



GLOBAL COMPARATIVE STUDY ON INTERACTIONS BETWEEN SOCIAL PROCESSES AND PARTICIPATORY GUARANTEE SYSTEMS

- A BEST PRACTICE STUDY FOR LEARNING AND DEVELOPMENT WITH CASE STUDIES FROM AFRICA, ASIA, EUROPE AND LATIN AMERICA



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GLOSSARY OF ABBREVIATIONS

AB	Agriculture Biologique
ADPE	Organic Producers Association-Huánuco
ANPE	National Association of Ecological Producers of Peru - Asociación Nacional de Productores Ecológicos del Perú
ASAPP	Association of Sustainable Agriculture Practitioners of Palimbang
BONM	Bryanston Organic and Natural Market, South Africa
CETAP	Center for the Dissemination of Alternative Technologies - Centro de Tecnologías Alternativas Populares
CIDA	Canadian International Development Agency
COMAC	Commission Mixte d'agrément et de Contrôle
CSB	Community Seed Bank
DIFS	Diversified Integrated Farming System
DRA	Regional Agrarian Directorate
ECOVIDA	Rede Ecovida de Agroecologia
FAO	Food and Agriculture Organization of the United Nations
FDAT	Farmers' Developed Adopted Technology
GALCI	Regional Group for Latin America and the Caribbean - El Grupo de America Latina y el Caribe
GMO	Genetically Modified Organism
IDMA	Instituto de Desarrollo y Medio Ambiente
IDRC	International Development Research Center
IFOAM	International Federation of Organic Agriculture Movements
INIA	Institute of Agricultural Innovation
INR	Indian Rupees
KF	Keystone Foundation
MAELA	Latin American Agroecological Movement - Movimiento Agroecológico Latinoamericano
MASIPAG	Farmer-Scientist Partnership for Agricultural Development - Magsasaka at Siyentipiko Para sa Pag-Unlad ng Agrikultura
MFGS	MASIPAG Farmers Guarantee System
N&P	Nature & Progrès
NGO	Non-governmental Organization
PGS	Participatory Guarantee Systems
PGS SEF	PGS Self Evaluation Form
PO	People's Organization
REDAC	Red Mexicana de Tianguis y Mercados Orgánicos
SHG	Self Help Group
SIMPLE	Syndicat Inter Massifs pour la production et l'Economie des Simples
SOAAN	Sustainable Organic Agriculture Action Network
SPDA	Peruvian Environmental Law Society - Sociedad Peruana de Derecho Ambiental
UNALM	National Agrarian University of Peru - Universidad Nacional Agraria La Molina

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AGROECO project: www.lamolina.edu.pe/hortalizas/Agroeco.htm

EXECUTIVE SUMMARY

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They verify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange. PGS are viable organic verification systems, alternative and complementary to third party certification. They are particularly appropriate for local markets and organized smallholder farmers due to low financial costs and reduced paperwork.

Currently, over 49,000 small operators are involved in PGS. 50 PGS initiatives are now established on all continents, and more than 60 initiatives are under development. Over time, some of these PGS initiatives function well while others discontinue or disappear. This brings one question to mind: Under which conditions are PGS likely to be successful and run for a long time?

Based on an assumption that further social processes of a PGS group strengthen the sustainability of the initiative this best case study was commissioned by the AGROECO¹ project. In order to further develop PGS as a tool for improving livelihoods in rural communities, the study analyzes the interactions between PGS and other parallel social processes, and it identifies how both PGS and parallel social processes can trigger innovation and adaptation to improve the livelihoods of rural communities worldwide and particularly in the Peruvian Andes.

The research was explored using a participatory rapid appraisal method based mainly on qualitative studies. In consultation with global PGS experts and leaders, including the members of the IFOAM PGS Committee, eight best practice cases of PGS initiatives using PGS and other social processes were selected for in-depth studies: Keystone Foundation, India; Green Foundation, India; Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP), Philippines; Asociacion Nacional de Productores Ecologicos (ANPE) / Instituto de Desarrollo y Medio Ambiente (IDMA), Peru; Nuclei of Alto Uruguai and Planalto from Rede Ecovida de Agroecologia (Ecovida), Brazil; Red Mexicana de Tianguis y Mercados Orgánicos (REDAC), Mexico; Bryanston Organic & Natural Market (BONM), South Africa; COMAC Lozère.

Drawing from in-depth semi structured interviews with 84 PGS female and male farmers from the selected PGS initiatives, as well as discussions with 24 stakeholders involved in the development of PGS, the studied cases show that PGS can be a very important platform for the development of social processes. Encountered parallel social processes

¹ Funding for this study is provided by the AGROECO project "*Ecological and socio economic intensification for food security in smallholder agriculture in Central Andes*", which is carried out by the Universidad Nacional Agraria La Molina UNALM (Peru), the Sociedad Peruana de Derecho Ambiental SPDA (Peru) and the University of British Columbia, UBC (Canada) under the Canadian International Food Security Research Fund (CIFSRF), financed by the International Development Research Center (IDRC), and the Department of Foreign Affairs, Trade and Development Canada (DFATD). AGROECO project: www.lamolina.edu.pe/hortalizas/Agroeco.htm

included: collective marketing; sharing experience, techniques and traditional knowledge; collective seed management and conservation; small scale saving systems; socialized pricing; collective work and collective mobilization of a committed, informed and supportive consumer base. The study displays examples of how these social processes positively impact PGS initiatives in different ways, thereby improving the functioning of the PGS group and improving the livelihoods of farmers involved.

The study found that entry into PGS offers farmers and their families a range of economic, environmental and social benefits: improved social bonds; farmer empowerment; lower production costs; better market access and regular sales; enhanced food security; better management of natural resources. PGS has therefore the potential to make a significant contribution to the reduction of food insecurity and poverty among farmers in rural areas, thus improving their livelihoods.

At the same time, the different PGS initiatives are facing challenges that need to be addressed so that they can become more efficient and relevant for their members (and thus independent and sustainable). These include: involving consumers in PGS, gaining public and government recognition, getting financial and technical support from authorities, overcoming long distances or difficult access between the members of the group, as well as from farm to market; increasing the presently low understanding of PGS among farmers involved in the initiative; overcoming the limited participation of some farmers in the PGS, and improving the poor documentation and record-keeping.

The examined cases have all existed for a long time and were chosen as they addressed the sustainability issue with great success. They impress by their performance, and the impact they create. The study concluded that in all examined cases PGS is an important platform for community development. The strength of this platform depends on the capacity of the group for social interaction and common performance. Participation options, ownership, conflict resolution culture and gender roles are as important factors to success as tangible economic benefits, like access to markets.

PGS can be the first social activity of a group leading to further community actions beneficial for development. While PGS triggered further social processes, it was also found that in some instances other social processes were in place before the PGS was established. They are a good precondition for establishing a new PGS. Hence, parallel social processes can be used as an element of a sustainability strategy for PGS since they help sustain the PGS.

Parallel social processes of groups strengthen the PGS and a common guarantee of compliance with organic production rules is favorable to other collective actions. The opposite however, that PGS may not function well without further social process can neither be confirmed nor excluded in the scope of this study.

The study revealed many PGS benefits on a household level, including cost savings, income and food availability for poor and marginalized smallholder farmers depending on agriculture and access to markets. All respondents saw that participation provided

personal empowerment including the development of knowledge, skills and self-confidence. The accompanying culture of continuous learning at community level empowers them to innovate and adapt at household and individual levels, leading to improved production and marketing, including in situations of external changing conditions. Respondents in the examined cases also widely expressed that participation of women has been a key for successful household empowerment. The main benefits identified by respondents were

- Savings in production costs and reduction of production risks;
- Enhanced market access and improved income: Over 80% of respondents (even 98% of respondents from developing countries) could increase their income at a household level and nobody reported a decrease in income;
- Enhanced food security: 78% see an improvement of their farm performance, leading to the present food security situation (92% of respondents are food-secure the whole year round) and increased diversity in their diet, compared to before joining the PGS (84% of respondents);
- Improved access to production resources.

The cases in this report demonstrate that PGS can provide farmers' access to desired markets, thereby improving farmers' profit margins. The short value-chain and direct relations to consumers increase the likelihood of farmers being able to fetch a price for their products that enables them to make a decent livelihood for their families. The impact of PGS initiatives has been observed for both, cash and subsistence farming thereby improving households' nutritional requirements. This means that PGS as a development approach has the potential to make a significant contribution to the reduction of food insecurity/poverty and to improved nutrition among farmers in rural areas.

Factors conducive to the development of PGS are:

- Good understanding of Organic Agriculture and PGS;
- Mobilizing farmers around a shared or common vision depending on the context of the PGS initiative;
- Stakeholder-owned and maintained PGS structures;
- Continuous improvement and learning;
- Involving consumers in PGS;
- Facilitating the development of collective actions by farmers (social processes);
- Enabling market access;

- Enabling financial contribution.

The identified farmers' benefits, from a public interest perspective, (environmental benefits, food security, poverty alleviation, development of remote rural areas etc.) associated with PGS justify government attention to PGS. Government support may include a) the acceptance and regulation of PGS as an organic assurance system b) using PGS as tool for own or donor suggested development programs c) integration of PGS development in its research and agricultural extension agenda and d) supporting PGS and its positive externalities in the public interest with subsidies. Governments therefore could address major challenges mentioned in the interviews.

The investigations in the scope of this study revealed further research is needed to deepen the understanding of the factors of PGS sustainability and of their impact in order to further improve facilitation of PGS developments. Namely:

- Analyses of discontinued PGS to understand common risks and mistakes;
- Quantitative analyzes of the impacts of using parallel social processes in PGS for sustaining PGS for representative (not just best) cases;
- Quantitative livelihood effectiveness and impact studies of PGS and parallel social processes.

1. BACKGROUND

1.1 Participatory Guarantee Systems: An overview

“Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify² producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange”³.

The terminology and conceptual framework for describing what is now known as PGS developed from the first “*International Workshop on Alternative Certification*”, which was organized in Brazil in 2004 by the International Federation of Organic Agriculture Movements (IFOAM) and the Movimiento Agroecológico Latinoamericano (MAELA). The workshop presented and discussed different existing and functioning alternative organic certification systems from around the world and represented the first step towards the systematization of the concept, which has been taking place over the past 9 years.

Even though the reasons for creating alternative certification systems might differ, one strong driver is the fact that third party certification systems are not always suitable for small operators and local market channels, in terms of the complexity of norms and paperwork as well as the costs involved⁴. PGS emerges therefore as a set of methodologies for conformity assessment⁵ that are better adapted to specific contexts and which are based on the participation of stakeholders to guarantee the organic integrity of products. There are now organic PGS initiatives on all continents, which have developed, independently, in different contexts and realities, in response to the various challenges faced by producers, consumers and stakeholders in the organic sector. This means that every PGS initiative is different and locally adapted; nevertheless, all have a number of key elements and features in common.

The key elements and features of PGS are described below. They were identified by an international working group appointed⁶ during the 2004 workshop mentioned above, in order to develop, facilitate and encourage PGS around the world (IFOAM 2007).

1.1.1 Key elements of PGS

The key elements are: shared vision, participation, transparency, trust, learning process, and horizontality. Explanations can be found below:

A **shared or common vision** is a group process, where internal and external stakeholders (producers, consumers and others) collectively support the core principles guiding the PGS initiative. The shared vision can be clearly expressed by principles and

² Depending on the definitions of “certification”, PGS may or may not qualify as a certification system. Certain definitions of certification restrict the use of the term to third party certification, in which case it would be more appropriate to use the term “verify” rather than “certify” for PGS.”

³ IFOAM 2008. Definition adopted by the PGS Task Force and endorsed by the IFOAM World Board in 2008

⁴ IFOAM 2007

⁵ Letter of Antonio Prado, Latin American PGS Seminar, Brazil, 2007.

⁶ Letter of Torres, International Workshop on Alternative Certification, Brazil, 2004.

values that are documented through norms, operations manuals, via the farmer's pledge or a charter. Depending on the context of a PGS initiative, this vision can refer to different goals related to standards, fair trade, development of agro-ecological systems, the autonomy of local communities, short supply chains, etc.

Participation is an essential part of PGS and it implies that producers, consumers as well as other stakeholders such as NGO staff, are engaged in the initial design, and in the activities of the PGS. All stakeholders (including producers) take part in decision-making processes related to certification and to the operation of the PGS itself.

Transparency exists because all stakeholders involved in the PGS, including farmers, are aware of exactly how the guarantee system works and how decisions are made. Even though not every detail is necessarily known by everyone, all stakeholders have at least a basic understanding of how the system functions or have access to written documents containing detailed information about the PGS when needed.

The concept of **trust** refers to the "integrity based approach" upon which PGS is built. It essentially corresponds to the idea that producers can be trusted and that PGS can be an expression and verification of this trust. The foundation of this trust is their shared vision, collectively developed and continuously shaped and reinforced through the PGS.

A permanent **process of learning**, which develops capacities in the communities involved, is the result of the effective involvement of farmers, consumers and other stakeholders on the elaboration and verification of the principles and rules.

Participation not only leads to the generation of credibility of the organic product, but also to knowledge and experience sharing, which contribute to increased social capital within the system.

Horizontality in PGS exists as all members have essentially equal terms in power sharing rights, responsibilities, and contribute to how the system is established. This is clearly reflected in PGS by the fact that the verification of the organic quality of a product or process is not concentrated in the hands of a few. Members of a PGS share responsibility by rotating different work positions, making decisions together in meetings, engaging producers directly in the peer review of each other's farms, helping each other when problems are presented, among others.

1.1.2 Key features of PGS

PGS initiatives translate the key elements mentioned above into practical features, which may take different forms but can be summarized as follows⁷:

- Standards and norms: these are conceived or selected from existing standards and regulations by the stakeholders involved in the PGS, through a democratic and participatory process. They provide a reference point for measuring organic integrity.

⁷ IFOAM 2007

- Grassroots organizations: certification should be perceived as the result of social dynamics, based on the active organization of all stakeholders.
- Suitable for smallholder agriculture: the participatory nature and horizontal structure of PGS allows for more appropriate and less costly mechanisms of certification, especially suited to farmers operating on a small scale, serving the domestic market and very often in direct relationships with consumers.
- Focus on enhancing livelihoods: principles and values are aimed at the well-being of farming families, fair relations with consumers and the promotion of organic agriculture.
- Documented management systems and procedures: minimal paperwork is in place and is often combined with alternative ways to document how farmers demonstrate their organic commitment and integrity.
- Mechanisms to verify farmer's compliance with established norms: different working tools such as evaluation sheets, peer-reviews, manuals of procedures and regular meetings allow for verification while stimulating participation, organization, and contributing to a continuous learning process for all stakeholders.
- Mechanisms to support farmers: access to information and training is usually provided to farmers and often to consumers involved in a PGS, including visits by field advisors, the production of newsletters, farm visits, etc.
- Farmer's pledge: each farmer joining a PGS states his/her agreement with the established norms through a bottom-line document, such as a signed declaration or a video recording, depending on what is culturally and socially acceptable in each context.
- Seals or labels: these provide evidence of organic status and are used either on the labeled products or displayed in the shops or stands where the produce is sold.
- Clear and previously defined consequences for farmers' non-compliance: farmers as well as all stakeholders must be aware of the results of practices that do not comply with the agreed upon standards, and these actions are usually recorded in a data base or made public in some way.

1.1.3 How a typical PGS initiative generally operates

A typical PGS initiative involves producers, consumers and possibly other stakeholders such as NGO staff, government representatives, extension services staff, consultant and university staff (Figure 1). Producers are typically organized in local groups, which are responsible for ensuring that all farmers of the group follow PGS standards and processes. Each farmer receives an annual farm visit from an inspection group composed of the various stakeholders. Results of the farm visit are summarized in a farm inspection report, which serves as a basis for the farmer group to take decisions on the compliance or non-compliances of the producer with the standard. Documentation

summaries and certification decisions are communicated to a higher level, for example to a regional council or national council representing PGS stakeholders. This council sometimes endorses certification decisions taken by the groups or more generally approves each local group and grants them the use of the PGS logo, if any. It also decides on the organic standards to be followed and represents the PGS towards external actors such as the government and IFOAM⁸.

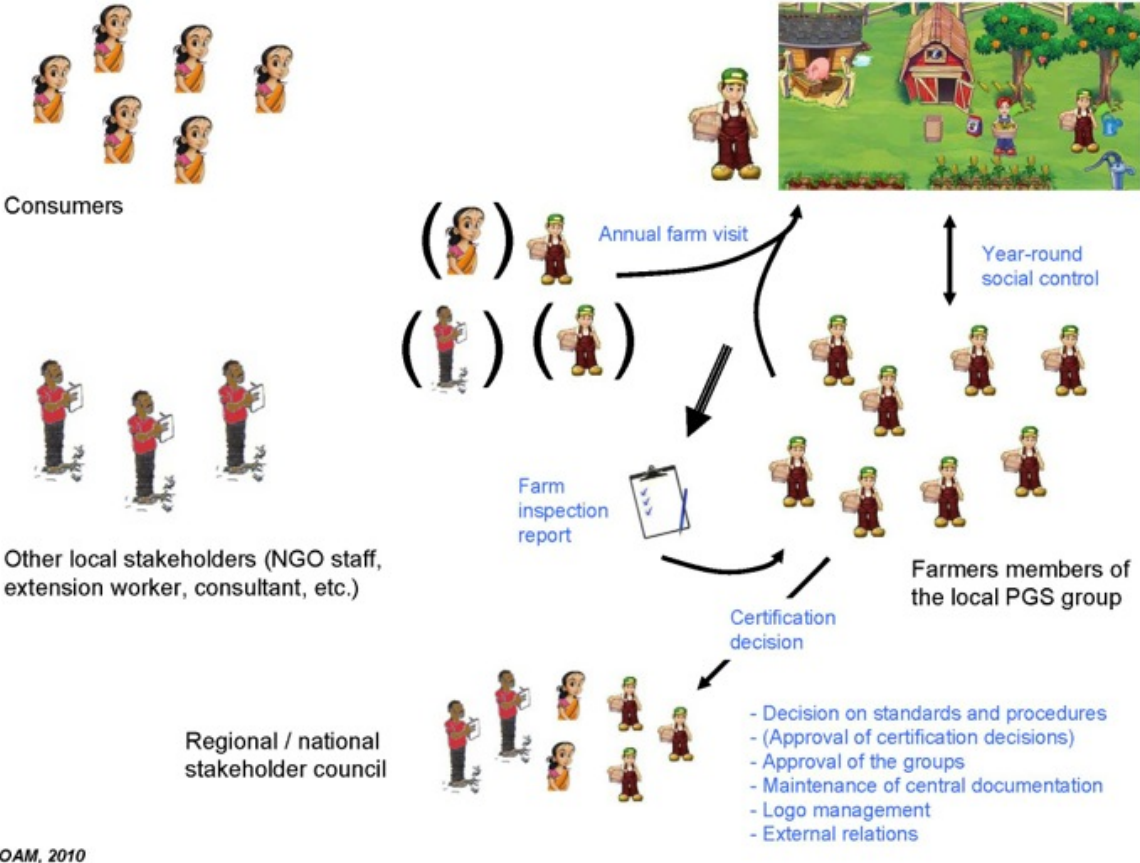


Figure 1. Diagram of a typical PGS initiative
 Source: IFOAM 2010

1.1.4 Differences between Internal Control Systems (ICS) and PGS

The concepts of participatory certification through PGS and group certification/Internal Control Systems (ICS) are the two main types of certification, which are particularly relevant to smallholder organic farmers. They share a common goal in providing a credible guarantee for consumers that organic production standards are met. Technically, PGS and ICS share some similarities in that they both have collective certification tools, standards/norms, mechanisms for verifying compliance, documented management procedures and farmer’s pledge and seal. As a result, they can look quite similar on the surface and are therefore sometimes confused.

⁸ IFOAM 2010

In theory and approach there are some key differences, as summarized in Table 1.

Despite these differences, there is nothing preventing an ICS from operating fairly similarly to a PGS initiative or for a PGS initiative to operate similar to an ICS. Indeed some local groups of PGS initiatives in Brazil (Ecovida) and Peru (IDMA/ANPE PGS) have been recognized as operational ICS by external certifiers.

