



# INSTITUTIONAL INNOVATION TO FACILITATE LOW-COST ORGANIC CERTIFICATION – HOW PARTICIPATORY GUARANTEE SYSTEMS (PGS) WORK IN VIETNAM

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Participatory Guarantee Systems (PGS) and short organic supply chains have emerged as promising solutions for smallholder farmers to provide organic produce to nearby consumers. PGS is an institutional innovation that builds trust among producers, traders and consumers through a low-cost transparent and participatory certification mechanism. They have particularly gained a foothold among smallholder farmers in middle- income countries, where third-party certification costs are often unaffordable.

In Vietnam, PGS schemes have now been set up in more than seven provinces in Vietnam (Ha Noi, Ha Nam, Hoa Binh, Tuyen Quang, Cao Bang, Ben Tre, and Hoi An). With training and coaching by the Vietnam Organic Agriculture Association (VOAA), at least five other local governments have expressed their intention to set up organic PGS groups in their respective provinces. Nevertheless, the local organic sector in Vietnam has grown slowly in recent years. PGS-certified vegetable production in Vietnam is generally more profitable and sustainable compared to non-certified production. However, it is constrained by crop productivity challenges and requires higher returns to labour.

In this Good Practice Note, Christian Grovermann, Pham Van Hoi, Pierre Ferrand and Robert Home reflect on the lessons learned from implementing PGS in Vietnam. They highlight the areas that need improvement in organic PGS vegetable production that can be integrated into capacity development interventions to boost the potential of PGS- certified production systems to deliver safe and sustainable produce to local markets.

With technical support of



**Food and Agriculture  
Organization of the  
United Nations**



**Funded by  
the European Union**



Cover photo: *Organic vegetable farmer from Tam Dat PGS Cooperative, Vietnam* ©Pierre Ferrand

## CONTEXT

Organic farming has been growing globally and has gained greater acceptance among farmers, consumers, market actors, policy makers and the general public.

Globally, almost 1% of the total agricultural land is cultivated organically and the market is approaching USD 100 billion (Willer et al., 2023). The domestic organic sector in Asia has grown, primarily driven by food scandals and health scares (Sahota, 2019), to become the third largest market for organic products in the world, after North America and Europe, and home to nearly 40% of the 1.1 million world's organic producers (Willer et al., 2023). National markets are developing in Asia as countries are moving from an export to a domestic focus (Sahota, 2019).

The demand for organic produce is rising in the region, driven by growing middle class consumers who consider it a better health option (Tanveer et al., 2021) and urban consumers in middle-income countries such as Thailand and Vietnam (Grovermann et al., 2017).

This growth presents an opportunity for smallholder farmers who practise organic agriculture to increase their sales, access new markets and improve their livelihoods (Crowder and Reganold, 2015). However, many constraints hamper their ability to access the organic market. For instance, smallholder farmers tend to have limited capacity to comply with national and international organic standards because of the lack of organizational resources and poor access to information (HLPE, 2019).

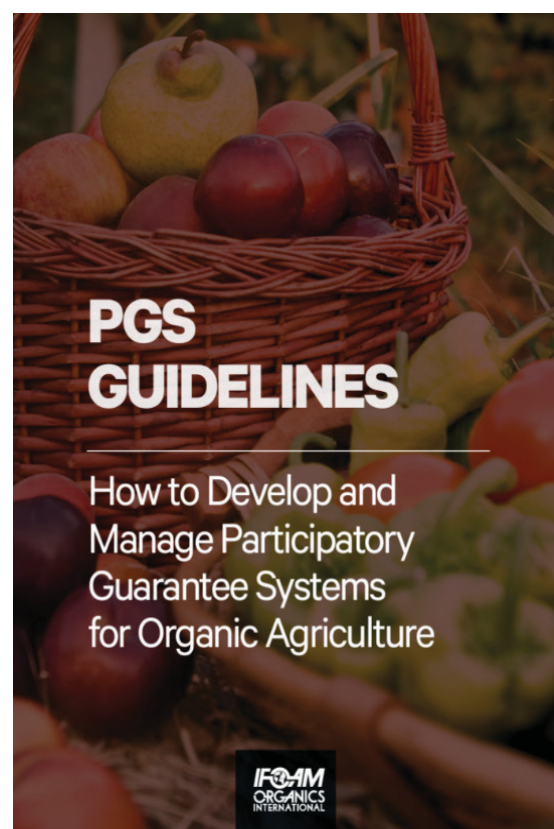
Those who do comply face challenges in gaining recognition for their compliance. A key pathway for an organic farmer to gain recognition is to become a certified organic producer. This is usually facilitated by an external certifying body, and the prohibitively high cost of third-party certification schemes is a further barrier to market access (Home et al., 2017).

