, the conclusions drawn are not very transparent and comprehensive from time to

time. Although publications of institutions and stakeholders involved in PGS are of importance for getting an idea of the current situation of PGS in the field, they need to be analyzed and viewed always against the background of their publishers and their (unaware) underlying interests and expectations. Hence in the interpretation of the literature we need to differentiate between facts and expectations of the authors.

Characteristics of PGS

Based on the above outlined principles of IFOAm, PGS have been subject to socio-political investigations and discussions in several scientific publications. Since the debate about organic standards and certification has reached the scientific world, there are several works dealing with the importance of organic standards in combination with TPC as governance mechanisms and their role in the "conventionalization" of organic agriculture (Raynolds 2004, Nelson et al. 2015, Grünewald 2013). PGS are considered an alternative to the current dominant certification system in organic farming and are often linked to concepts like "Food Sovereignty"² (Nelson et al. 2015, Rabendo 2011, Nigh/Gonzales 2015), "Alternative Food Networks" (Nigh/Gonzales 2015, Sacchi et al. 2015) and "Agroecology" (Torremocha 2011). In their research about the organic sector in Mexico, Nelson et al. (2015) consider the concept of PGS as an innovative governance mechanism that is based on the principles of food sovereignty and an institution with potential to challenge the current food paradigm. This current food paradigm is characterized by "conventionalization" as well as market-driven and export-oriented agriculture (Nelson 2015: 2). Although organic agriculture is globally still marginal in terms of cultivated land, organic products have been increasing and are already present in all kinds of supermarkets. This fast increase went hand in hand with an increasing institutionalization. standardization and intensification of organic The farming. "conventionalization" debate arose in the 1990s as a response to these developments. Key words like input and resource-substitution, culminated in the fear of organic being "just a slightly modified version of conventional agriculture" (Fouilleux/Loconto 2017:2). Mutersbaugh (2005) even goes as far as claiming that the harmonization and conventionalization of certification leads to a loss of values and the original standards. Alternative food networks (AFN) are one response to these developments and PGS is considered as part of the construction of AFN. Gonzales & Nigh (2015) underline this in their comparative study of two local market initiatives that are organized through a PGS in Mexico, with similar institutions in France. One of the major messages I took from this article was the purpose of the San Cristobal PGS (Colombia), which is to encourage the emergence of agro-ecological systems. The

² "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems." Declaration of Nyéléni 2007. (Campesina, 2007) (Campesina, 2007)

function of TPC is a strictly technical one and consists in a mere conformity assessment. PGS on the other hand, according to the experience of Guadalajara and San Cristobal de las Casas (Gonzalez/Nigh 2015), embark also social aspects, have a more holistic understanding of ecological sustainability that focus more on context-specificity, than on the mere compliance with technical standards. The local norms of the PGS are developed by the PGS participants and are all based on standard organic principles (Gonzalez/Nigh 2015: 330). The consumers in PGS are described by Rabendo (2011) as more than mere users of the end-products but rather they are enrolled and involved in the process of certification. In the course of this work we will get a slight insight into the situation of the consumer participation in the two PGS initiatives in Peru.

Associated Benefits with the participation in a PGS

When talking about PGS it is necessary to distinguish between three differing aspects: the characteristics of PGS, the possible benefits of PGS and the possible effects PGS have on their environment. Since the characteristics have been already mentioned in the sections above, I will now focus on the potential benefits and consequences of PGS that are mentioned in literature.

Several authors claim that PGS lead to the "empowerment"³ of small – scale farmers (Nelson 2015: 3f.; Rabendo 2011: 61). In the course of PGS, empowerment means for example the possibility of farmers and consumers to enter retail food markets on their own terms. This assumption is also linked to the "Prebisch-Singer-Hypothesis"⁴, a hypothesis generated and acknowledged in the academic field of development economics and geographically deriving from South America. The core assumption of this hypothesis appears also in a publication by Raynolds (2004), where she states that: "Latin American organic agro-foods are exported in unprocessed bulk form, so that the substantial profits derived from processing and packaging accrue to enterprises in Northern consuming countries." (Raynolds 2004: 736).

Gonzalez/Nigh (2015) analyzed AFN in Mexico and France and state that they are not just an alternative to conventional capitalist agro-food systems, but that they create an alternative social context. This context is characterized by face-to-face interaction, personal relations and results in support and recognition of especially smallholder agriculture (Gonzalez/Nigh

³ The term empowerment is frequently used and applied in (system critical) economic, social and political literature in the field of international development and here especially in debates about development cooperation.

⁴ The Prebisch-Singer-Hypothesis says that the demand and hence prices of primary commodities will always decline relatively to the manufactured commodities. In this fact Raul Prebisch and Peter Singer saw the underlying reason for the international inequality between developing countries and developed countries. The international labor division with the developing countries' economy mainly relying on the production of raw materials and the developed countries' manufacturing industries leads to a trap for the developing countries.

2015:337). "Empowerment" of small – scale farmers in PGS, is also related to the role of women, which are part of the debates about PGS. Gonzales/Nigh (2015) looked, amongst others, deeper into two women's initiatives in Mexico and state that their participation in AFNs is definite. As the main responsible person to feed the family they play a crucial role as producers, processors, organizers, promoters and consumers (Gonzalez/Nigh 2015:336).

Another claim of PGS supporters is that certification costs for farmers are lower in PGS than in TCP (IFOAM 2014, Sacchi et al. 2015). Mostly this is attributed to the lower bureaucratic effort and lower cost for the control itself, since there is no external certification body involved (Sacchi et al. 2015). According to data from the AGROECO project in Peru the costs per operator in a PGS are almost one fifth compared to the costs per operator in the case of an ICS (Table 1). The results shown have to be interpreted context specific and can't be generalized.

Table 1: Comparison of costs between Participatory Guarantee Systems (PGS) and Internal Control Systems (ICS). Example of a local PGS – group of 100 farmers in Peru (IFOAM 2014).

Participatory Guarantee System				Internal Control System			
Description	Number	Cost/unit (in US \$/year)	Total costs	Description	Number	Cost/unit (in US \$/year)	Total costs
Office Supplies	100	1,2	120	Office Supplies	100	1,2	120
Peer review visits	14	10	140	Internal inspections	14	10	140
Visits of the regional council	6	40	240	Annual audit of an external certification body	1	2.000	2.000
Delivery of documentation summaries to regional council	1	40	40	Overall coordination with certification body	1	80	80
Total costs PGS (in US \$)			540	Total costs ICS (in US \$)			2.580
Cost/ PGS member (in US \$)			5,4	Cost/ ICS member (in US \$)			25,8

Santacoloma (2007) emphasizes that it is important to take all costs into consideration when comparing the two systems. She divides the cost for ICS in two temporal phases (setting up the ICS and ongoing) and three levels in each of these phases. The three cost levels she mentions are the production-related, the certification-related and the marketing-related costs. Both PGS and ICS for example provide trainings for farmers and stakeholders involved in the guarantee process (Santacoloma 2007: 52ff.). The trainings represent a financial expenditure, which results especially in regions, where farmers have little or no knowledge about organic standards, certification or organic agriculture. In the case studies in Asia Santacoloma found out that farmers were not saving money, because of their membership in a certain certification system, but rather their conversion to organic farming saved them from being dependent on expensive fertilizers and pesticides (Santacoloma 2007). A major cost saving expense in PGS is the annual audit of an external certification body, as can be observed in the case of the PGS farmers in Peru. In this case the monetary expenditure is lower in PGS, than in ICS, but the

non-monetary investments in form of time need to be taken into consideration as well. Nelson et al. (2015:13) warn that it can be a risk for the functioning of PGS if they only rely on donated time and resources. One can conclude, that the costs for PGS and ICS are very dependent on the regional context, they are embedded in, its stakeholders and the underlying principles of both systems.

The better management of natural resources is another supposed positive consequence of the membership in a PGS. This due to the provision of workshops and trainings on organic agricultural practices, facilitating farmer-to-farmer knowledge exchange and hence promoting the adoption of more sustainable farming practices than before (IFOAM 2014: 55 f.) Nevertheless, there is currently no scientifically proven evidence available in scientific journals on this hypothesis.

The effect of certification on farmer's agricultural practices and knowledge was studied by Gonzalez/Nigh (2005), who looked into how organic TPC affects the participation of smallholders farmers. They come to the conclusion that the (mostly) external standards and the organic certification led to a change in farmer's use of their knowledge and their practices. Rather than trusting in their own traditional knowledge and practices, they tried to stick to the outlined standards in order to get certified. The authors call this "agricultural deskilling" (Gonzalez/Nigh 2005: 454). This led to farmers that were less environmentally concerned and aware but more price oriented. These assumptions need to be on the one hand considered as case specific, since the authors investigated three local developments in certification at the time in Mexico. On the other hand the article leaves quite open the method of data collection, with few indications about personal conversations. The authors seemed to base their conclusions mostly on literature. Another critical aspect is the scope of the study, which is very extensive and broad and may lead rather to a discourse based work aiming at contributing to the debate and giving new thoughts, than an empirically evidenced investigation.

Europe and the US are the two most important export markets for Peruvian organic agriculture. PGS is neither recognized by the NOP, nor by the EC 1235/2008. There are interests though to look deeper into the processes and dynamics of PGS from the certification perspective. Throughout the European research project CERTCOST for example, Moschitz et al. (2011) analyze in their report alternative certification systems like PGS to assess the efficiency and costs of those systems and identify possible improvements that can be made in the EU-organic regulation. After analyzing 20 different certification systems (not only organic) and interviewing experts on the topic the authors identified three crucial elements to improve the organic certification system of the European Union (which is dominated by TPC). They are namely: "Risk Based Inspection", "Social Network Factors" and "Capacity Building and Training". Key aspects of the second area are considered to be transparency, trust and participation. All of those aspects are pillars of an ideal *Participatory Guarantee System*. Further they are key dimensions of the so called "social capital" that, together with "social movement", constitute the "Social Network Factors" (Moschitz et al. 2011: 36 ff.). Although in this study social networking, trust, knowledge and agreement of norms are only considered as one part of certification they are considered very important factors in the organic guarantee system. Currently these factors are rarely addressed in organic regulations. What we can see from this publication is that the concept of PGS has already made it into the policy debate in organic certification and that it brings innovative and social aspects to the table that serve as potential improvements of the current organic regulations. But still TPC are considered as indispensable in the organic regulation of the e.g. EU.

4.2 PGS in practice – empirical evidence

To analyze the gap between ideals in theory and the actual situation on-site, case studies of PGS in practice are necessary. Experiences from practice and empirical evidence are limited in the scientific world though. Nelson et al. (2015) conducted a case study of the Mexican Network of Local Organic Market, consisting of 13 markets and eight initiatives in different stages of development. The authors were able to identify and describe the basic process of certification and the admission to the PGS, as well as the structural composition of the Network, which varies and which is adapted to the local circumstances. In the course of their study the authors analyze the PGS with regards to its reliability, the level of participation and its institutionalization. As one of the principles of PGS the relationship of trust between consumers and producers is of utmost importance for the functioning of a PGS. The most important factor in trust is the face-to-face interaction of consumer and farmer, usually at the market. Nelson et al. (2015) refer to other studies that even found the personal reassurance to be of more importance than an accredited certification. This kind of trust is also held to be the crucial factor pressuring producers not to commit fraud or free-riding. This is also supported by Zanasi et al. (2009: 57), who ascribe a paramount importance to the social cohesion of a group. They then further argue that social cohesion increases social control and, in contrast to TPC opens up the system and makes it more flexible. Hence PGS are potentially more adaptive and closer to local living environments.

Participation is supposed to be THE characteristic feature of PGS worldwide and at the same time probably the one most deviating from the ideal vision. Ideally consumers as well as representatives from NGOs, universities and other institutions involved in the PGS together with the producers should dedicate time to the certification process. Using the example of the *Mexican Network of Organic Agriculture* Nelson et al. (2015) also discuss the issue of participation. They find out that the participation of consumers and even producers is still very

much worthy of improvement. On the consumer side a lack of enrolment and participation already became apparent when conducting the interviews on the markets. There the results indicated that very few (ca. 30 %) consumers actually new about PGS. Other than that a lack of time resources and knowledge were the main reasons for the low participation of all stakeholders. Trainings and education of the participants on all levels is felt to be necessary by the participants themselves. Especially farmers in the Mexican network of Organic Agriculture didn't feel sufficiently trained to exercise certain tasks, like peer reviews and hence emphasized the importance of professionals (Nelson et al. 2015: 383). Since all the activities related to the organization of the PGS and the peer reviews are based on donated resources and time, the risk of low participation rates is high. The authors conclude that, although there are still many unclear issues in the implementation of PGS in practice, those kind of certification systems symbolize a movement towards food sovereignty especially in the Global South. PGS, they complete, do contribute to an empowerment of smallholders, to further local food production and consumption and go far beyond the TPC in the social sense (Nelson et al. 2015: 386).

Another example from practice, is one of the most widely known PGS: the *Rede Ecovida* from Brasil. There are several publications about the brazilian PGS available (Sacchi et al. 2015, Zanasi et al. 2009, Santacoloma 2007, IFOAM 2013) and often the *Rede Ecovida* is used as a role model for other PGS.

The Rede Ecovida is a network of NGOs, consumers and producers but also of small enterprises and traders involved with agroecology. It was formed in 1998 and nowadays operates in three different States of South Brazil. Their principles include organic agriculture, but go beyond this term and also encompass social and economic principles, put together under their vision defined as "Agroecology". They are summed up in the "Training Manual of Particiaptory Guarantee of Ecological Products", which also determines the process of participatory guarantee and how to obtain the Rede Ecovida seal (Ecovida Network of Agroecology 2004). Similar to the application process in the Mexican network, producers need to first enter a farmer's association, apply for certification by the ethical council (Mexico: regional committee) and then pass the visit of representatives from the council. In case the application is rejected, support and training to improve the producer's practices is offered by the ethical council (Zanasi 2009: 60). The ethical council is composed of technicians, farmers and consumers and is usually formed by every farmer group (=nucleus). To avoid interest conflicts the ethical council undertakes the field visits not in the *nucleus* of origin, but in another. Every producer is certified individually and obtains an individual certificate. The costs for the monitoring⁵ are lower in the participatory certification than in 3rd party, because it is carried out

⁵ Monitoring = inspection; preferred term in participatory certification (Santacoloma 2007: 35)

by the ethical council rather than an external control body (Santacoloma 2007 34ff.). Also Zanasi et al. (2009) found out that the main reasons for participants to enter PGS in Brazil are the lower certification costs. Zanasi et al. (2009) probably refer here to the monetary costs of PGS. If the non-monetary costs are considered by the researchers and the participants of their survey is not clear. When comparing costs of the different certification methods, one may fall into the trap of overlooking the costs, which are not visible at the first glance. Non-monetary contributions, like investing time in the organization internal controls play an important role both in PGS and ICS.

Zanasi et al. interviewed 18 farmers out of 2.432 from one municipality, asking them about their motivations and reasons for being member of the Rede Ecovida. The small sample size and the distribution of the sample makes the case study not representative at all, but still contributes to the relatively scarce literature about PGS in practice. Apart from economic and health related factors (e.g. healthier working conditions due to not using pesticides), the main influencing factors for farmers to enter the Ecovida network were neighboring farmers and farmer's associations. On this Zanasi et al. (2009) build their main argument, that social cohesion and social control are the most essential characteristics of the investigated PGS. Social cohesion is often referred to as the "glue" between a group of people. This "glue" is made up of, common beliefs and values and/or similarities of all kind. Social cohesion being the basis for trust among stakeholder and social control. This due to the fact that social control provides for the reliability of the system and also influences the efficiency of the PGS (Zanasi 2009: 63). Apart from these findings the authors come to several other conclusion regarding economical aspects, stating for example that the market access for farmers increased and the share of transaction cost decreased. In my personal opinion, it is not clear how some of these conclusions have been reached and can't be considered sound due to the small sample size.

Another interesting viewpoint on PGS, is a rather rational and practical one, which sees PGS not necessarily as an alternative to TPC, but rather as a stepping stone towards it, like it is the case in the *Sabeto Organic Producers Association (SOPA)* on the Fiji Islands (IFOAM 2016).

Case studies in India, France, the Philippines and other countries in Latin America have been conducted by IFOAM (2013;2014)

5. Research Aim and Research Questions

This research aims at presenting the functionality, structure and organization of two *PGS initiatives* in two different regions in Peru, against the background of their socio-politic environments. To achieve these aims, a system approach will be followed to combine the different sources of information (different kinds of interviews and literature research) and integrate them in a comprehensive way. Hence the first research question is:

I. How are the Peruvian PGS structured and organized on the national, regional and local level?

For answering this research question, all relevant qualitative and quantitative data collected throughout the research will be combined and integrated. This, in order to understand the exact steps in the process of participatory certification, social relations in the PGS initiative, communication pathways, internal mechanisms dealing with problems or incompliances and relations to the environment will be revealed. The first research question can be seen as an attempt to triangulate the findings from the three other research questions and translate them in two system and influence maps.

For a better understanding of PGS, the environment in which the system is embedded needs to be described. The first step in this process will be to entangle the net of institutions, organizations and private actors involved in the certification of organic agriculture and the PGS sector in Peru. While the mere identification of actors can be mainly done by literature research, their interrelatedness, the characteristics of their cooperation and operation and their opinions about PGS can only be revealed through personal interviews. Peruvian laws, like the one for the promotion of organic production (N° 29196) adopted in 2008, create the framework for the regulatory system and set the boundaries for the elements in the very same regulatory system, in which the PGS are embedded. The focus lies on the perceptions of stakeholders involved in the agro-ecological movement on the national scale. Hence the second research question needs to be:

II. How do institutional actors and experts on organic agriculture & PGS perceive the current situation of PGS in the context of the Peruvian regulatory system of certification in organic agriculture?

This question includes asking about their motives, ideas and opinion about PGS in general and in the Peruvian context, in order to get a better understanding of the current debate about PGS on the national level.

From the national scale I then step down to the level of one PGS initiative. Peru is characterized by a huge cultural and social diversity with more than 44 different ethnic groups and 14 different

linguistic families. This diversity of cultures is also reflected in the agricultural sector. There are currently more than 2.1 million small scale farmers (Escobal, Espinoza 2013) cultivating areas in the tropical forest (selva), the Andes (sierra) and the coast (costa). Since the operation of a PGS is not only influenced by legislation and (inter)national organic standards, but by its members, different PGSs are assumed to differ between each other. The aim is to get an in depth view of the processes and internal regulations of two PGS initiatives in Peru. Describing the system structure means identifying the single elements, their relation to each other, what influences them and if they show any pattern (Meadows 1999). This implies identifying the specific actors and their role in the respective PGS. Producers are certainly the skeleton of every PGS and so the focus in this study will lie on the assessment of their attitudes and behavior in regards to the crucial element of capacity building inside the PGS, as well as experiences within the system. This means asking them how they perceive the internal regulations and processes at a time and what role they themselves assign themselves in the PGS. Assessing the functionality of a PGS initiative also requires to ask participants about the level of satisfaction and identification with the system. Here again the focus will be on producers. This study tries to give farmers the opportunity to express their feelings, experiences and opinions about PGS and in detail about capacitation and learning processes. Through standardized interviews quantitative and qualitative data shall help to answer the second and third research question:

- III. How do producers perceive the situation of capacity building and knowledge exchange in their PGS?
- IV. Which internal challenges do producers identify?

6. The Peruvian Context: Organic Agriculture and PGS

To better understand the role of the Peruvian organic agricultural sector from the global perspective, some statistical data is necessary. More than three quarters (=more than 1.5 million) of all the organic producers worldwide are situated in countries of the Global South whereas most of the organic agricultural area (including wild collection and beekeeping areas) is located in Latin America with 6.4 million hectares (IFOAM/FIBL 2016: 68). Peru for example is on the ninth position in regards to organic agricultural area amongst the developing countries. The most important crops in those regions are so called export or cash crops, like sugarcane, coffee and cereals. Mexico and India have been amongst the top ten exporters of organic producers has increased tenfold from 1999 – 2013 and especially in developing countries there are more and more certified organic producers (Willer/Lernoud 2015).

6.1 Peruvian organic agriculture – some facts

Before going into detail of organic agriculture in Peru, I want to give a short overview over the structure of its agricultural sector. This is important to contextualize and understand the development and functioning of PGS in Peru. 30,1 % of Peru's area is agricultural land, of which 46,3 % are located in the *sierra*, 30,1 % in the *selva* an 23,7 % on the *costa* (INEI/MINAGRI 2012:4). Peru's agriculture is characterized by a huge number of smallholders and family farmers. According to the last agricultural census from 2012, 81,8 % of the agricultural units are smaller than five hectares, of which 68% are located in the *sierra* (INEI/MINAGRI 2012: 11). The total number of farmers (also those with more than five hectares) was 2. 260 973 in 2012. The application of chemical fertilizers increased 50 % from 1994 to 2012 and especially on the *costa* the application of pesticides is frequent (67 %). The level of education shows only slight differences between the regions in the number of farmers without any kind of education, which is in the *sierra* 18 % (double of *costa* and *selva*)Until 2012 160.00 farmers received technical assistance and/or business advice (e.g. commercialization), which makes up for 0,7 % of all farmers (INEI/MINAGRI: 24 f.). As technical assistance is of major interest in this research, those numbers will be recalled in the ongoing of this work.

When it comes to the number of organic farmers, Peru ranks on the eight position worldwide with 65.126 organic producers (IFOAM/FIBL 2016:59). Those small farmers are the ones that mainly supply the domestic market with organic produce. Peru's biggest export markets of organic products, on the other hand, are Europe (57%) and North America (37%). In 2014 the total export value of organic products made up around 339 million \$. This was an increase of approximately 50% compared to 2013. By far the most exported product is the banana followed by Quinoa, cacao and coffee (PROMPERU 2014). The free trade agreement with Europe signed in 2013, has increased especially the trade in Peruvian organic products. In regards to

the area of organic cocoa and coffee production, Peru ranges in both cases amongst the three biggest areas worldwide (IFOAM/ FiBL 2016)

Statistics and numbers about organic agriculture from Peruvian institutions are scarce. The national agricultural census lists only the number of farmers applying organic fertilizer. Actual numbers about Peruvian organic agriculture have been published by IFOAM/FiBL (2016) in their report about the organic world though. In this report it is also mentioned that finding precise figures on the number of organic units is often difficult in developing countries, due to very different ways of recording data.

In the report "The world of organic agriculture – Statistics & Emerging trends 2016" (IFOAM/FiBL) Peru is described as a market with high potentials to position and introduce organic produce on the global market due to the good reputation of its cuisine. The public sector, the report states, hardly supports organic agriculture, which is considered to be very important for promoting and distributing organic agriculture on the national and international level (IFOAM/ FiBL 2016: 236). By far the biggest organic production volume is coffee, followed by cocoa and quinoa. A huge share of the total organic produce in Peru is meant for export, but the domestic organic market has increased steadily between 2010 and 2015 and there are currently around 15 different organic street fairs in Lima every weekend for instance.