Table 1. Differences between PGS and ICS

	ICS	PGS
General	<p>Assurance based on external evaluation of an internal control system.</p> <p>External certification body prescribes the process and delegates the inspection activity. The requirements for how the ICS must operate are set from the outside (rules for accreditation of certification bodies).</p>	<p>Assurance based on internal quality “control” / co-responsibility system of a group or network of operators and interested parties in the production, distribution and consumption or use of the product or service.</p> <p>PGS methodology and processes are designed by the stakeholders to be appropriate to the local social context and smallholder farmers they are serving.</p>
Scope (targeted markets for the certified products)	Local, regional, national, but mainly international.	Local, national and regional.
Participation	<p>Contract or membership (production based)</p> <p>Single interest (production) dominating</p> <p>Group may be self-organized, organized by a common buyer or an NGO.</p>	<p>Groups are generally self-organized based on common social, ideological and economic agenda.</p> <p>Involvement of consumers and other key local stakeholders is encouraged and sometimes even required.</p>
Standards and norms	National and international standards and regulations,.	May or may not conform to regulation and international norms, but are locally adapted.
Quality assurance	<p>Documented system, following requirements set by the certification body.</p> <p>Internal “inspections”.</p> <p>Focus on managers and field officers/inspectors to ensure compliance through Internal Control Systems.</p> <p>Preliminary screening and performance criteria for inclusion of members.</p> <p>Training of members.</p>	<p>Focus on training and value formation of members. Also empowering members to take an active role in the norm setting and certification process.</p> <p>Rely on social conformity enhanced through procedures and social conventions.</p> <p>Involvement of different interested parties (including consumer participation)</p> <p>Minimal bureaucracy to maintain. Low costs for farmers and less paper work.</p>

Verification	ICS systems use the same methodology as certification bodies. External inspection to evaluate the group ICS performance and effectiveness based on document reviews and sampling of members' farms.	Membership pledge and affidavits. Peer review visits
Certification	"Internal decision" but subject to acceptance by an external certification body. Certification is mainly limited to single commodity products. The farmers' group, an NGO or the trader/exporter owns the certificate.	Collective decentralized decision-making. More commitment and responsibility of farmers in the certification process. Certification is given to the whole farm, allowing farmers to sell all the crops from the farm as certified organic. Individual farmers own their own PGS certificates.
Communication about quality	Use of certification mark.	Groups can have their own label, logo or seal, or use a national or regional seal (depending on the level of independence).
Transparency	Private system transparent only to the certification body.	Transparency and open access to information is the norm.
Marketing of products	ICS farmers must operate under 'Common Point of Sale' requirements. They are bound to sell only the products that were certified. And the claim of certification is only valid when these products are marketed through the group that holds the certificate.	Marketing is not always centralized. PGS farmers can market their products on their own behalf to whoever offers the best price. However, some PGS initiatives assume common marketing, as they are an integral part of an organic marketing plan.
Funding and resources	Market sales cover the costs of the system.	Rely greatly on voluntary work. Membership dues, donation, and/or percentage of sales cover direct costs.

Source: Adapted from Grolink 2006, IFOAM 2014, Källander 2008, Roure 2007, Rundgren 2007

1.1.5 PGS worldwide in figures

PGS initiatives have existed for many years but there has been a significant increase in the number of new initiatives launched since 2005, coinciding with the period after the first "International Workshop on Alternative Certification", in Torres, Brazil, 2004. According to IFOAM⁹ (2014), information is currently available on more than 100 PGS initiatives in over 50 countries. These may be fully operational (Figures 2) or still under development (Figures 3).

⁹ IFOAM is currently the only organization regularly collecting, compiling and publishing information on PGS worldwide. Updated figures are published annually (Castro 2014).

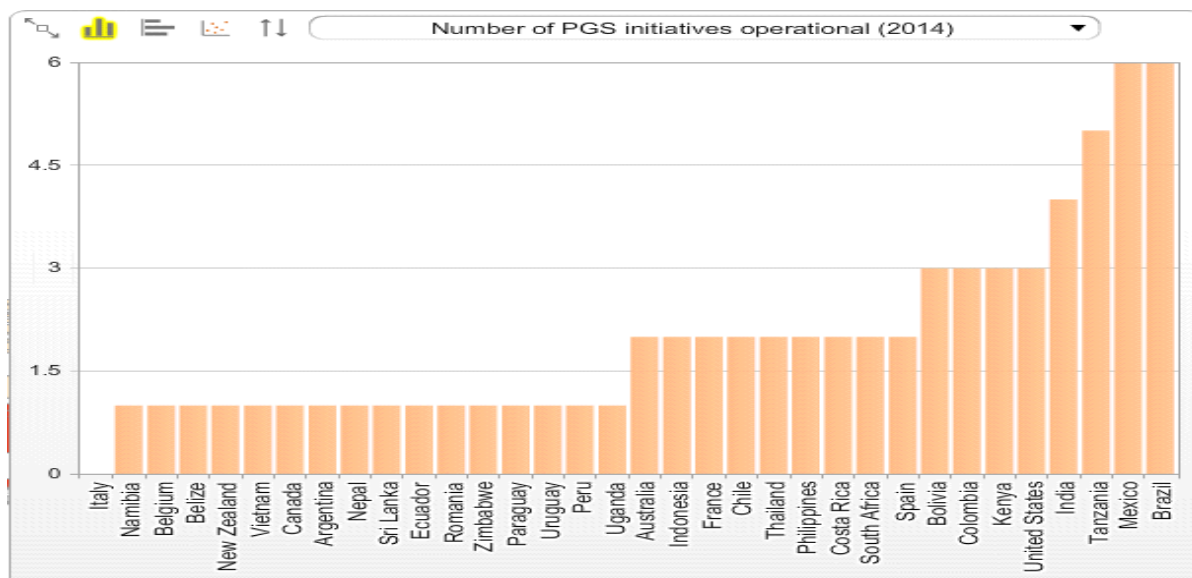


Figure 2: Number of PGS initiatives operational worldwide
Source: IFOAM PGS Map (online)

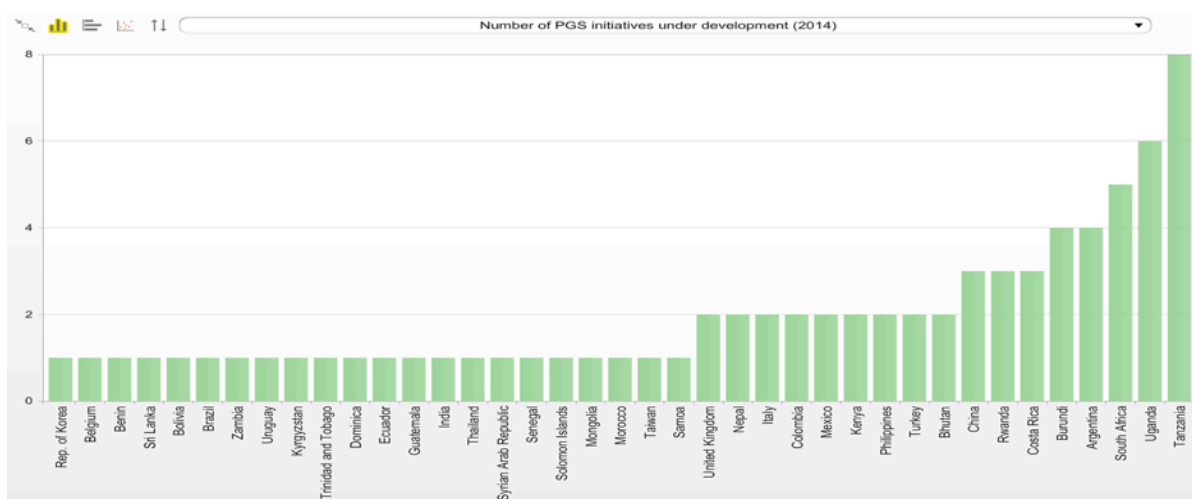


Figure 3: Number of PGS initiatives under development worldwide
Source: IFOAM PGS Map (online)

In the past 7 years, the number of PGS initiatives which are operational or under development has been continuously increasing, which is likely linked to the growing interest in PGS due to their strong potential for improving livelihoods in rural areas and contributing to sustainable development¹⁰ as they address the needs of small farmers with difficulties in accessing information on sustainable agricultural practices and local markets¹¹. IFOAM estimates that over 50 PGS initiatives are now established on all continents (Castro, 2014), and more than 60 initiatives are currently under development. Over 49,000 small operators (farmers and processors) are currently

¹⁰ Scialabba, Nadia. "Organic Agriculture and Food Security." International Conference on Organic Agriculture and Food Security. FAO, 2007.

¹¹ Auerbach, R. et al., Organic Agriculture: African experiences in resilience and sustainability, FAO, 2013

involved¹² in PGS. A few countries have a very high PGS uptake, namely the Philippines, with over 10,500 producers, followed by India, with around 6,000 producers and Bolivia, Uganda, Brazil and South Africa each with over 3,000 producers.

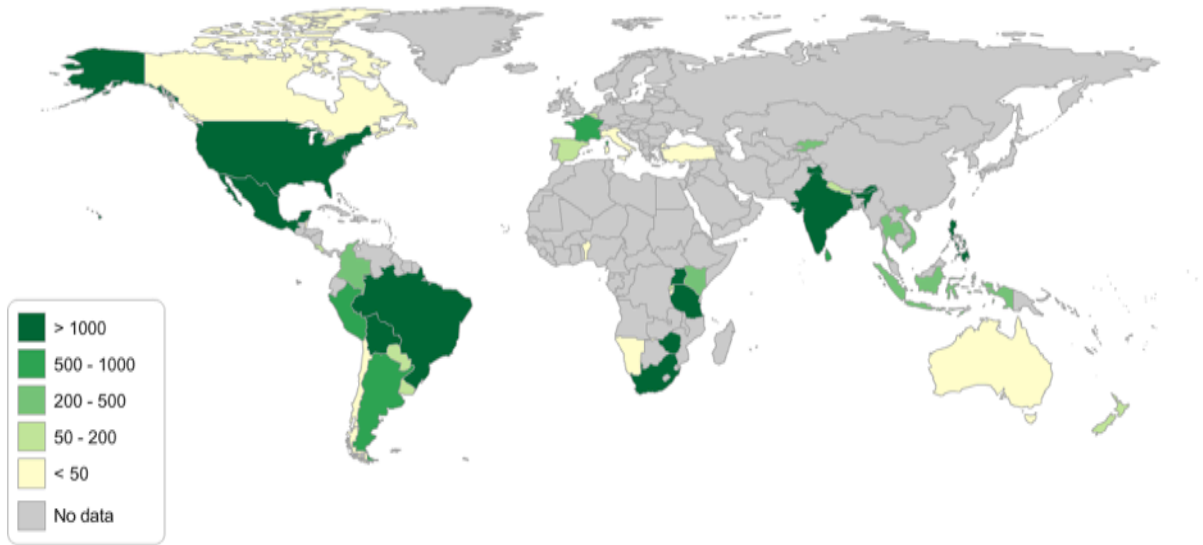


Figure 4: Producers involved in PGS worldwide
Source: IFOAM PGS Map (online)

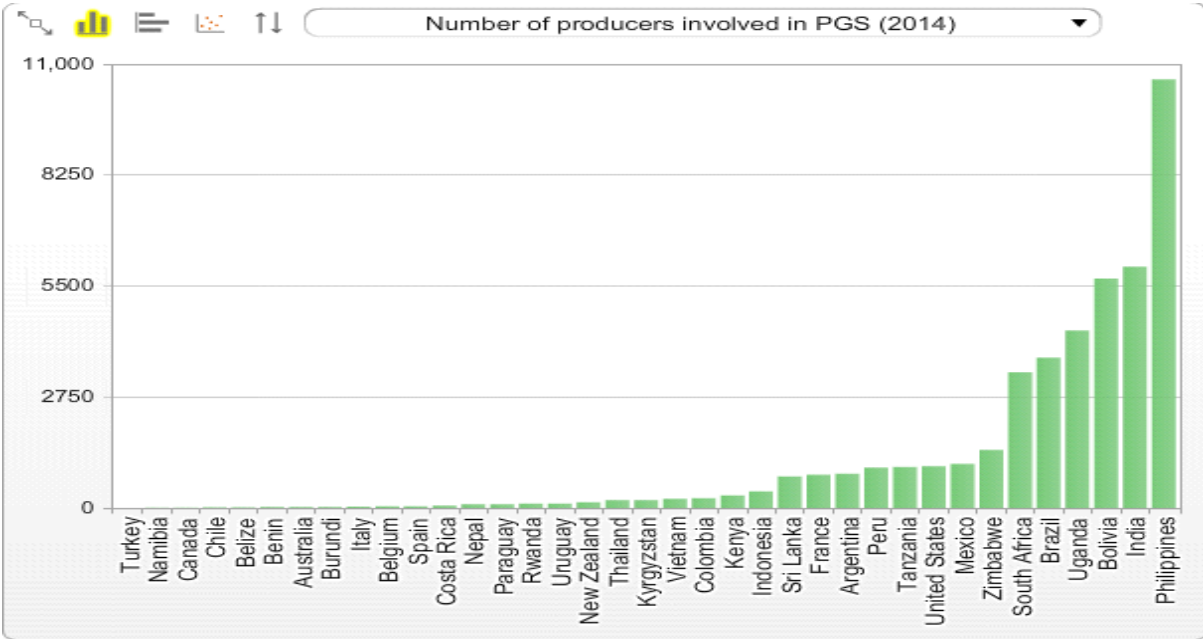


Figure 5: Number of producers involved in PGS worldwide per country
Source: IFOAM PGS Map (online)

¹² The difference between the terms ‘producers involved’ and ‘producers certified’ is adopted by IFOAM to collect data provided directly by PGS initiatives. It indicates that within a PGS initiative some producers might have joined a group and started to take part in its activities, trainings, peer reviews, etc. but have not yet received certification. These producers are in some cases considered to be “in conversion” but not all PGS initiatives use this category. Potentially, all “producers involved” will become “producers certified” in the long term.

PGS initiatives also exist in Europe and North America even though the legal framework in the European Union and USA do not recognize PGS. There are at least 2,000 producers involved in both continents combined, most of which are based in the USA (918) and France (830¹³).

In Latin America (Figures 6 and 7), there are over 12,000 producers involved in PGS in at least 13 countries. Several countries have a legal framework that acknowledges and accepts PGS, in most cases for the verification of domestic use (e.g. Bolivia). In Brazil, PGS has the same level of recognition as third party certification¹⁴.

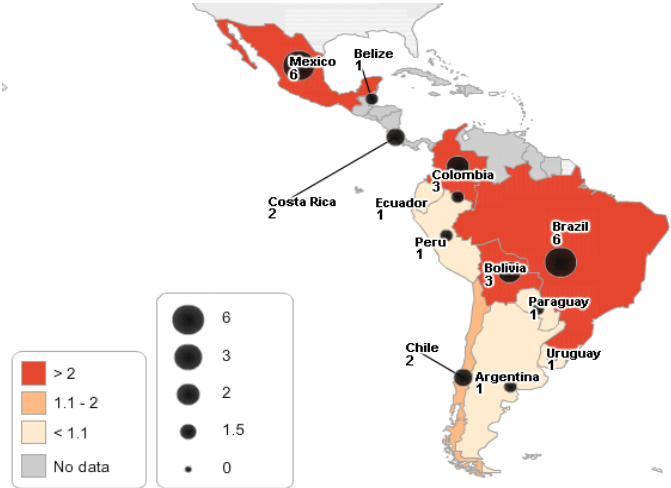
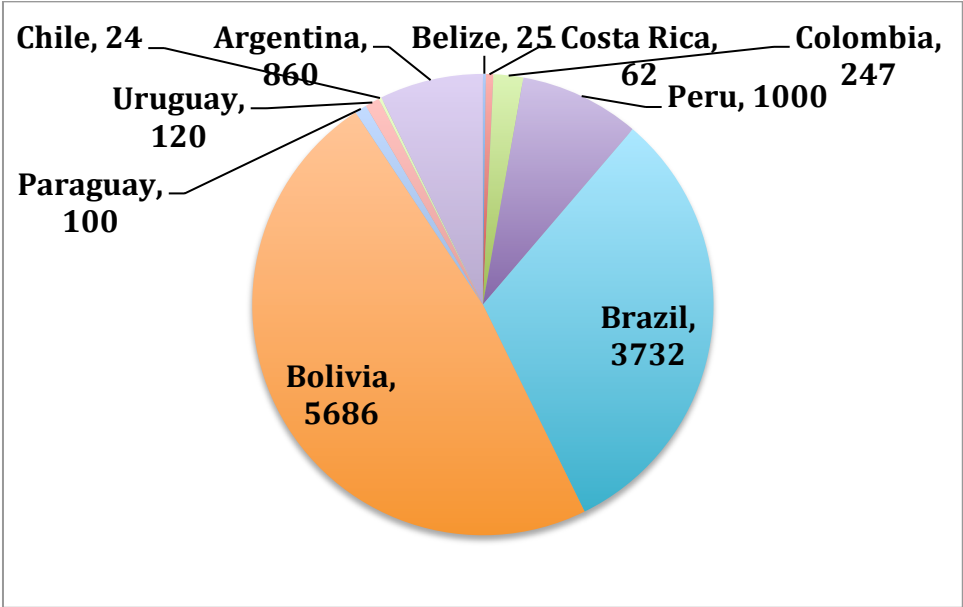


Figure 6: Number of operational PGS initiatives in Latin America
 Source: IFOAM PGS Map (online)

Figure 7: Number of producers involved in PGS in Latin America, per country
 Source: IFOAM PGS Map (online)



¹³ IFOAM PGS Map (online).

¹⁴ BRASIL. *Presidência da República. Decreto n. 6.323, de 27 de dezembro de 2007. Regulamenta a Lei 10.831, de 23 de dezembro de 2003. Dispõe sobre a agricultura orgânica, e dá outras providências. Diário Oficial [da] República Federativa do Brasil. Brasília, 27 dez. 2007*

1.2 Definition of key terms

For the purpose of this study, Success, Food Security, Sustainability, Social Processes and Livelihoods are defined as follows:

Food security: Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs, and food preferences for an active and healthy life.

Sustainability: Sustainability is the potential for the long-term maintenance of well being which has social, ecological, economic, cultural, and accountability dimensions.

Social process: A social process is the collective action of a community (e.g. farmer group) for a joint objective. Typical examples include: seed conservation, use of traditional knowledge, innovation of production methods, management of natural resources (e.g. water, biodiversity), making farm inputs and equipment available, saving groups, collaboration for processing/storage/transport, collective marketing.

Livelihood: Livelihood means securing the necessities of life including physical, economic, social and cultural needs. Aspects like food security, income and gender are therefore integral parts of livelihoods. Pursuing livelihood may involve, amongst others, production and market opportunities, information, cultural knowledge, social networks, land or other physical resources.

1.3 Problem statement, purpose and key questions

Over time, some PGS initiatives have functioned well while others have discontinued their activities and disappeared. This brings one question to mind: Under what conditions are PGS initiatives likely to succeed and last for a long time?

As a complex social process¹⁵ itself, PGS can be better understood when the specific social, economic and environmental contexts in which they are implemented are taken into consideration. Other social processes of the PGS groups (e.g. seed saving and conservation, dissemination and maintenance of traditional knowledge, group savings, etc.) have the potential to support the sustainability of a PGS and positively influence the impacts of the PGS on the livelihood of its members.

This study seeks to learn from long term PGS initiatives that practice other social processes. It analyses the interrelations between the PGS and other social processes, and the impacts on the PGS itself as well as on the PGS participants. It aims at identifying how both PGS and social processes can play a role in improving the livelihoods of rural communities worldwide, particularly in the Peruvian Andes. The lessons learned about synergies may help IFOAM to support other initiatives and better promote PGS as a tool for development.

The main guiding questions in the investigations were:

¹⁵ Please refer to the definition of “social process” adopted for the purpose of this study as explained in section 1.3 “Key definitions”.

- How do PGS, market linkages and social processes interact?
- What is the impact of PGS on communities where PGS initiatives are operational?
- Which main factors favor the sustainability of the PGS?

The study was conducted in the framework of the project “Ecological and socio-economic intensification for food security in smallholder agriculture in Central Andes, Peru” and carried out through desktop and field research as explained in detail in section 2 “Methodologies and Materials”. Hence, special focus is placed on the possible outcomes in a Peruvian context.

2 METHODOLOGY AND MATERIALS

The research questions were explored using a participatory rapid appraisal method based mainly on qualitative studies. In a consultation with key individuals and organizations involved in the development of PGS, as well as with members of the IFOAM PGS Committee¹⁶, best practice cases of PGS initiatives and their relevant social processes were identified. In a second step, studies were conducted on all eight selected cases of groups that are using PGS and other social processes. The studies were conducted as facilitated assessment processes, so that the participating PGS could also learn themselves from the reflections on how to further improve.

2.1 Selection of cases for in-depth field study

The main information source about PGS groups was the PGS database of IFOAM. In addition, recommendations were collected from key individuals and organizations, including the Regional Group for Latin America and the Caribbean - El Grupo de America Latina y el Caribe (GALCI) and members of the PGS Committee. Furthermore, a call for best practice cases of initiatives using PGS and own social processes was published through the IFOAM PGS newsletter¹⁷.

IFOAM established a dialog process with the identified and recommended cases throughout the world to ascertain their suitability and interest in participating in the study using the following criteria:

- The PGS is operational for at least three years.

¹⁶ The PGS Committee assists the development of PGS, provides advice on how to develop, facilitate and encourage PGS around the world, participates in mid-term and long-term strategic planning for IFOAM’s activities on PGS, and identifies and systemizes PGS concepts and tools appropriate for the facilitation and promotion of PGS. The PGS Committee is composed of a regionally diverse pool of PGS experts appointed by the IFOAM World Board. The committee was appointed in 2009 for the first time, for a three-year term and a new, currently operating committee, was appointed in 2012. The following individuals are members of the PGS Committee: Eva Torremocha (Spain), Alice Varon (USA), Chris May (New Zealand), Mathew John (India), Jannet Villanueva (Peru), Marc Lewis (South Africa). Flávia Castro, PGS Coordinator at the IFOAM Head Office, acts as the secretary of the PGS committee.