Without certification, smallholder farmers practising organic agriculture cannot easily differentiate their products from those of conventional competitors and are thus unable to supply this market.

PGS and short organic supply chains have emerged as promising solutions for smallholder farmers to access local markets for organic produce. These are alternative certification systems that are usually intended to provide organic produce to consumers nearby. PGS have particularly gained a foothold among smallholder farmers in middle-income countries, where third-party certification costs are often unaffordable. For example, PGS have become the most important certification mechanism for smallholder farmers and local markets in Vietnam. In addition to enabling recognition in local markets, participation in PGS enables farmers to improve their infrastructure and production capacity, and to gain networking and agribusiness skills, which can facilitate access to export markets in the future (Loconto and Hatanaka, 2018).

## PRINCIPLES GOVERNING PGS

A typical PGS initiative involves producers, consumers, and, often, other stakeholders such as staff from Non-Governmental Organization (NGOs), universities, extension services, government



representatives and consultants (Nelson et al., 2010). Producers were originally envisaged to be organized into local groups and be responsible for ensuring that all farmers in the group follow PGS standards and processes, with each farmer's farm being inspected annually by an inspection group composed of various stakeholders (inter-inspection) including peer farmers and consumers. This is the most cost-effective farm monitoring to ensure that farming standards set for the whole group are followed (Castro, 2014). However, many PGS groups report difficulties in maintaining consumer engagement during farm visits; also, high costs and reduced external funds have often limited stakeholder involvement to a core group of interested peer farmers, who often have an organizational role in the PGS.

A summarized report of the results of farm visits serves as the basis for the group to make decisions on the extent to which a producer complies (or not) with the agreed organic standards. Summaries of this documentation and certification decisions are usually then communicated to a higher level, such as a regional or national council representing PGS stakeholders.

These higher-level councils or organizations are generally responsible for the overall oversight and administration of the PGS program, and they often represent the PGS in communications with external stakeholders such as the government or IFOAM Organics International, the umbrella organization of the organic movement (Castro, 2014).

In some cases, they endorse certification decisions made by local groups, while, in other cases, they grant a general approval to local level authorities for the independent use of the PGS label, if such a label exists (IFOAM, 2019). From the individual farmer's perspective, the changes implicit in joining a PGS include the sacrifice of some independence in decision-making, which is balanced by engaging in associated social processes that benefit the group as a whole, and by

extension benefit the individual farmer (Nelson et al., 2015). Although this means that every PGS initiative is locally adapted and, to some extent, unique, they all share the following key goals:

- A shared vision
- Active participation of multiple stakeholders
- Transparency of processes
- Holding trust as a foundational element
- Conceptualizing certification as a learning process, and
- Horizontality, meaning that all members share equally in the rights and responsibilities related to how the system is established and maintained (IFOAM, 2008).

However, in practice PGS are often run and administered by Civil Society Organisations (CSOs), with limited direct smallholder involvement in the central administration. Farmer interests are however essential to PGS initiatives and represented through inter-groups. PGS commonly create what are known as self-help groups that enable the combining of resources for common goals, such as running seedbanks, collective buying of external inputs to gain economies of scale and securing credit (Home et al., 2017). PGS initiatives around the world have demonstrated how participation in PGS provides opportunities and creates a favourable environment for peer learning and knowledge and resources sharing between farmers (Home et al., 2017; Kirchner, 2014), helping them build capacity that can aid in improving the quality and quantity of their organic produce over time.