6.2 Legal situation organic agriculture and certification

Since 2008 organic agriculture has been officially regulated by the Peruvian government through the law for the promotion of organic production (La ley para la promoción de la producción orgánica, Nº 29196). In effect since 2008, the main purpose is to promote the sustainable and competitive development of organic agriculture (N° 29196 2008: Art. 1°). Organic Agriculture is considered as an alternative driving factor for social and economic development in the country and the contribution to diminish poverty and promote food security. The law N° 29196 defines the main aims, principles and certain terms like organic agriculture and PGS. Furthermore it defines the main competences, like SENASA's role as the responsible authority to recognize and register certification bodies. Although the law Nº 29196 was approved in 2008, its implementation wasn't regulated until 2012. This means that there were no concrete definitions of the functions and responsibilities of the different entities mentioned in the law or what their activities should be. In 2012 the regulation was adopted through a Decreto Supremo Nº 010-2012-AG and the framework for the implementation of the law Nº 29196 set up. This regulation defines and determines the functions of the entities responsible for the promotion and auditing of organic production (Decreto Supremo N° 010-2012-AG: Art. 2°). The ministry of organic agriculture (MINAGRI) is the governing body. The implementation of the law lies within the executing bodies, which are the Dirección General de Competividad Agraria (DIGNA), the Servicio Nacionál de Sanidad Agraria Peru (SENASA) and Page **26** of **112**

the Instituto Nacionál de Innovación Agraria (INIA). The DIGNA's main functions are to foster actions that promote organic agriculture in Peru and to lead the Secretaría Técnica of the Consejo Nacionál de Productos Orgánicos (CONAPO). Chaired by the MINAGRI, but led by the DIGNA the CONAPO plays an important role in the Peruvian organic agricultural sector. It is more or less the connecting body of the institutions on the governmental level and the regional bases (COREPO). Interestingly the CONAPO formed already in 2001 through a supreme resolution (No. 435-2001-PCM (01)) and started to elaborate a guiding document (Reglamento Técnico para los Productos Orgánicos) for organic agriculture in 2006. Its members are designated representatives from the government, civil society (NGOs), the regional farmer's bases (COREPO) of the three geographical regions (costa, sierra, selva), organic farmers from the respective region and governmental representatives. The detailed regulation of the processes and functions of CONAPO is written down in the law Nº 29196 (2012) Article 7°. Since the creation of CONAPO, among the institutions representing civil society, there was at least one which today is also engaging in promoting PGS. RAE Peru (Red de Agricultura Ecológica Peru) was part of the technical secretary of the CONAPO and was strongly involved in developing the Reglamento Técnico para los Productos Orgánicos (RTPO). CONAPO published the RTPO already in 2006 before the adoption of the law N° 29196 and its regulation (Decreto Supremo N° 010-2012-AG). The RTPO outlines the standards for organic production, processing, commercialization and certification. With this regulation all the respective stakeholders in the organic sector need to comply. The CONAPO is also responsible to elaborate the "National Action Plan for the Promotion of organic agriculture. The COREPOs are the, so to say, executive hand of the CONAPO. Their operative plans are oriented at the National Action Plan (R (Pe) N° 29196/2012).

So how and where are PGS embedded in the regulatory framework of organic agriculture in Peru? For this we need to look into how the certification of organic products is regulated. In the law N° 29196 PGS are only defined, but not further mentioned. Hence there are no direct indications for the (non-)recognition. Also in the regulation (Decreto Supremo N° 010-2012-AG), Article 18° empowers the creation of PGS, stating that those products produced by small-scale farmers and meant for the domestic market only, can be certified through self-organized regional associations. This under the condition that they are working according to the requirements and costs established by the relevant regulation and law (ibid: Art. 18). The RTPO on the other hand, defines clearly the requisites for organic certification. The law N° 29196 denominates SENASA as the only authorized federal unit that registers and recognizes certification bodies operating in Peru. Its purpose and functions are outlined in detail in Article 5°. The RTPO, important for implementing what is outlined in the law 29196, then defines the role of SENASA, the certification bodies and sets the minimum standard. According to the RTPO SENASA has the complete and absolute authority to define the requisites for the requisites for the requisites for the requisites for the requisites the role of SENASA has the complete and absolute authority to define the requisites for the requisites in the regulation in the regulation in the regulation in the regulation in the regulation.

certification process and the certification bodies (RTPO 2012: Art. 82°). Furthermore in Art. 85°, when specifying the requisites for the certification bodies, it states that all certification bodies need to be accredited with ISO 65. The latter excludes PGS already from the beginning, since it implies the controls to be impartial and hence be conducted by a third party. The prior defines the crucial role SENASA plays in certification of organic products and the official recognition of PGS. Analyzing the law N° 29196 and the RTPO, it was not clear to me, if there is an entity responsible for the accreditation of the certification bodies. Key informants that I asked during the semi-structured interviews all claimed that SENASA is responsible for the accreditation. Article 88° of the RTPO, suggests that "[...] the responsible authority (SENASA, annot. author) shall supervise the correct functioning of the registered certification bodies." (RTPO 2012: Art. 88°). This could be interpreted as SENASA being responsible for accreditation, in case necessary. Most of the certification bodies operating in Peru obtain an external accreditation though and hence may not rely on a Peruvian accreditation.

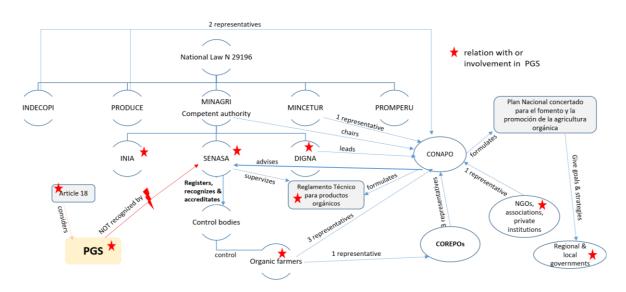


Figure 2: Map of institutions involved in the regulation of organic agriculture and certification in Peru (own elaboration).

6.3 Participatory Guarantee Systems in Peru

Peru ranges amongst the leading countries regarding the number of farmers involved in PGS. With 21,460 producers in 2015 only India overtakes Peru. The number of TPC organic farmers in contrast is relatively low though (3,347). Currently there are ten regions in Peru where PGS initiatives are operating in different stages of development (ANPE et al. 2016). Some just recently started (e.g.Huancavelica) others already operate many years (e.g. Lima, Huánuco, Apurímac). According to the *Global PGS Survey 2015* (IFOAM 2015) though, there are currently four operational PGS initiatives in Peru. In the IFOAM PGS - database ANPE (*Asociación Nacional de Productores Ecológicos del Perú*) is the only listed Peruvian PGS initiative. ANPE is listed under the category of "PGS initiatives not officially recognized by

IFOAM" (IFOAM 2016). This category is defined as: "[...] initiatives that are implementing functional certification systems to certify their producers, as well as PGS that are still under development and might not yet have functional PGS procedures in place". ANPE has 22 regional bases (ARPEs) throughout Peru, of which some are involved in regional PGS initiatives. Although recognized and mentioned by the law N° 29196 (2008) in the RTPO, which establishes the framework for implying the law, Article 85° requires certification bodies to comply with the ISO 65. This automatically excludes PGS because according to ISO 65, the process of certification needs to be impartial. Farmers doing the internal evaluation - that is visiting their fellow farmers - is not considered impartial. This means that PGS products can't be marketed as organic. There are regional exceptions, like in Huánuco and Apurímac though. Those will be mentioned later on.

The first two pilot projects of a PGS in Peru started in 2005 in the regions of Huánuco and Huancayo and were accompanied by ANPE and the NGO IDMA (*Instituto de Desarollo y Medio Ambiente*). Huánuco is also the only experience, to my knowledge, which has been subject to scientific investigation. León /Mallqui (2010) analysed in their research the economic impact of the organic market in Huánuco on producer families. Most of the PGS certified products are sold through an already before established ecological weekly market in Huánuco. The smallholder farmers (< 3 ha) of the regional PGS of Huánuco (*ADPEH*), which is the regional base organization of ANPE. The ADPEH supports its associated farmers in selling their products on the market via promoting the PGS label and technical assistance. In the case of Huánuco the main motivation to develop a PGS, was to on the one hand to support, the so called family agriculture. In the Peruvian context this does not necessarily mean family farms, but small-scale agriculture in general. As Carrion et al. (2013:40) claim, the aim of ANPE and IDMA was to counteract the governmental export-based subventions for agriculture with the support of smallholders that produce for the domestic market. (Carrion et al. 2013: 38 ff.).

In Peru the PGS organigram constitutes of three entities operating on three different levels (Figure 3): the national council (*Consejo Nacional, CN*), the regional councils (*Consejos Regionales, CR*) and the local nuclei (*Núcleos Locales, NL*) (Figure 3). Their tasks & responsibilities, internal structure and functions are outlined in the *Manual de Procedimiento del Sistema de Garantía Participativo (MPSGP)* (Ravello et al. 2015). This manual was elaborated by the national PGS council and is promoted in all regions to be used as the basis for PGS. It is important to note that the manual itself does not pose the criteria for organic agriculture, but refers to the RTPO (Ravello Gutierrez et al. 2015: 9). It is considered a guideline for PGS operating in different regions in order to harmonize the implementation of PGS all over Peru. There, the general structure, functionality and basic procedures of PGS are

defined and also the use of the PGS seal regulated. The responsibility of its implementation and compliance is with the regional councils, but also the national one (Ravello Gutierrez et al. 2015: 8). All actors in the PGS are advised to comply with this manual, which was elaborated by the National Council and its technical secretary and last updated in 2015. The manual is mainly a product of the CN, but also the regions were able to give their opinion about the content and bring in possible changes. (ibid. 2015).

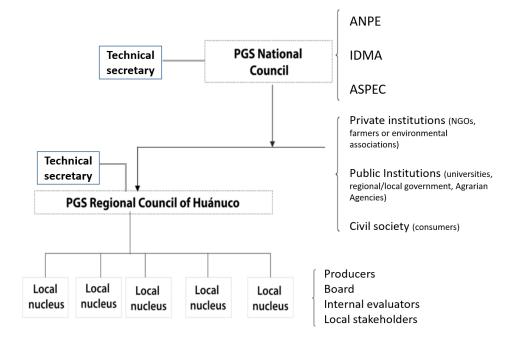


Figure 3. Organizational Structure of the Peruvian national PGS – example Huánuco (adapted from IFOAM 2014)

The monitoring process is based on an internal control of all farmers from one local nucleus by so called "evaluators" (farmers themselves of the same or other nucleus) and an external control done by the members of the regional PGS council. The CN is formed by the three institutions ANPE, IDMA and ASPEC (*Asociación Peruana de Consumidores y Usarios*). This merger of an association of farmers, a NGO and a consumer association is presiding the PGS in Peru. Formally it has a directive board, with a president, treasurer and secretary. It is mainly responsible for representing the interests of PGS on the national level, political advocacy and looking for financial support. It is accompanied by a technical secretary, which is formed by two representatives of ANPE and IDMA respectively and responsible for technical and direct advice in areas like the implementation of PGS in a certain region (Ravello et al. 2015: 19 f.). Furthermore the CN organizes the annual National PGS Forum, where actors involved in PGS from all over Peru come together to exchange experiences, discuss and also take joint decisions, like establishing technical secretaries on the regional level since 2014. Hence since 2014 in most PGS initiatives exist regional technical secretaries with two to three professionals, provided by the member institutions of the council.

The regional councils are constituted of many different actors ranging from academia, over private and public sector to civil society. According to the MPSGP they are the responsible and highest entity when it comes to the supervision of the process of PGS in the field. Likewise the CN, the CR has a directive board with president, treasurer and secretary. Since 2014 every CR has a technical secretary, which is responsible to advise the CR in technical and content related issues and is also often carrying out technical trainings for the farmers. Furthermore the CR keeps the record of every single farmer participating.

A local nucleo (NL) consists of minimum six farmers formally organized (directive board). The farmers are the core of every PGS and are responsible to comply with the PGS internal regulation, which may differ from region to region, but is mostly based on the MPSGP. Furthermore they need to carry out correctly the internal control and continuously educate themselves in the field of PGS and organic agriculture (Ravello et al. 2015: 16). In this manual also the necessary documents for the participation of the farmers and the guarantee process are outlined. Currently the following four different documents are needed:

- 1. Inscription (only when entering PGS)
- 2. Basic information about farmer, his/her living conditions, agricultural practices & land, as well as the commercialization of the products
- 3. Detailed plan of agricultural production
- 4. Internal control forms

The use of the PGS seal (Figure 4) is defined as well in the manual. All participant farmers are authorized to use this seal in their products, when approved by the PGS council.



Figure 4: PGS seal for the Sistema de Garantía Participativo Peru

"Frutos de la Tierra" – the first Latin American collective trademark

Together with ANPE and other institutions the University of Agriculture "La Molina" (UNALM) carried out the project "AGROECO" (*Ecological and socio-economic intensification for food security in smallholder agriculture in the Andes*). Apart from its focus on Agrobiodiversity, this project targeted the facilitation of the market access for small farmers, the strengthening of those knowledge and organizational systems that already exist and the development of new monitoring systems. In the course of four years (2011-2014) the project tried to establish

relationships between farmers and consumers, like it was the case of women farmers and restaurants. One of the five fields of action was the accessibility of local and national markets for small farmers. A major action in this field was the transformation of the label "Frutos de la tierra" from a private one to a more comprehensive label standing for family agriculture, biodiversity conservation and farmer organization in Peru. The then collective mark "Frutos de la tierra" is linked to a participatory guarantee process, small-scale family agriculture and the conservation and enhancement of biodiversity. The aim of the project and "Frutos de la Tierra" was to facilitate market access for smallholders, establish and strengthen the organization of farmers and create a network for the commercialization of agro-ecological products for the domestic market. What makes "Frutos de la Tierra" special in the Latin American context is, that it is not a trademark for only one product but many different products that all have the same characteristics as outlined in its set of rules (ANPE Peru 2013). This set of rules was elaborated mainly by representatives of ANPE and UNALM in the course of the project AGROECO. The collective mark is registered with the Instituto Nacional de Defensa de la Competencia y de la Propiedad Intelectual del Perú (INDECOPI) and is only accessible for members of ANPE or one of its base organizations (ARPEs). PGS in this context are deemed as instruments for small-scale family farmers to stand out with and establish trust in their products. They represent one element in AGROECO's strive for improving the grade of organization of agricultural producers. The formation of farmers as inspectors for the farm visits, as well as the establishment of strategic alliances between organic markets and farmers, were actions undertaken to promote and strengthen PGS. The "Frutos de la Tierra" label is not limited to PGS-products, but can also be requested by other organic farmers. In this case an inspection by one of the regional bases of ANPE needs to be carried out, in case the producer does not obtain any organic certification yet. According to the webpage of "Frutos de la Tierra", there are currently over 27 local and regional markets, called "ecoferias", around Peru. To improve and foster PGS, a system of monitoring and evaluation (Sistema de Seguimento y Evaluación, SyE) was also implemented, which aimed at increasing participation, improving the positive impact of the certification system on its members, making accounting and the economic management easier and enhancing a process of continuous learning and reflection (Van den Eeckhout, Carrión 2011: 41). For further information about the detailed objectives, measures and achievements of "AGROECO", additional project reports (Ugás, Van den Eeckhout 2013, ANPE, USAID 2013) and publications in the journal LEISA (2012, 2013, 2014) may be consulted.

In 2012 two trained researchers, Jannet Villanueva and Angel Ramires Lujan Sanchez (members of IDMA and ANPE) conducted research in Peru for an IFOAM global comparative study on the interactions between social processes and PGS. In the course of this study the PGS in Huánuco, which was initiated in 2005 by the IDMA and ANPE, was investigated. After Page **32** of **112**

semi-structured interviews, surveys amongst farmers and a final participatory consolidation workshop Villanueva and Lujan Sanchez found that five of the seven main social processes identified during the whole research project were incorporated in the PGS of Huánuco. The five social processes positively influencing the PGS in Huánuco are (Villanueva, Sanchez 2014):

- 1. Sharing information, techniques and traditional knowledge
- 2. Collective marketing
- 3. Collective Seed management and conservation
- 4. Small-scale savings systems
- 5. Committed, informed and supportive consumer base

These findings are in line with the description of the PGS in Huánuco by Daniel Carrión (2013). In 2014 several agro-ecological markets, RAE Peru (*Red de Agricultora Ecológica Peru*), the UNALM (University of Agriculture in Lima "La Molina") and *Centro Ideas* joined forces and created a network of organic markets, the *Red de Ferias y Mercados Ecológicos con Garantía (FyME)*. The aim of this network is to further local organic markets and fairs by supervising and monitoring the producers selling at the markets together, in order to provide consumers with guaranteed healthy food (Alvarado de la Fuente 2016).

7. Methods

7.1 Research Partners

First contacts have been established with Prof. Roberto Ugás from the "Universidad Nacional La Molina" (UNALM) in Lima and Antonieta Manrique & Fernando Alvarado de la Fuente of the RAEP before going to Perú. All three of them are actively involved in the área of PGS. Prof. Roberto Ugás, representing the UNALM, was part of the Project AGROECO, which aimed at strengthening the linkages between markets, sustainable farming practices and smallholder farmers in two Andean Regions of Peru. Amongst other measures by creating a brand in combination with PGS (Villanueva 2014). Prof. Ugás was crucial in establishing the first contact to many stakeholders of PGS on the national and regional level. Two of these contacts were Luis Ravello, a former employee of IDMA and now project coordinator in ANPE, and Gabriel Mejía, program coordinator of IDMA Lima-Lurin and president of the Regional PGS Council Lima. Both accompanied my research throughout the whole time by either providing me with in depth information about PGS in practice, upcoming events or introducing me to the "PGS scene" and its actors. The other interview partners on the national level, were a representative of the National Organic Farmer's Association (ANPE), an academic professor, 2 former employees of IDMA, a representative of IFOAM and two activists, who are part of the agroecological movement in Peru for a long time. They are both members of RAEP, one of them, Fernando Alvarado, holding presidency at the time of the interview. RAEP, in its function as a network for agroecology, focuses in many of its projects on the commercialization and promotion of organic products. Many of its institutional members, like the NGO IDMA, are involved in the promotion of PGS in Peru. On the regional level three representatives of the CR of Lima and five of the CR of Apurímac were interviewed. In both regions one government official was interviewed, in order to not only get the viewpoint from civil society activists (NGOs, farmer's association). On the national level I wasn't able to achieve an interview with a responsible representative of the government. Furthermore in both regions the president of the regional council was interviewed and the other interview partners were chosen according to their availability and their active involvement in the PGS CR.

My interview partners for the structured interviews (questionnaires) were 46 small-scale farmers located in Lima and Apurímac. Getting into contact with the farmers was the most difficult task throughout the field research in Peru. Here the support of the NGO IDMA was of utmost importance. In Lima I was able to accompany employees of IDMA to three field visits and during one of them a pilot test of the questionnaire was undertaken with seven farmers from Santa Eulalia, province of Huarochiri. The first contact to the later participants in Lima was established during an event organized by the regional PGS council of Lima in September. Here I got to know members of the association "Red de Agricultores Ecológicos Huertos en

Linea-Lima Sur", as well as a professional of the Agrarian Agency Lurin who helped to contact and also visit farmers from two associations (AREPA and ECOSUMAC) in the outscirts of Lima Metropolitan (Pachacamac and Lurin). In Apurímac, the two NGOs IDMA and IIDA (*Instituto de Investigación y Desarrollo Andino*), supported my research through invitations to workshops, reunions of the CR and field visits.

7.2 Research Area

The two regions selected for investigation are Lima and Apurímac (Figure 5).

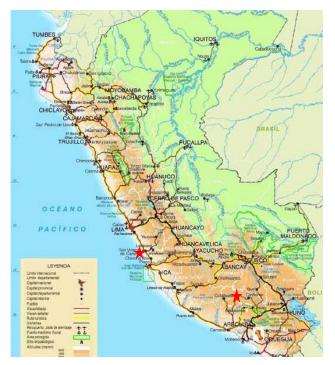


Figure 5: Map of Peru and the two regions of investigation with a red star ⁶

Apurímac

The region of Apurímac is located in the south of Peru in the Andes, bordered by the regions Cusco, Arequipa and Ayacucho. With a size of 20 895,79 km² it makes up for only 1.6 % of the area of Peru. It is divided into the seven provinces Cotabambas, Antabamba, Grau, Aymaraes, Abancay, Andahuaylas and Chincheros. Around half of the population (404,190) is living in rural areas and agriculture is contributing the biggest part to the region's GDP (21.9%) and 49 % are employed in this sector. The level of malnutrition is high with 53 % and Apurímac shows the highest illiteracy rate in Peru with 21.7 % (DRA 2013: 4f.). The mining sector is expanding increasingly and causes several political and humanitarian debates⁷.

Due to its geographic situation Apurímac's area can be divided into three agro-ecological Zones (DRA 2013) (Figure 6).

⁶ http://www.orangesmile.com/travelguide/peru/country-maps.htm

⁷ http://elcomercio.pe/sociedad/apurimac/se-reactiva-conflicto-proyecto-minero-bambas-noticia-1892122

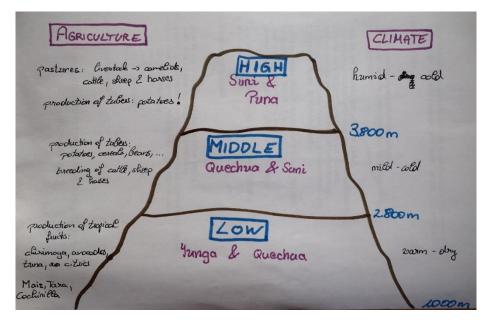


Figure 6: Agro-ecological zones in Apurímac (own elaboration)

The main problems Apurímac is facing in relation to agriculture are the scarcity of water, few links of markets to the broad mass of small-scale farmers, a low agricultural productivity on the individual scale and very few investigation and innovation in the field (DRA 2013: 10 f.). The research was conducted in the province of Abancay only and farmers in the four districts Abancay, Lambrama, Circa and Tamburco were visited. Even though those districts are all in the same province, getting to the communities in Lambrama and Circa was difficult and time consuming. The NL Caype in Lambrama for example was only accessible by motorbike or a 3 hour walk by foot. Caype (Lambrama) and Circa are the nuclei located at the highest altitude (3204m, 3120m). The NLs in Abancay and Tamburco are in the lower area of yunga and quechua (Figure 7)



Figure 7: Region Apurímac - NLs visited in four districts: Abancay, Tamburco, Circa, Lambrama (adapted from google maps)

Lima

The region of Lima is located in the central western zone of Peru, bordered by the regions Ancash, Huánuco, Pasco, Junín, Huancavelica and Ica. The region comprises of many different ecological zones due to the different altitudes in the two natural zones of costa and sierra. At a size of 32.126,46 km2 it makes up for 2.5 % of the total area of Peru (MINAGRI 2009: 4). It's divided into nine provinces and 128 districts. The investigation took place in the province of Lima. Lima is on the costa and characterized by a humid climate and desert like landscape with arid grasslands. 94 % of the agricultural land needs continuous irrigation. In the city of Lima the average annual precipitation hardly reaches 25 mm (FAO 2014: 59). In the inland mountainous areas the agricultural production merely exceeds the own consumption (MINAGRI 2009:6). Agriculture on the costa is characterized by big-scale export agriculture (asparagus, grapes, avocados), but also a huge amount of small-scale farmers ("minifundios") and animal husbandry (92.7 % chicken) (MINAGRI 2009: 9 ff.). Although the farm size on the coast is already small (average 2.72 hectares), the average farm size in the mountainous regions is even smaller with 1,49 hectares. Since the farmers visited were all located in Lima Metropolitana, I will focus in the following on this province. In the city of Lima, the capital of Peru, more than one third of the national population is concentrated (~ 10 million habitants). It is one of the most densely populated cities in Latin America, but at the same time one of the ten most prominent South American cities of urban agriculture (FAO 2014). Mostly in districts of the south, north and east of Lima urban agriculture is very present. 60 % of the urban farmers cultivate less than 1 hectare. The production focuses mostly on vegetables (ibid.: 62). The production is usually just for self-consumption and is predominant in areas with high poverty indices. In three districts in Lima Metropolitana farmer's associations were visited and were part of the investigation. Lurin and Pachacamac are located in the south of Lima, where the population density is already less than in the more central areas of Lima. The network of urban gardens of Villamaria del Triunfo Red de Agricultores Urbanos Huerto en Linea – Lima Sur on the other hand is located in a densely populated district in the south of Lima (Figure 8).