¹⁷ The Global PGS Newsletter is an electronic newsletter, which is published by IFOAM every two months with news and updates about developments of PGS around the World. The newsletter receives contributions from the PGS community all over the world, including the IFOAM PGS committee members, PGS practitioners, government representatives, farmers, consumers, etc. The newsletters are available at <http://www.ifoam.org/en/pgs-updates>

- The PGS initiative meets the minimum level of quality, based on the PGS Self-Evaluation Form (SEF¹⁸).
- The PGS initiative is linked to markets; is at least partially self-funded and has taken steps to move towards full self-funding.
- Seed conservation or other social processes relevant for food security and sustainability are part of the common vision and activities of the group.
- Readiness to collaborate in the study and to enter a participatory learning process.
- Geographic spread to cover a wide range of local contexts (cases in Asia, Latin America (outside Peru), Africa and Europe; 1 case in Peru).

As a result, the following eight cases were selected for the in-depth studies:

1. Green Foundation, India - Asia;
2. Keystone Foundation, India - Asia;
3. Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP), a member of the Farmer-Scientist Partnership for Development (MASIPAG), Philippines - Asia;
4. Asociacion Nacional de Productores Ecologicos de Peru (ANPE) and Instituto de Desarrollo y Medio Ambiente (IDMA), Peru – Latin America;
5. Nuclei of Planalto and Alto Uruguai from Rede Ecovida de Agroecologia (Ecovida), Brazil – Latin America;
6. Red Mexicana de Tianguis y Mercados Orgánicos (REDAC), Mexico - Latin America;
7. Bryanston Organic & Natural Market (BONM), South Africa - Africa;
8. COMAC Lozère, a member of Nature et Progrès, France – Europe.

2.2 Presentation of case studies

The basic details of the eight cases are presented in Table 2; cases are described in more detail in alphabetical order hereafter. A complete presentation of all cases surveyed is provided in Annex 1.

Table 2: Summary of the basic details of the eight PGS initiatives

Initiative	Location	Year of initiation	Number of producers involved	Number of certified producers	Key stakeholders involved
ANPE/IDMA	Huánuco, Peru	2005	320	260	Producers, consumers, regional government, university, college, institutes and regional agrarian directorate
BONM	Johannesburg, South Africa	2006	35	35	Producers, consumers, Market management and stallholders
Green Foundation	Bangalore, India	2006	631	32	Producers, Green Foundation, OFAI, Janadhanya, consumers

¹⁸ The Self Evaluation Form (SEF) is a voluntary questionnaire designed to provide PGS initiatives with a tool to see how they meet the key PGS features and elements. This is the reference document used in the assessment process for official IFOAM recognition of PGS initiatives. The SEF is available at <http://www.ifoam.org/en/global-online-pgs-database>.

Keystone Foundation	Nilgiri, India	2004	92	92	Producers, Keystone Foundation, OFAI, IIRD
MASIPAG (ASAPP)	Palimbang, Mindanao, Philippines	2007	33	33	Producers, consumers, MASIPAG
N&P (COMAC Lozère)	Lozère, France	1983	36	36	Producers, SIMPLE, consumers, Federation N&P
REDAC	Various regions of Mexico	2004	1030	1030	Producers, Universities,
Ecovida (Planalto & Alto Uruguai)	Rio Grande do Sul, Brazil	2006 and 2001	98	98	Producers, CETAP, cooperatives, small-scale agro-industries

2.2.1 ANPE (*Asociacion Nacional de Productores Ecologicos de Peru*) and IDMA (*Instituto de Desarrollo y Medio Ambiente*), Huánuco, Peru

IDMA is a private not-for profit organization. It was founded in 1984 to promote sustainable development. In 2001, IDMA started to support a group of agro ecological producers. As part of this support, IDMA initiated an ecological fair in Huánuco to link producers to markets. In 2005, IDMA introduced the PGS concept in the region as an affordable alternative to third party certification, thus making organic farming certification possible for low income producers and creating credibility and trust between consumer and producers.

IDMA is now a member of the Peruvian national PGS and follows its certification procedures and logo. The system is structured with local nuclei, regional PGS Councils, and a National PGS Council (Figure 8). Only the leaders of local groups (referred to as internal evaluators) are actively involved in the decision-making process. Various stakeholders joined IDMA in its efforts to further develop PGS and formed the Regional PGS Council of Huánuco, which is responsible for the validation of organic production. It is currently composed of representatives of the following organization: Organic Consumers Association - Huánuco; Regional Government- Huánuco; Organic Producers Association-Huánuco; Hermilio Valdizán National University; Municipalities of Molino and Chinchao; Engineering College- Huánuco; Regional Agrarian Directorate (DRA); Institute of Agricultural Innovation (INIA) and Institute of Civil Engineering-Huanuco.

In 2010, the Regional Government of Huánuco officially recognized PGS as a valid organic guarantee system in the region, allowing producers to sell their products as PGS certified organic within the region. PGS is not yet recognized by the national government in Peru. Producers receive training on organic farming and PGS from IDMA and all have the possibility to benefit from the different market channels.

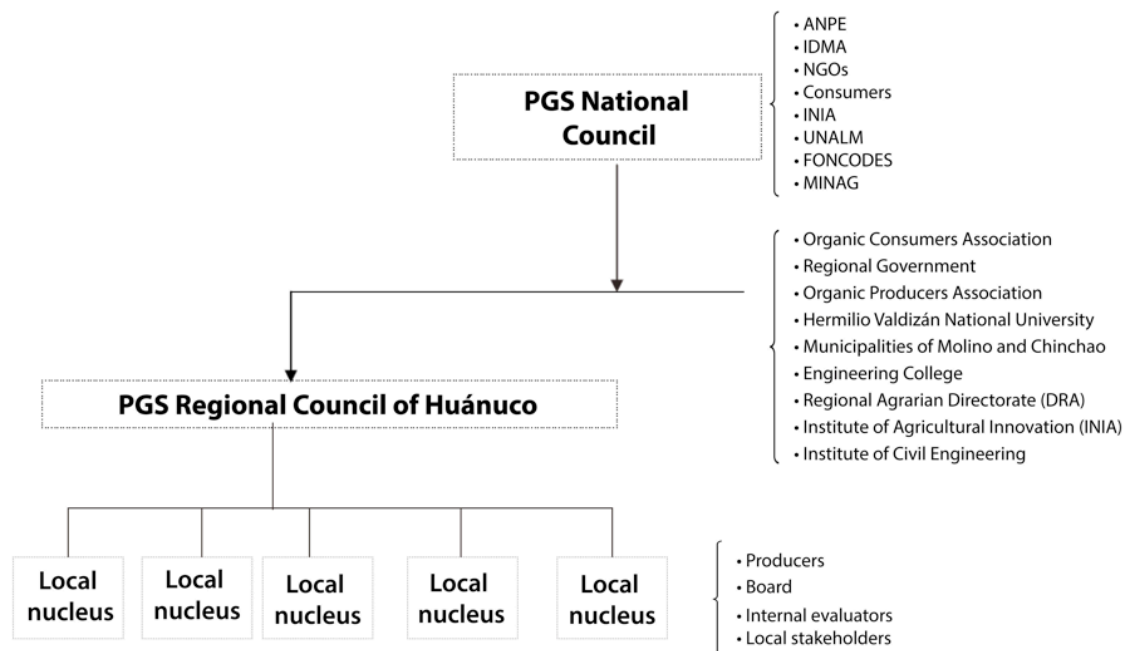


Figure 8: Organizational structure of the Peruvian national PGS

Source: AGRECO

Currently, 360 producers are involved in the IDMA PGS, of which 260 are certified.

Initially, IDMA benefited from external funding for the PGS in order to organize workshops and capacity building activities. Since 2012, the producers involved in the PGS do not have support from donors and the Organic Producers Association-Huánuco (ADPE) has taken on important administrative roles. Every week, each producer participating in the organic farmers' markets pays 2.5 soles (US\$ 1) to a fund that is managed by ADPE and mainly used to support the functioning of the PGS and setting-up of farmers' stands at the farmers' market.



Ecological fair in Huánuco



Logo of the Peruvian National PGS

2.2.2 Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP), a member of MASIPAG, the Philippines

MASIPAG is a network of 635 farmers' organizations, 60 NGOs and 15 scientists working toward sustainable use and management of biodiversity through farmers' control of genetic and biological resources, agricultural production and associated knowledge.

MASIPAG was instrumental in the establishment of the third party certification system in the Philippines. However, after participation in the "Alternative Certification Workshop" in Torres (Brazil) in 2004, MASIPAG started a PGS called the MASIPAG Farmers Guarantee System (MFGS). The MFGS is part of the continuing agenda of MASIPAG to empower resource-poor farmers who are engaged in sustainable agriculture, to strengthen farmer's control over the selling of their produce while improving productivity and achieving sustainable food self-sufficiency at a local level. It is implemented by 60 people's organizations throughout the country, including the Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP).

ASAPP is located in Palimbang, Sultan Kudarat in the southern part of the island Mindanao in the Philippines and was established in 2005. It became a regular member of MASIPAG in early 2007 and started implementing the MFGS in the same year.

The organization is composed of 33 members. The cultivation of lowland rice and fishing are the main platforms of their livelihoods. 97% of the members are Christians, while 3% are Muslims; 33.33% are female and 66.67% are male; and 39.39% are owners of their farms, while 60.61% are tenants. By landholdings, 57.58% are small scale (below 1.5 ha), 30.30% are medium scale famers (between 1.5. and 3 ha), and only 12.12% are large-scale farmers (3 ha and above).

As every organization involved in MFGS, ASAPP has different committees (e.g. PGS and advocacy committees), a set of inspectors and quality control officers. The PGS committee ensures the organic integrity of its members produce through inspection. They are also responsible for marketing activities (classifications, prices, etc.) of MASIPAG rice produced by members. Its inspectors cannot inspect members of their own organization to avoid a conflict of interest. They only inspect the farms of other organizations. The advocacy committee functions for education and training of members on advocacy-related issues, as well as orientation seminars for potential members.

The visit to the production unit (inspection) is the most important aspect in the organic guarantee system. Inspections verify the accuracy of information; detect any use of prohibited materials and assess the potential occurrence of use of prohibited materials or misrepresentation of non-organic products as organic. Inspectors from a different organization perform inspections at least twice per cropping season. The first visit is during the vegetative stage and second is during harvest. The Approving Committee decides on the organic status of farmers based on the inspection reports. Decisions are handed down to the farmers as soon as possible and include: approved; approved but with conditions and within specific timeframe only; and disapproved, due to violations of the standard. If a farmer has an approved status, then, the organization can market his

product and he/she will be provided with the MFGS logo. If a farmer is not approved, he/she can always make an appeal to the appeal committee of the organization.

All members of ASAPP work on a voluntary basis and, following the principle of MFGS, every member is given the opportunity to participate in certification processes. Expenses are kept minimal and refer mostly to trainings and visits to the production units. The Association is self-funded through revenues from activities generated within the group.



An organic rice field in Palimbang



Logo of the MFGS

2.2.3 Bryanston Organic & Natural Market, South Africa

The Bryanston Organic & Natural Market (BONM) is located in the up-market suburb of Bryanston, Johannesburg (South Africa) and is registered as a non-profit trust. The farmers' market has existed since 1976, serving a community interested in organic and natural products, which were offered without any specific system to guarantee the organic integrity, only on a trust basis. From 1997, farm inspections were introduced to guarantee fresh produce only, but these were largely informal. In 2005, the market received some bad media coverage on their sourcing procedures, and consumers started to question the market's organic integrity. Due to this consumer pressure, various options for an assurance system were investigated including third-party certification of all fresh produce suppliers. Due to the limited scale and administrative capacity of some of these suppliers, an alternative was preferred. In 2006, the PGS concept was introduced to the market management and a PGS was implemented for all fresh produce sold, following IFOAM PGS guidelines¹⁹.

Key stakeholders involved in this PGS include consumers, market management, retailer/stallholders, and grower/producers. However, PGS implementation is driven by the market itself, which provides the infrastructure, coordinates logistics, and in effect, manages the PGS process. The market has a Selection Committee which assesses and

¹⁹ BONM also recognizes third party certification. Within the Market there is a trader that sells only Third Party Certified organic produce.

approves - or rejects - products that are sold there. This Committee uses PGS as a decision making tool. If fresh produce is presented to the Committee for approval, it requests that the farm is first assessed through the PGS process. A PGS assessment group consisting of representatives of the market management, consumers, and farmers inspects each farm annually. This group then reports back to the Committee with an approval or else a rejection of the farmer’s produce. In case of approval, a certificate is issued and can be viewed on request by consumers, market retailers and market managers. Stakeholder meetings, grower group meetings and stallholder meetings were held to begin this PGS process. At present, meetings are convened when necessary, mostly to discuss new administrative aspects of the PGS.

There are 35 small-scale farmers involved in the BONM PGS of whom 30 are rural black and 5 are urban white farmers²⁰. The rural farms are situated in Limpopo Province, approximately 450 km or between five to six hours’ drive from the market. A PGS trader at the market is the key connection between the rural farmers and the market. It mobilizes and supports the rural suppliers and ensures that their produce reaches the market on public buses. The urban farmers are within a 30-minute drive from the market. Women represent the great majority of PGS farmers. Of the 35 farmers, 30 are women.

No fees are charged for the assessment of the farms or for participation in the PGS. A portion of the market’s marketing budget that is allocated to the promotion of organic agriculture serves to fund the expenses related to running the PGS. The market collects 10% commission on the fresh produce sold.



Vegetables on shelves of a PGS trader at the BONM



Logo of the BONM

²⁰ Categories according to ‘race’ are extremely problematic – particularly so in the South African context. In this report we use the race categories as set out by the Statistics South Africa’s Census 2011 survey: “Black African, Colored, Indian or Asian, White, Other” Statistics South Africa “Household Questionnaire” Census 2011, Available at http://www.statssa.gov.za/census2011/documents/CensusQuestionnaires/Census%202011_q_A.pdf

2.2.4 COMAC Lozère, a member of Nature et Progrès, France

In 1972, N&P drafted the first organic agriculture standards, laying objective foundations for the organization to certify operators and allow them to use the “Organic Agriculture” label, recognized now as the N&P label. N&P agronomists and technicians formed an association of organic agriculture advisors, ACAB - l’Association de Conseillers en Agriculture Biologique, which was started to conduct conformity assessments. These advisors reported their findings to their local groups or “Commissions Mixtes d’Agrément et de Contrôle” (COMAC), consisting of consumers and producers, who could then discuss the findings and decide if the assessed producers would be granted the use of the label. This is the first known case of a participatory guarantee system being formalized. This system was adopted within the federation and put into practice by the different groups.

Since the European Commission’s regulations on Organic Agriculture came into force, establishing the requirement that certification audits and controls can only be done by third-party organizations, N&P decided to take a step back from the official organic sector. Many small farmer members of N&P considered third-party organic certification ill-suited to the diversity of their environment. N&P decided to maintain their own participatory certification and found out (after the 2004 workshop on alternative certification, in Torres, Brazil) that similar alternative certification systems were also practiced in other parts of the world.

N&P comprises 16 local groups called COMACs of which 5 are recognized as independent ones (e.g. COMAC Lozère), which means they can set their own membership fees. In general, the responsibilities of the COMAC include the following tasks: schedule and carry out farm visits, and prepare the visit report. The number of visits in a year must be at least equal to the total number of producers in a COMAC; manage the N&P label with reference to new and former members; schedule COMAC’s meetings; and help in the development of standards. Each COMAC in the federation functions differently, according to its own context. N&P considers this an important aspect that ensures diversity and ownership.

The COMAC Lozère, located in the Cévennes in the province of Lozère, is composed of 31 operators (farmers, beekeepers, processors) and 200 consumers. In addition, 5 members are part of the independent association SIMPLE (Syndicat Inter Massifs pour la production et l’Economie des Simples). SIMPLE conjoins the COMAC Lozère since 2005 and is mainly involved in farm visits. The majority of members are registered as couples, but in total approximately there are 23 women and 19 men. All of them share the common vision that a better world is possible through organic agriculture. For them the access to organic markets and economic profit are not the main reasons to be part of the PGS group. They joined the COMAC mainly because N&P offers a comprehensive approach that goes far beyond a simple label. The N&P Charter embraces a vision and a wider-reaching project of society considering environmental, social, human and economic ideals. This is aligned with the values they uphold, including the belief that organic agriculture is a coherent way to live, producing and respecting the environment.

The secretary is the main body, which links the COMAC and the Federation. All members work on a voluntary basis and have to be involved in the decision-making and share responsibilities. For example, anyone can sign official documents.

The majority of farmers are not originally from the province of Lozère²¹. They settled in Lozère, over the years, coming from many different regions of France (Toulouse, Paris, Lyon, La Rochelle), even from other countries such as: England, Belgium, Germany, etc. They perform different activities and produce a diversity of organic crops/products, including: cheese processing (le Pélardon), processed fruit (e.g. juices, jams and syrups), fresh and processed chestnut, fresh vegetables, aromatic and medicinal plants, honey.

Consumers do not pay a membership fee. Operators of the COMAC Lozère pay an annual membership fee that counts the following:

- EUR 40 to the Federation; to cover the membership and administrative services of the Federation, including surveys, farm visits, transport, local meetings, etc. The Federation reimburses part of this payment, as the farm visits are done by the COMAC itself.
- EUR 60 to the COMAC Lozère.
- 0.3% of the operators' turnover to the Federation. This money contributes to checking standards, hiring the services of technical advisors, promoting PGS, and improving of the PGS system.



Farmer of the COMAC Lozère



Logo of Nature & Progrès

2.2.5 Green Foundation, Bangalore, India

Green Foundation began its work in 1994 in and around the neighboring communities of Ramanagara District, Karnataka, with an aim to make organic farming an economically

²¹ The geography of Lozère is complicated, covering four mountain ranges (Aubrac, Margeride, Causses, Cévennes). Moreover, with only 15 inhabitants per km², Lozère has the lowest population density in France (Annuaire-Mairie, 2013).

viable option for small scale and marginal farmers. At the time, many of the traditional seed varieties had almost disappeared from the region. Intensive efforts in the early years therefore aimed to restore this biodiversity loss and to promote the cultivation of indigenous seed varieties through the establishment of Community Seed Banks (CSBs).

As a part of these efforts, the farmers’ society of Janadhanya was established in 2006, for the procurement and sale of indigenous seed varieties at markets in the region. Before the establishment of PGS, these seeds were procured from individual farmers upon the understanding that they are organic. However, over the years, there was a need to prove the organic status of the seeds in local markets so that farmers could fetch higher market prices for their produce. In 2006, the PGS concept was therefore introduced in the region as an affordable alternative to third party certification, thus making organic farming certification possible for small scale and marginal farmers. The Green Foundation is now a member of the Regional Council of the Participatory Guarantee Systems Organic India Council (PGSOC) ²² and follows the PGSOC certification procedures. The roles and responsibilities of Key Groups in the certification process are summarized in Figure 9.