## PGS IN VIETNAM

In Vietnam, PGS have now been set up in more than seven provinces (Ha Noi, Ha Nam, Hoa Binh, Tuyen Quang, Cao Bang, Ben Tre and Hoi An). With training and/or coaching by the VOAA, at least five other





*Harvesting organic organic vegetables in Than Xuan, Vietnam © Pierre Ferrand*

local governments have expressed interest in setting up organic PGS groups in their respective provinces (Huong, 2019). A farmer can voluntarily join a PGS scheme, committing to contribute to the self-organization of the local PGS group. Inter-farmer groups coordinate local groups and act as intermediaries with PGS Vietnam, the PGS coordination body.

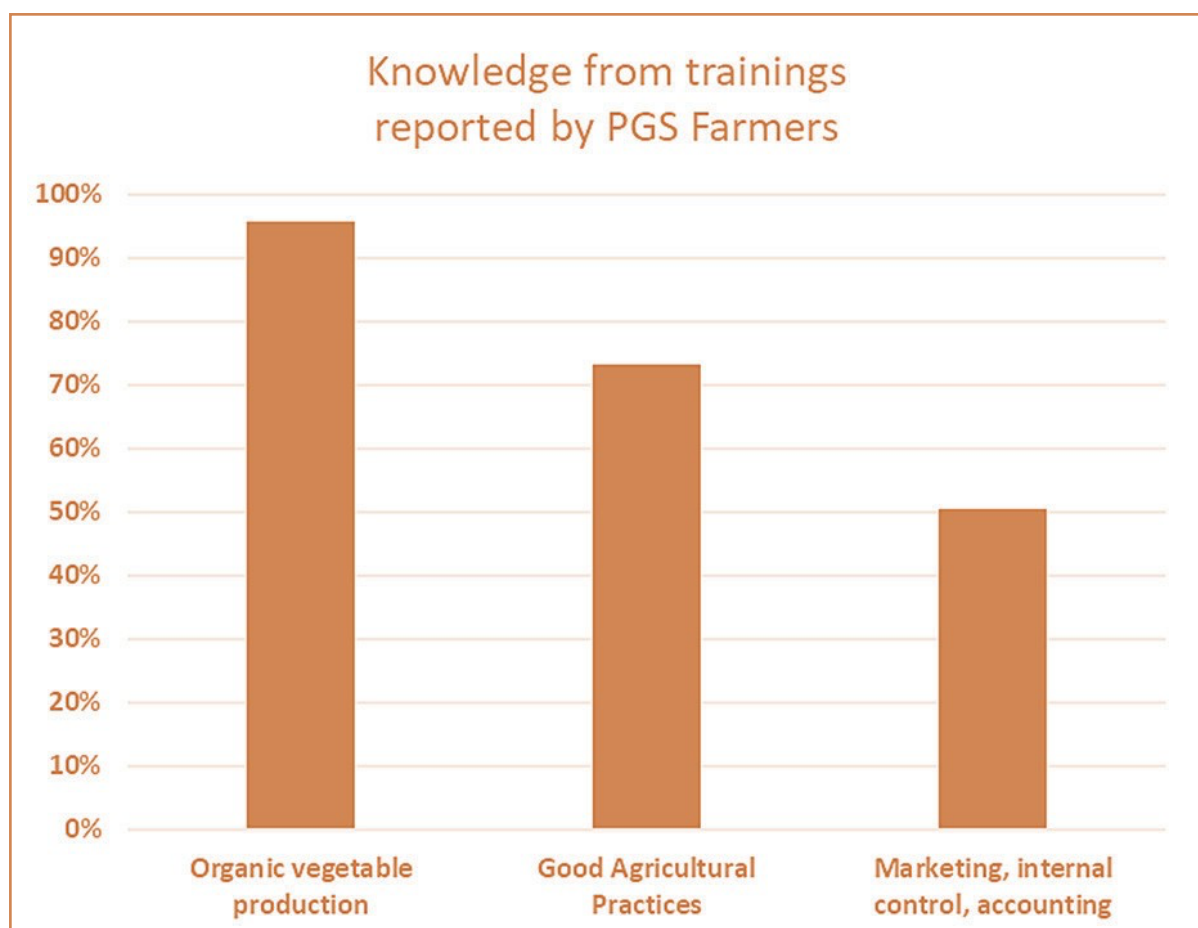
With the decree on organic agriculture recognizing PGS (109/2018/ND-CP and national standard set TCVN 110410), there has been an official recognition in Vietnam of organic PGS production and products, but support has not yet been provided at the central level. This gap is partially filled by PGS Vietnam, which has the mandate to support smallholder farmers engaging in local markets, and which coordinates 40 PGS groups in 4 local areas.