The most urgent problems to agriculture in Lima Metropolitana at the moment are the scarcity of water and the risk of pollution through animal husbandry (mainly swine) in the city (ibid.: 64 f.).



Figure 8: Region Lima- NLs visited in four districts: Villa Maria del Triunfo, Lurin, Pachacamac (adapted from Google maps)

7.3 Sampling and Data Collection

7.3.1 Literature Analysis

Before going to Peru and collecting data in the field, I engaged in an extensive literature research. Through online search tools like Scopus & Web of Science books, publications from different institutions, scientific publications, texts of laws and a collection of literature provided by Prof. Christian R. Vogl, I created a profound base of knowledge about organic certification in general and PGS. Since scientific literature on the actual functionality and structure PGS is scarce, I circumcised the topic from different disciplines and then integrated those to give an overview of the status-quo in literature about certification in organic agriculture and PGS. For conducting research in Peru, knowledge about specific regulations and standards of organic agriculture and certification in the country is as necessary as being aware of cultural and social aspects. To prepare for the former especially newspaper articles from "El Peruano" and governmental publications were studied and revised. To reach the latter, a language "tandem"⁸ was conducted with someone from Peru to practice my language skills on the one hand and to get some insights into social manners and traditions that might be helpful to know prior to the field research.

7.3.2 Semi-structured Interviews

All the qualitative interview data was collected during four months in Peru. Once in Peru, the first month eight semi-structured guided interviews with experts from different entities (universities, NGOs, associations) working on the topic of PGS or being enrolled in PGS on the national level, were conducted. Therefore an interview guide was developed in Austria,

⁸ A language tandem is a way of practicing foreign language skills with someone who speaks this language as a mother tongue and vice versa.

following the suggestions of Bernard (2006) about question wording and interviewing in general. The contacts to two of the key informants were established before the field trip. People were considered as a key informant when they held some kind of responsibility for the draft, implementation or the control over a certain solution of a problem or if they obtain a privileged access to information about PGS (Mayer 2013:41). The interview partners were chosen through non-probability purposive sampling and in some cases snowball sampling lead to new contacts. Roberto Ugás from UNALM, played an important role in approaching potential interview partners in Lima. He introduced me to some of them via e-mail. The semi-structured interviews were all conducted during personal meetings in Lima, since most of the institutions and their representatives are located there. All but one interview (technical problems) were audio-recorded and notes were taken during the conversation. These interviews revealed the stakeholder's perceptions and opinions about PGS in the Peruvian context. Furthermore the information gained from these interviews and the ones with the CR helped in the process of describing the regulatory system of organic agriculture in Peru. This implied the identification of the different system elements, their relation to each other and the underlying processes in the area of the regulatory system.

Based on the information and findings of this first data assessment, two regions for further data collection were selected. In the beginning I wanted to collect data in three regions – one in each ecological region (*sierra, selva, costa*) - in order to reveal possible differences. The three ecological regions are not only very different in terms of geography, climate and agriculture but also in culture and lifestyle. Due to time limits I decided to stay with two regions, one in the mountains (*sierra*) and one on the coast (*costa*) in order to get more in depth information about them.

The decisive criteria for choosing the two regions were, that the PGS was "active" and the CR was willing to support my research. Active meant, that a consolidated CR and affiliated farmer's associations carried out the process of quality assurance, as outlined in the PGS manual, and *constancias*⁹ were handed out. Based on these criteria the two regions Lima (coast) and Apurímac (Andean mountains) were selected. The interview guide for the interviews with the regional councils was developed in Peru, based on the information gathered from the first three interviews on the national level and a conversation with Ing. Roberto Ugás from UNALM. Three representatives of the CR in Lima and five from the one in Apurímac were interviewed. All but one (interview partner preferred not to be recorded) were audio-recorded. In both regions one representative of the institution presiding the CR and at least one representative of a public

⁹ Since PGS are not accepted by SENASA as certifying systems, farmers receive a "constancia" instead of a certificate, if their product complies with the standards outlined in the MPSGP and the Peruvian regulation on organic agriculture.

entity were interviewed. The importance of interviewing a public entity is rooted in the current debate about the official recognition of PGS by the Peruvian state, specifically SENASA (*Servicio Nacional de Sanidad Agraria*). Hence it was considered very important to include the opinions and perceptions of government officials involved in PGS in this research. Both interviews on the national and on the regional level were conducted during private meetings in the offices or any other quiet places chosen by the interview partners.

7.3.3 Structured Interviews

The second and most time-consuming part of the field research, were the structured interviews with 22 and 24 farmers in Lima and Apurímac respectively. In the region of Lima, farmers from three different associations were interviewed and in Apurimac farmers from nine different nuclei were interviewed. The different number of nuclei in the two regions is rooted in the difference in data collection. In Lima, the three associations could be visited various times and hence more farmers from one association were interviewed. In Apurímac on the other hand, the associations were located far away from the city of Abancay, were I was stationed, and mostly required someone from the NGOs, working with the respective farmer's community, to accompany me there. Hence the nuclei could only be visited once mostly. The questionnaire for these interviews was inspired by the one created and applied by Sonja Kaufman during her research about PGS in Mexico (Kaufman 2016) and adapted to the Peruvian context and my research questions. The questionnaires were completed during a personal conversation with the farmers (structured interview). The decision to complete the questionnaire together with the farmers instead of leaving them alone with it, was based on the experience during the pilot test with 8 farmers from two different farmers associations in Santa Eulalia, Chosica. It showed that those farmers that completed the questionnaire on their own, tended to skip several questions for different reasons, but mainly due to problems of comprehension. After the pilot test the questionnaire was adapted, shortened, several questions reformulated and one initial research question dropped. This in order to shorten the questionnaire, which in the end comprised in total of 63 questions. In the ongoing of the data collection, it resulted to be of great advantage completing the questionnaire together with the farmers, due to a higher information value and a more holistic image of the farmer's everyday life and perceptions. This often was an added value for the study and very important in many different ways. For example outstanding statements were noted during the structured interviews, and topics brought up by the farmers, that were not directly related to the questions asked, but crucial to get a better understanding of their perceptions and worldviews.

Visiting the farmers on my own was preferred and done, if possible. In many cases mobilization and/or knowing the region was necessary due to the geographic remoteness of some farmers, hence in some cases I accompanied a professional of the NGO working with them or a

professional from the Agrarian Agency Lurin in Lima. Few farmers were also approached on the market days on weekends and interviewed directly there.

7.3.4 Participatory Observation & Field notes

Apart from the mentioned methods, Participatory Observation, especially during farm visits and events was applied. In case I was accompanied by an employee of the local NGO, I was able to get a better understanding of the relationship, communication and the interaction between the regional (NGOs) and the local (farmers) level of the PGS. Pictures and notes after farm visits were taken to help contextualize the questionnaires in the different local nuclei. Further on an extensive mind map was created during two meetings of the national PGS working group, which was initiated during the time of my stay. Notes and audio recordings from several national and regional events on agroecology and PGS will complete the data collection.

7.4 Data Analysis

Throughout the four months of field research in Peru, both qualitative and quantitative data was gathered. In the following sections the tools used to analyze this data will be explained in detail.

7.4.1 Semi-structured interviews

Using an inductive coding approach, interviews with the key informants on the national level were analyzed and so the current main topics and debates about PGS in Peru, as well as the expert's perceptions of PGS in general were revealed. Therefore interviews were verbatim transcribed with the f4 transcription software. Then the transcripts were roughly read through in printed version to get an overall impression of the content. After that the transcripts were coded in detail with the software Atlas.ti. The coding approach was an inductive and descriptive one (Saldana 2012). This means that codes and categories were derived based on the transcript by going through it and highlighting passages or keywords. Key words, phrases or passages were considered as relevant if they were mentioned various times, if the interview partner stressed the importance of the said or if the stated things have occurred in relevant literature. The codes were then grouped into specific categories. Sometimes one code was assigned to two different categories, because the statements subsumed in this code were for example both critical and descriptive at a time. The categories helped to reveal the current main topics in the debate about PGS on the national level, the main characteristics of PGS, as well as challenges faced at the moment. One mind map, product of two private meetings of the PGS normative working group in Lima, as well as one summary of an informal additional meeting with a key informant were also included in this analysis. The so derived categories, were then assigned to two general themes. For the two interviews (one on regional, one on national level) that could not be audio-recorded the notes were used. During the analysis the statements were always tried to be viewed and interpreted in the context of the key informant's Page **41** of **112**

institutional and personal background (assessed through the question: "How are you involved in the topic of PGS?"). Code – Document tables, that showed frequencies of selected codes in the respective interview, and co-occurrence tables were created to visualize the data. The latter is a method were one can analyze those codes that were applied to the same text passage.

For analyzing the regional interviews a more deductive approach was followed, since the interview questions were more specific. Codes derived from the analysis of the interviews on the national level were applied also for the regional interviews, in case they were applicable. Some of the questions were used as categories for the coding. Questions and hence categories were based on prior literature research. Using a systems approach the information will be analyzed. Systems can be defined as "[...] components that interact together to achieve a particular purpose." (Berardi et al. 2015: 3). PGS are very complex systems that do not operate in a vacuum, but are rather influenced by a wide range of internal and external factors. Before trying to analyze internal structures, processes and functionalities though, it is of crucial importance to set the boundaries of the system. This means asking what subsystems and elements constitute a PGS in Peru. After setting these boundaries it will be possible to distinguish between internal and external influences and elements. Hence based on the regional interviews and additional information from some of the national interviews, the elements of the two PGS in the region of Lima and Apurímac were identified and then used to create two system maps. System maps are tools used in system's thinking to help understand complex systems and processes in a visual way. The main steps in developing a system map are identifying the subsystems and elements of each subsystem, describing those elements in the context of their actuation and describing the purpose of the system (Vester 2007: 184 ff). Based on the two system maps, a simple influence map was developed.

7.4.2 Structured Interviews

The questionnaire completed by the farmers contained closed and open-ended questions. The quantitative analysis was done with IBM SPSS Statistics 24 following a priorly descriptive statistics approach. This means that all the statements and conclusions drawn from the data can only describe this same data, but cannot be generalized and applied to other regions with PGS. Prior to testing correlations, demographic data was analyzed calculating absolute and relative frequencies to show how the sample was constituted. Focus was laid here on sex, education, age, the economical and the work situation of respondents. Two questions aimed at specifically assessing the knowledge of farmers. For the analysis question 32, asking about the existence of a PGS internal regulation and question 38, where farmers needed to put four given steps of the process of PGS in the correct order were combined under the variable "knowledge PGS".

To compare the two independent sample groups (Apurímac and Lima) non-parametric methods were used. For nominal variables cross-tables were created and Chi-square was used to test if the variables were related. In case of less than five cases in any cell of the cross-tables, the Fisher's exact probability test, instead of chi-square was applied. In case of the Likert Scales the Mann-Whitney U test was applied to analyze e.g. the perceived utility of different information sources. The problems farmers identified were coded qualitatively in an Excel file and graphically depicted.

7.4.3 Participatory observation

The field notes taken at the various events that I assisted, were used to complement the analyzed data and make the results more comprehensive.

In the process of triangulation the data assessed on the three levels was combined and two influence diagrams created. These were based on the two system maps, developed with the data from the semi-structured interviews, and shall depict the interrelations between and responsibilities of the actors as well as the dynamics of the PGS in Lima and Apurímac. By studying the interactions and the overall connectedness of the system with its environment, a better understanding of the system behavior can be reached (Vester 2007: 188 f.) Triangulation was understood, as defined by Flick (1998:230):

"Triangulation is less a strategy for validating results and procedures than an alternative to validation (...) which increases the scope, depth and consistency in methodological proceedings."

In this understanding triangulation helps to get a more holistic and complete image of the research object.

7.5 Ethical Considerations and limitations of the investigation

Before reaching Peru contacts have been established to Prof. Roberto Ugás Carro from the UNALM and two representatives from RAE Peru. Prof. Ugás was very helpful in establishing the contacts to the key informants for the semi-structured interviews. The interview partners were all very open to share their experiences and sending them my concept paper, resulted to be of great advantage in gaining their confidence. This due to the fact that my level of knowledge about PGS was mostly sufficient then to follow their explanations and allowed for a more in deep conversation. The great readiness to support my work and allowing me to participate in private reunions and working groups at the same time confronted me with the high expectations people had in my research and my person. Invitations to panel discussions and presentations, which were far out my range of competence and also risked to jeopardize my role as a researcher. I usually rejected these invitations, which sometimes left me in a

dilemma of wanting to return the favor the counterparts were doing me and not stepping out of my role as a research student, into one of a consultant

The selection of the farmers was absolute convenient sampling and mostly based on the support by the NGO IDMA, which was the most important actor in establishing the first contact with the farmers. In fact, in Apurímac it would have been very difficult to approach farmers from at all, since they were mostly situated in rural areas difficult to reach and find. Only some came to the weekly markets regularly and also there they were hard to identify, since not all of them identified themselves as being part of PGS. When possible I visited and interviewed the farmers by my own, which was possible with most of the farmers in Lima. In Apurímac though, I strongly relied on IDMA and was accompanied by various professionals working with the farmers. Approaching the farmers with the IDMA workers sometimes created a kind of loaded atmosphere and in one case the farmer seemed to fear of answering incorrectly and the worker tried to intervene in order to "support" the farmer in answering. After this experience I asked my companions from IDMA for privacy when interviewing the farmers. Due to the relationship and also the slight dependence on IDMA when choosing the farmers in Apurímac, may have had some distorting effects on the results.

Although the questionnaire was adapted two times and tested on seven farmers before starting the field research, to some farmers the questionnaire was difficult and long. This was mostly influenced by the time availability of the farmers, their patience and my ability to connect with them. In one NL linguistic difficulties appeared due to Quechua-speaking farmers. Here translators (mostly their sons or daughters) were very helpful. Other limitations in the interviews might have been the honesty of farmers, in case of controversial topics like problems or knowledge questions. As mentioned some farmers feared of being evaluated by my interview, therefore I always tried to make clear that my role was completely external and not related to any institution in Peru.

8. Results

The following chapter is composed of four parts, reflecting the four research questions. In the first the structure of the two PGS initiatives under investigation are depicted. Then the perception of the interviewed key informants will be presented and a general picture of the current topics and debates shall be drawn. The last two chapters are dedicated to the perceptions of farmers about technical training and eventual problems identified.

8.1 Structure and Organization of PGS in Peru

The general structure of PGS in Peru has already been shown and explained in chapter 6.3. Here I want to present though the role and importance of the CN observed throughout my research and then in detail describe the two PGS initiatives under investigation, Lima and Apurímac. It has to be noted that the experiences in those two regions can't be generalized for all initiatives. They can only serve to better understand the functionality of PGS on a regional and local basis and identify common features and differences.

While in some regions the national council works directly with the NLs, both Lima and Apurímac show rather independent operating regional PGS councils. Both regions use the PGS manual (MPSGP), designed by the CN, as the basic regulation. The CR Apurímac has elaborated its own internal regulation incorporating the MPSGP. The manual was developed mainly by the national technical secretary and the national PGS council, but has been revised and approved by the regions. Still the national council holds some kind of ownership on the regulation because it is also responsible for the dissemination of the regulation in regions that are planning to start a PGS initiative (Ravello 2016). This ownership came to be a central point of discussion during the National PGS Forum in Ayacucho in 2016. There, the president of ANPE and member of the national PGS council, Felimon Mechato, announced that the PGS seal has been officially registered to the name of the three member institutions of the national council (ANPE, IDMA, ASPEC). This caused mixed feelings among stakeholders, but was mostly criticized by representatives of various regional PGS councils, like Huancavelica and Apurímac fearing that this means privatizing PGS and in the long run making it more difficult for farmers to not only access the label, but also hampers bottom up PGS initiatives. In Apurímac this action of the CN even lead to the temporal stop of the monitoring process by the CR, demanding explanation and justification of the CN for the registration of the PGS seal. The idea of creating a franchise out of PGS was also mentioned by one interview partner, a representative of ASPEC:

It's (PGS, annot.of author) like a franchise. "Ok, you want to do PGS? Perfect, this is what you need to do and we will be supervising you." So with this we standardize it and make sure that everyone is following the same standards. (Mendiola 2016: 44:54)

Cecilia Mendiola is representing ASPEC on the regional and the national level and considers her contribution to PGS to be advocacy and political lobbying. She justifies the need for a franchise with examples of misuse of PGS by NGOs in some regions in order to gain funding. Registering the PGS seal officially, limits the access to the use of the seal to all those who comply with the MPSGP.

With PGS being illegal on the national scale, the state doesn't earmark funding for its promotion and implementation. Hence it is more the responsibility of the national council (mostly ANPE and IDMA) to promote PGS also on the regional level and provide the regions with technical trainings, says a representative of ANPE (Lujan 2016). A former representative from IDMA and the technical secretary of the national council has made an additional observation. He thinks that the national council has been pulling back from the regions in the last few years, which has sometimes caused irritation in the regions and PGS initiatives to collapse (Ravello 2016). During the interviews on the regional level stakeholders mostly saw the CN as an external entity, not present in the day-to-day activities of PGS and hence a marginal figure.

The main function of the CN is indeed the political advocacy on the national scale. This was reflected in the PGS working group, which formed in September 2016 and was constituted of representatives of the MINAGRI, ANPE, IDMA, UNALM and other institutions based in or around Lima. The aim of this group was to create a constructive dialogue between the DIGNA *(Dirección General de Negocios Agrarios)* and private/public institutions. DIGNA is part of MINAGRI and leads the CONAPO. Hence it is a potential influential actor in the national recognition of PGS.

Another activity of the national council is the organization of the annual National PGS encounter, which in 2016 was held in Ayacucho. This encounter is a space for the regional PGS initiatives to meet and exchange experiences and knowledge. Every forum ends with a declaration, where the main objectives and aims and the achievements so far (Annex 2).

8.1.1 PGS initiative Lima

The regional council in Lima exists since 2008 and is carrying out the participatory control annually since then, with a break from 2008-2010. The region of Lima is politically divided into two different regional governments: *Lima Provincia* and *Lima Metropolitana*. The founding institutions INIA, IDMA and ASPEC are members of the council until today. Interviews were conducted with one representative of each institution. INIA is a governmental institution of agrarian research. The representative of INIA explained that the involvement of INIA in the CR Lima is based on a personal invitation by IDMA. IDMA, together with ASPEC and ANPE, is part of the national council and was one of the main driving organizations in the beginnings of PGS. Throughout my investigations in Lima, IDMA was accompanying and consolidating

various nuclei, but also forming new ones. IDMA is involved in political incidence as well as in the field. At the time of investigation IDMA presided the CR Lima and I interviewed Gabriel Mejía, who represented IDMA in the CR. ASPEC on the other hand is rather working on the political level and is rarely involved in the direct communication with the farmers or the process of external control, as Cecilia Mendiola explains.

In Figure 9 a system map of the regional PGS council Lima is presented. The boundary of the system is the CR, hence for example the CN is an external element. As can be observed the CR consists of several subsystems, which either again contain subsystems or elements. Subsystems are characterized by the boxes, elements by mere text. Those subsystems operating on the same level are in the same color. Hence all the subsystems at the regional level are colored in shades of green and all on the local level in shades of red. The external elements are all in orange. To get an idea of the different subsystems, I will describe them shortly in the following. The main purpose of the PGS council in Lima is...

...to annually guarantee the organic quality of agricultural products, through a participatory and social process in order to support small-scale organic farmers.

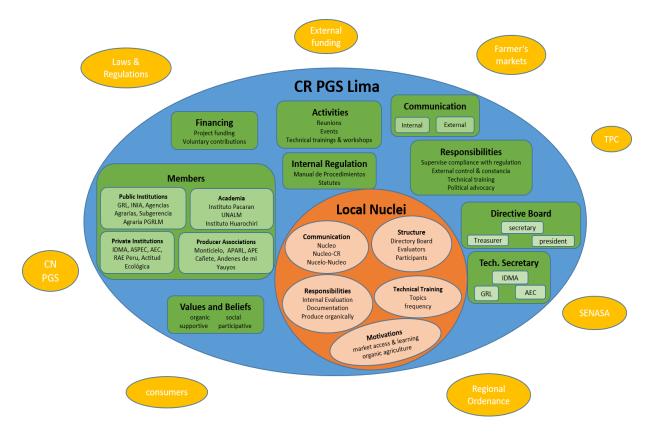


Figure 9: System map of the regional PGS council (CR) Lima (blue = the system boundary, green = subsystems & their elements (light green) at the regional council level & red = subsystems & their subsystems & elements (light red) on the local level. Orange = the external influence factors on the regional council) (own elaboration).

Subsystem Members

Officially 17 institutions constitute the regional PGS council of Lima. In contrast to Apurímac, in Lima many different farmer's associations and public institutions are involved and one representative of the regional government (GRL) is also part of the technical secretary. One representative of the national institute for agrarian investigation (INIA) was interviewed. Three academic institutions and four producer's associations, who at the same time are nuclei, are members of the council. Among the five private institutions is the one holding presidency at the time, IDMA. IDMA is a very present and active member of the council and together with ASPEC their representatives are also part of the national council. Both, together with INIA they are the founding institutions of the PGS council Lima. The participation of all of the members is voluntarily and hence it depends on the institutions if the representative's time invested is being remunerated or not. According to the interviews and own observations, strategies are diverse and range from totally voluntary (mostly in the private and producer area) to including it in the remunerated working time (mostly public area). The degree of engagement varies strongly among stakeholders. According to the current president of the regional PGS council, Gabriel Mejía, around 12 of the 16 institutions are actively involved. This means they are participating in the council's meetings, events and are assuming tasks.