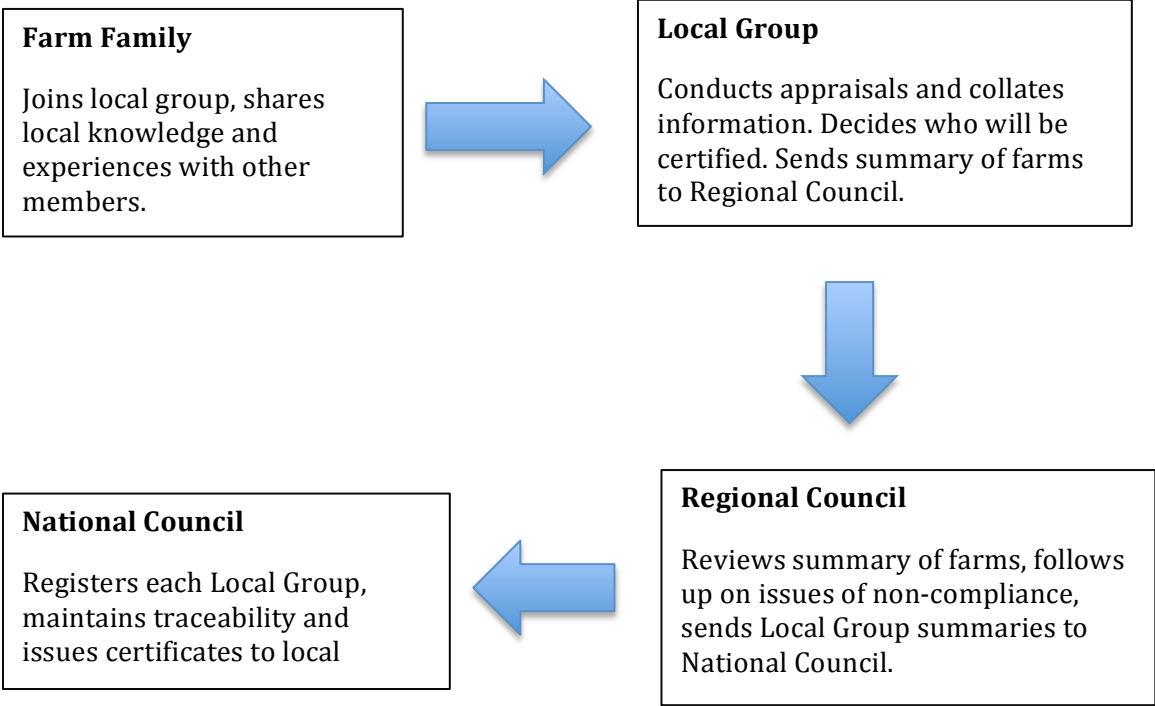


Figure 9: Certification process of the PGS Organic India Council

Source: Participatory Guarantee Systems Organic Council

According to this figure, farmers of the same village or region come together to form a Local Group, often under the initiation of the Green Foundation. In most cases, these farmers are members of Self-Help Groups (explained below). Every farmer takes a pledge that upholds organic farming principles. A PGS local group must consist of a minimum of 5 members and a peer appraisal committee or assessment team of 3 to 5

²² The PGS Organic Council coordinates the overall PGS network in India. It is registered as a society and its work is carried out through eleven organizations (e.g. Keystone Foundation and GREEN Foundation), spread across the country, which perform as PGS Organic Facilitation Councils.

members is appointed from within the group. A literate member of the group is then designated as the convener. The peer appraisal committee does peer reviews of group members and makes decisions on certification, with support from staff of Green Foundation, and sends summary of farms to Regional Council. 3 to 4 meetings (including farm visits) take place during a year, and peer appraisal is one of them. The Regional Council reviews summaries of farms, follows up on issues of non-compliance and sends Local Group summaries to the National Council. The National Council registers each local group and issues certificates to Local Groups. Producers certified through PGS can carry the label of the PGS Organic India Council as a mark of quality.

About 631 producers (60% of whom are women) are involved in the initiative. The great majority of farmers are small scale and marginal with landholdings of less than 5 acres. They are mostly subsistence farmers who also utilize uncultivated and wild food sources²³. They produce a diversity of organic crops. The most important products are indigenous seeds of paddy, millet and vegetable varieties. Other crops grown include field beans, castor oil plant, sorghum, mustard and amaranth. The average turnover of PGS products sold by this initiative in the past 3 years was of INR 384,561.67 (about US\$ 6,154). No fees are charged for the assessment of the farms or for participation in the PGS. Expenses are kept minimal and all work done by farmers is voluntary.



Women members of the Green Foundation PGS



Logo of the Indian PGS Organic Council

2.2.6 Keystone Foundation, Kotagiri, India

Keystone Foundation²⁴ is registered as a Non-Governmental Organization (NGO) since 1993. It began working with indigenous communities of Nilgiri Biosphere Reserve in the state of Tamil Nadu (India) in 1995, in the field of environment conservation and livelihood enhancement of indigenous communities. One of the primary concerns was to

²³ Seed to Food, From Subsistence to Surplus by GREEN Foundation

²⁴ Detailed information about the Keystone PGS is available in IFOAM 2008b, Participatory Guarantee Systems: 5 Case studies from Brazil, India, New Zealand, USA, France.

provide support for marketing organic produce. Keystone was therefore looking at better avenues for the marketing of tribal organic produce. There was some success in the local market and for certain products. However, when it came to expanding the markets on a larger scale, there were shortcomings mainly due to the quality of the products and the lack of a “label” which would convince the consumer that the produce was organically grown. Discussions were therefore held with certifying agencies to address the aspect of organic certification, but problems of costs, accessibility of the fields, documentation and understanding were an issue.

Since organic certification was not becoming a reality through certification agencies, there was a need to set up a simple system, which would basically inform consumers of the organic quality and guarantee its credibility. In 1998, Keystone designed its first internal monitoring system to check the quality of products. The same year, a need was felt to bridge the information gap between organic farmers and consumers, and assure the latter that the produce that they were buying was indeed organic.

The option of using an Internal Control System for certification was close to the Indian context but the cost was prohibitive. PGS was chosen in 2004 (Keystone participated in the Torres workshop on alternative certification, held in Brazil that year), after experimenting with several expensive and expert-driven certification processes, as well as with simpler systems for the local market. The choice was due to its inclusiveness and cost-effectiveness in ensuring the quality of the products.

The Keystone Foundation is a member of the Regional Council of the PGS Organic India Council. It therefore follows the same PGS certification procedures as summarized in the GREEN Foundation profile.

The guarantee system works on the basic premise of trust. This trust is complemented by a simple system of inspection on a village level by Keystone, which also provides market access to communities through a range of initiatives like green shops and production centers at community level. The term inspection is used with a strong positive connotation; the implication is one of periodic oversight rather than monitoring and faultfinding.

Currently, 13 PGS groups (about 92 farmers) across 11 villages are involved in the Keystone PGS. All farmers are from the indigenous community and have very small individual landholdings of less than a hectare. They produce a diversity of organic products. Some of these are millet, pepper, coffee, honey, sesame, beans, onions, cowpea, herbs, maize, etc. These products are mainly marketed to Green Shops and Honey Huts²⁵ established by Keystone Foundation.

²⁵ Honey Huts are production center and market facilities. They are encouraged and promoted by Keystone to cater to the very local market close to villages and communities.



Woman member of the Keystone Foundation PGS in her coffee field

2.2.7 Red Mexicana de Tianguis y Mercados Orgánicos (REDAC), Mexico

The Mexican Network of Local Organic Markets (REDAC) was founded in 2004 with just four markets. One of the challenges for these markets was that most small-scale farmers involved did not want to obtain third party certification for the organic quality of their products because of the lengthy, expensive, and highly bureaucratic process. As a result, the Network decided in 2008 to develop and implement PGS in all markets.

While remaining independent entities with distinct characteristics, the markets do share a similar certification process. Table 3 summarizes the key steps of the certification process in Chapingo Market, one of the markets that has led the development of PGS in Mexico. According to this table, a certification committee forms the basis for PGS for each market. This committee, composed of producers, consumers and other stakeholders (e.g. university staff and students), develops the documents for farm inspections, conducts evaluations, decides on certification, and also grants access to the market. The Network and other national specialists in organic farming build capacity for implementing PGS, including the organization of exchange visits between markets and special workshops on PGS.

Table 3: Steps to achieving participatory organic certification in Chapingo Market

Steps	
1. A producer wishing to join a market fills out a questionnaire on past and current production practices.	
2. The certification committee reviews the questionnaire and, if there are no obvious violations of organic standards, a visit to the production unit is scheduled.	
3. The certification committee visits the production unit and fills out a check list covering data about the farm operation as well as basic organic control points (e.g. source of seeds and water; pest and diseases management practices etc).	
4. The case is discussed in a meeting of the entire certification committee. The committee decides to certify unconditionally, certify with conditions, or deny certification. In addition the producer is classified as “natural” or “organic”.	
5. A letter outlining the committee decision is delivered to the producer.	<ul style="list-style-type: none"> - If the producer complies with all standards, he/she is granted organic status and can immediately begin selling in the organic section of the Chapingo Market. - If certification comes with a set of conditions (e.g. develop natural barriers to prevent contamination from neighboring conventional farms) and provided that the producer work with the certification committee to meet these conditions, he/she can begin to sell his/her products in the “natural” section of the market which is physically separated from the organic section and marked with a sign. - If certification is denied, assistance is offered to help the producer make the transition to organic production.
6. Follow-up visits, continuous communication and capacity building are used to ensure that organic standards are maintained or that the conditions for certification are being met, and eventually the producer may be eligible for full organic status.	

Source: Nelson et al. 2008

REDAC has benefitted from external funding for its PGS, which is used to organize workshops and capacity building activities. No membership fee is charged, but the markets themselves can charge membership fees to the farmers joining them. All work done by farmers is voluntary.

Currently, 1030 producers are involved in 28 markets across the country. In addition, 25 different stakeholders are part of the network (mostly consumers’ associations and students).



Products of a PGS farmer of REDAC



Logo of REDAC

2.2.8 Rede Ecovida de Agroecologia (Nuclei of Planalto and Alto Uruguai), Rio Grande do Sul, Brazil

These two local PGS initiatives are part of the Ecovida Network and receive support and technical advice from Centro de Tecnologias Alternativas Populares (CETAP), which has been promoting agroecology in northern Rio Grande do Sul since 1986. CETAP is a NGO involved in the development of PGS and a member of the Ecovida Network²⁶ since its foundation. Members of the network can decide to form a regional group (nucleus) and implement the participatory certification. Ecovida has developed this PGS as a tool to promote the concept of 'agroecology' and as a more appropriate system to ensure credibility and quality guarantee.

Presently, there are 28 regional nuclei in different stages of organization such as the nuclei of Planalto and Alto Uruguai where this research was carried out. Furthermore, there is a cooperative (COONALTER) that connects these two nuclei and is responsible for the commercialization of products from all Planalto's groups and some of Alto Uruguai's groups at the farmer's market in Passo Fundo.

As shown in Table 4, each regional group that is part of the Ecovida Network must have a working "Ethical Council", a body that receives requests for certification from the farmers that have applied to join the PGS. The farmer must be a member of Ecovida in order to apply for certification. Other members of its own local group support the farmer, and the first oversight comes from the regional "Ethical Council". The first level of decision-making refers to the farmers themselves, which is then endorsed or rejected by the regional Ethical Council. In case of rejection, the necessary improvements are communicated to the farmer, facilitating therefore a future endorsement.

²⁶ Detailed information about the Rede Ecovida's PGS is available in IFOAM 2008b, Participatory Guarantee Systems: 5 Case studies from Brazil, India, New Zealand, USA, France.

Table 4: Necessary minimum steps established by the network for a farmer to obtain Ecovida label

Steps	Information
1. Be a member of Ecovida.	The group joins the Ecovida Network through the nucleus.
2. Request of certification to the regional Nucleus.	The nucleus must have a working Ethical Council.
3. Fill in the form to acquire certification.	For each production unit it is necessary to fill in a form with information about the production process.
4. Address the Ethical Council.	According to the internal dynamic of the group the forms are addressed to the council for analysis.
5. Analysis of the forms by the Ethical Council.	The council may require more information if it is needed to better understand the production process.
6. Visit (inspection) to the production unit.	The number of units visited should be equivalent to the number of members of each group.
7. Report of the Ethical Council.	Approval or rejection. The necessary improvements are pointed out.
8. Consent of certification by the nucleus.	The nucleus approves certification and authorizes the use of the label. The nucleus can emit certificates and declarations for the members.

The Planalto nucleus is composed of 7 groups of famers (52 farmers' families) distributed in 7 municipalities from three different regions in northern Rio Grande do Sul (Planalto, Encosta da Serra e Altos da Serra); 1 agroecology consultancy NGO (CETAP); 2 cooperatives of commercialization (COOPVIDA e CAS); 5 familiar agro industries; and a central of commercialization²⁷ (Encontro de Sabores).

The Alto Uruguai nucleus is composed of 10 groups of famers (46 farmers' families) distributed in 9 municipalities from the region of Alto Uruguai; 1 agro ecology consultancy NGO (CETAP), 1 cooperative of commercialization (ECOTERRA), 5 small scale agro industries; and a central of commercialization for small and family farm products.

The range of products currently being produced in both nuclei is very large and similar, including vegetables, fruits, cereals, aromatic and medicinal herbs, sugar, juices, jellies, honey, flours, wine, cachaça, eggs, chicken meat, dairy (milk, cheese, butter), pickled vegetables, salami, bread, cookies and cakes.

As a member of the Ecovida Network, each farmer pays an annual fee of US\$ 60. Within the two regional groups, half of the amount is paid to the network and the other half remains within the regional group.

²⁷ The primary role of the central de commercialization is to facilitate the marketing of native fruits from region and coordinate orders and distribution of inputs needed for ecological production.



2.3 Methodological approach for in-depth case studies

For each case, data and information collection was carried out in different steps by local researchers, involving structured, semi-structured interviews and participatory exercises as follows:

- First, semi-structured interviews with selected local stakeholders such as representatives of NGOs involved in PGS development and consumers were conducted. These aimed at getting a better understanding of the PGS initiatives and have consequently an explanatory nature.
- In a second step, a survey with a non-random sample of at least 6 women and men farmers per case (Table 5) was carried out: Farmers were selected to ensure the diversity of respondents. The selection criteria included completion of at least three years in the PGS; gender (to reflect the gender ratio of farmers with at least 3 years in the PGS initiative); location and landholding/activities. The themes examined as part of the interviews included interactions between PGS and social processes, food security, income, sustainability of the PGS and impacts of PGS. The complete survey questionnaire is available in Annex 2. Farmers were mostly interviewed in their villages. However, if an important event such as a workshop took place in the regions, several farmers were interviewed at the venue of this event.
- In the third and last step, a participatory consolidation workshop was held per case. This brought together selected representatives of the PGS initiative and local stakeholders to present and validate the preliminary findings, consolidate conclusions and recommendations, and facilitate a process of reflection and learning among stakeholders.

2.3.1 Testing of the methodological approach

The methodological approach and the tools for data collection were tested October 2011 in Huánuco (Peru) in conditions as similar as possible to the proposed study research methodology. They were revised after the testing to ensure that the questionnaire and other research tools would provide the type of information required to fulfill the objectives of the study.

2.3.2 Research team

Data collection took place between January and October 2012. Two local researchers per case were chosen in a screening process, coached and trained by IFOAM according to a defined plan. They conducted research for this report in their relevant countries, as follows: Lucas Gambogi Rodrigues and Tabatha Frony Morgado (Ecovida, Brazil); Anupama Kalgudi and Ramesh Hegde (Green Foundation, India); Buduru Salome Yesudas and Kevaran Velan (Key Foundation, India), Marc Lewis and Rowan Laidlaw (BONM, South Africa), Eric Randy Reyes Politud and Dr. Renante Decenella Taylaran (ASAPP, the Philippines), Jannet Villanueva and Angel Ramiro Lujan Sanchez (IDMA/ANPE, Peru), Rita Schwentesius Rindermann and Miguel Ángel Escalona Aguilar (REDAC, Mexico). All local researchers were able to speak the local language fluently and were familiar with the geographic area of the survey.

In addition, Hervé Bouagnimbeck, IFOAM coordinator of the study, and Maria Eugenia Manrique, IFOAM PGS & Academy Intern, collected the data for COMAC Lozère (Nature et Progrès), France.

Finally, the IFOAM PGS Committee acted as an advisory body, providing inputs into the selection of cases, the research methodology and the drafting of the final report. Some of the members of the Committee were interviewed in their role as local PGS stakeholders. Furthermore, Janet Villanueva coordinated the data collection in Peru and Mexico.

Table 5: Number of farmers interviewed per case

PGS Case	Country	Date of data collection	N° of farmers interviewed
Green Foundation	India	January 2012	10
Keystone Foundation	India	January 2012	10
Bryanston Organic & Natural Market (BONM)	South Africa	February 2012	6
ASAPP from MASIPAG	Philippines	February 2012	12
COMAC Lozère from N&P	France	March 2012	12
Nuclei of Planalto and Alto Uruguai from Ecovida	Brazil	July 2012	12
ANPE/IDMA	Peru	September 2012	10
REDAC	Mexico	October 2012	12
	Total		84

3 FINDINGS AND DISCUSSION

This chapter presents and discusses the findings of the study. It is composed of three main parts. The first part presents and describes the social processes identified among the different case studies, the direct or indirect interactions between these processes and PGS, and their relevance for the sustainability of the PGS and vice versa, as reported by the respondents. The second part describes the beneficial impacts of PGS in the different areas of livelihoods (e.g. food security, income, cost savings etc.) to assess the changes which can be linked to the establishment of PGS and identify good practices. The third part analyses the main challenges that need to be addressed as reported by the respondents so that PGS initiatives can become stronger.

3.1 Main social processes identified and their relevance for the PGS

The results of this study show that PGS is an important platform for the development of social processes. In some cases social processes were in place before PGS started, but even there, PGS contributed to strengthening the pre-existing process and stimulated the development of new social processes, which are now recognized by participants as being important for their livelihood developments. Table 6 shows the main social processes identified among the surveyed PGS initiatives, which are:

- Collective marketing and sharing information, techniques and traditional knowledge, both identified in all cases;
- Collective seed management and conservation relevant for Keystone Foundation, Green Foundation, ASAPP, ANPE/IDMA and Ecovida;
- Small scale saving systems, which are relevant for Keystone Foundation, Green Foundation, ANPE/IDMA and Ecovida;
- Collective work relevant for Keystone Foundation, Green Foundation and ASAPP;
- Committed, informed and supportive consumer base, specific to ANPE/IDMA, BONM and COMAC Lozère;
- Socialized pricing, specific to ASAPP.

The feedback from the interviewees indicates that these social processes positively influence the PGS initiatives and vice versa in different ways, thereby improving the sustainability of the PGS and the impact of it to the livelihoods of its members.

Table 6: Main social processes identified

	Keystone Foundation	Green Foundation	ASAPP	ANPE/IDMA	Ecovida	REDAC	BONM	COMAC Lozère
Sharing information, techniques & traditional knowledge	x	x	x	x	x	x	x	x
Collective marketing	x	x	x	x	x	x	x	x
Collective seed management and conservation	x	x	x	x	x			
Small-scale savings systems	x	x		x	x			
Collective work	x	x	x					
Committed, informed and supportive consumer base				x			x	x
Socialized pricing			x					

x: relevant empty cells: not relevant or was not specifically mentioned

3.1.1 Sharing information, techniques and traditional knowledge

According to all respondents, PGS provides a good platform for sharing information, techniques and traditional knowledge among farmers. By acting as platforms for knowledge sharing and exchange on various aspects of agriculture, PGS initiatives allow for organic practices to develop, as training is provided by many initiatives. At the same time, PGS contribute to traditional knowledge maintenance and dissemination and empower farmers to make use of locally available inputs and breeds, therefore contributing to improved resource management in the communities. One farmer of the Keystone Foundation PGS explains:

“Traditional knowledge should be transmitted from generation to generation and we see a key role of PGS in this knowledge transmission”.

This social process also contributes to building trust and to improved group dynamics, which are essential for PGS. The respondents pointed out to a number of ways in which PGS mechanisms and tools have contributed to intensifying the exchange of information, techniques and traditional knowledge, such as:

- Visits to the production unit that are considered not just as an inspection to assess the conformity with the relevant standards, but also as an opportunity to discuss farming challenges with peers and relevant stakeholders (e.g. consumers) and seek advice.
- Regular meetings of the group that stimulate farmers’ participation and information exchange through collective discussions over common challenges and solutions.

3.1.2 Collective marketing

Farmers across all surveyed cases carry out different collective marketing activities that have developed within PGS or were strengthened following the entry into PGS (Table 7).

Table 7: Collective marketing activities identified

Activity	Initiative	Establishment
Green Shops and Honey Huts	Keystone Foundation	Before PGS
Farmers’ society	Green Foundation	Before PGS
Farmers’ markets and fairs	ANPE/IDMA & Ecovida	Result of PGS
Organic markets	BONM & REDAC	Before PGS
Collective buying	COMAC Lozère	Before PGS
Bulking products at the time of sales	ASAPP	Result of PGS

It emerged from interviews with farmers that, PGS is very important for all these collective marketing activities and vice versa. In general, respondents mentioned that being in the PGS enables them access to specific markets, reduces costs related to the organization for the market and helps reach consumers on a larger scale. This strengthens social bonds and trust within the group and leads to increased farm income, thereby improving the sustainability of PGS.

The following examples illustrate these findings:

1. Even though farmers may sell their products individually, farmers of ASAPP (MASIPAG, Philippines) also gather their produce together at one location and market them collectively to better access markets through large volumes. Collective marketing is also used with reference to the purchase of farm inputs, which were previously purchased individually. This gives farmers the power to negotiate better prices. In particular, the high prices for inputs can be avoided through eliminating the intermediaries in transactions, who would charge high prices.
2. PGS farmers in Rio Grande do Sul, Brazil join forces to market their products in fairs and markets (e.g. the farmers' organic market in Passo Fundo and joint sales to governmental programs such as the Program for Food Acquisition and the National School Feeding – PAA and PNAE). The fairs and markets also create opportunities for exchanging recipes and information about production techniques, while requiring teamwork regarding production and organization of the market, contributing to group dynamics, which are important for the sustainability of the PGS. In particular, the organizations that are part of Ecovida have developed a system for promoting the exchange of PGS certified organic produce in the south of Brazil: the Ecovida's "Southern Circuit for Food Circulation". This system is based on principles that ensure the organic quality of the products exchanged, guarantee food security for participating producers and their families, while increasing the diversity of the products available in each region through the exchange and reduced costs for transportation. Detailed information about Ecovida's Southern Circuit for Food Circulation is provided in section 3.2.
3. At the COMAC Lozère (France), collective marketing is referred to as "Collective Buying", as the process was originally implemented to assist farmers with the purchase in bulk of farming inputs. As it is practiced now, farmers can purchase in bulk and can sell through a centralized system that manages the orders and the distribution to consumer members. As a result, farmers can obtain lower prices for farming inputs and consumers receive quality organic products at reasonable prices. Moreover, the 'Collective Buying' system contributes to bringing consumers closer to PGS, as members are invited to join farm visits and group meetings, thus contributing to the sustainability of the PGS initiative.