## Capacity development

New PGS groups undergo a three-month training to learn about PGS principles, organic production techniques and agroecosystem analysis through classroom sessions, but mainly through farmer field days. Pioneer PGS farmers are invited to share their experiences with new PGS farmers and sometimes external experts provide inputs during the training. There is no fee for farmer participation in the training. A range of stakeholders may get involved at various stages of the initial training:

- Government-supported extension services and local authorities
- Traders to facilitate contracts with PGS farmer groups for future vegetable provision





- NGOs and development agencies such as Rikoto, GIZ, Oxfam, FAO and GreenHub that are actively supporting PGS development in Vietnam.

Depending on available funding, follow-up capacity development is organized in the format of short 1-3-day courses that relate to management, production and marketing skills.

A survey of 119 PGS vegetable farmers in March and April 2023, conducted as part of the Agro-Econvert project, found that 95.8% of the participating farmers were trained in organic vegetable production techniques, 73.1% in good agricultural practices; and 50.4% in other areas such as vegetable marketing, internal inspection and accounting.

In addition to training, VoAA and PGS Vietnam are active in conducting workshops (funded by PGS retailers or NGOs) to share knowledge related to organic production and

marketing, covering topics such as how vegetable traders can differentiate PGS from conventional vegetables, how they can work in groups or even how to share PGS experience from other countries.

### Production of technical handbooks and leaflets

VoAA also produces technical handbooks on PGS practices and a periodic leaflet that updates events related to local organic agricultural development, such as workshops/training/marketing or successful cases of local organic farmers' groups (for more information, go to <https://vietnamorganic.vn/>).

## CHALLENGES

The first two years of organic PGS-certified production can be difficult for farmers, given high pest pressure and initial market uncertainty. After the transition phase, it





*PGS-certified organic vegetables at the market, Vietnam © Tu Thi Tuyet Nhung – Chair of PGS Vietnam*

usually becomes easier. The local organic sector in Vietnam has grown slowly in recent years. PGS-certified vegetable production in Vietnam is generally more profitable and sustainable compared to non-certified production. However, it is constrained by the following challenges:

- Local customer's inability/unwillingness to pay a price premium for PGS certified products. There have been a few official efforts to raise public awareness on organic products among consumers, with the promotion of organic products limited to some national TV shows, VoAA websites and efforts by private sector actors who run organic product businesses. Since the proportion of Vietnamese household income that is spent on food (>20%) (Fitch solutions, 2021) is high (compared to 6% in Switzerland), paying a price premium for organic produce is beyond the reach

of many. The rapid growth in disposable incomes in Vietnamese households suggests that there is an untapped potential market, but this hinges on the Vietnamese consumer being convinced to trust the Vietnamese PGS labels. However, despite the efforts of PGS Vietnam, trust remains relatively low, and imported fruits and vegetables remain the preferred choice due to perceived superiority in quality and safety standards (Fitch solutions, 2021).