Subsystems Technical Secretary and Presidency

Since 2014 there's a technical secretary assisting the regional PGS council. The members are denominated annually, need to be representatives from the institutions of the CR and be competent in organic agriculture and its regulations, as well as the regulation of PGS. In Lima a representative from IDMA, the regional government of Lima (GRL) and the *Asociación Ecológica Cieneguilla (AEC)* conform the technical secretary. Their main tasks are advising the CR in content-related issues, processing the data and information of the internal control submitted by the farmers and planning and coordinating the external control visits of the CR.

The president of the council, as well as the other official functions (treasurer & secretary), are elected every two years by the members of the council. The main responsibility of the president is to summon reunions and to coordinate the communication between the members.

Subsystem Internal Regulation

According to the three interview partners there are two regulations applying for the internal processes. One is the statute of the regional council, which regulates the formal issues, like decision making, reunions, term of presidency and so on. The *Manual de Procedimientos del Sistema de Garantía Participativo (MPSGP)* regulates the participatory guarantee process in Lima.

Subsystem Responsibilities

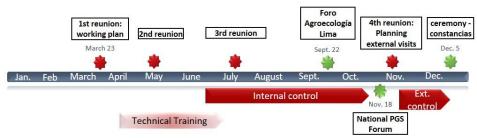
The three main responsibilities of the regional PGS council Lima are the supervision of the compliance with the internal regulation, the MPSGP, performing the external control, issue the constancias and provide technical training for the farmers and sometimes also to the members of the regional PGS council. Supervising the compliance includes processing applications of new nuclei, as well as the records of the internal control and checking the formal status of the nuclei. The external control takes part after the internal control, done by the farmers, is concluded. Two to three members are visiting a minimum of 20 % of the farmers from one NL. The farmers are selected randomly and the appointments are made prior to the control visits. To be able to conduct the external control, CR-members are obligated to participate in a training for evaluators. Luckily I could attend the ceremony of the constancias in Lima in December, where I was able to observe how various representatives of the institutions forming the council, were handing over the constancias to the farmers. A crucial task of the regional PGS council are the workshops and technical trainings for the farmers. A more detailed description of the technical training will be given in the subsystem "activities". These tasks are more or less all related to the responsibility of accompanying farmers. Especially in the beginning institutions accompany and advice newly entered or formed nuclei. Political advocacy on the regional level is mentioned by two of the interview partners. At the moment of investigation the council was strongly engaged in achieving the local recognition (ordenance) of PGS in various districts, like the following quote explains:

We are promoting events and politics. For example in the district of Pachacamac. They already think about an ordinance. (Mejía 2016: 28:39)

Subsystem Activities

This subsystem contains the three elements reunions, events and technical training, which represent the main activities carried out or organized by the regional PGS council. Technical training is considered as crucial by all interview partners. In the course of PGS there are compulsory and voluntary trainings for farmers. The compulsory ones are the ones teaching farmers the basic principles of PGS and the internal regulation (in case of evaluators). Sometimes there is also a workshop about the necessary documentation and how to fill certain forms. These trainings are always in the initial phase of PGS. Annually there are special trainings for those farmers, who will carry out the internal control in their nuclei, the so called evaluators. Although the president of the CR clarifies that PGS is not an instrument to teach farmers about organic agricultural practices, workshops related to these issues are provided if the farmers themselves ask for them. I was able to attend two of these workshops. One given by a representative of the Agrarian Agency of the district of Lurin about organic fertilizers and one about commercialization by a representative of the municipality of Villa Maria del Triunfo. Page **49** of **112**

The events are mostly organized through the contribution of several member institutions with the aim to call attention to PGS. In 2016, an agro-ecological Forum was organized with the municipality of Lima. Annually a public ceremony where PGS *constancias* are handed out is organized at the end of the year. After analyzing the three interviews, it was difficult to know how frequently the CR was reuniting throughout the year, because two of the interview partners only participate sporadically in the formal reunions. Combining the information from the president of the CR with a presentation given at the National PGS Forum, the following timeline for the year 2016 was created and all the activities I could ascertain (Figure 10). It has to be noted, that the internal control is not an activity of the regional council, but was included for a clearer idea of the participatory guarantee process. The national PGS forum was organized by the national council mostly, but represents a very important event for all the PGS initiatives in Peru.



Agenda - Regional PGS Council Lima 2016

Figure 10: Agenda for the activities organized by the Regional Council (CR) Lima in 2016. Red arrows=Processes performed by CR, red stars=internal meetings of CR, green stars=public events attended/organized by CR.

Subsystem Financing

At the moment of investigation there was no internal source of funding. There is no membership fee and the farmers participating did neither pay for the external controls, nor the technical trainings (also proven by the results from the farmers questionnaires). Hence arising expenses have to be covered by the member institutions of the CR. The time dedicated to the reunions and events are either voluntary contributions by the representatives or financed by their institutions. Expenses for the external controls, which often imply long distance journeys and board and lodging, are covered by the private institutions and here especially IDMA. This was revealed throughout the interview with the representative of INIA, in which she states that IDMA is covering her expenses when carrying out the external controls. Material contributions, like a truck for visiting the farmers or a location to meet for the reunions, are given by those institutions that have the possibility to do so. Generally the PGS council in Lima relies a lot on the voluntary contributions of its members and the monetary or material contributions of the institutions they represent. IDMA, a major donor in this case, is allocating funds from (mostly) international projects they achieve, to promote PGS. Those projects are not solely dedicated

to PGS, as the IDMA representative explains, but rather they are in the field of sustainable agriculture or agro-ecological markets and contain PGS as one element.

Subsystem Communication

This subsystem was divided into two further subsystems: the external and the internal communication. External communication means the communication of the CR with its environment and was considered important, because it shows how the PGS council is making PGS visible. The CR itself is only promoting and disseminating PGS through jointly organized events, as mentioned above. Most of the work in this area is done by the institutions themselves. Every institution in their own field of action is disseminating the concept of PGS through for example print publications¹⁰, radio programs or workshops. Here the diversity of actors is a potential benefit in disseminating PGS among different kinds of people and in different areas.

The communication between the members (internal) is mostly through emails and phones. Assemblies and reunions are usually summoned by the president, but already planned in the first reunion of the year. In case of urgent issues, also other members can summon an assembly. According to the president Gabriel Mejía there is a constant communication between the nuclei and the regional council. This through the so called leaders of the farmers associations, who represent their NL in reunions and events. Most of the time those leaders are either part of the directive board and/or they are evaluators inside their NL. In this way a continuous flow of information shall be guaranteed.

Subsystem Values and Beliefs

During the interviews with the regional PGS actors, they were asked why they decided to get involved in PGS. I expected to receive manifold reasons and underlying motivations and I did, but all of the interviewees agreed in one thing. They were all seeking to support those small-scale family farmers, who, in their opinion, were ignored by national agricultural politics and the public in general. They all saw a great need to make those farmers visible to the public. The belief in organic agriculture and the necessity for it in Peru is uniting them as well, although the motives are different. Here for some health aspects, for others environmental aspects are most important. PGS is also seen as part of a social and participative process, which aims at empowering farmers. The participation of consumers is in the same way important like the involvement of public entities.

¹⁰ E.g. Guía de Buenas Prácticas Para Productores Agroecológicos, (Vilcapoma, Mendiola: 2014), SGP-Instrumento de Inclusión, Promoción y Certificación de Productos Agroecológicos que Cuidan la Salud y el Medio Ambiente. (IDMA 2016)

We consider PGS a tool. A tool that helps, but is not the end. It's a tool that helps to visualize, certify and ehhh in a way contributes to promote equity among farmers. Especially in the Andean regions, where they face situations of poverty. (Mejía, 23:44)

Subsystem Local Nuclei

The local nuclei are the core of the whole PGS. In the region of Lima, there were 20 nuclei registered at the regional council, with a total of 293 farmers participating of which 190 were approved as organic and received their *constancia* (Quispe Holgado 2016). All the local nuclei need to have a directive board and at least one evaluator, who is responsible for the internal control and the submission of the necessary documentation before the deadline set by the CR. The internal evaluation is usually done in a timeframe of five months, during which the evaluator(s) have to pay a visit to every farmer of their NL. For the internal control they have to use the control sheets provided by the CR, as outlined in the MPSGP. In some cases local nuclei are already existing farmers associations, in others the farmers start to organize themselves or are supported by institutions to form a formal NL.

Another responsibility, which has been mentioned frequently by the farmers during the structured interviews is to produce organically. The technical training and assistance is an integral part of the nuclei involved in PGS. Especially those that recently entered receive workshops about the principles and functionality of PGS and the organic regulation. Detailed results considering the topics, frequency and farmer's perceptions about technical training will be given in chapter 8.3. The communication, transmission and dissemination of information between the farmers of one association depends on the NL and the type of information. Among the NLs visited were two farmer's associations (AREPA, ECOSUMAC) and one network, initiated and financially supported by a private company, through a NGO. Within those, regular assemblies and meetings, as well as the telephone were the main form of communicating between the members. Although not all of the members of the farmers associations were part of PGS, those who were part, regularly meet. The other four nuclei were organized in the network of urban farmers (Red de Agricultores Urbanos Huertos en Linea-Lima Sur), hence they had two levels of communication. One within the NL and one within the network of urban gardens in Lima. After assisting a reunion of a NL and also an assembly of the network, I can deduct that only one of the nuclei I visited was organizing weekly reunions. The other nuclei, were coming together in the general meetings of the network. There was a central coordinating person, who was the connecting link between all the different nuclei of the network, as well as the regional PGS council and the nuclei. She was organizing meetings, informing the members of upcoming events like the PGS Forum in Ayacucho and was consulted in case of questions about organic agricultural practices. She was employed by the NGO accompanying the network and had a special role inside it. In between the nuclei of the urban garden network few communication was observed, apart from some exceptions. Communication between the nuclei in general was observed mostly in joint events, organized by the regional council. The communication between the regional PGS council and the nuclei happened mostly through denominated representatives in the NLs and the institutions working with them. It has to be admitted though, that this issue was not of central interest during the investigation and hence findings can't be considered complete. In the questionnaire farmers were asked about the three main reasons for participating in PGS. Half of the respondents were able to give three different reasons for participating, the rest one or two. The main reasons for participating are the hope of a better access to the local markets, receiving technical trainings and increasing the own knowledge about organic agriculture. Those farmers considered PGS an instrument to promote organic agriculture and its principles. Differentiating their products from conventional ones and being able to prove the organic quality of their product through PGS was another important factor. One farmer also mentioned that the participation in PGS means a better inclusion of his interests as a small-scale farmer in politics and the political agenda to him.

Influence map:

In the following map (Figure 11) the most important influences are indicated with arrows. Since the subsystems inside the system of the CR Lima have been explained and their interaction with each other described, here only the influences of the external elements on the PGS Lima and vice versa are shown. The element where the arrow is parting from (dot) is the active one, and the element at which the arrow head is pointing, is the one that is being affected. The influences graphically depicted in the map are based on the analysis of the interviews on the regional and national level. The system external elements (orange) are constituting the environment in which the PGS council in Lima is embedded. Their influence on the functionality of PGS will be described in the following.

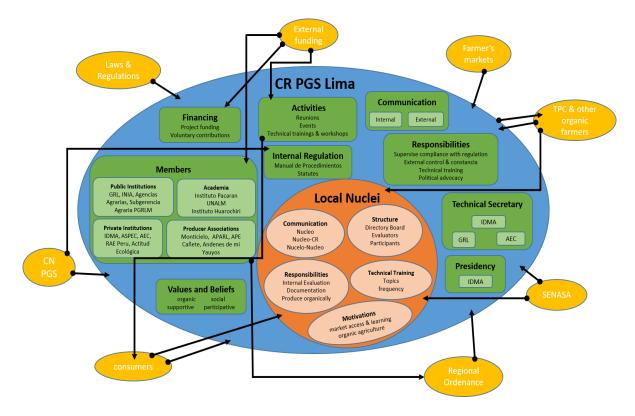


Figure 11: Influence map regional PGS council (CR) Lima: blue = the system boundary, green = subsystems & their elements (light green) at the regional council level & red = subsystems & their subsystems & elements (light red) on the local level. Orange = the external influence factors on the regional council. Arrows indicate influencing effect of one element/subsystem (dot part) on another element/subsystem (arrow part) (own elaboration).

TPC is added as an external influential element, on the one hand because it serves PGS to differentiate and position itself as an alternative to it. On the other hand in some cases PGS is considered a stepping stone towards TPC. TPC is often considered a goal to reach, due to the non-recognition of PGS, which does not allow PGS farmers to sell their produce as organic, and poses a limitation to their commercialization channels. Furthermore organic farmers, obtaining TPC, are posing competition to the PGS famers since theoretically they act in the same market segment. Since PGS farmers are not allowed yet to sell their products as organic in the region of Lima, the completion factor is rather negligible. By some interviewees PGS was considered to do the pre-work for TPC, since its furthering the associativity of farmers, providing technical assistance and is urging them to keep records of their agricultural land and production.

Farmer's markets have a strong influence on the development of PGS, since they are the main channels of commercialization for PGS farmers. In the city of Lima, where many farmers sell their produce, markets could play an important role in disseminating PGS and in promoting it. But this is not always the case. The oldest and well established organic market in the district of Miraflores for example, only accepts products with an organic certificate of TPC and thus excludes PGS farmers. Since almost all farmer's markets in Lima are organized by private

actors, it is in their hands to limit or facilitate access for PGS farmers. Through their purchase consumers decide which production system and which farmer they further. Promoting and disseminating the concept of PGS among consumers may lead to a more conscious decision in favor of PGS products. Hence it is important that the CR is fostering the external communication through events, publications and the actual use of the PGS seal. The use of the seal though was almost non-existent and could only be observed on one farmer's market.

External funding is defined as the monetary support that the regional council receives from actors not directly involved in PGS. Since the regional council as an entity does NOT receive any funding, it is the money achieved through projects by the council's member institutions. According to the representative of IDMA – the institution which is contributing a great part to the financing of the regional PGS council – most of these projects are based on an international cooperation with e.g. FAO, European Union and so on (Mejía 2016: 9:42). This dependency on external funding, influences the amount and the type of activities the CR can organize and carry out.

The national PGS council is strongly involved in the development of the PGS manual and hence directly influences the internal regulation of the PGS in Lima. In Lima, the CN is a bit more present in the matters of the CR, due to the situation that two people (ASPEC, IDMA) are representatives in both entities. Since most of the responsibilities in regards to the process of evaluation, as well as all the relevant documentation of farmers are with the CR, the CN is mostly influencing the CR indirectly, through political advocacy on the national level.

The political external elements are the *regional ordenance, SENASA* and *laws®ulations*. At the time of investigation the CR was working intensively on achieving a regional ordenance for the regions of Lima Metropolitana and Lima Provincia. This to allow PGS farmers to market their produce as organic. Also there were ongoing negotiations with municipalities to achieve distrital ordenances in the district of Santa Eulalia and Pachacamac. SENASA is mentioned always in connection to the official recognition of PGS on the national level. This debate is also affecting the PGS on the regional level and drives the CR of Lima to opt for a regional recognition of PGS. To all interview partners of the CR Lima, the legal recognition of PGS is of utmost importance for the functionality of the system. Even the representative of INIA, being a governmental institution, calls for an official recognition:

What we need now is that the state is recognizing it. It's a great need to integrate PGS in the regulation, because in the law it's already included. The concept and the definition are in the law 29169, but not in the regulation. [...]But SENASA, the National Service of Agrarian Health, kind of ignores it. It sticks with the idea of working with certification bodies of TPC. (Cruzada 2016: 32:50)

The law for the promotion of organic agriculture N° 29169 and its regulation, the RTPO, mentioned in this quotation are the ones that have a direct influence on PGS. Indirectly there also other laws, which affect the PGS and are constructing the legal framework in which PGS can operate. Throughout the interviews, the legal recognition by SENASA was not only a matter of financial benefits and a better access for PGS farmers to the organic market, but also for many it converted over time into an emotional and personal topic, which has a great influence on the motivation of PGS actors. Not being allowed to sell their PGS certified produce as organic, takes away the incentive to participate in this process for all stakeholders, which still is time-consuming in a way.

8.1.2 PGS initiative in Apurímac

The institutions initiating PGS in Apurímac were IDMA and the ARPEA in 2010, when the first pilot projects started. In 2015 624 producers from four provinces (Abancay, Andahuaylas, Aymaraes, Grau) of Apurímac participated in the PGS process. They were organized in 50 nuclei. IDMA is still an active part of the CR, accompanies various NL and is part of the technical secretary. In the course of the investigation in Apurímac I interviewed five members of the CR and visited five NL, where I conducted the structured interviews. Same as with the CR Lima, a system map for the region Apurímac was created (Figure 12). The boundaries are the CR Apurímac and the external elements are shown in the orange bubbles. In the following I will describe in detail the subsystem and, where applicable broach the issue of connections and influences of the external elements on the CR. Both regional PGS councils, Lima and Apurímac, have the same basic aim. The main purpose of the PGS in Apurímac is...

...to annually guarantee the organic quality of agricultural products, through a participatory and social process in order to support small-scale organic farmers.

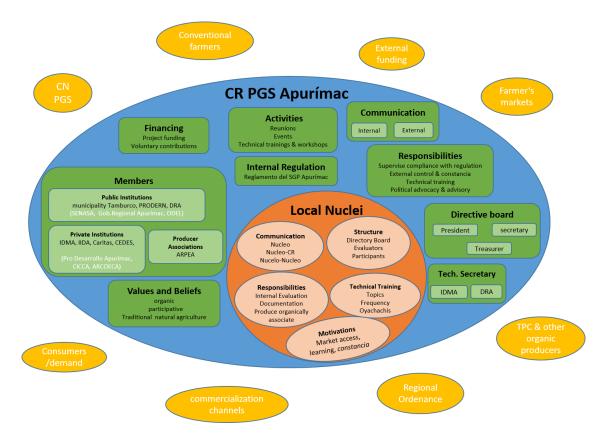


Figure 12: System map of the regional PGS council (CR) Apurímac: blue = the system boundary, green = subsystems & their elements (light green) at the regional council level & red = subsystems & their subsystems & elements (light red) on the local level. Orange = the external influence factors on the regional council, white font indicates inactive members of regional council (own elaboration).

Subsystem Members

In the last two years the number of actively participating institutions dropped drastically. According to the president of the CR Apurímac, Cirilo Zambrano, there are five to six institutions engaging in the CR. They are namely PRODERN, IDMA, Caritas, ARPEA, DRA (*Dirección Regional Agraria*) and the NGO IIDA (*Instituto de Investigación y Desarollo Andino*). The municipality of Tamburco is sometimes part of the meetings and was also supporting an event related to PGS, throughout my investigations, but is considered as an onlooker. One private institution, which was not mentioned by the president, but is accompanying various nuclei and is participating in the process of PGS is CEDES (*Centro de Estudios y Desarollo Social*). Unlike in Lima, there are no academic institutions involved and also only one farmer's association is part. The interviews were conducted with one representative from IIDA, Caritas, CEDES, DRA and ARPEA each.

All the actively involved private institutions are accompanying various nuclei, which they often call "their" nuclei. This due to the project based work, where certain rural communities are selected by the institutions to work with. Alfredo Bravo, representative of Caritas, says:

The role of Caritas (in PGS, annot. of author) is similar to the one of all, no? Every institution, every NGO has their nuclei, which we accompany. (Bravo 2016: 25:53)

Most of the projects related to organic agriculture incorporate PGS as an element (Caritas, Cedes, IIDA, IDMA). The involvement of the DRA and PRODERN reinforce the regional council, from the public side. The dedication of the municipality of Tamburco is rather marginal, although mentioned by the president. PRODERN (*Programa de Desarollo Económico Sostenible y Gestión Estratégica de los Recursos Naturales en las regiones Apurímac, Ayacucho, Huancavelica, Junín y Pasco*) entered the CR in 2014 and is a bilateral cooperation of the Belgian development cooperation and the Peruvian Ministry of Environment (MINAM). Its general objective is to reduce poverty through the conservation and sustainable use of natural resources and biodiversity. One of the 17 projects PRODERN is, together with the regional governments, implementing the "[i]mprovement of the competitiveness of agro-ecological production". Those institutions that are officially registered as members, but in reality don't participate anymore in the activities of the CR Apurímac are colored white and put in brackets.

Subsystem Technical Secretary and Presidency

According to the internal regulation (2013) of the CR Apurímac, the technical secretary is formed by one representative of IDMA and the ARPEA, who are elected by the CR. During my stay a representative of IDMA and one of the DRA were part of the technical secretary. Two interviewees stressed that the technical secretary is responsible for the technical trainings Page **58** of **112**

concerning PGS (Bravo 2016, Mallma 2016). The directive board is constituted of a president, a treasurer and a secretary elected every two years. The officially elected president of the CR Apurímac was ARPEA, but after the withdrawal of its representative, the NGO IIDA took over the presidency. The responsibilities, according to the president himself, are:

"Organizing meetings and assemblies, monitor the various agreements, communicate, all that. Sometimes also inaugurating events, as president of regional PGS council. That's all additional to my work, no? Around ten percent of my working time I dedicate to PGS." (Zambrano 2016: 15:14)

Subsystem Internal Regulation

The CR Apurímac has developed its own internal regulation called "Reglamento Interno de la Gestión Estratégica y Operativa del CR Apurímac" (2013). In this regulation the principles of PGS, the different entities and their responsibilities, as well as the control process, sanctions and the necessary documentation are regulated. Furthermore the internal formal issues, otherwise regulated in statutes, are part of the internal regulation as well. The regulation is based on the RTPO, the regional ordenance and the MPSGP. According to this regulation all PGS farmers need to be members of ARPEA. According to the vice-president of ARPEA this should promote a better organization of farmers in the region and strengthens the general associativity (Medrano Peña 2016). This caused sometimes disputes among farmers, who don't want to become member of ARPEA.