View of the PGS farmers' organic market in Passo Fundo, Brazil

3.1.3 *Collective seed management and conservation*

The key collective seed management and conservation processes identified are summarized in Table 8 and include trial farms, community seed banks and seed sharing through PGS.

Table 8: Collective seed management and conservation processes identified

Process	Initiative	Establishment
Trial farms	ASAPP	Before PGS
Community Seed Bank	Green Foundation, Keystone Foundation	Before PGS
Seed sharing	ANPE/IDMA, Ecovida	Result of PGS

These social processes are considered important especially for PGS initiatives from Asia, where it is more consistently adopted as an alternative to seed varieties promoted by Asia's Green Revolution. As such, they contribute to the continuity of organic agriculture practices with regard to the availability of locally suitable organic seeds. On the other hand, they strengthen social bonds and positively impact the way the members of PGS interact.

The following examples illustrate how this takes place:

1. As part of MASIPAG's overall strategy on seed conservation and management, ASAPP started with a farmer-managed trial farm before joining the MASIPAG Farmers Guarantee System (MFGS). The organization devoted a piece of land to be planted for two cropping seasons with a minimum of 50 different varieties of rice, both traditional and improved. The trial farm strategy, which functions both as a conservation strategy and a source of planting materials for members, free of charge, ensures a continuous supply of organic seeds to the members of ASAPP. More importantly, farmers have control of seeds and do not need to buy organic seeds externally. Control of seeds by farmers enables farmers to develop the kind of seeds they want, thus enabling them to pursue a common goal and strengthening the organizational development of the group, thereby contributing to the sustainability of PGS.
2. The organization of farmers in Ecovida's PGS nuclei of Planalto and Alto Uruguai has enabled the development of a network for seed sharing, and facilitates joint seed acquisition, when necessary. Seed sharing occurs in different ways. For example, during farm visits for peer review, at the farmers' market, during local group meetings and during the expanded meetings from Ecovida, which bring together all 28 regional nuclei²⁸. Considering that the availability of seeds is considered by some farmers in PGS initiatives as a bottleneck for the development of organic agriculture in Brazil²⁹, this specific social process has the potential to contribute to the sustainability not only of PGS but also of small-scale organic farming in the country as a whole.
3. In the case of the Green Foundation, seed management and conservation through Community Seed Banks (CSB), which were established prior to the introduction of PGS, have impacted the development of the PGS in many ways, thereby improving its sustainability. As a platform for information and knowledge exchange, CSBs have helped disseminate organic principles and practices, thus enabling the farmers to switch to organic production and very often playing a role in the farmers' decision to enroll in PGS. Moreover, with regard to group dynamics, CSBs bring together community members who often have common interests in agriculture. This strengthens social bonds and positively impacts the way the members of PGS interact. Currently, there are seven CSBs in the area covered by the Green Foundation PGS. They provide seeds to farmers free of charge on the condition that every farmer returns twice the amount of seeds taken from the bank. These CSBs are run almost entirely by women of the area. This has contributed to improve gender equality and women's empowerment within the communities.

²⁸ More information on the nuclei which are part of the network can be found online: <http://www.ecovida.org.br/nucleos/>

²⁹ As reported by local researchers in charge of the field research in Brazil.



Community seed bank of farmers members of the Green Foundation PGS

3.1.4 Small-scale savings systems and common funds for common activities

Four cases have been able to successfully manage their small-scale saving systems (common fund or collective savings systems), either as a social process already existing at the time PGS started (e.g. Green Foundation and Keystone Foundation) or as a new practice adopted through a PGS (ANPE/IDMA and Ecovida's nuclei of Planalto and Alto Uruguai). In both cases these small-scale savings systems were mentioned as tools to create positive group dynamics and to strengthen the financial sustainability of the PGS, by covering common expenses, while improving farmers' livelihoods through better access to credit. Some examples of how this interaction takes place are provided below:

1. Within Keystone PGS, each group received, prior to the establishment of PGS, a grant of Rs 10,000 to 15,000 (around US\$ 63 to 245), which was provided as capital for investment in organic (traditional) agriculture, as a revolving fund. The management of the fund is entirely left to the group and it has enabled a number of farming households to access easy and affordable credit for farming activities. This has helped disseminate organic principles and practices, thus enabling farmers to switch to organic production. More importantly, with regard to group dynamics, the revolving fund strengthens social bonds within the group and positively impacts the way the members of the PGS interact. Since PGS groups are composed of people living in close proximity and sharing the same ideals, the monitoring of the credit usage and that of repayment is easier and the need for coercion is reduced.

2. PGS has led to the establishment of a common fund in some groups of Rede Ecovida. These funds are mainly used for marketing purposes. A farmer explains: “*Our group from Sananduva consists of 12 families and our farmers' market is organized as follows: each family pays 1BRL [US\$ 0.5] plus 2% of sales every day of the market (the market happens twice a week and the average weekly sale is R\$ 3,000 [about US\$ 1.500]). The money raised during the farmers' market is mainly used to pay for the transportation of products from farms into town. Through the common fund we managed to market our products.*” This financial participation encourages greater participation and commitment in the group as well as a sense of involvement and ownership.
3. In India, Self Help Groups (SHGs), specific collective savings systems that existed before PGS implementation, have impacted the Green Foundation PGS initiative in many ways, thereby improving its sustainability. SHG’s have facilitated mobilization of PGS groups, especially in communities where the above-mentioned CSBs did not exist. Respondents mentioned that it is often SHG members who join to form a PGS group. This strengthens social bonds and positively impacts the group dynamics. SHGs provide a platform for group savings and easy access to micro-credit with low interest rates, which would be unavailable to them individually. This improves the financial security of the farmers and contributes to the sustainability of the PGS group.

3.1.5 Collective work

Collective work is a social process that the study came across in cases in Asia (e.g. Green Foundation, Keystone Foundation and ASAPP), as a means of providing manual labor and helping each other in the group. As a result, collective work not only reduces the need to purchase labor and capital but also increases trust and cooperation among PGS members, thus leading to better relationships within the group and a more efficient running of the PGS.

In the Philippines, for example, collective work or *Bayanihan* means, “helping each other” and is also known as *dagyaw* and *alayon*. It is a community-based system of labor traditionally used in different parts of the Philippines where people come together, during planting, harvest time and other social activities, to work on each other’s projects – either as pure reciprocal labor or sometimes for a portion of the harvest. This old traditional collective labor system almost disappeared with the introduction of the Green Revolution, which brought, amongst others, specialized and expensive machines for farm activities. MASIPAG encourages the revival of *bayanihan* in its member-organizations for the conversion to organic agriculture and the establishment of diversified farms. For the members of ASAPP, PGS has made members more enthusiastic about participating in their *bayanihan* because of the concrete economic benefits it offers to farmers in terms of increased incomes, since farmers control the marketing of their produce. As a result, there is increased community cooperation and solidarity within the group.

3.1.6 Socialized pricing

Socialized pricing, a social process identified in the Philippines, is an element of the MFGS. The socialized pricing scheme is a collective action of the group that enables farmers to command the price of their produce to make them available to many consumers. For instance, PGS guaranteed organic rice is sold to consumers for Php 40 to 60 (US\$ 1-2) per kilogram, depending on the variety and on what the consumers can afford to pay. Other members of the PGS may even get the rice for less than a dollar per kilogram. This price is a lot cheaper than the third party- certified organic rice available in the market, which usually costs Php80 to 160 (US\$ 2-4) per kilogram. This enhances relationships among PGS members and increases the consumption of organic rice in the community, thus contributing to local food security.

3.1.7 Committed, informed and supportive consumer base

While many PGS initiatives focus on the internal social processes as manifested by farmers and farmers groups, ANPE/IDMA, BONM and COMAC Lozère have an added process that drives its sustainability – a committed, informed and supportive consumer base.

The BONM consumer, for example, is prepared to pay a premium in support of the small farmers who supply the market. This support often goes beyond just paying 15 or 20% more for their products, into actively supporting the market in good and bad times. This became very clear in 2008, when the market suffered a severe setback – more than half the market burnt down, and stallholders suffered heavy losses. Temporary stalls were set up in order to trade the Saturday following the fire. This day was a record sales day, as consumers came to support the stallholders who suffered losses during the fire.

This kind of social support helped the BONM survive and grow for 38 years. And it helped in developing the PGS system through consumers being involved, asking questions, and being informed. By purchasing from this market, rather than from a recently developed more “sophisticated and mainstream” organic retail market in Johannesburg, and by being prepared to pay even an increased premium, the BONM consumers become an integral part of the PGS community and contribute to the sustainability of the Market.

3.2 Benefits associated with participation in PGS

This section discusses the various benefits of farmers who are involved in the PGS, including cost saving, income, food availability, resource management, families and communities.

It should be noted that the farmers involved in this study are all small-scale or subsistence farmers. They depend on agriculture for their food and livelihoods and faced difficulties in accessing markets. The study found that becoming a member of a PGS offers farmers and their families a range of economic, environmental and social benefits, thus improving their livelihoods.



Consumers at the BONM, South Africa

3.2.1 Farmer empowerment

According to all respondents, farmer empowerment (involving personal growth, strengthening of individual self-confidence, increase in knowledge and skills) is one of the most remarkable benefits of PGS. As reported by the respondents, such empowerment can take place through various processes. As mentioned in section 3.1 in different instances, for example, PGS promotes personal relationships based on trust and is built through democratic structures, sharing of traditional knowledge and best organic practices. This improves social bonds within the community and the management of local natural resources, while contributing to empowered social organizations at the local level.

Through participation in PGS, farmers are exposed to a permanent process of learning through training in organic farming, PGS tools and procedures, seed conservation, collective marketing, management of small funds, among others, that develop farmer capacities in problem solving and research skills within their communities. This participation gives farmers a central role in defining the priorities and direction of the development of their organizations and the system, with local stakeholders both from the civil society movements and the private sector acting as facilitators.

Women in particular are directly empowered through PGS, as they receive equitable access to training and technical support in the PGS where they are involved. More importantly, women are given responsibility in collective activities such as seed management and collective marketing. In many cases, women are not only involved in the production of goods but are also actively involved in selling them at market places.

3.2.2 Cost savings

In order to assess the impact on farming costs of participation in PGS, farmers were interviewed about how their cost savings changed since becoming involved in the PGS. As shown in Table 9, for 67% of farmers, becoming a member of the PGS led to cost reduction. 30% of farmers, the great majority in the cases of France, Mexico and South Africa, reported having seen no change, as they were already doing Organic Agriculture before being involved in PGS.

Table 9: Has the PGS helped you to realize cost savings? (n=72)

	Green Foundation	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	COMAC Lozère	Total	%
Yes	10	12	8	12	5	1	0	48	67
No	0	0	1	0	5	4	12	22	30
No answer	0	0	0	0	1	1	0	2	3

For many farmers, becoming a member of a PGS is associated with the conversion to Organic Agriculture. This uptake of organic farming practices has resulted in the reduction of the costs of farming, as organic farming involves the use of affordable indigenous crop varieties and organic inputs that are generally produced on the farm rather than externally purchased (such as seeds, synthetic pesticides and fertilizers). This is particularly important for farmers in the Asian cases who report that before joining PGS they had to take high-interest loans from middlemen in order to purchase synthetic agricultural inputs. PGS therefore facilitates costs saving because:

- PGS farmers no longer purchase synthetic agricultural inputs;
- The costs for seeds are reduced, as the great majority of the surveyed PGS initiatives have developed strategies for seed conservation and management, such as the farmer-managed trial farm in the Philippines or CSBs in India.
- The dependency on the middlemen decreased and farmers have less debts

A farmer of the Green Foundation PGS explains:

"I had to pledge my wife's jewels to take loans from middlemen for inorganic cultivation. I had to bow my head and walk after that. Once you have taken loans, no one will give you money if you need it in an emergency. And then you have to sell all your yields back to the middlemen because you owe them money. They cheat you on measurements and you have to take what money they give you. I have beaten the ground in my frustration in those times before organic farming."

For some farmers, PGS also leads to reduced costs related to certification of the organic quality of the produce, as shown in tables 3.5 and 3.6.

Table 10 shows a cost comparison for PGS and third party certification (ICS) for a local group member of IDMA/ANPE PGS in Huánuco (Peru)³⁰. According to these figures, third party certification (US\$ 2,580) is almost five times more expensive than PGS (US\$ 540) on an annual basis.

Table 10: Costs comparison between PGS and third party certification (US\$/year) for a local group (100 farmers) of the IDMA/ANPE PGS

PGS				Third party certification (ICS)			
Description	No.	Cost/unit	Total	Description	No.	Cost/unit	Total
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 PGS			540	Total ICS			2'580
Cost/operator PGS			5.4	Cost per operator ICS			25.8

Source: AGROECO

While farmers of the COMAC Lozère felt that entry into organic production through PGS did not help them realize costs savings in general, they indicated that being part of a PGS initiative has enabled them to reduce costs related to certification.

Table 11 shows a comparison of costs for PGS and third party certification for a farmer member of Nature et Progrès in France³¹. These costs are related to certified organic goat and pig meat, including cheese and delicatessen production lines. The turnover of the operator is around 47,333 euro. According to these figures, third party certification (670 euro) is much more expensive than PGS (262 euro) on an annual basis.

³⁰ In addition to the certification through PGS, 100 operators of this PGS initiative have also been recognized as operational ICS by external certifiers, allowing them to gain access to markets outside Huánuco, particularly in Lima.

³¹ In addition to the N&P label, 10 operators of this PGS Initiative have also the organic official logo Agriculture Biologique (AB), allowing them to benefit from government's subsidies and sell to organic shops that only accept third-party certified products with the AB label.

Table 11: Costs comparison between PGS and third party certification (euro/year) for a farmer of N&P (COMAC Lozère)

PGS		Third party certification	
Annual fee to N&P	40	Annual audit of the production unit	670
Annual fee to the COMAC Lozère	60		
0.3% of the total sales to N&P	142		
Total	242	Total	670

Source: Nature & Progrès (2012)

In another case, farmers of the BONM PGS in South Africa, who had originally considered third party certification, indicated that their costs had not increased after joining the PGS, as there are no costs involved, contrary to the high costs incurred by individual farms for obtaining third party certification. For example, according to the fee structure applied by Afrisco³² (a certification body operating in various African countries), the fees for a full annual farm inspection and certification are estimated at 12,000 Rand (about US\$ 1,400) per year.

3.2.3 Enhanced market access and better income

In addition to the impacts in terms of cost savings, respondents were interviewed about how their farm income has changed since becoming involved in the PGS. As shown in Table 12, this question reveals strong differences between the regions. 16% of farmers, the great majority being based in a developed country (France), reported no change in their incomes. This reinforces the fact that, as mentioned in section 2.2.4, for farmers of the COMAC Lozère, economic profits are not the main reasons to be part of the PGS group. They joined the PGS because of ideological reasons. Being part of the PGS represents for them a vision and a wider-reaching project of society, considering environmental, social, human and economic ideals.

Table 12: Perceived farm income changes since becoming involved in the PGS (n=82)

	Green Foundation	Keystone Foundation	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	COMAC Lozère	Total	%
Decrease	0	0	0	0	0	0	0	0	0	0
The same	0	1	0	0	0	0	0	12	13	16
Increase	10	9	12	9	12	10	5	0	67	82
No answer	0	0	0	0	0	1	1	0	2	2

³² http://www.afrisco.net/Html/Client_Info_Fee_Structure.htm

In contrast, 82% of farmers, all of them based in developing countries, stated their income has increased since they joined the PGS.

For example, before joining the MASIPAG Farmers Guarantee System (MFGS) in 2007, the average farm income of ASAPP members was estimated at only 3,000 Pesos (about US\$ 69) per hectare. Early in 2012, this income had tripled reaching 15,000 Pesos (about US\$ 347) per hectare.

According to CETAP (2011), PGS farmers from Planalto nucleus (Brazil) have an average annual income of US\$ 10,000, meaning twice as much as conventional farmers in the same region. According to Conteratto (2004)³³, the great majority of conventional farmers in northern Rio Grande do Sul have an annual income of up to US\$ 5,000.

Farmers across the surveyed cases pointed to a number of ways in which PGS directly or indirectly enabled them to increase their income. To begin, PGS enables the access to markets and regular sales.

As mentioned in section 3.1.2, PGS facilitates the establishment of collective marketing initiatives and the access to diversified marketing channels, promoting increased volumes of offer and product diversity, thus helping farmers to access specific direct and regular markets, eliminate intermediaries in transactions and further increase their profit margins.

In India, for example, collective marketing initiatives such as the society of Janadhanya helped Green Foundation PGS members who would have been otherwise unable to access markets, without the support of their peers. This enables farmers to have increased incomes by securing good prices for their surplus products. One crucial aspect of Janadhanya is that it provides members with the freedom to determine prices for their produce in regular meetings held by the society. This was not the case earlier, when farmers were forced to sell their produce to middlemen who had loaned them money at arbitrarily fixed rates. Since farmers are able to sell produce at rates suited to them, indigenous variety seeds are being sold at relatively high prices, thus increasing farm incomes. Moreover, joining the PGS provides Keystone PGS farmers with good market opportunities through Green shops and Honey Huts³⁴. As a result, indigenous communities enjoy a premium price for their organic homestead produce and forest products. Coffee farmers, for example, note price premiums of 10% above local market prices for raw coffee.

In Brazil, PGS farmers of the Ecovida's nuclei of Planalto and Uruguai reported an increase in their incomes as an outcome of the participation and weekly direct sales of products at the local PGS farmers' market. A farmer explains: *"By selling directly, the*

³³ CONTERATO, M. A. A mercantilização da agricultura familiar do Alto Uruguai/RS: um estudo de caso do município de Três Palmeiras. Dissertação de Mestrado. Programa de Pós-Graduação de Desenvolvimento Rural/UFRGS. Porto Alegre, 189 p., 2004.

³⁴ Honey Huts are production center and market facilities. They are encouraged and promoted by Keystone to cater to the very local market close to villages and communities.

income is net. There is no middleman in the chain, the farmer sells directly to consumers, the return is much higher.”

In Peru, PGS enables different groups to get involved in local markets, particularly the ecological farmers’ market in Huánuco, thus eliminating intermediaries in transactions and further increasing profit margins.

In South Africa, the BONM PGS has enabled the inclusion of poor rural farmers into the supply chain, thereby enabling them to increase their incomes. The increase in demand for PGS certified produce at the market has led to larger quantities of produce being sold. As a result, both urban and rural farmers indicated increased and more regular sales to the market and subsequent increased incomes.

A farmer of the BONM PGS explains: *“If there was not the market, there would not be the demand. We are like a big farmer...only possible because of the PGS...”*.

Figure 10 provides evidence of farmers’ perception with respect to the market’s overall sales of fresh produce at the BONM.

According to the figures provided in 2011, the largest PGS trader exceeded the turnover of the others by a significant margin. In total, sales of PGS traders grew at the market by 123% between 2006 (when PGS was implemented) and 2011. A PGS trader representing various rural and urban grower groups as well as individual farmers, showed the most dramatic growth following the implementation of the PGS, which amounted to an increase of 265%.

In Mexico, before joining collective marketing initiatives (*tianguis*) farmers mainly sold to agents, at unfair prices and with no acknowledgement of the organic quality of their produce. After joining the PGS, respondents felt that their access to markets improved. This in turn has increased their income to varied degrees. This is consistent with a study by Nelson (2012), that found in a survey of 80 producers in 10 organic markets that are part of *Red Mexicana de Tianguis y Mercados Organicos*, that 56% of producers felt that their economic security had improved or improved greatly as a result of their participation in one of the local organic markets. The main reason for this is that market sales provide a stable weekly source of cash and the local organic markets also help farmers find new income sources such as clients’ special orders, contracts for agricultural training and extension services, or other job offers³⁵.