- Insufficient labour for the extra effort required in organic farming. Rural Vietnam is facing a labour shortage as young Vietnamese seek better pay and conditions in service and manufacturing industries in urban areas. Hence Vietnamese farmers seek alternative solutions, and the use of harmful agrochemicals is a convenient option due to their ready accessibility and low cost.



The availability of harmful agrochemicals is not expected to decrease in the foreseeable future, which means that alternative, agroecological solutions must be offered if the situation is to improve.

- Insufficient knowledge of organic farming techniques. Technical training courses provided to farmers are often in the form of individual techniques such as how to make and use compost, how to prepare and use biopesticides, or how to prepare soil. Although these techniques are valuable, Vietnamese farmers have rarely received sufficient training to build the capacity to apply these techniques in a systematic way. So many farmers have an inadequate understanding of the whole farming system from which critical bottlenecks can be identified and focused

on, and in which possible innovations can be implemented. Without agroecological knowledge and systematic thinking, farmers will be constrained to effectively adopt these techniques in their local daily changing contexts. Such knowledge gaps can lead to farmers applying practices without fully understanding the consequences, such as incorrect soil preparation that can lead to soil degradation in intensive and continuous farming conditions. Insufficient knowledge is itself a symptom of weakness in the agricultural knowledge and innovation system in which new farming techniques that have been developed are not communicated to smallholder farmers in a way that they can absorb the information and adopt the techniques.



*Farm gate with PGS Vietnam logo in Thanh Xuan, Vietnam © Pierre Ferrand*



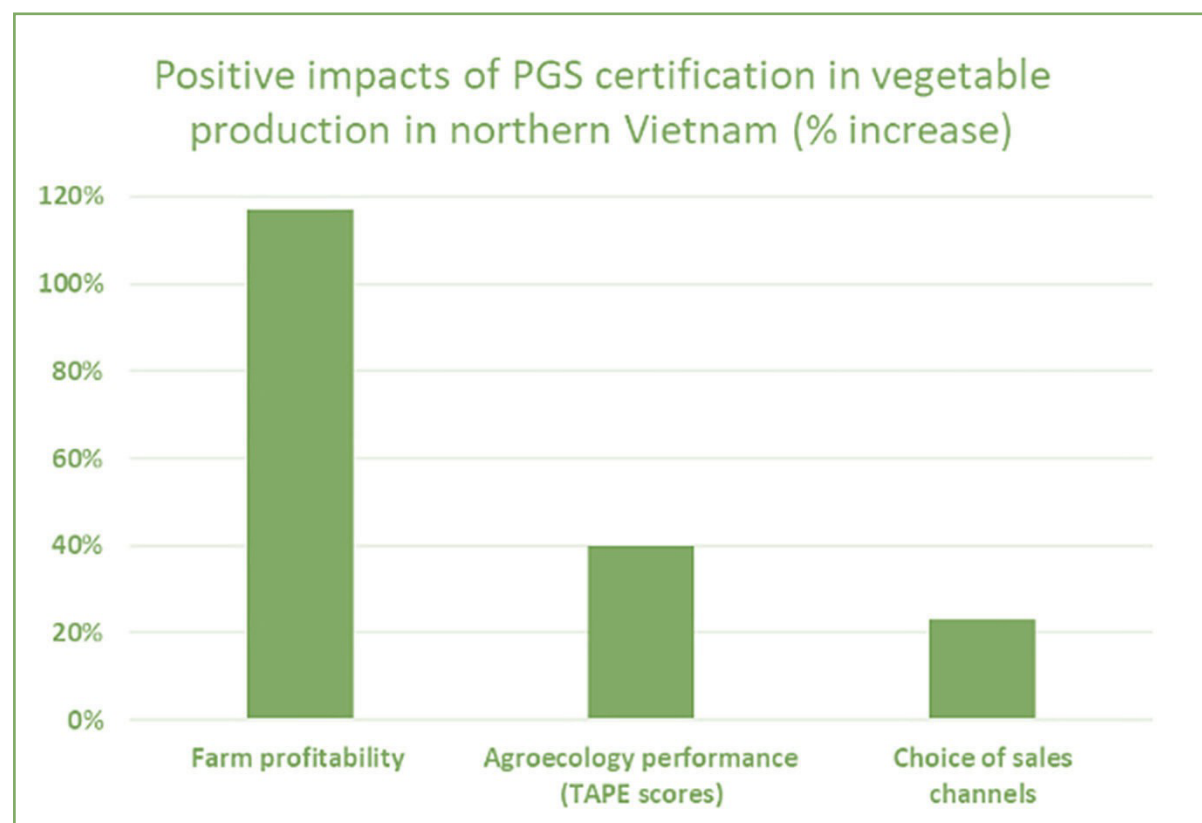
- Insufficient institutional cooperation and government support (Presilla, 2018). The dominant paradigm in Vietnamese agriculture, which has long been managed intensively with heavy use of synthetic inputs, has also contributed to limiting the development of organic farming. For instance, applying certificates for farms in the Red River or Mekong River deltas, which are close to the Hanoi and Ho Chi Minh City markets respectively, was perceived as being risky given the existing pollution in these deltas and uncertain government and institutional support.