Subsystem Responsibilities

The responsibilities of the CR Apurimac are generally very similar to those of the CR in Lima and will hence not be repeated in detail. The external control is carried out by the members of the CR, as well as the external control. Due to the geographic and infrastructural situation, the expenditure of time for the external control and also the additional visit to the farmers during the period of internal control (according to the internal regulation), is quite higher than in Lima. This makes it not only complicated for the institutions, but also for the farmers. Handing in the reports from the internal control, meant a two day trip for some NL. Hence it is mostly the institutions going there to pick up the reports, risking that not every farmer filled the necessary documents. This is what I could observe when accompanying the NGO IDMA to some of their visits to the farmers communities. Technical training and workshops are offered by the institutions mostly to the nuclei, they work with. In case of trainings about PGS, the technical secretary is mostly carrying them out. An issue mentioned by all interview partners, was the need to disseminate PGS more intensively and to raise the awareness of the consumers. This desire goes hand in hand with their perception that there is a lack of demand and appreciation

of organic products, which will be described in more detail later with the external factors. If marketing, creating demand and commercialization in general is part of the responsibilities of the CR is still an unresolved issue. The general attitude though, is visible in the following statement by the representative of CEDES:

The CR is not responsible and also not qualified to develop markets and to further demand. Although there's a strong need to link the farmers to the local markets. For this public involvement, through the regional governments and the DRA is necessary. (Mallma 2016)

The above mentioned DRA is represented by on person in the CR, who shows to be extraordinary motivated and fond of promoting PGS. During the interview he frequently mentions the political advocacy he is doing for PGS, through sensitizing the regional governmental officials, who are changing rapidly their positions and make it more difficult to establish an environment favoring PGS. This due to the fact that most of the officials, when entering office don't know PGS. Another aspect mentioned is the responsibility of every member institution of the CR, to continuously develop further their own skills and educate their staff in order to provide the farmers with good technical assistance.

Subsystem Activities

The CR meets twice a month, which is compared to Lima (5 x/year) a considerably higher frequency. Participating in one meeting during my stay, I was able to observe how actors communicated during the meeting and which were present. The members present were those that have been mentioned above, only Caritas was missing. Decisions were taken in a consensus and preparations for the upcoming National PGS Forum in Ayacucho were made. One institution was asking for support at an event it was planning. The events organized range from organic farmers markets, over competitions between producer families to public meetings for seed exchange. The initiative for those events comes from the institutions and support in organizing them is sometimes provided by other members of the regional council. During my stay the first meeting of almost all NL of the PGS was held in the city of Abancay. The meeting was organized by ARPEA and IDMA and the aim was to strengthen ARPEA by motivating farmers to become members and to discuss important topics related to PGS and organic production. A central point of discussions was the commercialization and the market demand, which will be explained with the external elements. Meetings of this kind are scarce and it was a great achievement ARPEA, IDMA and the farmers to unite all of them and exchange opinions. Technical trainings and workshops are mostly done independently by the institutions and are more frequent in the initial phase of farmers' participation in PGS. As will be explained

in the subsystem "financing", most of the projects are not uniquely meant for PGS, but rather incorporate it in their activities aiming mostly at improving livelihoods of rural communities.

Subsystem Financing

Like in Lima the CR Apurímac doesn't dispose of an own source of income. The expenses are covered by the institutions forming the CR. In case of the NGOs through the projects they achieve and in case of ARPEA mostly through the projects the national association (ANPE) achieves. The public representative of the DRA for example is partly paid by the DRA, partly dedicates his personal time voluntarily and in case of expenses due to events, the project funding of the NGOs sometimes covers his expenses. Only the president of the CR stated that he and his team need to dedicate time to the activities and tasks in connection with PGS on a voluntary basis. All of the interviewees were aware of the risk that the project based financing is posing to the sustainability of the PGS. Most of the projects have a duration of two to three years. For farmers, who were cultivating conventionally it takes three years (transition period) until they receive their *constancia* and can sell their product as organic in Apurímac. This means that most projects are already finished before farmers officially reach the organic status. Looking at the records of the last years one notices a relatively high fluctuation of nuclei participating. This is partly due to the phenomena of farmers dropping out of the PGS process as soon as the institutions stop directly working and hence supporting them.

Subsystem Communication

The communication between the members of the CR is constant through the regular meetings twice a month. Decisions are primarily took in a consensus. Every institution needs to inform the president of the CR in written form, if it is planning an event. The communication to the NL is mainly between the institution and the nuclei, it accompanies. This communication takes part mostly between the institution and the local leader of the NL. The leaders are either selected by the institution or they are self-proclaimed leaders. In many cases they have a certain educational level or are pioneers of organic agriculture in their communities. Having a mobile phone is also a criteria in many areas. Meetings, like the above mentioned regional reunion of the NLs, are rather an exception, but are used to exchange experiences and also necessary documents for the process of PGS.

Communicating of PGS to the environment is mainly done through forums, discussions and making PGS visible at the farmer's markets. The latter is done by using banners and making the PGS farmers stand out by green colored aprons (

Picture 1). Also the farmers wear their constancia visibly to the consumers (



Picture 2).



Picture 1: PGS Farmers with green apron at weekly Market "Parque Centenario", Abancay, Apurímac Picture 2: PGS – constancia of female farmer

All the interview partners were complaining about the current situation of dissemination of PGS and called for a higher presence of PGS on the farmers markets and in the agenda of the regional and local governments.

I'm a bit worried about how we are going to take this ahead. But one thing we have to do, in order to become sustainable, is a lot of dissemination. Campaigns, raising awareness, forums and writing summaries, so that consumers start taking note of PGS. (Zambrano 2016: 33:35)

Officially there is a consumer association (APEREC) participating in PGS. I personally perceived this association to be very weak and rather inactive during my stay in Abancay and its members were mostly those people already involved in the CR.

Subsystem Values & Beliefs

The principal value that unites all the members interviewed is organic agriculture. The manifestation of this value is different and ranges from personal health issues to a practical professional interest. A very dominant perception of the interview partners was, that small-scale farmers experience great contempt in Apurímac. There is a lack of appreciation for the work and the products of small-scale organic farmers in general, which is reflected in the low price and the low demand for organic products. In this sense PGS enters as a tool to support these small farmers and to preserve traditional cultivation methods. The belief that farmers are given the chance to add value to their products through PGS unites the members of the CR. The participative character of the system is also emphasized, as the importance of the

involvement of the public and private sector, as well as civil society and the grassroot farmer's organizations (Mallma 2016).

Subsystem Local Nuclei (NLs)

The NLs show the same formal structure like those in Lima. They constitute of an elected directive board, evaluators and the normal participants. The evaluators are responsible for the internal control and are mostly also the contact persons for the CR. They are the link between the CR and their NL. They disseminate information and upcoming events among their fellow farmers. Furthermore they are responsible to bring together the members of the NL in case of on-site technical trainings or visits of the supporting institution. An observation made throughout the visits and the stay in Abancay is that the formal organization of the local nuclei was mostly through an impulse by institutions and organizations like IDMA, IIDA and other NGOs. Farmers use to be organized in *comunidades*¹¹(communities), but usually only part of the community was part of PGS. Hence the formal structure of the visited NLs in Apurímac seemed to be less strong than in Lima.

It could be observed that in many cases it was of utmost importance that the professional providing the technical trainings and continuously accompanying the NLs speaks Quechua. Many of the farmers, especially those older than 60/70, only speak Quechua and hardly understand Spanish. The communication inside the same NL was mostly through internal meetings and personal exchange. The communication in between the different nuclei is limited to personal relations or meetings organized by the institutions of the CR. The internal control was in its final phase during my stay in November. As has been mentioned by the interviewed members of the CR, the productivity of the small farmers they are working with is relatively low. One of the main responsibilities, also identified by the farmers themselves, is to continuously provide organic products. This is not obvious in many cases, since farmers have been and partly still are only able to produce for their own consumption and their community. Only in case of overproduction they sold their products on the markets. This is part of the general problem of high poverty rates in the region Apurimac. With the improvement of their farming methods and the added value of selling their product as organic, the CR hopes to increase farmers' productivity and better link the farmers to the local markets. The technical trainings are especially intensive in the initial phase of the PGS participation. Some institutions, like CEDES, are training so called Oyachachis. The Oyachachis are farmers trained and educated in PGS and organic agricultural practices in order to educate fellow farmers. This system of making farmers facilitators of PGS and organic agriculture and becoming experts, helps to cover a broader area and penetrate areas difficult to access for institutions. More

¹¹ In Apurímac there exist 377 *comunidades campesinas (DRA 2013).* In those communities agricultural land is common good and they are often characterized by community based joint work like the *ayni.*

details on the topics, the frequency and the perceptions of farmers about the technical training will be given in chapter 8.3. Farmer's main motivation to participate in PGS was, like in Lima, the commercialization. A better market access and better prices have been indicated by ten farmers to be the main reason for being enrolled in PGS. The technical trainings and assistance have also been mentioned as an important motivation factor, as well as achieving an official *constancia* in order to differentiate their product from the conventional ones. Generally farmers in Apurímac came up with only few reasons why they participate in PGS. Only four of 24 respondents could give three different reasons.

Influence map - external factors

In the influence map of the regional council of Apurímac (Figure 13) the external elements influencing the CR Apurímac are similar to those of Lima.

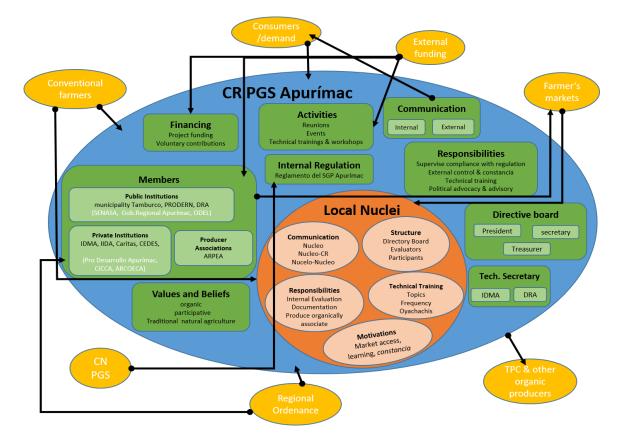


Figure 13: Influence map CR Apurímac: blue = the system boundary, green = subsystems & their elements (light green) at the regional council level & red = subsystems & their subsystems & elements (light red) on the local level. Orange = the external influence factors on the regional council. White font indicate inactive members of regional council. Arrows indicate influencing effect of one element/subsystem (dot part) on another element/subsystem (arrow part) (own elaboration).

What can be seen though, is that the issue of commercialization and market demand is more present than in Lima. All of the farmers I visited were selling their produce at the weekly markets in Abancay. Members of the CR and farmers told me that some years before they were permitted to build up an own sector for the farmers of PGS in the dominical market of "Parque centenario". All this under the patronage of ARPEA and the label "Frutos de la Tierra".

Due to several political and personal reasons – explaining them here would go beyond the scope of this work – they were forced to split up and from thereon farmers had to sell individually at different markets all over Abancay. At the time of the field visit in Abancay, farmers were selling at four different markets, often being almost invisible among the mass of conventional farmers selling their produce. At the "Parque Centenario" traces of the former organic section could still be seen and the few farmers left, wore green aprons and their personal *constancias* as a distinguishing feature. Another attempt to make PGS more visible and provide farmers with a distinguished space to sell their products is a stall at the daily central market, the "Punto Verde". It was initiated by the CR. I visited the market several times, but never found the stall open. When drawing the CR's attention to this issue, the respondents either didn't know that it was closed most of the times or they lay the blame on the farmer, who was supposed to be responsible for the organization of the stall. These two examples shall show how the members of the CR try to influence the farmer's markets by creating spaces for PGS farmers. Unfortunately all of these space have been restricted or neglected at the time of the investigation.

Similar to the CR Lima, the external funding is the major economic driving force in the CR Apurímac. Especially the participation of the NGOs in the CR depends on the funding they achieve and therefore often starts and ends with a project. Institutions like Caritas and CEDES are including PGS as one element in their projects. Their participation is strongly influenced by the funding they are able to achieve. This is a risk for the CR and causes fluctuations in the members. IDMA, being an NGO as well, has been specializing strongly on PGS and has been part of the CR since 2010. Dependent on the financial resources of the members of the CR, activities are planned and carried out.

Conventional farmers are mentioned various times by the interview partners. They pose a strong competition to PGS farmers, but more important they sometimes pose a threat to the credibility of PGS. This is explained by the representative of the DRA:

Well, not any person can put up a banner or such a thing and say "agro-ecological producers". Since when are they (conventional farmes, annot.author) agro-ecological? [...] Without being agro-ecological they take the seal and compete the truly agro-ecological farmers. (Mariscal 2016: 27:00)

The competition of conventional farmers to PGS farmers is perceived more severe and influential than in Lima. One factor that may play a role is the lack of consumer demand and a differentiated market for organic products (Zambrano 2016). Interview partners stress the need to disseminate and promote PGS and raise consumer awareness. Especially the latter is considered a crucial task, still to be fulfilled. Raising consumer awareness not only about PGS, but about organic agriculture and the value of organic products in general. Dissemination and

a constant communication of the PGS council with its environment is considered an important factor in sensitizing consumers for the topic. Therefore how the CR is communicating with its environment can have an influence on the consumer's purchase decision, according to my interview partners.

The national council is mentioned few times during the interviews. The regional PGS council operated rather independent and the CN is rather seen as the connecting entity of all the PGS initiatives in Peru, which can act as a vehicle for the regional PGS to exchange experiences. Marisol Medrano, vice president of the regional farmers association ARPEA, emphasizes that the communication with the CN is sporadically, although important, but that the CN needs to recognize the regional differences between the PGS initiatives (Medrano Peña 2016). The internal regulation of the PGS in Apurímac is based on the MPSGP, hence changes in the MPSGP also mean changes in the internal regulation.

In Apurímac PGS is officially recognized through a regional ordenance since 2013 (N°020-2013-GR.APURIMAC/CR). This means that farmers certified through PGS are allowed to market their products as organic. There PGS is recognized as an alternative approach towards sustainable and competitive development and the promotion of organic agriculture in Apurímac (GR Apurímac/CR 2013: Article 1°). Furthermore it determines that the regional PGS council is attached to the DRA, which takes over a consulting function (GR Apurímac/CR 2013: Article 2°). As the representative of the DRA states himself, the objective of this condition is providing sustainability to the PGS:

So, when the project ends, these associations, which are accompanying the producer nuclei at the moment...who will provide sustainability? So, what I'm aiming at is, the DRA will never die. So we are the ones, who want to provide the sustainability to all those nuclei. (Mariscal 2016: 1:12)

The regional ordenance is hence intending to strengthen the PGS as a whole in Apurímac and establishes the basis for the legal support of the system.

The last external element in the influence map is *TPC* & other organic producers. The supply of organic products was very low to non-existent in the city of Abancay. This conclusion can be drawn after visiting almost all the markets and shops in the city and backing up the observations with the opinions of the members of the CR. Hence TPC certified organic farmers rarely compete with PGS farmers. Also TPC is not considered an option for most small-scale farmers in Apurímac, because it's too expensive. That's why for example Caritas included PGS in their project with farmers of "native potatoes" (papas nativas) in the district of Sañayca, Apurímac. Interestingly in this project Caritas is not only working with PGS, but also another

kind of certification given by SENASA directly. Therefore one can observe rather an influence of PGS on TPC than vice-versa.

8.2 Perceptions of key informants on the national level

Especially interview partners, who were actively or are still actively involved with PGS in the field for a long time, were very willing and keen to share their opinions about these topics. This description fits three interview partners that have been or still are working with one of the two main actors of PGS on the national level, ANPE or IDMA and for the representative of IFOAM, who herself started as an employee at IDMA. The analysis of the eight interviews derived 72 codes bundled in 10 categories, which were then assigned to two general themes. Although the topics that arose during the interviews, were very diverse and subsuming them under general themes didn't seem to be very expedient in the beginning, two reasonable themes could be derived. Those themes helped to better structure the ongoing interpretation of the results. They helped to distinguish between those categories that were rather referring to PGS on a subjective and valuing level, from those that were primary describing the PGS and its environment as it is or was. Hence the two themes were called system evaluating statements (SES) and system describing statements (SDS). Under the theme SES seven categories were subsumed and five categories were assigned to the SDS. Three categories, controversial topics, legal framework and PGS definitions have been assigned to both themes, because they contained statements of both themes (Figure 14).

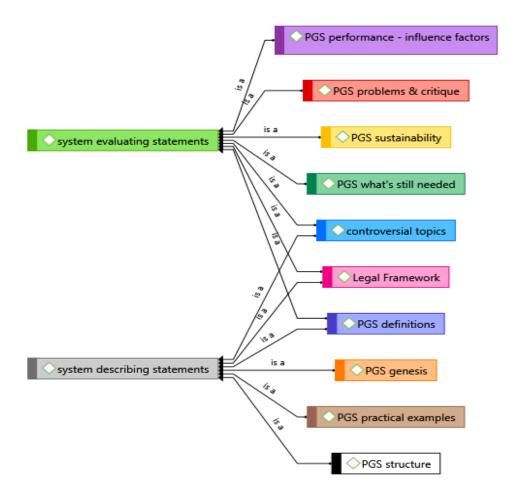


Figure 14: Themes and categories derived from qualitative analysis

The category *Structure of PGS* contained most statements (96), which means that it was the most recurring topic throughout the conversations. The three dominant categories and hence most recurrent topics throughout the interviews were *PGS critique & problems (83), PGS performance-influence factors (78)* and *Legal Framework (64)*. In the following chapters I will describe in detail the ten categories derived, starting with the five system descriptive ones. These include those three categories that have been assigned to both themes. Since the structural part of PGS in Peru has already been extensively presented (8.1), I will focus on how key informants on the national level define PGS, which includes also codes from the category legal framework. The *PGS genesis* and the *PGS structure* categories are included in the description of the PGS structure, organization and function in the former chapter.

Then I will go into detail of the four system evaluating categories and the *controversial topics*, a category assigned to both themes. Practical examples mentioned by the interview partners will be used where they fit the argument. Since the legal framework plays an important role in the perceptions of key informants and strongly shapes the current debate about PGS on the national level, it will be included as well in the chapter of system evaluating statements (8.2.2, 8.2.3).

8.2.1 System descriptive – becoming and defining PGS

One of the questions during the semi-structured interviews I asked the interview partners was to describe PGS in a few words. This task resulted to be difficult for almost all of them, since the definitions they gave were very extensive. Comparing the different answers and analyzing the responses it can be stated that the general idea of what PGS is, is quite similar among the interview partners. Some have a more technical idea of PGS than others and hence were able to define it in fewer words like the following:

PGS are systems that guarantee the organic quality of products in a participative way and through social control. (Villanueva 2016: 93:39)

In this sense the primary function of PGS is, to certify products as organic and help the farmers to differentiate their product from the conventional ones. It is considered by all key informants as an alternative certification mechanism. Furthermore six out of eight interview partners agree that PGS are strengthening and supporting the organization of farmers. To carry out the process of participatory certification, farmers need to be organized and associated in a formal manner. Hence prior unconnected and dispersed farmers need to form an association to be part of the PGS. These statements are supported by my observations in the field and the regional interviews. Since the whole guarantee process is carried out annually, the formal associations need to be intact. This issue is related to the idea that PGS creates social networks. Interview partners on the national level refer here to networks among farmers, institutions and the environment they are embedded in. The regional PGS council of Lima is mentioned as a positive example, due to the diverse institutions from the public and governmental sector involved. In this council, actors are working together that usually would not coincide and they constitute a strong social support for PGS. This social support is also an important aspect of sustainability of PGS, which will be discussed in 8.2.3.

A frequently noted characteristic is that PGS is doing the pre-work for TPC and hence enables TPC. In some cases PGS can and already has been a stepping stone towards TPC for farmers. Key informants base this observation on practical experiences (Huánuco) and information of certification bodies like *Biolatina*. It is important to note that in Peru most small-scale farmers with TPC are not certified individually, but organized in ICS. In the ongoing of PGS, farmers are not only supported in their organizations, but also tend to receive technical training in terms of documentation, organic regulations and organic farming practices and principles. So on the one side there is already documentation of the production of farmers available at the moment of passing from PGS to TPC and on the other hand, PGS is doing all the "painstaking work" (Villanueva 2016: 73:40) preparing farmers for the bureaucratic and intellectual challenges they have to face with TPC. The above mentioned technical training is considered an important characteristic of PGS and a crucial service for farmers to empower themselves. In this sense

the representative of IFOAM defines PGS also as a learning space for farmers, a space where they can develop their capacities and generate autonomy (Flores 2016). A very controversial topic among key informants and the stakeholder I could observe, is the cost issue. Here there are two clear opposing positions. One claiming that PGS is and will always be cheaper than TPC and ICS the other that is convinced that ICS are cheaper.

Considering the professional background of the interview partners I could observe that there are differences in the perceptions of the responsibilities, possibilities and aims of PGS. While the representative of IFOAM had a very holistic, idealistic understanding of PGS, the practitioners have a simpler and more concrete view. Skepticism is mainly coming from the interview partner from UNALM and one representative from an NGO not directly involved in PGS at the moment. Both are rather involved in TPC and do support PGS as an alternative certification mechanism, but don't expect PGS to be a tool to improve farmer's livelihoods or have a major social impact. Also they were both actively involved in the development of the current regulation (RTPO) of organic agriculture, through participating in the CONAPO. It is important to note that the agro-ecological movement was part of the development of the current RTPO, which is part of the problem of the recognition of PGS by SENASA at the moment of investigation. Most of the interview partners are conscious about that and critically reflect their actions at the time.

8.2.2 System evaluating – PGS performance

One of the main topics that interview partners talked about, was the performance of the current PGS initiatives. In all interviews, statements about factors influencing the performance of PGS in Peru were made. Seven main performance factors (=codes) were identified (Figure 15). The two bars below the names of the categories indicate the groundedness (G) and the density (D) of the respective category. The groundedness indicates how often this code has been used when reading through the transcripts. The density on the other side, shows how linked the code is to others. The code *PGS driving factor: existing market/demand* for example, was applied 15 times in the texts and is related and linked to five other codes, while the rest of the influence factors is only linked to the category *PGS performance: influencing factors*.

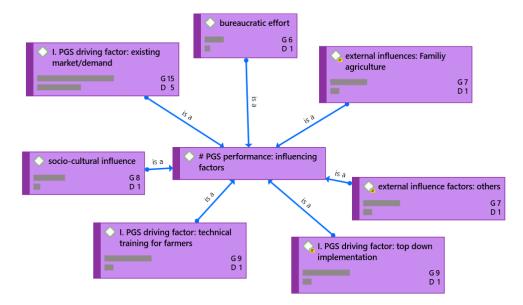


Figure 15: Seven main influence factors on the performance of PGS in Peru with groundedness (G) and density (D)

The factors can be divided into external factors, like the socio-cultural aspect, family– agriculture and others and the internal factors (Figure 15). External in a sense that they are constituting the environment, in which the PGS initiatives perform and are hardly influenced by the PGS itself. The code *socio-cultural influences* includes statements about how the peruvian/Andean culture benefits the good functioning of PGS, as one interviewee stresses:

"The thing is, I think, one of the great cultural potentials we as an Andean country have, is the tradition of working in groups." (Flores 2016: 16:35)

Another interviewee relates the performance of PGS rather to characteristics of people on an individual level.

Family agriculture is the term that represents the dominant agricultural system in Peru, which is characterized by a small farm structure. More than 72 % of conventional and organic farm units owning less than six hectares of farm land (INEI/MINAGRI 2012). In Peru the law N°30355 is regulating, recognizing and promoting the concept of family agriculture, which is a given reality in the country. On the basis of this recognition government policies also paid more attention to organic agriculture and thus PGS, as indicated by the following statement:

"But the state started to provide funding for projects related to Family Agriculture and through this organic agriculture was benefitting of some of this funding...but very much in the background." (Manrique 2016: 9:20)

The code *external influences: others,* sums up different statements referring to geographical, infrastructural and economic circumstances influencing PGS. For example two interview partners mentioned the recent gastronomic boom of the Peruvian cuisine, which positively affects people's interest for food and its origin and in the long run the demand for organic

products. While this is seen as a positive influence, the geographical adversity of the Peruvian country and the lack of a functioning infrastructure is hampering the development of proper distribution systems of the products of PGS farmers.