³⁵ Nelson, 2012b

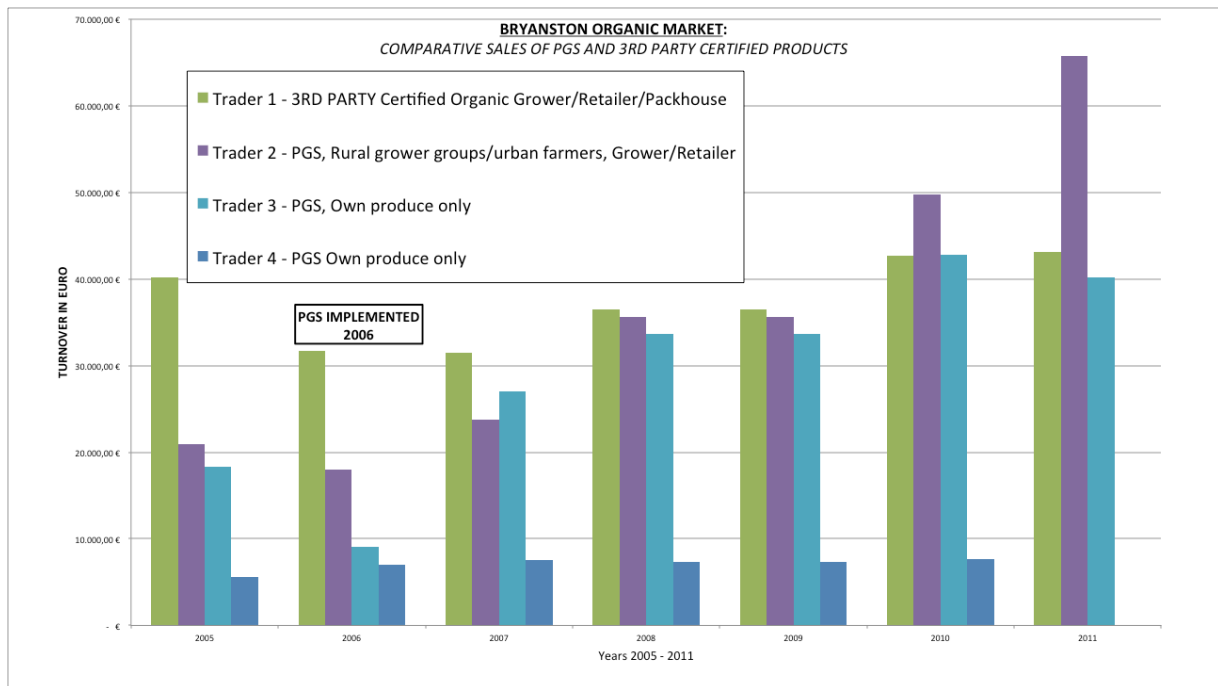


Figure 10: Comparative sales of PGS and 3rd party certified products at the BONM market
Source: Bryanston Organic & Natural Market (2012)

3.2.4 Enhanced Food security

Three close-ended questions related to food security were used to give the respondents a chance to voice any positive or negative impacts they have experienced on their farm, family and community since becoming involved in the PGS. The close-ended questions³⁶ that are presented below, also served as a means to cross check the findings of relevant open-ended questions in the questionnaire:

- Is the performance of your farm better today than before joining the PGS?
- Do you have access to sufficient food during the whole year?
- Do you think your family has more diverse meals (dietary score) now than prior to joining the PGS?

The study found that PGS enhances food security. As shown in the tables below, 78% of the respondents stated that their farm performs better today than prior to joining the PGS. 92% claimed that they have access to sufficient food during the whole year, while 84% believe that their families have more diverse meals now than before joining the PGS.

³⁶ These questions were not part of the discussions with farmers of Nature & Progrès (COMAC Lozère), in France, as it was assumed that food security is not a problem. According to FAO (2012), almost 870 million people are chronically undernourished. The vast majority live in developing countries, where about 850 million people, or slightly fewer than 15% of the population, are estimated to be undernourished. Farmers of the Keystone PGS provided no answers to the questions.

Table 13: Is the performance of your farm better today than before joining the PGS? (n=60)

	Green Foundation	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	Total	%
Yes	7	12	8	12	5	3	47	78
No	3	0	1	0	5	0	9	15
No answer	0	0	0	0	1	3	4	7

Table 14: Do you have access to sufficient food during the whole year? (n=60)

	Green Foundation	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	Total	%
Yes	10	12	7	12	9	5	55	92
No	0	0	2	0	1	0	3	5
No answer	0	0	0	0	1	1	3	3

Table 15: Do you think your family has more diverse meals (dietary score) now than before joining the PGS? (n=60)

	Green Foundation	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	Total	%
Yes	5	12	8	12	10	3	50	84
No	5	0	1	0	0	2	8	13
No answer	0	0	0	0	1	1	2	3

Farmers pointed to a number of ways in which PGS enabled them to improve their food security. While some reasons cited can be directly attributed to PGS, others are related to the general benefits of Organic Agriculture. However, both categories will not be differentiated below, as for many farmers joining a PGS is directly associated with the adoption of organic practices.

As a first example, farmers of the Green Foundation PGS, India, mentioned the setting up of kitchen gardens and the increased cultivation of indigenous seeds, which are suited to local agro-climatic zones. These practices contributed to increased yields, diversity and nutrient content of meals.

A farmer of the Green Foundation PGS explains:

“In the olden days, we used to have these pearl millets that matured at 6-months or 3-months or 2-months. If the 6-month crop failed due to rain, we would just plant the 3-month crop and there would still be food at home. If you don’t have any varieties, then you have only one crop and if that crop fails, then you have nothing.”

Another farmer also from Green Foundation PGS mentions:

“I have no worries about getting seeds now. We used to stand in long queues before, but now we get them so easily in the seed bank. And you can save these seeds for planting next year. You can’t do that with those ‘packet’ seeds.”

The expansion in the diversity of crop and livestock production also contributes to food security. For example, in the region studied in Brazil, the strategy for adoption of agro-ecology passed through a redesign of agri-food production systems. Thus, farmers who used to grow only soybeans, beans and corn as monocultures or raised pigs, poultry and dairy cattle, began to diversify their crop and livestock production. This led to increased productivity and food availability.

A farmer from the Rede Ecovida’s group of Alto Uruguai, Brazil, explains: *“Before joining the Rede Ecovida, I grew corn and beans; now I have, over the years, produced about 30 different products to sell: from vegetables to fruits, dairy and others.”*

Another farmer of Red Mexicana de Tianguis y Mercados Organicos, Mexico, describes:

“...I hear lots of people who say you can't live off farming. Honestly, you can't, because let me tell you the truth, you really can't. People just want to plant one thing, for example, there are people here who just plant maize, others just do fruit, and no more, but if you go to a field you put many things into it, and you can survive with that [...] I think there should always be variety of fruits. Just here I am about to plant figs, just in this part of the ravine [...], and upwards we are planting peaches, as well as in any other parts where we see more peaches can fit. [...] Watercress is growing over there, because that is where some water comes out [...]. As you can see there are lots of green vegetables that grow, and you just have to sow. For the moment, where it has been cleaned we are getting green sprouts; they take them to sell and we can feed ourselves.”

Furthermore, the Diversified Integrated Farming System (Box 3.1) implemented by ASAPP in the Philippines in the framework of the MASIPAG Farmer Guarantee System enabled farmers to improve their food security. In addition to increased diversification, the access to different markets led farmers to improve the productivity of both their cash and subsistence food crops, thereby improving households’ nutritional requirements and their ability to feed themselves.

Box 3.1 Diversified Integrated Farming System (DIFS)

DIFS constitutes the core of MASIPAG approach to sustainable food production. It implies an expansion in the diversity of crop and livestock production to increase the overall diversity and productivity on the farm. ASAPP farmers included in this study produce 4 to 10 rice varieties. In addition to the diversification of rice varieties, they have started, for example, production of vegetables, poultry and aquaculture operations aside the rice farming. With their initiative, they were able to acquire a 5-hectare model farm, which serves as the training venue for DIFS. Individual members are free to use the area for farm production and income-generating projects for the organization.

The opportunity to join a PGS also provides farmers with new opportunities for exchange of products within local and regional groups, thereby enabling a wide diversification in the diet of the families involved. The exchanges can take place in an informal way through the personal relations between farmers at a farmers' market. Usually, the farmer offers products that others do not grow and receives in exchange the products that he or she does not produce. But this exchange can also take a more formalized structure and cover a wider area of production. In Brazil, for example, the PGS groups that are part of Rede Ecovida developed the Southern Circuit for Food Circulation to address the issues of food security within the network, described in detail in Box 3.2. Through this circuit of commercialization, a vast number of farmers and their families can now have access to PGS certified seasonal products, which are produced and exchanged over an area that represents roughly 7% of the Brazilian territory.

Box 3.2 Rede Ecovida's Southern Circuit for Food Circulation (Circuito Sul de Circulação de Alimentos)

Realizing the issue of seasonality and different climatic zones of production as a possible limiting factor in commercialization, Rede Ecovida, with other partner organizations, launched in 2006 the Southern Circuit for Food Circulation. The objective of this 'circuit', based on seven stations and ten sub-stations is to achieve more markets and enhance production, and organizations from the States of São Paulo, Rio Grande do Sul, Parana and Santa Catarina take part in it. The guiding principles for this initiative are that: the produce offered must be organically produced and certified by Rede Ecovida; the producer must be a small family farmer, adopting diversified practices to ensure food security for the families; the organizations that offer products must also purchase products from the other organizations joining the circuit. This ensures the diversity of products available in the different regions and reduces the costs with transportation, as all trucks travelling between the different stations are always loaded.

3.2.5 *Better management of natural resources*

By acting as platforms for farmer-to-farmer knowledge sharing and exchange, PGS initiatives allow for organic practices to develop. At the same time, PGS contribute to traditional knowledge maintenance and dissemination and empower farmers to make use of locally available inputs and breeds, therefore contributing to improved natural resource management in the communities. The study found that joining PGS contributed

to wider adoption of different organic farming practices, which has resulted in improved natural resource management in the areas and communities concerned. These practices include: use of traditional seeds and breeding of local species; organic input production and use; tree planting and sustainable agroforestry; increased biodiversity through the incorporation of greater variety of cultivated species; vermicast production; contour ploughing, mulching; crop rotation; etc. Organic farming techniques have also brought a number of benefits to the environment such as increased soil fertility, reduced run-off, an increase in beneficial soil microorganisms and increased biodiversity conservation.

These findings echo Bachmann et al. (2009) who found that the environmental contribution of organic farms is much higher than for conventional farms in rice-based small-scale farming in the Philippines, as illustrated in Figure 11.

Full organic farmers have:

Increased on-farm diversity
Organic farmers grow on average 50% more crop types and three times more varieties of rice than conventional farmers.

Decreased chemical fertilizer and pesticide use
Organic farmers have eliminated the use of chemical fertilizers and pesticides and use a variety of organic methods. In contrast, 85% of conventional farmers use fertilizers and 80% continue to use pesticides.
97% of the full organic groups use alternative pest management.

Increased soil fertility, biodiversity and crop tolerance
84% of organic farmers but just 3% of conventional farmers report increases in soil fertility.
59% of organic farmers but just 6% of conventional farmers report a reduction in soil erosion.
Increased tolerance of plant varieties to pests and diseases is reported by 81% of organic farmers. In contrast, 41% of conventional farmers see the tolerance to pests worsening.

Figure 11: Environmental contribution of organic and conventional farms in rice-based small-scale farming in the Philippines
Source: Bachmann et al. (2009)

Tuck et al. (2014) also affirm that organic farming has large positive effects on biodiversity compared with conventional farming. Their meta-analysis of 94 previous studies covering 184 farm sites, mostly from developed countries, found that on average, organic farms support 34% more plant, insect and animal species ('species richness') than conventional farms.

3.3 Challenges experienced by PGS

While joining a PGS offers farmers many benefits, different PGS initiatives are facing some challenges that need to be addressed so that they can become stronger. The respondents were requested to state the challenges that are experienced in running the PGS initiatives. An overview of the challenges reported by each surveyed PGS initiative is provided in Table 16.

According to this table, the most common challenges reported by the respondents are:

- Involving consumers in PGS;
- Gaining recognition and support from authorities;
- Poor documentation and record-keeping;
- Long distances or difficult access between the members of the group, as well as from farm to market;
- Low understanding and participation of some farmers in PGS;
- Low farmers' education levels;
- Reliance on voluntary work.

3.3.1 *Involving consumers in the PGS*

Out of the 8 cases surveyed, only 1 case, the IDMA PGS in Peru, has regular consumer participation in visits of the production unit and management of the PGS. This is mainly due to the fact that the consumers association of Huánuco and several local organizations are members of the local PGS regional council, as mentioned in section 2.2.1. In all other cases it emerged that while involving consumers is considered an important aspect for the functioning of the PGS, it remains in practice difficult to achieve, despite the different strategies adopted. The following examples illustrate the findings:

- In South Africa, consumers of the BONM PGS were aware that the market has an assurance system for organic produce in place, but only a few of them were aware of how it functioned. Consumers were equally not aware of how frequently the farm inspections were carried out and requested that more information be made available at the various retail outlets.
- In Mexico, participation of consumers in the system is extremely irregular and this is considered as a challenge in many organic markets and *tianguis*, particularly for the credibility of the system.
- In France, despite the important role attributed to the participation of consumers in farm visits (platform for knowledge and experience sharing), many consumers who are involved in the initiatives still do not take part in annual visits of the production unit. According to the members of the COMAC Lozère, the main reason for this is that consumers are afraid to join a farm visit, because they do not consider themselves as specialists. Some visits have even been cancelled because consumers did not attend. The COMAC is considering different strategies to address this issue, such as: (i) reminding consumers that their opinion is important during the farm visits; (ii) engaging consumers' participation through new communication channels such as conferences, fairs, markets, and events and, (iii) promoting the voluntary participation of consumers in the farm visits and the meetings of the COMAC. Some producers said they considered crucial that consumers participate in a first visit, because they are then more likely to participate in future visits.

Table 16: Challenges of surveyed PGS initiatives

	Keystone Foundatio	Green Foundatio	ASAPP	ANPE / IDMA	Ecovida	REDAC	BONM	COMAC Lozère
Involving consumers in the PGS	x	x	x		x	x	x	x
Gaining recognition and support from authorities			x	x	x			x
Poor documentation and record-keeping		x		x		x		x
Long distances or difficult access between the members of the group as well as from farm to market	x				x		x	
Low understanding of PGS among farmers involved in the initiative		x				x	x	
Low participation of some farmers in the PGS		x				x	x	
Low farmers' education levels		x		x			x	
Reliance on voluntary work					x	x		
Lack of market knowledge		x						
Land tenure challenges			x					
Limited access to credits with larger amounts	x							

x: relevant empty cells: not relevant or was not specifically mentioned

3.3.2 *Gaining recognition and support from authorities*

Respondents in Brazil, France, Peru and the Philippines pointed to the lack of support from the government. Indeed, few governments have taken measures to support the growth of PGS initiatives in their countries and to include PGS in their national organic legal frameworks³⁷. As a result in many instances, PGS farmers cannot make organic claims despite the fact that most of these comply with organic standards and have been practicing organic farming techniques for many years. This inhibits the conversion of

³⁷ IFOAM, 2011.

conventional farmers to Organic Agriculture and reduces the positive impacts that PGS generate.

In France, for example, N&P has developed its own comprehensive private organic standard, and certification procedure; the N&P label is well recognized among French consumers as a synonym for high-quality organic products, even though it does not make organic claims, as they operate under the European Union regulation which requires compulsory third-party certification. The unfavorable legal framework has not dissuaded the PGS initiative from maintaining its approach nor from managing to reach a vast market, including the possibility to sell through the national supermarket chain Bioocop. Nevertheless, many operators of the COMAC Lozère have opted for certification also via a third party certification body based on the national organic standard in order to have the official logo called Agriculture Biologique (AB) in addition to the N&P label. This also allows them to benefit from government subsidies and sell to organic shops that can only accept third-party certified products.

In Peru, PGS is recognized as a quality assurance system by the regional government of Huánuco but not by the national organic regulation. As in the European case, this restricts the use of the term 'organic' only to producers who are certified by a certification body that is accredited by the Government.

Even in Brazil, the only country where PGS have obtained full recognition at the same level as third-party certification as a quality assurance system for Organic Agriculture, respondents pointed to the lack of support from the government and international cooperation for agro-ecology. This could change with the recently announced "National Plan for Organic Agriculture and Agroecology" (Plano Nacional de Agroecologia e Produção Orgânica (Planapo)), which was launched by the Brazilian President Dilma Rousseff on 17 October 2013³⁸. This plan acknowledges the need to support systems that are alternative to third-party certification with reference to consumer awareness and possibilities of increased access to markets.

3.3.3 Poor documentation and record-keeping

Although the bureaucracy and the paperwork associated with PGS are minimal, some producers still found it challenging to maintain documentation and record keeping (e.g. production expenses, sales records, etc). As a result, necessary information for understanding the activities of farm operations is missing and proper management decisions cannot be made. While this challenge may be due to low education of some farmers, Nelson et al. (2008) note that this problem is exacerbated in Mexico because there is no cultural tradition of maintaining such records. But even in France, a country where there is a cultural tradition in building and maintaining documentation, the stakeholders complain about missing records about the historical developments, the organization and the structure of the COMAC Lozère.

³⁸ Brazil, 2013.

3.3.4 Long distance or difficult access between the members of the group/from farm to market

As the territories in which PGS operate are very different, in the context of some initiatives the long distances between the members or between the farms and the market can pose difficulties to the overall running of the system. This is the case for the BONM PGS in South Africa, Ecovida in Brazil and Keystone Foundation PGS in India.

For the BONM PGS, for example, the distance of 450 kilometers between the market place and the rural producers constitutes an issue with negative impacts on the level of participation of farmers in the PGS, as well as on the possibility to ensure the organic quality of the produce is maintained during the transportation.

For some PGS farmers in Rio Grande do Sul, Brazil, the long distance between the families is also considered as a challenge for the PGS, increasing the cost of transportation and constituting a barrier to joint commercialization, especially for isolated families.

3.3.5 Low understanding of and participation in the PGS, and low levels of farmers' education

The study found that knowledge of Organic Agriculture and PGS is limited and most farmers do not take part in PGS farm visits of other farmers due to time and production constraints. This is mostly the case for market driven PGS such as the BONM in South Africa and REDAC in Mexico, or PGS with low farmers' education levels such as the Green Foundation PGS in India. The following examples illustrate the findings:

- In South Africa, most farmers of the BONM PGS do not participate in the farm inspection of other farmers due to time and production constraints. Farmers only engage in the process when they are visited at their own farms. This has to do with the fact that rural farmers did not come together in search of a market, but instead were approached by a PGS trader at the market who was finding it difficult to meet the increasing demand from the market's affluent urban clientele. Where rural farmers might not have been aware of organic principles and methods that would give them access to the BONM, they were advised. In addition, short training sessions were held to further improve their knowledge of organic methods. This limits their understanding and participation in the system. This problem is exacerbated because of low educational levels of the rural farmers involved in the BONM PGS.
- In India, low education levels within the Green Foundation PGS also create unequal sharing of responsibilities/participation, dependence on educated members of the group, and lack of understanding of the process itself, which reduces the possibilities for farmer empowerment and ownership of the process.
- In Mexico, many producers of REDAC feel unsure about participating in the farm visits, as they believe their knowledge is insufficient to judge. Moreover, members of the local participatory certification committee work on a voluntary basis, and as a

result, they do not participate in regular group meetings, thus making committee meetings irregular.

3.3.6 *Reliance on voluntary work*

For some producers of REDAC (Mexico) and Rio Grande do Sul (Brazil) reliance on voluntary work is a problem in their PGS initiatives. This challenge echoes Fonseca (2004) who argues that a key limitation of PGS is its high dependence on voluntary work to function. This can pose difficulties to the overall running of the system.

In Mexico, for example, some committee meetings are irregular, due to the fact that contribution in time is provided on a voluntary basis and producers do not always have sufficient time to devote to the process. This is considered a challenge in many organic markets, as Nelson et al. (2008) note for the Chapingo Organic Market: *“In Chapingo, the challenges of making a system work with volunteer labor made it difficult to keep up with the demand for certifying new producers who wished to enter the market, and also to consistently monitor the farms of existing market members. This was particularly problematic because deficiencies of supply (both quantity and variety of products) is currently a major limiting factor for the market.”*

For some PGS farmers in Rio Grande do Sul, the extra work involved for marketing activities often takes time away from activities on the farm. As a result, the performance of farms is negatively affected.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions for the eight PGS

All the PGS cases scrutinized in this study impressed by their performance, sustainability and the impact they create. It is however also obvious that they face challenges a have untapped potential and points that could be improved. Despite having a lot of impact, these PGS need to continue their efforts to demonstrate relevance to their members. To be sustainable a holistic view is required and all discussed sustainability dimensions need to be addressed in the institutional development. Every PGS is different partly because of the different environment (e.g. country or agro-ecological conditions) but also due to its individual history and its specific stakeholders with their own objectives. The researchers identified the following strengths and challenges for those eight cases.