However, this situation is changing, driven by the “National Action Plan on Food Systems Transformation in Vietnam towards Transparency, Responsibility, and Sustainability by 2030”. Vietnam is committed to increasing the area of agricultural land under organic production to at least 2.5% of the total agricultural area. The quantity of organic fertilizers supplied to the market accounts for more than 30% of the total amount of fertilizers, which has doubled since 2020.

## IMPACTS

There is scant data on the contribution that organic farming, especially PGS-certified systems could make to future challenges and the sustainable development of Vietnamese agriculture, and there is insufficient knowledge on how resources could be efficiently and effectively committed to promote the sector. This hampers policymakers in making sound decisions that could enable the future development of the sector and help develop supportive, evidence-based policies.

As part of the Agro-Econvert Project, an evaluation of the impact of organic PGS certification was carried out in Vietnam by CARES from Vietnam and FiBL from Switzerland, with support from FAO. Agro-Econvert is based on a robust counterfactual analysis and a broad set of sustainability outcomes, representing the first rigorous and comprehensive impact evaluation of PGS certification in Vietnam. The findings show that PGS-certified production of organic vegetables



in Vietnam shares several benefits and challenges with organic practices in other countries, such as improved gross margins and better agroecological performance, whereas crop yields are lower and labour requirements are higher. While these trade-offs are well established, they are not inherent to the system; so, it is important to quantify the positive and negative effects of certification. The study demonstrated that PGS significantly improves farm profitability (by 117%), agroecology performance (by 40%) and choice of sales channels (by 23%). However, it had no significant effect on returns to labour and a negative impact on crop yield. Higher profitability is largely driven by lower production costs and price premiums (Grovermann et al., under review).

## LESSONS LEARNED

PGS-certified vegetable production in Vietnam is generally more profitable and sustainable compared to non-certified production. It holds great promise in that it provides safe and healthy produce to a large number of consumers and enhances the environmental integrity of cultivation. However, organic vegetable production systems with PGS certification are constrained by crop productivity challenges and require increases in the return to labour.

Among the areas for improvements in organic PGS vegetable production that can be integrated into capacity development interventions include transplanting of healthy seedlings rather than direct seeding, reduced tillage for enhanced soil structure, nutrient holding capacity and weed control.