The remaining four codes can be considered as PGS internal performance factors. Three of them already imply in their title the positive "driving" effect they have on the performance of PGS, while the code *bureaucratic effort* is not a driving factor per se. The expression "driving factor" already implies, that it helps to get the PGS started and running. So the three driving factors discussed in the following are considered important especially in the beginning of a PGS. According to six out of eight interviewees, an outstanding importance for a good functionality of PGS, are the existence of a market and demand for the products of PGS farmers. Especially the three interview partners who are or have been doing a lot of practical work with PGS in the field, stress the importance of an existing demand for PGS products. This is also reflected in the category *PGS sustainability*, where the same code can be found. I will go into detail of this category later on. The following quote reflects well the general tone about the market factor:

An important factor is the market. The PGS that are linked to a market, are generally those PGS that continue [working]. (Ravello 2016: 1:20)

Demand and hence a prior existing market are crucial for the good development of a PGS initiative. Two interview partners, who were both part of the pilot PGS project in Huánuco in 2005, mention that they started to implement PGS in those regions, were farmers markets already existed and with those associations that already had access to these markets. This leads to the next influence factor, which, against the background of the principles of PGS, comes surprisingly: the *PGS driving factor: top down implementation*. As has been mentioned before (8.18.2.1), the structure of PGS in Peru is rather centralized. Throughout the interviews, while explaining how PGS is working and how it should work, I noticed that all interviewees emphasize the important role of the institutions accompanying the farmers. The following quotation shows impressively how the role of the institutions on the regional level is perceived:

Well, it's the economic aspect, the social aspect, no? Also the technological aspect, the methods and all that. If you let things slide, people don't understand and don't know, because this [PGS, annot. author] is a quite complicated topic. [...]So you have to decide with which workshop you start, what are you teaching them first and what later on. So that people are slowly introduced. If you start with the paperwork, the documents to register and that stuff, people will see that and escape right away. So, first thing you do is to motivate them." (Ravello 2016: 48:10)

This quotation demonstrates the main tasks and responsibilities that are assigned to the institutions engaged in PGS. All of the interview partners shared this view more or less. The Page **72** of **112**

last sentence of this quotation, indicates that the initial step towards PGS is taken by the institutions. They are the ones approaching farmer's associations or small rural communities and not only introduce them to the concept of PGS, but also provide them with workshops of how to implement a PGS. The way of doing this depends on the institution, but throughout my investigation in Lima and Apurímac the key actor in promoting and disseminating the principles of PGS and its internal regulation is the NGO IDMA. A project engineer from the IDMA office in Abancay explained to me once how their organization is "choosing" communities and farmer's associations to convince them participate in PGS. Although the top down implementation is not considered as characteristic for PGS according to IFOAM, in the Peruvian contexts it is considered a main driving factor, especially for the initial phase of PGS. It has to be mentioned though, that interviewees at the same time stressed the importance of empowered and self-organized farmers, as will be mentioned in the following section. The quotation of Ravello (2016) also included partly the two remaining factors, which are technical training for farmers and the bureaucratic effort. Technical training was considered important by all interviewees. While the specific contents of technical training were not elaborated, all agree that farmers need to be skilled in organic agriculture and its standards and practical implementation to be able to form their own networks and organize themselves, as well as know how to implement a PGS. The bureaucratic effort was considered to be important in a way that documentation should not be too extensive and complicated, but also not too simple. According to one interviewee, who was heavily involved in developing the PGS manual, the Peruvian PGS has chosen the "middle course" (Ravello 2016: 38:25).

8.2.3 System evaluating - PGS sustainability & what is still needed

Interviewees were specifically asked about the important requisites for a PGS to be sustainable and if they see those requisites existent among PGS initiatives in Peru. In the following paragraph the six aspects of sustainability mentioned by the interview partners will be presented and, if appropriate, linked to the codes from the category *What PGS still needs*. This because sometimes sustainability aspects and suggestions for improvement complement each other. The analysis derived six main aspects of sustainability (in decreasing number of frequency):

- 1. Empowered farmers and strong farmer's associations
- 2. Governmental support and involvement
- 3. Committed actors
- 4. Participative and horizontal
- 5. Existing market/demand
- 6. Different channels of commercialization

The term empowerment is described by the interviewees as a certain intellectual, economic, technological and social autonomy that enables farmers to identify and solve problems. One interviewee sums it up in this way:

So, there is this practice missing, this starting to think, reflect and observe by yourself the ecosystem in a different way. [...] The technical assistance will not be there forever. They [the famers, annot. author] themselves have to, when they have the opportunity and receive technical assistance, in this same moment they have to be able to face intellectual challenges in a reflective, analytical way, so that they find their own solution and don't fall for the convenient solution [...]. (Flores 2016: 42:32)

What she emphasizes here is empowerment on a very profound and individual level, which in her opinion goes hand in hand with technical training and workshops. Based on this statement the others can be assigned to the same category. Empowered farmers take the PGS initiative they are involved in as their own and hence defend it if necessary, stresses another key informant. A strong producer's organization is based on the empowered farmers themselves and goes hand in hand with their ability to cope with different kinds of problems inside their PGS, as well as in their community. The second most important aspect is considered to be the governmental support and involvement. The importance of this aspect throughout the interviews is partly due to the current debate about the official recognition of PGS on the national level. Currently PGS are not recognized by the responsible authority SENASA. This means that PGS farmers are not allowed to sell their produce as organic on the markets. In all interviews conducted, people considered this as a factor hampering the development of PGS. Interview partners expect more involvement of governmental institutions, like SENASA or the Regional Agrarian Offices (DRA) in the regional councils of PGS and generally more support by the municipalities and regional governments. This is linked to the call for a strict control and monitoring of organic products and the need for more transparency in the PGS. Since there is increasing fraud of farmers trying to take advantage of the organic movement, some claim that a stricter control of the certificates will lead to an increasing interest in PGS, since the need for a certification increases. Recognizing PGS on the national level is considered to be a way out of the current "grey" zone, in which PGS operate. Being officially recognized, according to the key informants, opens up new sources of financial support and strengthens PGS in general. It also leads to more committed and motivated internal actors that are supporting the system and hence create a favorable environment for PGS to develop. An important requisite for this, is a continuous dialogue and communication between the actors on the same level, as well as on different levels, like local and regional. In this area, key informants still see the need for improvement. Transcending the participative and horizontal character of PGS in theory into practice was emphasized strongly by one interviewee:

Sometimes the national council wants to be the boss and wants to…but PGS has a different rationale. [...] Well, the best thing about PGS is, that it's participative. Nothing else. (Ravello 2016: 44:02)

Luis Ravello is amongst those in Peru that have worked longest with PGS and was part of the movement from the beginning. He has a special connection to the reality of the farmers, since he mostly works directly with farmers giving workshops and disseminating the concept and idea of PGS amongst farmers. Due to his experience with the farmers, but also his work for the national council (as an employee of IDMA) he is sometimes torn between the need for a strong structure and good leadership and at the same time permitting PGS initiatives to develop independently. This dichotomy was making itself clearer to me after visiting the two regions I investigated. In both there were different nuclei in different stages of implementing PGS. Most of them though still were in need of a strong regional council that supervises their activities and only few of them were already able to carry out the internal control independently and without any kind of support from the regional council.

The last two aspects of sustainability are both related to the commercialization. The code *existing market/demand* already occurred as a performance factor in the chapter before (8.2.2). It was also included in this category because it was mentioned several times explicitly in connection with sustainability.

So, the market is what causes PGS to develop, to implement and to certify the production. If there is no existing market, it [PGS, annot.author] is not sustainable. (Lujan 2016: 30:18)

Together with this, the different channels of commercialization represent another important step towards sustainability. Here interviewees mention two things, they consider it important to open up new channels. The need for alliances between the private sector and farmers, in terms of small organic shops or even supermarkets is expressed before the background of an already existing experience from the PGS farmers of the region of Huánuco. Huánuco, being one of the two pilot PGS regions in Peru, is frequently mentioned in the interviews and is one of the longest operating PGS initiatives in Perú (since 2005). It is mentioned as a role model to other PGS farmers are selling their organic passion fruit to a big super market chain, which is considered a great success. It has to be mentioned though that those farmers can only sell their passion fruits, labelled as organic to the supermarket because they achieved a third party certification, based on the pre-work of PGS. The representative of IFOAM stresses that these commercial alliances though, should go beyond a mere producer-buyer relationship towards a more supportive function of the supermarkets and shops for the farmers. Concrete examples for this would be that the buyers contribute to the provision of training for farmers in agro-

ecological farming practices or processing goods. The importance of not only selling primary agricultural goods, but rather adding value through processing is mentioned as well as a sustainable indicator, although it could already be seen as a general issue for agriculture in Peru.

I see ANPE trying hard to work with giving added value to the products, so that the consumption in the cities increases (Siura 2016: 19:38)

Two aspects, that go hand in hand and are indirectly related to the topic of commercialization, are the raising of consumer awareness and making PGS more visible. Consumer participation is, in the experience of the interview partners, very low to non-existent in all regions. Lima and Huánuco are considered exceptions. Here two active and strong consumer associations form part of the regional council. The other aspect of consumer awareness, is to increase it by making PGS more visible. At the farmers markets I visited, as well as information from PGS is hardly visible to the consumers and hence they don't know it. Making PGS more visible means promoting the use of the logo on the products, showing the certificates and actually demanding the certificate at the markets.

8.2.4 System evaluating - PGS critique & problems identified

Strikingly all interview partners mentioned at least once some kind of critique or problem the peruvian PGS is facing at the moment. This category also contained most codes of all (10) (Figure 16). Again the G stands for the frequency of the code and D for the connectivity. The different color of the code Organic Regulation RTPO can be explained by the fact that this code is also assigned to another category (Legal Framework). Quickly one notices that the code PGS problems: no recognition by SENASA is not only by far the most frequent one, but that it's also heavily linked to other codes. Not being officially recognized is hence a central critique and problem in the current PGS debate on the national level and will be discussed below. On the right side are those problems and points of critique that are not directly related to the recognition issue. There is the structural critique, which claims that the PGS structure in Peru is too centralized. Critical comments were made with certain reluctance though and only two interviewees questioned the national council and were convinced that the current structure should be changed. The rest of the interviewed persons were either satisfied with the current PGS structure or didn't give an opinion on it. Interinstitutional conflicts were identified on the national and the regional level. On the national level the conflicts described are mostly between two of the three institutions forming the national council. Discussions on this level are mostly about the role and responsibilities of the national council and the communication with the regions. On the regional level conflicts between the institutions of the regional council arise due to many different reasons not mentioned in detail, but they can certainly weaken the functioning of PGS in the respective region, as interviewees underline by giving practical Page **76** of **112**

examples. Under the category National Agro-Politics, all those quotations are subsumed, that criticize the government's focus on big-scale export agriculture and as a result the negligence of the small-scale family agriculture. This policy has not only consequences for small farmers in general, but also for PGS, since the political interest and its actions or inaction influences the development of the PGS strongly. One interviewee explains it like this:

So, all this sector of the small producers was invisible to politics. The government's agricultural politics were more oriented towards the big scales. (Manrique 2016: 11:15)

With the adoption of the law for family agriculture in 2015, the focus in national Agro-Politics shifted slightly towards small-scale agriculture, but still small (organic) farmers are very much neglected by national politics. One consequence of this may be the next problem that interviewees mention: the *weak producer's organizations*. This problem is mentioned in connection with the functioning of PGS and technical training by an interview partner that used to train farmers in the field. She stresses that without a strong producer's organization, the best technical training can't be of use (8.2.2). Only two statements were assigned to this code, so among key informants it does not seem to be a very present problem.

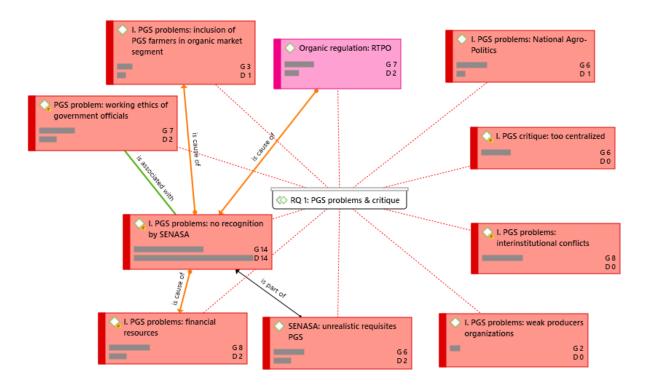


Figure 16: Codes assigned to category PGS problems & critique with groundedness (G) and density (D)

The lack of official recognition by the National Agrarian and Food Safety Service, SENASA is the central point of critique (Figure 16). Six out of eight interviewees made references to this

issue. During my 1,5 months stay in Lima, I was given the chance to attend two reunions of a recently formed working group on the normative situation of PGS in Peru. In this working group representatives from the above mentioned institutions involved in PGS, but also representatives from the agricultural ministry (MINAGRI) participated. The aim of this working group was, to find a way of how PGS can be officially recognized. At the time of leaving Peru, the group was still active and discussions ongoing. This underlines the presence of the topic in the PGS scene on the national level. To show the centrality and interconnectedness of the code *PGS problem: no recognition by SENASA (*recognition-code), a network in Atlas ti. has been created (Figure 17).

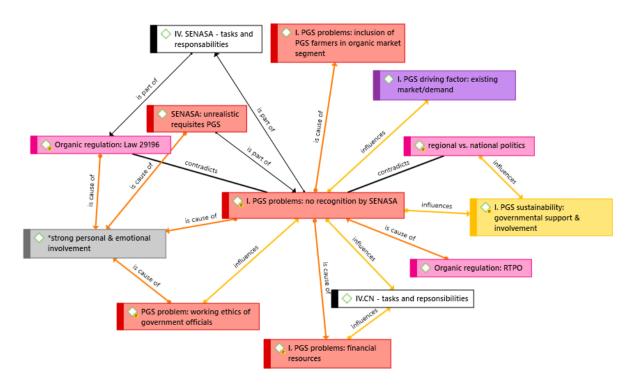


Figure 17: Network Analysis PGS problems: no recognition by SENASA (Servicio Nacional de Sanidad Agraria)

The network shows that the recognition-code is related to codes from different categories (different colors) in different ways and that these codes are also sometimes related to each other. There are four different types of relations, which will be explained in the following section using examples.

One can read from this network that the lack of recognition is causing two other problems mentioned by the interviewees. Due to PGS not being recognized officially, PGS farmers can't sell their produce as organic, if they don't additionally obtain a certificate by a TPC. Interviewees therefore consider the "illegality" of PGS as an obstacle in including PGS farmers in the market segment in general and specifically in the organic market. Although in some regions, a regional ordinance recognizes PGS and hence opens up the organic market to the PGS producers, on the national level these ordinances are illegal and interview partners wish

for a national recognition of PGS. This also due to the potential financial support, through government projects and funds that could be accessed and gained easier in case of a recognition. A co-occurrence analysis in Atlas ti. revealed, that interview partners showed a strong emotional involvement especially when talking about the topic. Therefore a causal relation was established between those two categories in the network. A strong personal involvement was also detected in connection with the *unrealistic requisites* SENASA is urging PGS to fulfil, like complying with the ISO 17065, in order to be recognized. The last causal relation is between the two codes *Organic Regulation: RTPO* and the *PGS problems: no recognition by SENASA* and demonstrate the fact that the main reason that SENASA is not recognizing PGS officially, are the legal requirements according to the organic regulation (RTPO).

The relations termed "influences" are drawn in cases, where the effect from one variable on the other is not completely clear or rather indirect. For example if PGS systems would be recognized, farmers would be officially allowed to label their products organic, hence the legal status will probably have an effect on the commercialization of PGS products. So the driving factor market is influenced by the recognition of PGS by SENASA. Further the legal status of PGS has an influence on the tasks and responsibilities of the national council (CN). At the moment of investigation a major task of the national council was the political incidence and lobbying for PGS on the national and partly international scale. A representative and member of the technical secretary of the national PGS council explains that if PGS were legally recognized, the regional PGS councils or local institutions promoting PGS would have the possibility to apply for governmental funding and hence operate more independent from the national council (Lujan 2016). With PGS being illegal the state doesn't earmark funding for PGS and it is more the responsibility of the national council (mostly ANPE and IDMA) to promote PGS also on the regional level and provide the regions with technical trainings. This due to the fact that the institutions on the national level (ANPE, ASPEC, IDMA) dispose of more funding and an easier access to it (Lujan 2016). A former representative from IDMA and the technical secretary of the national council has made an additional observation. He thinks that the national council has been pulling back from the regions in the last few years, which has sometimes caused irritation in the regions and PGS initiatives to collapse (Ravello 2016). These statements demonstrate the important role that the national council plays in the PGS in Peru. The role of the national PGS council is subject to controversies though. A structural critique is especially expressed by the IFOAM representative. She considers the national PGS council to be the symbol of a too centralized system that is not adequate for a country like Peru and its "complexities and diversity" (Flores 2016: 12:39). In her opinion the national PGS council should have been already resolved itself or at least retreated to give more autonomy to the regions.

Furthermore the non-recognition by SENASA influences the sustainability of the PGS, expressed by the code PGS sustainability: government support and involvement. The contradicting policies on the national and regional levels towards PGS influence this sustainability factor as well. The already mentioned regional ordinances in some of the regions where PGS initiatives operate, have lead, as one interviewee observes, to inconsistencies between the national SENASA and its regional offices that were sometimes participating in the regional PGS councils. Another important finding from analyzing literature and the semistructured interviews is, that the National Law on the Promotion of Organic Agriculture (N°29196) and the RTPO are contradictory. In the law article 18° a special regulation for organic products in terms of certification is indicated and a certification through PGS is considered as possible for products meant for the domestic market. The RTPO, which is responsible for the regulation of the law, though is putting the responsibility of the recognition of PGS in the hands of SENASA and SENASA is only accepting ISO 17065 accredited certification bodies (RTPO 2012: Art. 82°). At last there is a rather personal observation two interviewees make about the working ethics of SENASA officials. A representative of the agro-ecological movement form Peru for years and co-founder of the first Latin-American certification body Biolatina, expresses his thoughts as follows:

In ours (organic regulation, annot. author) it says: "Organic product that is certified through third party." There's no alternative. After this another law came, I don't know when, opening up the thing. But if one is a squared SENASA official...what does the norm say: Third Party. PGS is not valid. We are trapped in this since 10 years. (Alvarado 2016: 20:13)

What Alvarado is referring to here, is the already mentioned contradiction between the Organic Law N°29196 and the criteria SENASA is setting for recognizing PGS. Not only him, but also another interviewee emphasizes on the personal dimension, criticizing the way of thinking of some of the SENASA officials.

8.3 Farmer's perception of technical training in their PGS

Before going into detail of the results regarding technical training and assistance in the two PGS initiatives, it is important to draw a general demographic picture of the farmers interviewed. Then an overview over the topics and the practical experiences of farmers with technical trainings and technical assistance will be given. Finally the knowledge of farmers about PGS and organic agriculture, which has been assessed through some questions, will be presented.

8.3.1 Demographics of farmers in Lima and Apurímac

For the sake of comparing the two different regions, the demographic data was mostly calculated for the two different regions separately. In total 46 farmers, 22 from Lima and 24 from Apurímac were interviewed. The gender distribution showed a strong dominance of women participants, with a total of 37 women and only nine men. In the case of Apurímac this imbalance was even more significant with only three male and 21 female participants. One NGO employee reduced the official participation of mainly women in the PGS to the fact that inside the traditional family structure it is the women's responsibility to sell the products at the market (Personal conversation with IDMA employee 19.11.2016). Hence the *constancias* are mostly issued in their name. The mean age is around 55 years with the youngest participant being 27 years and the oldest 76 years old. The educational level was divided into five categories, reflecting the current educational system in Peru. Striking was the high number of participants, with few or no formal school education at all. More than half of the participants (13) in Apurimac didn't finish primary school (age 6-11) and also in Lima nine out of 22 did not graduate from primary school (Figure 18).

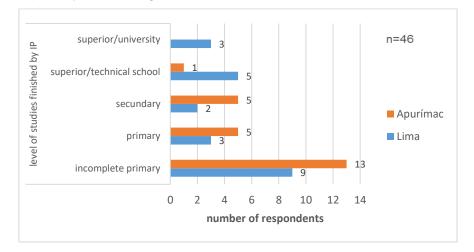


Figure 18: Level of participant's finished studies by region (absolute frequencies, simple response, n=46=100%).

A significant difference in the area cultivated by the farmers could be observed between the two regions. In Apurímac the mean area cultivated by one farmer was 1.4 hectares, while in Lima farmers cultivated a mean area of 0.3 hectares. This can be explained by the urban

farmers of Lima, the *Red de Agricultores Ecológicos Huertos en Linea-Lima Sur*, who only owned very small plots of land.

The economic situation of farmers in Lima and Apurímac was assessed through asking the participants to indicate their total estimated household income. In total 22 out of 46 respondents indicated, that their average income per month is below 600 soles and six respondents earned between 601 and 900 soles a month. In Apurímac the monetary situation of farmers was especially precarious. Around two thirds of the farmers claimed to earn less than 600 soles. In 2016 the minimum wage in Peru was with 850 soles. Only 25 % of respondents earned more than 950 soles a month. Seven respondents could not tell how much their monthly income is. Almost 60.9% of the farmers interviewed had other types of income additional to agriculture and for 64 % of them agriculture only made up for maximum 50 % of their monthly income.