Table 17: Strength and Challenges of surveyed PGS initiatives

PGS	Strong points	Three main challenges
1. Green Foundation, India - Asia	<ul style="list-style-type: none"> • Social processes including seeds and traditional knowledge management • Women empowerment • Community engagement and social events 	<ul style="list-style-type: none"> • Involving consumers • Lack of marketing knowledge • Low education level of farmers
2. Keystone Foundation, India - Asia	<ul style="list-style-type: none"> • Good brand, good products and marketing in a national network • Natural resources management (e.g. Biodiversity), traditional/modern knowledge management • Member incentives with social processes (e.g. Credits) 	<ul style="list-style-type: none"> • Involvement of consumers • Long distances and access infrastructure • Investment capital
3. Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP), a member of MASIPAG, Philippines - Asia	<ul style="list-style-type: none"> • Cultural diversity and strong common vision • Strong science practitioners links • High stakeholder commitments 	<ul style="list-style-type: none"> • Recognition and support of authorities • Land tenure rights • Involvement of consumers
4. Asociacion Nacional de Productores Ecologicos de Peru (ANPE) and Instituto de Desarrollo y Medio Ambiente (IDMA), Peru - Latin America	<ul style="list-style-type: none"> • Sustaining after donor support with own revolving fund • Several parallel social processes (seed, savings, marketing and learning) • Common learning and connection to national network 	<ul style="list-style-type: none"> • Recognition and support of authorities • Poor education • Poor documentation
5. Nuclei of Planalto and Alto Uruguai from Rede Ecovida de Agroecologia (Ecovida), Brazil - Latin America	<ul style="list-style-type: none"> • Strong systems and groups governance • Capacity building and training documentation • Recognition by Government 	<ul style="list-style-type: none"> • Involvement of consumers • Difficult access and long distances • Reliance on voluntary work
6. Red Mexicana de Tianguis y Mercados Orgánicos (REDAC), Mexico - Latin America	<ul style="list-style-type: none"> • Network of PGS in the country and decentralised approach • Local markets • Commitment by stakeholders 	<ul style="list-style-type: none"> • Involvement of consumers and irregularity of consumption • Poor education • Reliance on voluntary work and weak group governance
7. Bryanston Organic & Natural Market (BONM), South Africa - Africa	<ul style="list-style-type: none"> • Market access and demand driven • Trust and loyalty of consumer • Support from market management 	<ul style="list-style-type: none"> • Governance of consumers and producers • Long distances • Poor education of rural farmers
8. COMAC Lozère, a member of Nature et Progrès, France - Europe	<ul style="list-style-type: none"> • Strong philosophical background • Strong farmers education • Good group governance 	<ul style="list-style-type: none"> • Recognition by Authorities • Poor documentation • Involvement of consumers

4.2 Synthesis conclusions

This study has evaluated the interactions between PGS and social processes and discussed how both PGS and other additional social processes can function as a trigger to sustain the PGS group and improve livelihoods of rural communities worldwide and particularly in the Peruvian Andes.

In carrying out this study it was found that there are significant differences in the strengths of various surveyed PGS. Some are very strong, for example economically, while others are very strong in participatory processes, in common learning of sustainable farming or in strengthening of access to genetic resources, such as seeds. The selection of cases implied that the PGS initiatives all have been successful in sustaining themselves while providing tangible benefits to their members. The study was able to synthesize many factors that contributed to the institutional sustainability and impact on the livelihoods of the members. However, it could not identify a common pattern of development or standardize criteria to assure the desired sustainability leading to a guideline or even blueprint for other PGS initiatives. The uniqueness of every group is not only given to the fact that all the PGS were from different countries or even continents. Even in the local context, the development processes of the PGS are rarely copied or imitated.

4.3 PGS for community development and sustainability of community collaboration (community benefits)

The study found that in all examined cases PGS is an important platform for community development. The strength of this platform depends on the capacity of the group for social interaction and common performance. This capacity includes not only technical and managerial knowledge but also social and cultural skills by everybody. Among others, participation options, ownership, conflict resolution culture and gender roles seem to be as important to members as tangible economic benefits, like access to markets.

All stakeholders agree that parallel social processes of the groups do strengthen the PGS; and they agree that the common guaranteeing of compliance with organic production rules is favorable to other collective actions like seed banks, common savings or socialized pricing. In all the studied cases, the synergies lead to more resilience of the groups and hence to increased sustainability. The opposite however, that PGS may not function well without further social process can neither be confirmed nor excluded in the scope of this study.

While PGS triggered further social processes, it was also found that in some instances other social processes were in place before the PGS was established. Hence, existing social processes are a good precondition for establishing a new PGS. However, PGS can

also be the first social activity leading to further community actions beneficial for development.

PGS have contributed to strengthening pre-existing processes and they have stimulated the development of new social processes that are now recognized as important. The identified social processes facilitate teamwork; give farmers a central role in defining the priorities and direction of the development of their organizations and the system; increase trust, solidarity and cooperation among the farmers of the group, thus leading to better group dynamic and improved self-confidence. All these competencies are crucial for the management and subsistence of the PGS. This implies that social processes can be used as an element of a sustainability strategy for PGS and that they very likely help sustaining the PGS.

4.4 PGS for livelihoods improvements (household or individual benefits)

The study revealed many PGS benefits on household level, including cost savings, income and food availability for poor and marginalized smallholder farmers depending on agriculture and access to markets. Most of the respondents could improve their livelihoods thanks to membership in the PGS group that has become more robust thanks to the diversification of their actions.

All respondents saw that participation provided personal empowerment including the development of knowledge, skills and self-confidence. This participation forces its members to continuously interact and enlarge their scope of experience. PGS being a complex structure obliges farmers to cooperate to take decisions commonly and take responsibility of their own and the other members' actions. The accompanying culture of continuous learning at community level empowers them to innovate and adapt at household and individual levels, leading to improved production and marketing, including in situations of external changing conditions. Respondents in the examined cases also widely expressed that participation of women has been a key for successful household empowerment.

The empowerment achieved through innovation in production and marketing, as well as the adaptation to a changed framework of conditions that aimed at improving households and individual livelihoods to cover the family needs, is translated into improved self-esteem and better livelihood skills. Such broad and general effects translate into an array of possibilities to cope with livelihood challenges. Nevertheless, the study could observe a number of concrete examples that the PGS, including the parallel social processes, typically helped to improve at the individual and household level. Improvements were:

- **Saving in production costs and reduction of production risks**, mostly through collective learning to be able to better manage a low input agriculture system (Organic Agriculture). This applied particularly to those that converted to

Organic Agriculture when they entered the PGS. The cost savings were also attributed to collective marketing and to reduced certification costs;

- **Enhanced market access and improved income.** Over 80% of respondents (even 98% of respondents from developing countries) could increase their income at household level and nobody reported decreased income.
- **Enhanced food security.** The picture is very similar to that of the improved income. 78% see an improvement of their farm performance, leading to the present food security situation (92% of respondents are food-secure the whole year round) and increased diversity in their diet, compared to before joining the PGS (84% of respondents).
- **Improved access to production resources.** Improved access to resources was found for genetic resources (particularly seeds with seed banks), for investment capital (saving groups), common purchases of farm inputs, and for access to knowledge. Depending on the framework conditions, PGS groups could also look into animal genetic resources, water resources, or collective soil protection and fertility improvements.

The cases in this report demonstrate that PGS can provide farmers' access to desired markets, thereby improving farmers' profit margins. The short value-chain and the direct relations to the consumers increase the likelihood of farmers being able to fetch a price for their products that enables them to make a decent livelihood for their families. The studied cases provided evidence that PGS groups and common learning can impact both cash and subsistence food crops, thereby improving households' nutritional requirements. That means that PGS as a development approach has the potential to make a significant contribution to the reduction of food insecurity and poverty among farmers in rural areas.

4.5 Recommendations for PGS developments

On the basis of the research presented and lessons learned from the surveyed case studies, this section provides conclusions for the development of PGS. Obviously, the recommendations given are not a 'recipe for PGS development', but rather factors conducive to the development of PGS. These factors could assist and inspire people and organizations designing, establishing, maintaining or supporting PGS around the world, even if their situations and environments are very different.

Good understanding of Organic Agriculture and PGS

PGS is an organic quality assurance system. A good understanding of Organic Agriculture and the assurance system (key features and elements) is therefore the foundation from which PGS grows and develops. This offers PGS farmers the

authenticity and the credibility they need in the market place. Moreover, it leads to better use of common resources (e.g. water, soil, biodiversity etc.), cost saving and the development of solutions appropriate to specific situations and conditions. In most of the cases analyzed, the first step for the establishment of PGS was to build the capacity of farmers for organic farming and usage of the PGS tools.

Mobilizing farmers around a shared or common vision depending on the context of the PGS initiative

A PGS group needs a clear idea of its mission and shared basic values. The cases reveal the importance of farmers and particularly their leaders having an intrinsic motivation and commitment not only because of short-term benefits, but because it is part of their vision that is shared in the group. The shared visions and values motivate and enable farmers to cooperate with other members in a group. The process of creating this common/ shared vision may either be initiated by farmers themselves (e.g. COMAC Lozère, France) or be promoted by an NGO (e.g. IDMA, Peru or Green Foundation, India) or another facilitating agency. Entrance point for building ownership may be social processes existing prior to the PGS funding. The farmer-managed trial farm in the Philippines or community seed banks and self-help groups in India, established before the introduction of PGS, are a good illustration of how such common visions among farmers can be built and positively impact the PGS.

Stakeholder-owned and maintained PGS structures

Many PGS started with the support of an NGO or a private organization (e.g. in the case of Green Foundation, MASIPAG, IDMA or BONM). These provide farmers with information and training and financial resources needed to run the system. While such support may be a start and accelerate of processes, it is important to ensure that the stakeholders take full responsibility and have the decision power to achieve the sustainability of a PGS beyond external donor support and influence. The development of collective actions and the associated empowerment of farmers with social processes beyond the PGS management (e.g. with a seed bank) is a way to address this issue. Those social processes enable farmers to collectively create systems and to experience the benefit of collective actions. The learning and success in a less multifaceted process may be a catalyst for building a system as complex as the PGS.

Continuous improvement and learning

A PGS is a self-help organization that needs institutional development; and it needs continuous improvement to guarantee good governance and management. The required culture of learning is more easily achieved if the collective improvement of farming practices is an associated social process in the PGS as found in all they eight cases. Farmers are exposed to a permanent process of learning through training in organic farming, PGS tools and procedures development, seed conservation, collective marketing, management of small funds etc., that develops farmers' capacities in problem-solving and research within their communities.

Involving consumers in PGS

While regular consumer participation in farm visits (platform for knowledge and experience sharing) and management of a PGS is a basic feature of the PGS concept, in practice it remains difficult to achieve. Actions to enhance participation of consumers in PGS should be considered carefully right from the beginning to increase transparency and credibility. The studied cases did not reveal examples of social processes beyond PGS of farmers together with consumers, so that no synergies to improve consumer involvement based on parallel social processes could be identified. Very active consumer involvement was observed in the IDMA PGS in Peru. This PGS initiative has managed to engage many stakeholders (consumers), including the Organic Consumer Association, in the Regional PGS Council of Huánuco, now advocates for the PGS (e.g. during ecological fairs, with consumer surveys etc). Active consumers can be excellent promoters and therefore play a crucial role as an engine for demand development and economic growth for farmers.

Facilitating the development of collective actions by farmers (social processes)

As described in section 3.1, social processes give farmers a central role in the development and implementation of solutions appropriate to their specific situations and conditions, thereby strengthening farmers' self-confidence and enabling the long-term capacity of the group to drive its own development and to maintain the PGS. All the observed social processes proved to be conducive to the development of the PGS and therefore deserve being considered, depending on the specific conditions in the local community and farmers' identified priorities: community seed banks; farmer-managed trial farm; collective marketing to access specific markets; management of a common fund or small-scale savings system; collective work; common product processing; collective input sourcing and sharing information, techniques and use of traditional knowledge. The study has not come across social processes that were competing (e.g. in terms of time or management) or even had negative effects on the PGS development.

Enabling market access

Market access is of fundamental importance in the livelihood strategies of rural producers and for the continuation of the PGS initiatives. It can lead, particularly for resource-poor farmers, to regular sales and subsequent increases in income, thus leading to a good atmosphere in the group. The cases reveal that well-functioning PGS not only verify compliance with standards but also help their members accessing markets by facilitating the establishment of collective marketing activities (e.g. join forces to market products at fairs and markets or gather products to one location and market them collectively). The committed and supportive consumer base of the BONM provides a good illustration of how socially and economically engaged consumers can sustain a PGS initiative.

Enabling financial contribution.

The cases reveal that PGS initiatives keep expenses related to running the PGS as low as possible. However, there are always costs attached to running the PGS and relying on donors and on volunteering is usually not sustainable. Producers' financial contribution

is an option to cover these expenses. Social processes dedicated to raising the funds to cover the costs may even increase the possibility to build ownership for the sustainability of the PGS. This helps stimulate farmers' commitment, enables the system to generate its own financial means and strengthens social bonds within the group. In Peru, for example, producers' financial contributions were used to support the functioning of the PGS and the setting-up of farmers' stands at the farmers' market. In France, producers of the COMAC Lozère pay an annual membership fee to cover the membership and administrative services of the Federation and the COMAC. Most of the cases surveyed rely on volunteer work from member farmers to function. While this functions well in some initiatives, it poses difficulties to others since producers have limited time to devote to the process.

4.6 Recommendations to governments

The identified farmers' benefits in the public interest (environmental benefits, food security, poverty alleviation, development of remote rural areas etc.) associated with PGS justify governments' attention to PGS. Governments support may include a) the acceptance and regulation of PGS as organic assurance system b) using PGS as tool for own or donor suggested development programs c) integration of PGS development in its research and agricultural extension agenda and d) supporting PGS and its positive externalities in the public interest with subsidies. Governments therefore could address major challenges mentioned in the interviews.

IFOAM³⁹ has provided in the policy brief "How Governments Can Support Participatory Guarantee Systems (PGS)" recommendations in this regard, depending on the stage of development of the organic sector and the regulatory framework in the country. According to this policy brief, and reinforced by the views of the stakeholders and results of this study, the best way to support PGS is to include it as one of the conformity assessment systems permitted under the organic regulation. This means that governments can develop organic regulations that define organic certification as conducted by either a third party certification body with the appropriate accreditation or an approved PGS. This would imply that organic producers certified through PGS should also be included in any financial and technical governmental support granted to all organic producers.

There is a close association between PGS and rural development, as shown by the study. Therefore, governments at local and national levels may include PGS in their strategies for rural development and create positive conditions for developing PGS in their region such as supporting the development of markets (e.g. weekly farmers' markets or fairs) in collaboration with the private sector and NGOs. This study provides many lessons and ideas for approaches and design of rural development projects using synergies of PGS and social processes for impactful programs for poverty alleviation, food and nutrition security.

³⁹ IFOAM, 2011

Research about PGS and the other related social processes for evidence building, system design analyses and innovations strongly support farmers groups, addressing their challenges and adapting international knowledge to local conditions. The integration of the well-proven messages into the agriculture extension system increases the positive impact and makes research more efficient.

4.7 Further research

The scope of this study allowed looking in depth into eight best cases and it revealed the importance of parallel social processes in the groups for PGS developments and for increasing the impact on livelihoods of participating smallholder family farmers. The qualitative study was however focused on best practice, innovative ideas and potentials. It did not analyze representative samples for statistical analyses that could be used to extrapolate quantitative impacts. Therefore, further research may look into:

- **Discontinued PGS.** Further research would be required to identify and analyze discontinued PGS in order to understand the risks, common mistakes and the reasons of their discontinuation in order to get a better understanding of the requirements to achieve sustainability of a PGS.
- **Quantitative analyzes of the impacts of using parallel social processes in PGS.** The positive impacts of parallel social processes found in this study should be translated into a hypothesis that can be confirmed or rejected based on quantitative studies of representative PGS cases. The study would compare PGS groups that use parallel social processes and PGS that don't, without selection criteria of good performance.
- **Quantitative impact studies of PGS and parallel social processes.** The impacts of PGS and social processes identified in this study on farmers' livelihood should be quantified in comparison with PGS not using parallel social processes and with non-PGS farmers.

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Annex 1: Presentation of case studies

This chapter presents the case studies specially prepared for this report by the local researchers. They have, however, been edited and summarized. Case studies are presented in alphabetical order.

A. ANPE (Asociacion Nacional de Productores Ecologicos) and IDMA (Instituto de Desarrollo y Medio Ambiente), Huánuco, Peru

• General information

This PGS has been operating in Huánuco for 8 years, since 2005. Currently, about 1.000 producers are involved in the PGS and 350 producers are certified.

• Background

- Why PGS

In 2001, IDMA started to support a group of agroecological producers in the region, starting a farmers' market and introducing the concept of PGS as an affordable alternative to third-party certification.

- Implementation and decision making

Various stakeholders joined IDMA in its efforts to further develop PGS and formed the Regional PGS Council of Huánuco, which is responsible for the validation of organic production. In 2010, the Regional Government of Huánuco officially recognized PGS as a valid organic guarantee system in the region, allowing producers to sell their products as PGS certified organic within the region. PGS is not recognized by the national government in Peru yet. Producers receive training on organic farming from IDMA and all have the possibility to benefit from the different market channels. Only the leaders of local groups (referred to as internal evaluators) are actively involved in the decision-making process.

- Funding

Initially, IDMA benefited from external funding for the PGS in order to organize workshops and capacity building activities. Since 2012, producers involved in the PGS don't have support from donors and the Organic Producers Association-Huánuco (ANPE) has taken on an important administrative role. Every week, each producer participating in the organic farmers' markets pays 2.5 soles (US\$ 1) to a fund that is managed by ADPE and mainly used to support the functioning of the PGS and set-up of farmers' stands at the farmers' market.

• Social processes and PGS

The social processes identified in this initiative were:

- 1) joint marketing,
- 2) seed management and conservation,
- 3) sharing information, techniques and use of traditional knowledge and
- 4) small scale savings.

All of these social processes were initiated through the implementation of PGS and therefore are strongly linked to the PGS. The interaction between each social process and PGS leads to:

- 1) improved market access, better organization of tasks and a stronger group spirit;
- 2) the existence of a network for seed sharing, which is physically possible during the farmers' market of Huánuco where farmers from different regions interact;
- 3) improved group dynamics, farmer empowerment and reduced dependence on external inputs;
- 4) financial sustainability of the initiative.

- **Impact of PGS**

The improved opportunities to access markets through different channels has contributed to increased incomes. Trainings have contributed to better understanding of organic practices and improved natural resources management. More farmers from the same communities are now interested in joining the initiative due to the positive experience of the farmers who are involved in PGS, while the local government strongly supports the initiative.

- **Challenges**

Administration and financial issues are still challenges to be addressed, in order to reduce costs overall, increase the number of producers involved in the system and build capacities within local groups.

B. Bryanston Organic & Natural Market, South Africa

• General information

This PGS has been operating in Johannesburg (South Africa) for the past 7 years. About 30 producers from rural communities are involved in the initiative, which has certified 55 producers overall.

• Background

- Why PGS

The farmers' market has existed since 1976, serving a community interested in organic and natural products, which were offered without any specific system to guarantee the organic integrity, only on a trust basis. From 1997, farm inspections were introduced to guarantee the fresh produce only, but these were largely informal. In 2005, the market received some bad media coverage on their sourcing procedures, and consumers started to question the Market's organic integrity. Due to this consumer pressure, various options for an assurance system were investigated including third-party certification of all the fresh produce suppliers. Due to the limited scale and administrative capacity of some of these suppliers, an alternative was preferred. The PGS concept was introduced to the market management and a PGS was implemented for all fresh produce sold, following IFOAM PGS guidelines.

- Implementation and decision making

PGS implementation is driven by the market itself, which provides the infrastructure, coordinates logistics, and in effect, manages the process. The market has a Selection Committee, which assesses and approves - or rejects - products. This Committee uses PGS as a decision making tool. If fresh produce is presented to the Committee for approval, it requests that the farm is first assessed through the PGS process. A PGS assessment group consisting of representatives of the market management, consumers and farmers inspects each farm annually. This group then reports back to the Committee with an approval or rejection of the farmer's produce. In case of approval, a certificate is issued and can be viewed upon request by consumers, market retailers and market managers. Stakeholder meetings, grower group meetings and stallholder meetings were held to begin this PGS process. At present, meetings are convened when necessary, mostly to discuss new administrative aspects of the PGS.

- Funding

No fees are charged for the assessment of the farms or for participation in the PGS. A portion of the marketing budget that is allocated to the promotion of Organic Agriculture serves to fund the expenses related to running the PGS. The market collects 10% commission on the fresh produce sold.

• Social processes and PGS

The social processes identified in this initiative were 1) joint marketing and 2) committed, informed and supportive consumer base. While many PGS Initiatives focus on the social processes as manifested by farmers and farmers groups, BONM has an added process that drives its sustainability - a committed, informed and supportive consumer base. These processes were in place for urban farmers but they were initiated through the implementation of the PGS for the group of rural farmers. The joint marketing for a specific kind of market created a platform from which

farmers started to experiment with ecologically appropriate production practices and gained access to a new market channel.