Collective crop planning and management are also important to enhance labour efficiency, farming structure and overall farming landscape ecosystem services. To attract more farmers, especially youth, and realise the agroecological potential of organic PGS production systems, the challenges may be addressed through an improved agricultural knowledge and

innovation system that provides PGS farmers with the information they need. For example, rather than training farmers in individual techniques whose application may be disjointed, training in agroecology can lead to a better understanding of how the whole farming ecosystem functions. Providing PGS and other farmers with information in a format that they can absorb will encourage better application and adoption of innovative techniques in their local daily changing contexts. Government and other stakeholders' investment and efforts to promote these practices appear well justified, considering the positive environmental externalities, economic opportunities and food safety advantages that can accrue from PGS-certified vegetable production. PGS schemes are also an essential instrument in the basket of institutional innovations to foster trust among producers, traders and consumers. Combined with the right agronomic innovations, PGS can make important contributions to food system transformation.

## REFERENCES

Castro, F. 2014. Overview of participatory guarantee systems in 2013. *The world of organic agriculture. Statistics and emerging trends*, pp.146-148.

Crowder, D.W. and Reganold, J.P. 2015. Financial competitiveness of organic agriculture on a global scale. *Proceedings of the National Academy of Sciences*, 112(24), pp.7611-7616.

Fitch Solutions. 2021. *Unpacking Vietnam's 2021-2025 Five-Year Plan*.

Grovermann, C., Schreinemachers, P., Riwthong, S. and Berger, T. 2017. 'Smart' policies to reduce pesticide use and avoid income trade-offs: An agent-based model applied to Thai agriculture. *Ecological Economics*, 132, pp.91-103.

Grovermann, C., Hoi, P., Yen, N., Schreinemachers, P., Hai, M. and Ferrand, P. under review. Impact of participatory guarantee systems (PGS) on sustainability



outcomes: The case of vegetable farming in Vietnam. *International Journal of Agricultural Sustainability*.

HLPE, 2019. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE), Rome.

Home, R., Bouagnimbeck, H., Ugas, R., Arbenz, M. and Stolze, M. 2017. Participatory guarantee systems: Organic certification to empower farmers and strengthen communities. *Agroecology and Sustainable Food Systems*, 41(5), pp.526-545.

IFOAM, 2019. PGS Guidelines. How to Develop and Manage Participatory Guarantee Systems for Organic Agriculture. IFOAM Organics International. Bonn, Germany.

Kirchner, C. 2014. Participatory Guarantee Systems (PGS). How PGS can intensify knowledge exchange between farmers.

Loconto, A. and Hatanaka, M. 2018. Participatory guarantee systems: Alternativeways of defining, measuring, and assessing 'sustainability'. *Sociologia Ruralis*, 58(2), PP. 412-432.

Shaikh Tanveer, H., Chang, J. and Tagupa, V.A.J.F. 2021. Developments in the organic sector in Asia in 2020. In *The World of Organic Agriculture. Statistics & Emerging Trends 2021*. Research Institute of Organic Agriculture FiBL and IFOAM-Organics International. PP. 197-126.

Willer, Helga, Bernhard Schlatter and Jan Trávníček (Eds.). 2023. *The World of Organic Agriculture. Statistics and Emerging Trends 2023*. Research Institute of Organic Agriculture FiBL and IFOAM – Organics International. Frick Switzerland and Bonn, Germany.

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## Good Practice Notes Series

The Asia-Pacific Islands Rural Advisory Services Network (APIRAS) and the Asia-Pacific Association of Agricultural Research Institutions (APAARI), in close collaboration with the Office of Innovation at the Food and Agriculture Organization (FAO) of the United Nations, are committed to strengthening Agriculture Innovation Systems (AIS) in the Asia-Pacific region to transform agri-food systems.

There is a growing recognition on the importance of institutional innovations in promoting more efficient and productive collaboration among the various actors in AIS. The publication of this series of Good Practice Notes by APIRAS and APAARI is an attempt to document cases of institutional innovations that are currently transforming agrifood systems.



## The TAP-AIS project

This publication was developed in the context of the TAP-AIS project (2019-2024), funded by the European Union and implemented by the Food and Agriculture Organization of the United Nations.

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The editorial support for developing this Good Practice Note was provided by the Centre for Research on Innovation and Science Policy (CRISP), Hyderabad, India ([www.crispindia.org](http://www.crispindia.org))