An observation was the correlation between the educational level and the roles that participants had or still have in their PGS. Although only significant in three categories, the possibility of being an elevator increased with the educational level (Figure 19). The results have to be treated with precaution though, since the number of respondents in the educational categories is unbalanced. When categorizing the educational levels into those of primary or lower(1) and those secondary and higher (2) education the correlation is not statistical significant (df=1, X^2 =3,37, p=0,06)

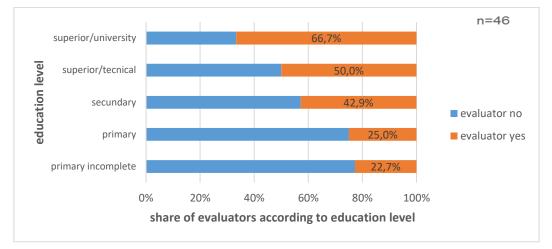


Figure 19: Evaluators according to educational level in percent (relative frequencies, n=46=100%)

8.3.2 Technical trainings – practices, opinions and knowledge

Frequency of trainings

In all of the nuclei technical training was available, which was assured by all respondents. Furthermore 44 of 46 farmers claimed to participate or have been participating in the provided trainings and workshops. In the cases of the two not participating, one indicated that his wife is participating and in the second case the farmer himself was giving trainings himself and didn't participate in trainings in the course of PGS. Those farmers indicating that they participate in technical trainings, were also asked to mark the frequency with which they receive and participate in the trainings. The results are differing not only between the two regions, but also between the farmers of the same NL. In Lima one third of the respondents receives trainings four to six times a year and one third even more than six times a year. In Apurímac 14 and 33 percent receive trainings four to six times or more than six times a year respectively. In both regions only one person responded that there was less than 1 training provided and assisted a year. The variability among the responses is also visible among the farmers of the same NL. The standard deviation ranges from 0.5 - 2.08 and indicates that farmers of the same NL ticked very different frequency categories. Only in one NL in Apurímac, Ccorhuani, the three respondents agreed upon the frequency of technical trainings provided because they had scheduled weekly trainings. Two of the interviewed farmers stated that they were more or less obliged to participate in those trainings offered by a regional NGO. The period of being a member of PGS does not have an influence on the frequency of the trainings received, as some stakeholders of PGS (e.g. Ravello 2016) mentioned that especially the initial phase of PGS membership tends to be more intense in terms of technical trainings and assistance.

Providers of technical training and assistance

Farmers were also asked by whom they usually received the technical trainings and could give multiple responses. In both regions all respondents (n=44), who before indicated that they receive technical training, stated that the workshops are usually held by external professionals. When specifying by whom they received technical trainings, NGOs resulted to be the main providers of technical trainings in Apurímac with IDMA (24 out of 34) dominating, followed by other NGOs like Caritas. In Lima governmental actors like INIA and the Agrarian Agency Lurin, were mentioned by several farmers (Figure 20).

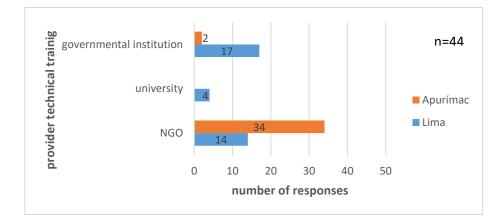


Figure 20: Technical Training by external professionals according to institutions per regions Lima (n=22) and Apurimac (n=22), (absolute frequency, stated institutions by farmers then categorized, n=44=100%)

The Agrarian Agency of Lurin was exclusively mentioned by the farmers of the two associations in the district AREPA and ECOSUMAC. The farmers of the *Red de Agricultores Urbanos Huertos en Linea – Lima Sur* on the other hand stated that the municipality of the district was and is actively involved in providing trainings, but also the accompanying NGO, IPES.

In eight cases in Lima and four in Apurímac, farmers mentioned that they also have received trainings from fellow farmers from the same association they are part of or another one. Here the role of the evaluators was striking. Those farmers indicating to be internal evaluators in their respective NL, also tended to be those, who already have given workshops or technical trainings for fellow farmers. In Lima for example 100 % (5 out of 5) of the farmers, who already acted as trainers are also evaluators. In Apurímac 60 % (3 out of 5) have been giving workshops and are internal evaluators. In both regions a significance below 0.05 (p<0.05, df=1, fisher's exact) was reached, hence indicating that there is a difference between evaluators and non-evaluators in regards to being a trainer. The unbalanced number of evaluators and non-evaluators needs to be taken into consideration when interpreting this result, though.

Topics of technical training

Participants were asked to select from a list of six categories (topics) those in which they already received trainings. In both regions "organic agricultural practices" were selected by more than 90% (20 responses/region) of the participants, followed by principles of organic agriculture (total26) and principles of PGS (total 25) (Figure 21). These results show that in both regions organic agriculture, its practical implementation and principles are paramount. This is also reflected in the responses to a follow up question, asking producers if they implemented something learned in the technical trainings and if yes what this was. Here 40 farmers mentioned organic agricultural practices like pesticide control through orange traps and biocide, the production of organic fertilizer to improve soil fertility and crop rotation. Although PGS was marked by 32 % and 25 % of respondents in Lima and Apurímac respectively, only two farmers mentioned PGS related topics in the follow up question. One explanation for the relatively low count of PGS, as a topic of trainings might be, that mainly internal evaluators are trained in the principles of PGS and its implementation or that their training is more intense and hence still more present in the farmers' minds. This hypothesis is supported by the results of a chi-square test, which was significant (df=1, X²=12.36, p<0.001) for a relationship between those farmers, who are internal evaluators and the selection of PGS being a topic of the trainings. Furthermore 82% (14 farmers) of all the respondents participating in a workshop for evaluators and control visits to fellow farmers indicated that they are internal evaluators. Topics related to "organization & management" are of minor importance in both regions. Commercialization was marked by 22 of the 44 farmers and contained specific topics like how to present and sell the product at the local farmers markets. Workshops related to

transforming products, were mostly experienced in Lima in for example making cheese, yoghurt and jams. In Apurímac farmers mostly mentioned that they were taught about packaging of products. Farmers could select more than one topic, when asked about the topics, hence the mean number of response for both regions was calculated. In Lima farmers tended to mark 3.72 categories and in Apurímac 3 different topic groups.

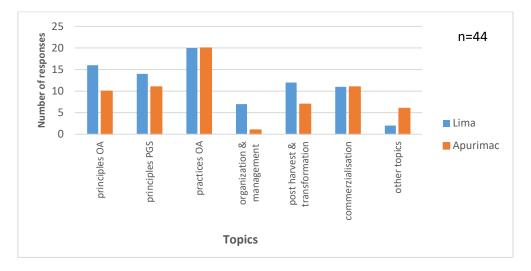


Figure 21: Topics of technical trainings per region Lima (n=22) and Apurímac (n=22). (absolute frequencies, multiple response, n=44=100%)

Furthermore there was a category other, where farmers could add topics not mentioned in the prior categories. Seven participants used the other category and added seven topics to the existing list (Table 2). The topics categorized in the theme "other agricultural practices" were not considered to be part of the category "organic agricultural practices" by participants, hence they were mentioned as other.

Table 2: Topics added by participants (n=6) in category "other". Categorized in three general themes

social	environmental	other agricultural practices
group dynamic	Ampay Sanctuary (regional national Park)	breeding of guinea pigs
family violence	climate change	apiculture
motivation workshops		

When asking farmers how utile they rated different kinds of information sources listed, in both regions (no significant difference, df=2, X^2 =0.373, p=0.830) workshops by professionals from external institutions were ranked most helpful. 25 of 44 farmers in both regions (57%) rated the workshops of eternal institutions as very useful and 16 (36%) as useful. This was also the only source of information which was ranked by all farmers, which means that no one responded with the category "doesn't apply". This category was introduced in case the listed source of information was not available to the respondent and was selected most by

respondents in the case of Internet. Although in Lima farmers ascribed the internet a higher value than the farmers in Apurímac (df=2, $X^2 = 9.413$, p=0.094), it still plays a minor role in the learning and information process in both regions (Figure 22).

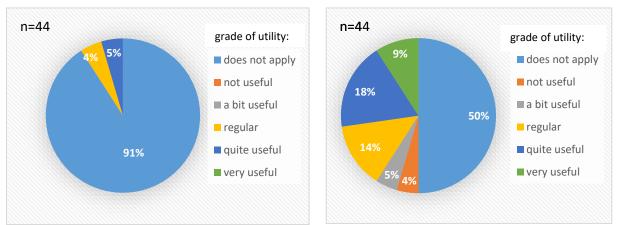


Figure 22: Perceptions of utility of Internet in the two regions Apurímac (left, n=22) and Lima (right, n=22) (absolute frequencies, n=44=100%)

Knowledge exchange between farmers was generally rated more utile than the participation in the external control process of the PGS (Figure 23) and the knowledge exchange between farmer and consumer in both regions.

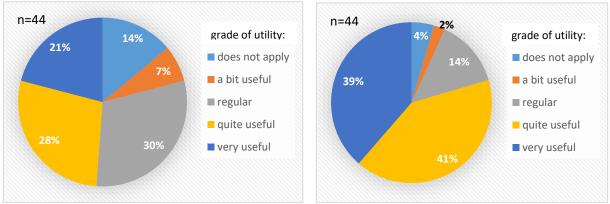


Figure 23: Perceptions of utility of two different sources of information in both regions: participation in external control of PGS (left) and the farmer-to-farmer knowledge exchange (right) (absolute frequencies, n=44= 100%)

Level of participation

Farmers were asked in different sections of the questionnaire about their participation in activities related to PGS or functions and responsibilities they assume inside the PGS and their NL. The activities and responsibilities can be clustered into two groups: those activities directly related to PGS and those related to the NL. In the first group "technical training", "control visit", "PGS evaluator", "regional council" and "evaluator workshop" are subsumed (Figure 24). The results show that technical trainings are assisted by 100 % of the farmers in Lima and 96 % of those in Apurímac. Furthermore 43 of 46 farmers stated that they would like to receive more technical trainings. In Lima the participation in control visits was ten times higher than in

Apurímac. Control visits included both internal control and external control. The lower participation in Apurímac can be explained partly by the constitution of the sample, with 10 evaluators in Lima and five in Apurímac (visible in bars "PGS evaluator") and the fact that in both regions almost exclusively the evaluators participated in control visits (Lima: df=1, X² = 14.673 p <0.001 Apurímac: df=1, X²=15.338, p <0.001). The same counts for the participation in workshops for evaluators. Participation in the regional PGS council of the respective region is in Lima and Apurímac very low. The participation in NL related activities is shown in the last three categories (Figure 24). Assemblies of the local nuclei are assisted by almost all farmers in both regions. A function in the directive board of the NL has been held by 13 out of 22 respondents in Lima and six out of 24 in Apurímac. Working groups were rather scarce in all of the NLs and hence the participation rate low. The category "farm visits" refers to excursions and formal or informal visits to fellow farmers in order to learn something from them. The participation of farmers in external farm visits was in both regions higher than 80%.

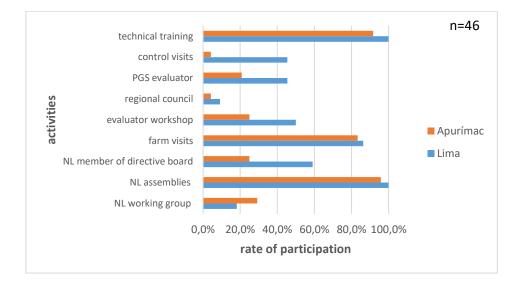


Figure 24: Farmer's participation in PGS (Participatory Guarantee System) and NL (Núcleo Locál)-related activities as indicated by farmers (absolute frequencies)

Level of knowledge about PGS

Among the farmers in Lima and Apurímac 15 (32 %) were able to respond correctly to both knowledge questions, assessing the knowledge about the existence of an internal regulation and the process of PGS. There was a significant difference in the level of knowledge between farmers in Lima and Apurímac (U=137.5, p<0.05). In Lima almost half of the farmers could put the four steps of the certification process in the correct order, whereas in Apurímac only 25 % were able to do so. Furthermore farmers in Lima were far more aware about the existence of an internal regulation of PGS, than respondents in Apurímac. This pattern appears also when farmers were asked to rate their own knowledge about PGS. Farmers in Apurímac the difference between the self-estimated knowledge of farmers is relatively high. Ten farmers said that their

knowledge of PGS was either low or very low, whereas nine farmers rated their knowledge as high or very high. In Lima most of the farmers considered their knowledge about PGS as acceptable (12 respondents) or high (8 respondents).

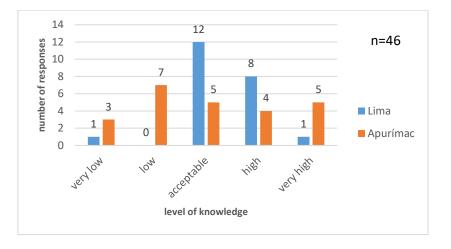


Figure 25: Self-evaluated knowledge about PGS in the two regions (absolute frequencies, n=46=100%)

Again evaluators tended to respond more correctly to the knowledge testing answers than nonevaluators. In Apurímac four out of six respondents, who could put the process of PGS in the right order are evaluators (p<0.01, X^2 =10.189, df=1). Only one evaluator in Apurímac couldn't do so. In Lima this correlation was not significant, but again 7 out of 10 evaluators were able to give the correct answer, which makes up for 58 % of the right answers. Only 58 % of the non-evaluators were able to put the PGS process steps in the correct order (p= 0.185, X^2 =1.766, df=1)

8.4 Problems identified by farmers in their PGS

When asked if there are currently any problems within the NL or association with PGS, ten respondents (45.5%) in Lima and 14 (58.3%) farmers in Apurímac indicated that they experienced some problems with PGS in their NL. Although some problems identified are similar in both regions, there are certain differences. In both regions the problems identified can be divided into association/NL – internal and external problems. Furthermore most of the problems mentioned are not directly related to PGS, its principle or its functionality, but rather they state problems the associations face in general. Cross-connections can be made though. In Apurímac (Figure 26) the main problems mentioned by farmers lie within the nuclei themselves. Structural problems, like a missing president or even a missing directive board have been mentioned as well as a lack of participation of some members in the upcoming tasks associated with PGS and the organization in general. Here some farmers lamented that only part of their community was part of the PGS and they wished for a higher participation of fellow farmers and a better cooperation between members. Distrust and fraud inside the nuclei was mentioned by two farmers, who claimed that not all farmers comply with the organic

standards but still pass the internal and external controls. The financial situation was only addressed by one farmer, who lamented a lack of budget to carry out PGS control properly. A frequently mentioned matter was the situation of fraud by other non-PGS farmers misusing the PGS seal. In contrast to Lima, many farmers in Apurímac use the label or their constancia to differentiate their products. Here organizations like ARPEA or IDMA support the farmer by putting up banners and giving them green aprons with the PGS seal. Some PGS farmers mentioned that other, supposedly conventional farmers, are taking either the seal or wear the same aprons pretending to be a PGS farmer. This observation has been made by institutional actors (Mariscal 2016) as well and has been subject to discussions several times. This issue is also related to the problem of a lack of demand of PGS products, mentioned explicitly by two farmers. An issue mentioned by one farmer, who had been working a lot with PGS and organic agriculture on the national level and is considered a role model and leader in the district of Abancay is the lack of communication between and the inclusion of farmers in the regional PGS council of Apurímac. An issue mentioned by one farmer only, but also subject to debates among stakeholders throughout the time of investigation is the obligatory membership at ARPEA. This is outlined also in the internal regulation of the PGS Apurímac (CR Apurímac 2013).

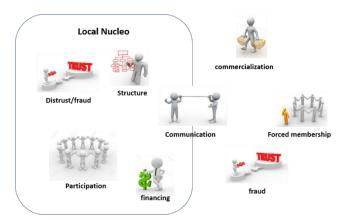
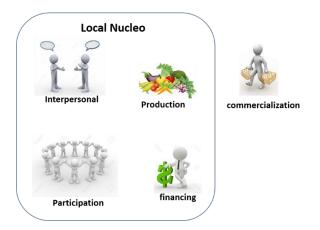


Figure 26: Problems identified by farmers in Apurímac. Categorized and separated into internal (blue box) and external problems. ¹²

In Lima farmers identified less problems than in Apurímac, mentioning as well the lack of participation and dedication of fellow farmers impeding the good functioning of PGS sometimes (Figure 27). Financial bottlenecks are mentioned by the president of one of the associations in Lima. One of the main problematic issues mentioned by several farmers were interpersonal disputes ranging from simple discussions to robbery. The latter problem was mentioned by some farmers from the network of urban gardens, who had all small plots right next to each other. Furthermore there seemed to be some conflicts between the different nuclei from the network and issues of dominance from some over the others arose. Group internal conflicts

¹² Source cliparts: https://clipartfest.com/welcome.html

dominated the statements of farmers of the urban garden network. Another problem present in the network was the low productivity of some farmers. Some respondents claimed that their fellow farmers are not producing anything to sell on the markets, either they only produced for their self-consumption or they didn't cultivate their plot at all. This again, was only a problem perceived by farmers from the network. The missing market and opportunities to sell their products is also mentioned by the farmers of Lima to be a central problem. Although there exist weekly organic markets for producers, the PGS farmers can either not access them, because they don't have a TPC or the quantity they produce is too small.



*Figure 27: Problems identified by farmers in Lima. Categorized and separated into internal (blue box) and external problems.*¹³

Between the identification of problems and the overall level of satisfaction of farmers with PGS was no significant correlation (U=257, p=0,866). In Lima 50 % of the respondents are satisfied and 31.8 % very satisfied with PGS in their association. Three respondents were indifferent and one was unsatisfied. None of the respondents marked very unsatisfied. In Apurímac 54 % are satisfied and 25 % very satisified with PGS, three indifferent and two unsatisfied. Running a Mann-Whitney Test comparing the overall satisfaction with the PGS among the regions showed, that there was no significant difference in the level of satisfaction between Lima and Apurímac (U=243, p=0.613).

¹³ Source cliparts: https://clipartfest.com/welcome.html

9. Discussion

In contrast to other experiences of PGS in Latin America (Brasil, Chile, Colombia), the structure of PGS in Peru is more centralized (8.1). This was sometimes criticized by interview partners on the national scale (e.g. Flores 2016). At first sight this centrality also opposes the PGS principle of horizontality (Källander 2008), but some interview partners stressed that the main responsibility of the implementation and functioning of the PGS lies within the regions (CR) and the farmers (NLs) (Ravello 2016, Mendiola 2016). The CN is supposed to be mainly responsible for political advocacy on the national scale and financing (Ravello 2016, Luján 2016) and is hardly involved in the regional and local PGS processes. The CN was more present in discussions and talks in the CR Lima than in Apurímac, since all three member institutions (ANPE, ASPEC, IDMA) have their main offices there. While the monitoring process of the PGS in e.g. Brasil is based on one control (Ecovida Network of Agroecology 2004), in Lima and Apurímac an internal and an external control are necessary.

In literature the empowerment of farmers is mentioned often as a benefit of PGS (Nelson et al. 2015, Rabendo 2011, Gonzalez/Nigh 2015) and this was also stressed by several key informants on the national and regional level. The high share of involvement of women in the two PGS initiatives can be interpreted as one aspect of empowerment, which is in line with the definition of empowerment of Gonzalez/Nigh (2015), who state that the participation and active involvement of women is a great part of empowerment. Following Zanasi et al. (2009) higher education is an important precondition for good and functional implementation of PGS. The aim of this study was not to evaluate the functionality of the two PGS initiatives, hence no result could either prove or disprove this assumption. The argument of Zanasi et al (2009) is slightly supported though by the findings that internal evaluators tend to have a higher educational level than the other PGS farmers. Also almost all of the interview partners of the regional councils at least had a superior technical or university degree and they are crucial in the implementation of PGS in the two regions. The educational level among farmers, was generally low (46 % incomplete primary school), especially in the region of Apurímac (8.3.1).

Technical trainings and technical assistance resulted to be an important tool and medium to empower farmers in Peru. This perception was shared among all stakeholders on all levels. The prevalent topics of the workshops and the technical assistance were organic agricultural practices, the principles of organic agriculture and the principles and functioning of PGS. Technical trainings constituted the main links between the farmers and the members of the regional PGS council. Considering the critique of Gonzalez/Nigh (2005) of certification's negative effect on agricultural and traditional knowledge of farmers, PGS in Lima and Apurímac certainly contribute to the dissemination of organic agricultural practices and values among its stakeholders. PGS related trainings are intensively provided only to some of the farmers, who

usually are the designated internal evaluators. Their level of knowledge about PGS tended to be higher in comparison to the non-evaluators and evaluators also strongly tended to be the ones providing technical workshops to their fellow farmers. In Lima and Apurímac they seem to have a crucial role in the NLs visited and are potential key figures in the implementation of PGS. To my best knowledge I couldn't find any scientific literature analyzing or discussing either the role of technical trainings and workshops nor of key figures in PGS. In 2011 only 0.7% of all farmers in Peru received either technical assistance (INEI/MINAGRI 2012: 24 f.). Although the guarantee process in PGS was only clear to 55 % in Lima and 25 % of the interviewed farmers in Apurímac, technical assistance reached all farmers in the associations visited and was very welcome and required in all of the NLs. PGS is hence contributing to increase the relatively low share of farmers receiving technical training in Peru. Villanueva and Sanchez (2014) identified in their study about the PGS in Huánuco ongoing processes of sharing information, techniques and traditional knowledge. This was also found in the two regions of Lima and Apurímac. The mutual learning process is in both regions characterized by a strong duality of knowledge-donor and knowledge-receiver. The knowledge-donors are the institutions of the regional PGS councils, which provide workshops and technical assistance to the knowledge-receivers, the farmers. The importance of the external professionals was also found by Nelson et al. (2015) in their study of the Mexican Network of Organic Agriculture, where farmers didn't feel trained enough to carry out certain tasks in the PGS. In Apurímac some farmers already acted as facilitators of knowledge, gave workshops to their companions and were supported by the NGOs of the CR though.

A national guideline, the MPSGP, shall harmonize the functioning of the different PGS initiatives in Peru. This guideline is strongly oriented towards the principles of PGS as outlined by IFOAM and the national regulation on organic agriculture (N⁰ 29169). Complying with the same organic agricultural standards has been often used as a supporting argument for PGS in the debates about its recognition, which was a central issue on the national level. Also the regional stakeholders mentioned the problematic situation of not being recognized, although in Apurímac the regional recognition slightly ousted this topic from the agenda of the regional council. The importance of a legal recognition of PGS was also held to be important for the success of the system by Nelson et al. (2015). In the viewpoint of Gonzalez/Nigh (2015:337), the context in which PGS develop is characterized by personal relations and face-to-face interactions, which should result in support and recognition of small-holder agriculture. In the case of Peru, regional governments already started to legally recognize PGS, whereas on the national level the recognition is yet to be achieved.

Another aspect of a supportive environment, and also a principle of PGS, as outlined by IFOAM is the consumer participation. In the Mexican PGS Nelson et al. (2015) found that consumers

knew way less about PGS than the producers and their participation was significantly lower. The consumer participation in Peru was in both regions low to non-existent. After a pilot test on the organic market in Cienequilla, one of the most advanced and independent organic fairs in Lima, I needed to drop the research question including the consumers. None of the eight interviewed consumers did know what PGS was, nor had they heard of it. All stakeholders involved in PGS I talked to in Lima and Apurímac mentioned that the participation of consumers is almost non-existent. A possible cause, as some national stakeholders assume, is the invisibility of PGS to the consumers. PGS farmers rarely use the seals in their products or show their constancias. Especially in Lima, only on one of the many markets visited farmers indicated their participation in PGS. In Apurímac the use of the seal or the constancia was observed to be more frequent, but here the consumers were less aware about organic products in general and the demand for organic products was generally low. The non-existence of an organic market, as well as the price for organic products, which didn't differ from the conventional one, support this assumptions. This observation opposes one of the main principles of PGS according to IFOAM and mentioned in literature (Rabendo 2011), as well as findings from a prior case study in the region of Huánuco (Villanueva, Sanchez 2014), which identified a committed and informed consumer base in the regional PGS.