- **Impact of PGS**

Rural farmers obtained regular access to a market and indicated an increase in sales since joining the PGS. In general, sales of PGS traders at the market grew by 123% between 2006 (when PGS was implemented) and 2011. A PGS trader representing various rural and urban grower groups as well as individual farmers, showed the most dramatic growth following the implementation of the PGS of 265%. The large demand for produce from the PGS had encouraged them to expand their productive capacity but it had not affected their ability to feed themselves. Two of the rural farmers attributed increased diversity in their family meals to the increased demand for more diverse produce through the PGS. The PGS is growing beyond the borders of the market, with other retail outlets, purchasing from BONM's PGS farmers. A national PGS movement has developed from this PGS and could assist with regional and national support of PGS movements in the country. Consumers interviewed at the Market stated that their awareness of production practices had increased due to the introduction of the PGS

- **Challenges**

The distances between the market and the rural producers, as well as their being less resourced and having limited access to communication tools (internet and emails) than the urban counterparts, results in their being less involved in the PGS and thus less knowledgeable about the processes. Most farmers only engage in the process when they are visited at their own farms. Assessments and farm visits only occur on an annual basis through the efforts of BONM.

c. Green Foundation, Bangalore, India

- **General information**

This PGS has been operating in Bangalore (India) for the past 7 years. About 631 producers (60% of which are women) are involved in the initiative and 32 of them have received certification. The average turnover of PGS products sold by this initiative in the past 3 years was of INR 384,561.67 (about US\$ 6,154).

- **Background**

- **Why PGS**

Green Foundation has worked to make organic farming an economically viable option for small-scale and marginal farmers. As a part of these efforts, a farmers' society was established in 2006, for the procurement and sales of indigenous seed varieties at markets in the region. Before the establishment of the PGS, these seeds were procured from individual farmers upon the understanding that they are organic. However, over the years, there was a need to prove the organic status of the seeds in local markets so that farmers could fetch higher market prices for their produce. The PGS concept was therefore introduced in the region as an affordable alternative to third party certification, thus making organic farming certification possible for small-scale and marginal farmers. Green Foundation is now a member of the Regional Council of the PGS Organic India Council (PGSOC) and follows the PGSOC certification procedures.

- **Implementation and decision making**

Farmers come together to form a local PGS group, often under the initiation of Green Foundation. In most cases, these farmers are members of Self-Help Groups (explained below). Every farmer takes a pledge that upholds organic farming principles. A PGS local group must consist of a minimum of 5 members and a peer appraisal committee or assessment team of 3 to 5 members is appointed from within the group. A literate member of the group is then designated as the convener. Inspection field dates are set and other formalities are completed through a preliminary session. 3 to 4 meetings (including farm visits) take place during a year, and the peer appraisal is one of them. The visited farmer must always be present. The peer appraisal committee makes decisions on certification, with support from staff of Green Foundation.

- **Funding**

Green Foundation currently provides funding, there is no formal structure in place to collect fees from the farmers joining the groups and all work done by farmers is voluntary.

- **Social processes and PGS**

The social processes identified in this initiative were:

- 1) joint marketing,
- 2) seed management and conservation,
- 3) sharing information, techniques and use of traditional knowledge and
- 4) small scale savings.

All processes were implemented already before the set up of the PGS, providing entry points and platforms for organization of the system. At the same time, all

processes have become stronger through the interaction with PGS, with improved social dynamics and the potential for up scaling the benefits provided by each process individually. In particular, PGS emphasis on a group approach and the quality assurance it provides for organic produce is especially beneficial to supporting joint marketing efforts.

- **Impact of PGS**

Positive economic impacts of PGS implementation mentioned were: better prices secured due to the quality assurance system, leading to increased farm income; costs savings due to less costs for inputs (home made or easily accessible, like seeds) and sharing of labor among group members. From the perspective of food security, the increased cultivation of indigenous seeds, better suited to local conditions, led to increased resilience to climate change, improved diversity and nutrient content of meals and enriched biodiversity. PGS has brought about the institutionalization of the Organic Agriculture movement at a grassroots level, providing a structure and framework that proffers guidelines for farmers ready to take up organic farming and contributing to improved management of natural resources. Non-PGS families are slowly incorporating organic practices in their farms and utilizing farm resources more effectively, thanks to improved information exchange among community members. NGO intervention spearheaded the PGS process in the communities and this was a catalyzing external factor that made significant contributions to the development of local groups in the area.

- **Challenges**

The lack of formal structure within PGS limits mechanisms to support farmers. Low education levels create unequal sharing of responsibilities/participation, dependence on educated members of the group, and lack of understanding of the process itself by all members of the group.

D. Keystone Foundation, Kotagiri, India

- **General information**

This PGS has been operating in the Nilgiris (India) for the past 9 years. About 92 producers are involved in the initiative. The average income of PGS members per acre is about INR 40,000 (about US\$ 650).

- **Background**

- Why PGS

Keystone Foundation began working with indigenous communities of Nilgiri Biosphere Reserve in the states of Tamil Nadu (India) in 1995, in the field of environment conservation and livelihood enhancement of indigenous communities. One of the primary concerns has been to provide support for marketing organic produce. In 1998, Keystone designed its first internal monitoring system to check the quality of products. In 1998, a need was felt to bridge the information gap between organic farmers and consumers, and assure the latter that the produce that they were buying was indeed organic. The option of using Internal Control System for certification was close to the Indian context but the cost was prohibitive. PGS was chosen in 2004 (Keystone participated in the Torres workshop on alternative certification, held in Brazil that year), after experimenting with several expensive and expert-driven certification processes, as well as with simpler systems for the local market. The choice was due to its inclusiveness and cost-effectiveness in ensuring the quality of the products.

- Implementation and decision making

In 2006, during an initiative by FAO, Ministry of Agriculture and IFOAM, to discuss the possibility of starting an Indian PGS programs, a draft of the system to be followed was decided and agreed upon. Many groups decided to take forward the pilot phase. Later, the system was finalized and a set of suggested guidelines formulated. The participatory system works on the basic premise of trust. This trust is complemented by a simple system of inspection on a village level by Keystone. The term inspection is used with a strong positive connotation; the implication is one of periodic oversight rather than monitoring and faultfinding.

- **Social processes and PGS**

The social processes identified in this initiative were: 1) joint marketing, 2) seed management and conservation, 3) sharing information, techniques and use of traditional knowledge and 4) small scale savings. These processes were partly in place when PGS was implemented but were then strengthened due to the interactions with PGS. In particular, according to the respondents, PGS groups act as platforms for knowledge sharing and exchange on various aspects of agriculture such as soil and moisture conservation techniques including water conservation. PGS allowed them to blend both traditional and modern techniques of agriculture to get maximum benefit from both. Same way PGS has both young and old members, which provide a wide scope for mutual learning and respect. Also, PGS groups facilitate small-scale savings and credit activities. The respondents found that PGS has increased internal interactions and provided space and time for counseling and economic assistance. The thrift and credit activities that were started within these

groups had a positive impact on respondent's financial position and insulated them from usurers and micro-finance institutions.

- **Impact of PGS**

With reference to the economic impact, Green shops and Honey Huts secured members of the PGS financially to a large extent. PGS contributed to reducing costs related to labor to a great extent. Before PGS implementation only family members worked in their farm, but now all PGS members work together in each member's farm for preparatory works, collection of silk cotton, storing of seeds, etc. Food security has improved, as most of the households are able to meet all their food requirements using produce from their own fields. Respondents mentioned that livestock maintenance capacities have increased (better biomass management and more fodder availability, leading to more manure availability) promoting increased soil fertility. The performance of existing PGS groups inspired other farmers to join or form a new group.

- **Challenges**

Access to credit remains difficult and despite the good results on increasing membership due to performance, there are still problems regarding this issue. Consumer involvement remains low, also due to the distances between producers and areas where goods are sold.

E. MASIPAG (Association of Sustainable Agriculture Practitioners of Palimbang), Palimbang, the Philippines

• General information

This PGS has been operating in Palimbang, Mindanao (Philippines) for the past 6 years. About 33 producers are involved in the initiative, all of which are certified. The average income of PGS the members of the group, per hectare, is about 15000 PHP (about US\$ 340).

• Background

- Why PGS

The MASIPAG Farmers Guarantee System (MFGS), a type of Participatory Guarantee System (PGS), is part of the continuing agenda of MASIPAG to empower the resource-poor farmers who are engaged in sustainable agriculture and strengthening farmer's control over the selling of their produce while improving productivity and achieving sustainable food self-sufficiency at the local level. It is implemented by member-organizations of MASIPAG including the Association of Sustainable Agriculture Practitioners of Palimbang (ASAPP). ASAPP became a regular member of MASIPAG in early 2007 and started implementing the MFGS in the same year.

- Implementation and decision making

All members work on a voluntary basis. These members are spread across five (5) barangays of Palimbang such as Badiangon, Kanipaan, Baranayan, Tibohol and Milbuk. 97% of the members are Christians, while 3% are Muslims; 33.33% are female and 66.67% are males; and 39.39% are owners of their farms, while 60.61% are tenants. By landholdings, 57.58% are small scale (below 1 ½ ha), 30.30% are medium scale famers (1 ½-below 3 ha), and only 12.12% are large-scale farmers (3 ha and above). Following the principle of MFGS, every member of ASAPP is given the opportunity to participate in the processes. The PGS committee ensures the organic integrity of the members produce through inspection. They are also responsible in marketing activities (classifications, prices, etc.) of MASIPAG rice produced by members. The advocacy committee functions for education and training of members on advocacy-related issues, as well as orientation seminar on prospected new members.

- Funding

Expenses are kept minimal and refer mostly to trainings and inspections. The Association is self-funded through revenues from activities generated within the group.

• Social processes and PGS

The social processes identified were: 1) seed management and conservation, 2) sharing information, techniques and use of traditional knowledge, 3) joint marketing and 4) Bayanihan (concerted efforts/collaboration). The first three processes are directly linked to the PGS as they started to be implemented as an integral part of the MFGS approach. The fourth social process refers to a traditional practice, which had not been used for some time but was recovered through PGS. In its interaction with PGS, it promotes increased community cooperation, contributing to better organization and better relationships among members, leading to a more efficient running of the PGS.

- **Impact of PGS**

The economic impact since PGS was implemented is quite significant. Before joining the MFGS in 2007, the average farm income of ASAPP members was estimated at only 3,000 PHP (about US\$ 65) per hectare. In 2012, this income has tripled reaching 15,000 PHP (about US\$ 340) per hectare. This increase is due in particular to reduced expenses with farm inputs and collective work. Food security is also a central issue in the MFGS approach, through the diversified integrated farming system. 100% of respondents claimed that they have more balanced meals after joining the organization compared to before. The respondents also emphasized enhanced community relationships, through bayanihan, unity, belongingness, trust and camaraderie among the members in the community. It likewise bridges cultural differences between Muslims and Christians and respect of religions.

- **Challenges**

Land tenure and infra-structural issues still constitute challenges to the initiative. Difficulties regarding raising awareness within the community have been mentioned, as well as difficulties to increase membership.

F. Nature et Progrès (COMAC Lozère), Lozère, France

• General information

This PGS initiative has been operating since 1983 as part of the Federation Nature et Progrès, in Lozère. It involved 36 operators and 200 consumers. All 36 operators are certified. The annual average income of operators is EUR 16,137 (about US\$ 21,850).

• Background

- Why PGS

In 1972 N&P drafted the first Organic Agriculture standards, laying objective foundations for N&P to certify operators and allow them to use the “Organic Agriculture” label, recognized now as the N&P label. N&P agronomists and technicians formed an association of Organic Agriculture advisors, ACAB - l’Association de Conseillers en Agriculture Biologique -, which was started to conduct conformity assessments. These advisors reported their findings to their local groups or ‘Commissions Mixtes d’Agrément et de Contrôle’ (COMAC), consisting of consumers and producers, who could then discuss the findings and decide if the assessed producers would be granted the use of the label. This is the first known case of Participatory Guarantee Systems being formalized. This system was adopted within the federation and put into practice by the different groups. Since the European Commission regulation of Organic Agriculture came into force, establishing then the requirement that certification audits and controls must be done by third-party organizations only, N&P decided to take a step back from the official organic sector. Many small farmers’ members of N&P considered third-party organic certification ill-suited to the diversity of their environment. N&P decided to maintain its own participatory certification and became aware, after the 2004 workshop on alternative certification, in Torres, Brazil, that similar alternative certification systems were also practiced in other parts of the world.

- Implementation and decision making

COMAC Lozère is one of the oldest local groups (COMACs) of N&P and one of the five independent ones, which means they can set their own membership fees. In general, the responsibilities of the COMAC include the following tasks:

- Schedule and carry out farm visits, and prepare the visit report. The number of visits in a year must be at least equal to the total number of producers in a COMAC.
- Manage the N&P label with reference to new and former members.
- Schedule the COMAC’s meetings.
- Help in the development of standards.

Each COMAC in the federation functions differently, according to their own context. N&P considers this an important aspect that ensures diversity and ownership. Farmers in a region where a local group is active choose to join the system for various reasons. The main reasons mentioned by farmers to joining COMAC Lozère were: the social interactions, the N&P Charter and the farm visits.

- Funding

Consumers do not pay a membership fee. Operators pay an annual membership fee that counts the following:

- The admission and administrative costs of the Federation.
- The services of the Federation, including surveys, farm visits, reports, transport, local meetings, etc. The Federation reimburses part of this payment

if the farm visits are done by the COMAC. This is the case for the 5 independent COMACs.

Operators of the COMAC Lozère pay an annual membership fee as follows:

- 40 euro to the Federation; to cover the membership and administrative costs of the Federation such as surveys, farm visits, reports, transport, local meetings, etc. The Federation reimburses part of this payment, as the farm visits are done by the COMAC itself.

- 60 euro to the COMAC Lozère.

- 0.3% of the operators' turnover to the Federation.

This money contributes to checking standards, hiring the services of technical advice, promoting PGS, and improving PGS.

- **Social processes and PGS**

The social process identified was joint marketing (also referred to as collective buying.) Farmers can purchase in bulk and can sell to consumers who are members through a centralized system. In its interaction with PGS, the social process contributes to bringing consumers closer to the PGS, as members are invited to join farm visits and group meetings. Also, it enables them to work together and make decisions, increasing and stimulating the concept of group living, creating a good atmosphere, considered the COMAC's first goal to accomplish.

- **Impact of PGS**

With reference to the impact of PGS, many operators mentioned that their income is now enough to cover the needs of their family. The reduction of the costs of certification and the adoption of individual direct marketing to food shops or to consumers at regional and local markets have enabled operators to establish secure incomes. It also promoted enhanced community relationship – through visits of the production unit, trust and camaraderie among the members in the community and collective buying. Above all, being part of the N&P Federation represents for them a vision and a wider-reaching project of society, considering environmental, social, human and economic ideals. According to this vision, the visits to the production unit provide operators an opportunity to meet people and to discuss farming challenges and seek advice from their peers, thus creating strong relationships and trust within the group.

- **Challenges**

Among the challenges mentioned, members indicated difficulties in involving consumers in the annual visits of the production units. Another potential problem is the lack of a product differentiation strategy. The local researchers also identified that appropriate written documents explaining the history, structure and functioning of the COMAC Lozère are missing. This makes it difficult to understand the management of the group. The fact that all members work on a voluntary basis could also potentially represent a risk with reference to financial sustainability.

G. Red Mexicana de Tianguis y Mercados Orgánicos

- **General information**

This PGS initiative has been operating in various regions in Mexico since 2005. It is estimated that a total of 1100 producers are involved in this initiative, of which at least 400 are certified. Another 25 different stakeholders are also part of the network (mostly consumers' associations and students). Nearly 50% of the producers interviewed have monthly incomes of US\$ 500, three times the minimum wage in Mexico; 7% have an income of US\$ 2,000 or more, equal to that of a PhD professor in a University.

- **Background**

- Why PGS

The "Mexican Network of Local Organic Markets" (REDAC) was created by participants involved in the first organic markets and *tianguis* in the year 2004, and counted then four farmers' markets. One of the challenges for the markets that were part of the Network was that most small-scale farmers involved cannot obtain third party certification for the organic quality of their products. This issue led to the attempt to create a guarantee system that would be affordable for the producers in the network. A first workshop was organized in 2005 and a pilot was set up. Questionnaires adapted from the ones used for third party certification were created and experiences abroad were revised as reference. In 2008, the network decided to implement PGS in all markets.

- Implementation and decision making

A Certification Committee is formed for each market, composed of producers, consumers, researchers, professors, students and other stakeholders. This Committee develops the documents for the revision of the farms, conducting the evaluation, deciding on certification and granting access to the market. REDAC and national specialists in organic farming carry out training workshops so everyone understands the philosophy of participatory certification, to know the guidelines and regulations on which the evaluations will be based. This training covers the theory and the practice, with visits to different productive units of the different products sold in the local market. Visits are not understood as inspections but they serve the purpose of finding possible weaknesses in the management of the farm. At least 2 members must join the visit and there must always be a representative of the farmers joining the visit (as inspector, not inspected). The visit therefore becomes a space of interaction and mutual learning for everyone involved. Once a decision is taken, the producer is urged to contact any producer in the tianguis or the participatory certification committee in case of any questions regarding any inputs or how to obtain and reproduce seeds.

- Funding

REDAC has benefitted from external funding for the PGS, to organize workshops and capacity building activities. No membership fee is charged, but the markets themselves can charge membership fees to the farmers joining them.

- **Social processes and PGS**

The social process identified was joint marketing and the tianguis represents a way for producers to be organized and gather under the common goal of selling

their products as organic, getting a space of their own to sell them. Before joining the markets, approximately 50% of producers sold to agents first, at unfair prices, and with no acknowledgement of their produce being organic. Afterwards, access to markets improved. 95% of interviewees claim profits from sales in local organic markets. This process already existed before PGS was implemented; in fact, PGS was promoted by the tianguis themselves. Currently, the interaction between joint marketing and PGS strengthens both, turning these processes into tools for strengthening friendships and boosting learning, mutual support, and collaboration processes. Likewise, there is a consensus within the network that implementation of local participatory certification committees is crucial, due to advantages it has over certifications by third parties.

- **Impact of PGS**

40% of interviewees claim their health improved since they became a part of an organic tianguis/market. Almost all markets offer workshops and training for consumers on different topics, including organic production and certification. The implementation of PGS and the work carried out via the network have also had an impact at policy level. It promoted the participation of a large amount of producers during the preparation of the Organic Production Law, which resulted in the inclusion of PGS as a valid certification process for products sold locally in the country.

- **Challenges**

There is still a large potential for the development of the system and its procedures, such as more simplified and/or innovative ways of doing paperwork and legal processes. There are no collective actions of seed management and exchange. Many producers feel unsure about participating, and/or they believe their knowledge is not enough for them to judge. The extremely irregular participation of consumers is a problem in some markets that are part of the network. Committee meetings are irregular, possibly due to the fact that the contribution in time is provided on a voluntary basis.

H. Rede Ecovida de Agroecologia (Rio Grande do Sul), Brazil

- **General information**

This PGS initiative has been operating under the umbrella of Ecovida Network in the regions of Planalto and Alto Uruguai, in southern Brazil. There are currently 98 families involved and the annual average income of the producers is of about US\$ 10,000.

- **Background**

- Why PGS

These two local PGS initiatives are part of Ecovida Network and receive support and technical advice from CETAP, which has been promoting agroecology in northern Rio Grande do Sul since 1986. CETAP is a NGO involved in the development of the PGS and a member of Ecovida Network since its foundation. Members of the network can decide to form a regional group (nucleus) and implement the participatory certification. Ecovida has developed this PGS as a tool to promote the concept of "agroecology" and as a more appropriate system to ensure credibility and quality guarantee.

- Implementation and decision-making

Each regional group that is part of the Ecovida Network must have an "ethical council", a body that receives the requests for certification from the farmers that have applied to join the PGS. The farmer must be a member of Ecovida in order to apply for certification. Other members of his/her own local group support the farmer, and the first oversight comes from the regional "ethical council". The first level of decision-making refers to the farmers themselves, which is then endorsed or rejected by the regional ethical council. In case of rejection, the necessary improvement is communicated to the farmer, facilitating therefore a future endorsement. All farmers interviewed answered that they are very active within the network, with most farmers mentioning meetings, learning exchange and peer reviews as the main involvement.

- Funding

As a member of the Ecovida, each farmer pays an annual fee of US\$ 60. Within the two regional groups, half of the amount is paid to the network and the other half remains within the regional group.

- **Social processes and PGS**

The social processes identified were: 1) Joint marketing, 2) Seed management and conservation, 3) Sharing information, techniques and use of traditional knowledge and 4) Saving groups (Common Fund in Sandaúva). Except for the last one, all processes are directly linked to PGS implementation, happening only since PGS was implemented and through the PGS processes. At the same time, these processes are necessary for PGS as they are essential for example to reduce farmers dependence from external inputs and therefore contribute to financial sustainability.

- **Impact of PGS**

Overall, interviewees have listed among the positive impacts of PGS: reduction of production costs; increased production due to improved practices; increased diversification of products sold and access to new markets and therefore increased income; improved access to education and health care services (farmers are able to define the prices of their products with more autonomy and then are not vulnerable to middlemen). Some farmers point out that families

who participate in the PGS have achieved greater success in the permanence of children staying in agricultural production. The impact of PGS on farmers' empowerment was also highlighted, through recognition and personal growth.

- Challenges

The challenges mentioned are related to the fact that commercialization of the products as well as peer visits are difficult because of the long distance between the families. There is currently little production and exchange of organic seeds.



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