The participation among farmers on the other side was very high in the technical trainings (>90%) and also in other activities like farm visits and assemblies in the nuclei farmers strongly participated.

As Veldstra et al. (2014) mention, the decision to farm organically is a production decision, whereas the decision to certify ones product is a marketing decision. In both regions, Lima and Apurímac, one of the main motivations of farmers to participate was the commercialization and the hope to increase their market opportunities. The decision to produce organically was very case specific, but mostly driven by the incentives of the institutions of the CR, promoting organic agriculture and PGS among farmers. The issue of an existing market and demand as an important influence factor for PGS performance and its sustainability, is a prevalent topic on all levels (local-regional-national), but most pressing in the regions and among farmers. The approach though is somehow a different one. While on the national level interviewees stress the importance of an already existing market before starting a PGS, the actors on the regional level tend to claim that this should be the case but that reality is often not meeting this criteria. Especially in the region of Apurímac, PGS is often used as a tool to not only facilitate market access for farmers, but also to create a market segment and enhancing demand. This also goes hand in hand with my own observations when visiting PGS farmers on the market and the findings of an IFOAM study (2014:30), which revealed that the organic market in Huánuco, Peru was a result of PGS. Strikingly Peru was the only example (among eight initiatives from

different countries), where the PGS developed prior to the ecological market. Collective marketing, which has been a characteristic of the PGS in Huánuco (Villanueva/Sanchez 2014), could also be observed in the two regions with some limitations. Either the lack of space and demand (Apurímac) or the non-recognition of PGS farmers (Lima) could be identified as limiting factors.

Discussions about the reliability of TPC, are focused on the risk of partial certification bodies through competition (Silva Castañeda 2011) and/or the influence of global players on them and organic standards (Howard/Jaffe 2009). Especially in Apurímac reliability issues of PGS have been noticed. Fraud and misuse of the PGS seal by non-PGS farmers have been mentioned by various farmers and representatives of the CR.

10. Conclusion

This research aims at contributing to the lack of scientific empirical evidence on PGS in practice. Through integrating the viewpoints of stakeholders on three levels (national-regional-local), two PGS initiatives in Peru have been described in detail and contextualized. During my four months investigation in Peru, I was able to closely observe the functioning of the two regional initiatives of PGS, their structure, functions, organization and the discourse on PGS on the national level.

The recognition of PGS on the national level is the most pressing issue at the moment to all national stakeholders. Many of the actors, who have been fighting for the recognition of PGS on the national level, are exhausted and find themselves in a circle of debating the same thing over and over again and not "getting closer to being recognized one centimeter" (Flores 2016: 18:55). But still, there is a spirit of optimism, due to the change of the government in 2016 and the willingness of the responsible government officials for dialogue. This change in attitude towards PGS was visible in the working group, that formed, as well as in the presence of SENASA representatives at my final presentation at the UNALM.

The concept of PGS is definitely not uniform and different ideas of PGS among the stakeholders on the different levels (national, regional), but also between actors on the same level, lead to discussions that may hamper and slow down the development of the two PGS initiatives under investigation. Additionally it is probably difficult to advance in the political incidence for recognition on the national scale if the debate is still stuck in the justification of the concept per se.

PGS systems in Lima and Apurímac are certainly characterized by a diverse network of institutions, which possibly wouldn't cooperate if it wasn't for PGS. PGS is embedded in a complex web of actors and social relations, public policy, cultural traditions and economic interests. PGS acts as a link between different actors on the national level and also contributes to put small-scale farmers' interests on the political agenda, which was shown in the formation of a working group and the involvement of representatives of NGOs, academia, farmers and public actors, like the ministry of agriculture.

Both initiatives are structured and implement PGS according to the internal regulation, the MPSGP. The idea of decentralizing the PGS structure and furthering local initiatives, expressed on the national level, does not meet the reality in practice in the two regions. Although the regions acted quite autonomous, the CN has a certain influence on the functionality of the single PGS initiatives either indirectly through its political advocacy or directly through decisions affecting all regions. In both regions IDMA was an integral part of the CRs, but is at the same time member of the CN. Also ANPE, being part of the CN, was working in several regions either directly with PGS initiatives or, as is in the case in Apurímac,

through its regional bases. Hence, certain interests of the CN are automatically transferred to the regional level. Tendencies to centralize PGS also on the regional scale have been noticed especially in Apurímac, where all farmers were obligated to be members of the regional base of ANPE, ARPEA. This may on the one side be an attempt by national institutions to better organize the millions of small-scale farmers in Peru, on the other side it may also be seen as a consequence of the strong dependency on external financial support causing the dominance of some institutions.

Clearly cultural and demographic factors play a crucial role in the current implementation of PGS in the two regions. Structural poverty¹⁴ in both regions make a sophisticated functioning of PGS complicated. In Apurímac farmers are widely dispersed, infrastructure is poorly developed and malnutrition is still an issue. Furthermore the educational level of farmers is low to very low in both regions, which poses a challenge to the farmers themselves and the institutions involved in PGS. In Apurímac many respondents weren't able to read or write and depended on the support of their children, friends, fellow farmers or the professionals of the institutions in order to be able to participate in PGS. In Apurímac the level of knowledge about PGS among farmers was lower than in Lima and only few actually understood the concept and process of PGS. The strong dependence of the functionality of PGS in Lima and Apurímac on external financing through NGOs, poses a risk to PGS's sustainability, which many of the stakeholders are conscious of. In Apurímac this dependency of farmers was more noticeable than in Lima, which maybe also rooted in the low knowledge of farmers about PGS and its processes. A strong and consolidated NL is an important factor for farmers to be able to express their needs and carry on with PGS once the accompanying institution has withdrawn its support, due to the end of the project. The participation of NLs in PGs is often related to the duration of the institution's support, which is determined by the projects it achieves. According to many key informants in Apurímac, once the project phase is over and the NGO withdraws its support, the farmers stop to participate in PGS. Therefore the CR has to deal with a high fluctuation of members. Two of the NLs in Lima seemed to be acting rather independently already, whereas the network of urban gardens and all (but one) NLs in Apurímac relied heavily on the support of the accompanying institutions. This observation confirms the central role of the regional PGS council in the functioning of the PGS.

On all levels the market situation for PGS farmers in both regions is still critical. Key informants on the national scale claim that one of the most important aspects in the sustainable and good functioning of PGS is an existing market and demand. Ideally PGS should develop as a response to consumer demand. Summing up the observations from the two regions I conclude

¹⁴ Structural poverty is understood as a long term persisting kind of poverty more caused by structural external factors (economy, infrastructure, etc.) rather than the personal behavior

that in Lima there is consumer demand, but PGS farmers are not allowed to sell their products as organic and in Apurímac there is few demand, but PGS is recognized in the region (regional ordenance Nº020) and farmers can market their products as organic. On farmer's markets in Lima, the PGS farmers are mostly not distinguishable from the non-PGS farmers, either organic or conventional. There are several weekly markets, claiming to be solely organic but only on two of these markets PGS was actively promoted, by either putting up the PGSconstancias visible to the consumer or by using the PGS label on the product. Some organic markets even prohibited PGS products on their fairs, due to its legal non-recognition. In Abancay, Apurímac on the other hand the situation for organic farmers is different, since there is no official market for organic produce and few support towards this by the municipalities. Here the Regional Organic Farmers Association Apurímac (ARPEA) is trying to support PGS farmers by making them more visible to consumers. This through uniform aprons and banners put up at the stands. Furthermore there is a general idea among stakeholders of bundling PGS farmers on one market place, rather than letting them sell dispersedly on different markets. The critical situation of commercialization makes it hard for stakeholders to further develop PGS, since a very important incentive for farmers to participate – the chance to sell their produce at a better price – is not always given.

Probelms directly related to PGS were hardly identified by farmers and also suggestions for improvement were only made by very few respondents, which was the reason for not including the last aspect in the results. The underlying reasons for the low response rate to those questions are possibly a combination of a low level of knowledge about PGS, a low presence of PGS in the day-to-day activities of most of the farmers and maybe also certain trust issues towards me, since I was an external and mostly unknown person to the farmers when conducting the interviews. The latter was experiences sometimes with farmers in Apurímac. Additionally some NLs have only been involved in PGS since one or two years, which may also explain their reluctance in addressing problems or suggest improvements. The low presence of PGS in the farmers' lives roots, in my opinion, in the strong support from institutions in the tasks of PGS and the designation of some evaluators and leaders, responsible for the internal controls. Furthermore PGS has not yet caused the feeling of ownership among most of the farmer's associations visited. In many cases it seemed like farmers were relying very much on the institutions and hence didn't see the necessity of starting to take the responsibility for the process of PGS. Sometimes I had the feeling that PGS, in itself a complex concept and process, was overstraining some farmers. Hence a clear and at the same time simple preparation of farmers for the basic processes of PGS is of utmost importance. In the case of Apurímac the language (quechua!) of the workshops and trainings resulted to be an important factor as well. The internal evaluators definitely play an important

role in their associations, often act as leaders and facilitators of knowledge among their companions and are important linkages between the local and the regional level of PGS.

Summing up, perceptions on PGS in Peru are shaped by the stakeholder's background and the level on which they are involved in the process of PGS. The empowerment of farmers, by increasing their market access through an alternative to TPC, bringing their interests on the political agenda and preparing them to comply with organic agricultural standards are the main aims and underlying motivations for PGS among national and regional stakeholders. On the national level actors are mostly concerned with the national legal recognition of PGS and are placing many hopes of improvement of the general situation of PGS in the country, once the recognition has been achieved. The discussions with the responsible authority SENASA and the ministry of agriculture (MINAGRI) involved mainly the structural component of PGS, which can be traced back to the fact that the responsible governmental actors are still critical towards the basic concept of PGS. At the regional level both initiatives are implementing PGS in a light top-down manner. The formation of NLs was usually initiated by the members of the CR or NGOs, working with certain farmers, included PGS in their activities and then joined the regional PGS council. Farmers approaching the CR on their own initiative was scarce and in Apurímac almost non-existent. The CR plays a crucial role in both regions and assumes the same responsibilities, like coordinating the annual PGS process, the monitoring of the NL and the promotion of PGS and organic agriculture amongst farmers and occasionally also consumers. Although the promotion of organic agriculture should be a secondary task of the CR, the topic was omnipresent for farmers of the NLs. The CR in Lima appeared to be a bit more stable, than the one in Apurímac due to the involvement of several farmer's associations and small institutions. This diversity of actors involved, but also the availability of resources due to the participation of two public entities (municipality of Lima and INIA) and the location in the capital, seemed to have a furthering effect on the implementation of PGS. The demand for organic products in the capital can also be considered a driving factor for the long-term implementation of PGS in Lima. The CR in Apurimac faces some problems in the lack of participating institutions and financial resources, as well as a low demand for organic products in the region.

An empowering effect has been noticed in both regions, strongly coupled with technical trainings and assistance. Although technical training was considered important, effective and highly required by farmers, institutions need to be more aware of adapting the trainings to farmer's needs. The identification of local leaders in the NL is a promising driving factor for good performance of the PGS, since they can act as local disseminators of knowledge, as well as motivators and role models for their fellow farmers. As found in this investigation, internal evaluators tend to act as such leaders. The main benefits that have been achieved through

PGS in the regions are organizing farmers, get them to associate and starting to create a link, albeit weak, between them and the local markets. Saying it in the words of Jannet Villanueva (2016), former worker at IDMA, PGS is doing the "ant work", which in some cases paves the way to TPC. PGS is picking up farmers from where they stand at the moment in the regions of Apurímac and Lima. Although there are still many aspects to improve for PGS in the Peruvian context, they are an instrument to draw attention to the manifold small-scale organic farmers and their needs and contribute to making them more visible to the consumers, as well as the Peruvian state.

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ANNEX

1. Interview guide national and regional level

Interview guide national semi-structured interviews:

Fecha:

Lugar:

Nombre y Apellido:
Uso del contenido de las entrevistas de forma anónima

Consentimiento:

El uso del o	contenido de las entrevist	tas es de forma anónima. Y	′o,
estoy con	en	a día	y, siendo informado sobre el
propósito	de esta entrevista. Estoy	de acuerdo con que sea gr	abada.

Firma:

1. ¿Qué es su ocupación principal?

Antes de hablar sobre la certificación participativa me gustaría tocar el tema del reglamento de la agricultura orgánica en Perú.

- 2. ¿Cuáles son los principales elementos en este reglamento (ley, ministerios, grupos,...)?
 - a. ¿Quién es responsable para acreditar a las certificadoras?
 - b. ¿Quién vigila a los organismos de acreditación?
 - c. ¿Los productores, pueden elegir a la certificadora?
- 3. ¿Cómo está usted involucrado en el tema de los SGPs?
- 4. ¿Que son, en pocas palabras, los Sistemas de Garantía participativo para usted?
- 5. Por favor, puede mencionar los característicos, que considera más importantes para que un sistema de garantía participativo sea sostenible.
- 6. ¿En su opinión, cuáles son los agentes/grupos más importantes en la organización y el manejo de los SGPs en Perú al nivel nacional?
- ¿Cómo ve la situación de los SGPs en Perú en cuanto a la Ley de Promoción de la producción Orgánica y Ecológica (N°29196) actualmente?

Interview guide regional semi-structured interviews:

Nombre y Apellido:	Fecha:	Lugar:	CR:
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Información básica/historia del SPG en la región:

- 1. ¿En qué año se inició el SPG aquí?
- 2. ¿Quién inició el proyecto del SPG aquí?

Creencias: (motivación)

3. ¿Cuáles fueron las razones principales por las que usted decidió unirse a/crear el SPG?

Actores/Grupos:

- 4. ¿Qué grupos/actores están involucrados y activos en el Consejo Regional?
- 5. ¿Cuantos diferentes grupos forman parte del Consejo Regional en total?
- 6. ¿Cuantos productores son asociados al SGP al nivel regional? ¿Cuántos NL?

Reglamento:

- 7. ¿Qué reglamento sigue el CR? (RTPO, Manual de Procedimientos)
 - a. ¿Quién desarrolló este reglamento?
 - b. ¿Usted ha participado en desarrollar este reglamento?

Estructura Interna CR:

8. ¿Cómo están nombrados los representantes de la Junta Directiva/Secretaria Técnica? ¿Cuánto es la duración del mandato?

Organización – responsabilidades y funciones:

- 9. ¿Qué responsabilidades tiene el Consejo Regional?
 - a. ¿Qué son sus funciones básicas? (asesoría técnica, talleres, apoyo financiero a los NL, enlace,...)
 - b. ¿Qué tipo de decisiones toma?
- 10. ¿Hay una distribución de trabajo o responsabilidades dentro del CR? Si, si como es?

Organización - financias:

- 11. ¿Cómo cubre el CR los costes de sus actividades?
- 12. ¿Recibe el CR ayudas financieras externas actualmente? (institución pública, gobierno, ONG, universidad, organización)
- 13. ¿Qué tan importante son las ayudas financieras externas?
- 14. ¿Hay ingresos internos del SGP? (cuotas de miembros, "bolsilla del mercado")
 - a. Si, si ¿cuáles y cuanto cubren de los costos totales más o menos?

Organización - personales:

- 15. ¿Cuánto tiempo remunerado usted dedica al SPG? (organización, visitas,...)
- 16. ¿Cuánto tiempo no remunerado usted dedica al SPG? (organización, visitas,...)
- 17. ¿Recibe el SGP algún tipo de apoyo externo en cuanto a personales (técnicos, asesores)?

Organización – comunicación:

18. ¿Cómo es el proceso de tomar decisiones?

a. Cómo se llega a un acuerdo? (consensus, mayoría)

- 19. ¿Cómo se comunican entre el CR y el CN y el CR y los NL? (encuentros, de forma escrita,...)
 - a. ¿Cómo están difundidas las decisiones o novedades entre las diferentes entidades dentro del SGP?
- 20. ¿Con que frecuencia se junta el Consejo Regional?
- 21. ¿Cómo es la comunicación externa? (publicaciones, informes, pagina web, eventos, ...)

Proceso de certificación y comercialización:

- 22. ¿Puede describir en pocas palabras que rol tiene el CR en el proceso del control externo?
- 23. ¿Qué principales canales de comercialización existen para los productores en el SGP?

Capacitación:

- 24. Bajo su opinión, ¿qué importancia tiene la capacitación en el SPG?
 - a. ¿Qué tipo de capacitación ofrece el CR?
 - b. ¿Quiénes son las personas que dan los talleres/los que capaciten?

Cooperaciones:

25. ¿Existen cooperaciones con instituciones o grupos externos?

Problemas:

26. ¿Hay algunas dificultades en el funcionamiento del SPG?

Sí - ¿Cuáles son los principales?

Sostenibilidad:

- 27. Bajo su punto de vista, ¿cuáles son los principales motivos del buen funcionamiento del SPG?
- 28. ¿Usted considera el SGP sostenible?
 - a. Si : ¿Cuáles son los principales característicos que lo hacen sostenible?
 - b. No: ¿Qué le falta para ser sostenible?

Información básica

Edad:	Sexo:
Ocupación(es)	Estudios:

Consentimiento:

El uso del contenido de las entrevistas es de forma anónima. Yo,			
estoy con	en	a día	
siendo informado/a sobre el propósito de esta entrevista. Estoy de acuerdo con que sea			
grabada.			

Firma

Fecha, Lugar

2. Declaration of Ayacucho

Annually the National PGS Council organizes a national encounter of all PGS initiatives in Peru. This event serves as a platform to share experiences, network, discuss actual topics regarding PGS and promote small-scale agriculture. The encounter always ends with a joint declaration signed by the representatives of the regional councils and the national council. In this declaration usually reflection about PGS in Peru, to date achievements of PGS, current problems and claims towards the Peruvian are stated. Also eventual agreements affecting the PGS system in Peru, like the implementation of a technical secretary on the regional level in 2014, are made. In 2016, the encounter was held in the city of Huamanga, region of Ayacucho. 10 regional PGS councils and several representatives from PGS in other countries, like Chile, Mexico and Brasil participated. The main issues outlined in the declaration are:

- Achievements: e.g. promoting organic agriculture and strengthening the national organic market, as well as supporting small-scale farmers,
 Participation of the head of the Dirección de la Competitividad Agraria (DIGNA), Angel Manero, in the encounter, indicating the willingness of the government to negotiate about the legal recognition of PGS.
- Problems: national non-recognition of PGS \rightarrow many regions react with regional ordenances
- Challenges: widen the commercialization channels and improve market access for farmers, negotiate with the ministry of agriculture (MINAGRI) in order to achieve the national legal recognition of PGS through a national regulation



VIII ENCUENTRO NACIONAL DEL SISTEMA DE GARANTÍA PARTICIPATIVO SGP - AYACUCHO 2016

El Sistema de Garantía Participativo – SGP, se ha constituído en una alternativa viable) exitosa para certificar y promover el consumo nacional de productos ecológicos

EL CAMINO ANDADO Y LOS RETOS FUTUROS

DECLARACIÓN DE AYACUCHO

Los 250 participantes en el VIII ENCUENTRO NACIONAL DEL SGP realizado los días 18 al 20 de Noviembre del 2016, en la histórica ciudad de Huamanga "Cuna de la Libertad Americana", con la activa participación de representantes de los Consejos Regionales de Ayacucho, Lima, Huánuco, Cusco, Apurimac, Ancash, Ucayali, Huancavelica, Loreto y Junín y delegaciones de los países de México, Brasil, Chile, Bolivia; después de un enriquecedor intercambio de reflexiones, propuestas; y en base a los más de diez años de experiencias de implementación del SGP en varias regiones de lasí, declaramos:

reconversión (dejando la agricultura convencional con agroquímicos) cuenten con un que los lleva pequeños productores que optan por la agricultura ecológica, o que se encuentran en proceso de de la exclusión a la inclusión real, y les da posibilidades de articularse en los mercados El proceso de implementación del Sistema de Garantía Participativo en el Perú, liderado por el Consejo Nacional, los Consejos Regionales y Núcleos Locales, ha permitido construir pertinente a la realidad nacional; de instrumento a su alcance, que los reconoce como productores ecológicos, miles de cientos anb y validar un modelo de certificación participativa alternativa para diferenciados en mejores condiciones. real constituyéndose en una

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 Los avances logrados por el SGP a nivel nacional con el impulso de un colectivo de más de 100 organizaciones e instituciones públicas/privadas y la implementación de acciones han gestado y potenciado cambios positivos en el proceso de promoción y avance de la agricultura ecológica orientada principalmente para el consumo nacional.

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Luego de 8 años de aprobada la Lev N° 29196 de Promoción de la Producción Orgánica o Ecológica y 4 años de emisión del Decreto supremo N° 010-2012-AG, que aprueba el reglamento de la Lev; consideramos que el apoyo del Gobiermo Central al proceso de implementación y avance de la agricultura ecológica y del SGP ha sido limitado y en mucho inexistente. En ese contexto varios Gobiernos Regionales y locales (Huánuco, Apurímac, Huancavelica, Ayacucho, Yurimaguas, Cusco y Ucayali) entendiendo la importancia del proceso han emitido Ordenanzas Regionales que reconocen el trabajo del SGP, promoviendo iniciativas y proyectos orientados a impulsar este proceso inclusion.

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VIII ENCUENTRO NACIONAL DEL SISTEMA DE GARANTÍA PARTICIPATIVO SGP - AYACUCHO 2016

- 4. Al iniciarse el nuevo periodo de gobierno en el Perú (2016-20121), apreciamos la Agricultura familiar disposición del Ministerio de Agricultura de apoyar a la pequeña Agricultura Familiar Ecológica; y especialmente de aprobar una norma nacional que reconozca y viabilice la implementación del SGP a nivel nacional, tal como lo ha expresado el Director de la Dirección Nacional Agraria del MINAGRI en el presente Encuentro Nacional del SGP.
- El Consejo Nacional se compromete a realizar sus mayores esfuerzos para consensuar la propuesta de la norma nacional del SGP con el MINAGRI y otros sectores vinculados, para lograr su aprobación e implementación en el ámbito nacional.
- 6. El impulso del SGP ha contribuido a promover y fortalecer el mercado nacional de productos ecológicos; sin embargo es necesario ampliar los distintos canales de comercialización de productos ecológicos, para que estén al alcance de todos los consumidores a nivel nacional. Lo que requiere un apoyo concertado del estado, productores, consumidores y todos los actores involucrados en la producción agroecológica.
- 7. Asimismo reiteramos nuestro compromiso de consolidar lo avanzado y ampliar su implementación en todo el territorio nacional, considerando que el SGP va más allá del reconocimiento a la implementación de prácticas agroecológicas y su debida certificación; sino que se ha constituido en un instrumento promotor de equidad e inclusión real, de solidaridad, de trabajo compartido de impulso y fortalecimiento de la producción ecológica en el país; especialmente de la pequeña agricultura ecológica familiar; como una estrategia exitosa para afrontar los efectos del cambio climático y superar la pobreza en el ámbito rural.



Huamanga 19 de noviembre del 2016

