

Participatory Guarantee Systems: Agroecological Certification to Enhance Small-Scale Family Farmers' Adaptive Capacity to Climate Change

Pablo Urbina¹, Jürgen Pretzsch²

Introduction

- Adaptive capacity is the ability of a system to:
 - Adjust to climate change
 - Take advantage of opportunities
 - Cope with consequences.
- Governance and institutions are critical determinants of adaptive capacity and resilience since they stimulate:
 - Flows of knowledge
 - Participation
 - Interaction between stakeholders
- Participatory Guarantee Systems (PGS) are alternative mechanisms for regulating food production standards:
 - Adapted for the local market
 - Rely on active participation of stakeholders

Material and methods

- Multiple case study design. Two PGS initiatives from Peru
- Data collection:
 - Document and records:
 - Procedures manuals and standards (n = 4)
 - Farmers' field report (n = 54)
 - Semi structure interviews with key informants (n = 32)
- Data analysis:
 - Inductive thematic analysis



Fig 1. Case 1, red: PGS of Plataforma de Agricultura en Lima, Peru
Case 2, blue: PGS of Consejo Regional Junín, Peru

Findings

Organization as compliance criteria

One of the prerequisite necessary to qualify for the seal: Be an organization or a collective of urban or peri-urban farmers. (Case 1. Standard, p.1)

They must have a 'local nucleus', they must have a minimum of 10 participants, now due to the pandemic we have been making the formats more flexible and erm... group them within 6 people. The 6 producers form a local nucleus and present the documents so that they can belong [to the PGS]. (Case 2 Interviewee)

Sustainable agriculture as standard production rules

44 Different items are verified during evaluations of the PGS of Junín

37 Different items are verified during evaluations of the PGS of Lima

The standard is the document that determines the rules of how the production, processing, certification and marketing of organic or ecological products should be (Case 2. Standard, p. 7)

Agricultural production must be free from the use of synthetic inputs in order to provide healthy and safe products to consumers. (Case 1. Standard, p. 4)

The urban agroecological production standard applies to: (1) Plant production, (2) Animal production, (3) Agricultural inputs and (4) Food processing. (Case 1. Standard, p. 1)

Since there is no human activity that does not generate impacts on the environment, attention to the care of ecological systems essential for our survival is of vital importance, always promoting positive impacts on the environment.. (Case 1. Standard, p. 1)

Evaluation methodologies as learning platforms

External controls

Internal controls

The evaluator should:

- Provide feedback and recommendations
- Share ideas and suggestions to help the organization establish sustainability measures (Case 1. Field Verification Sheet, p.1)

There are some NGOs like CONVEAGRO, FOVIDA also, those who participate a lot especially with the professionals, [they] train us on agriculture... pests of some species, even new diseases that we face due to climate change. Case 2. Interviewee)

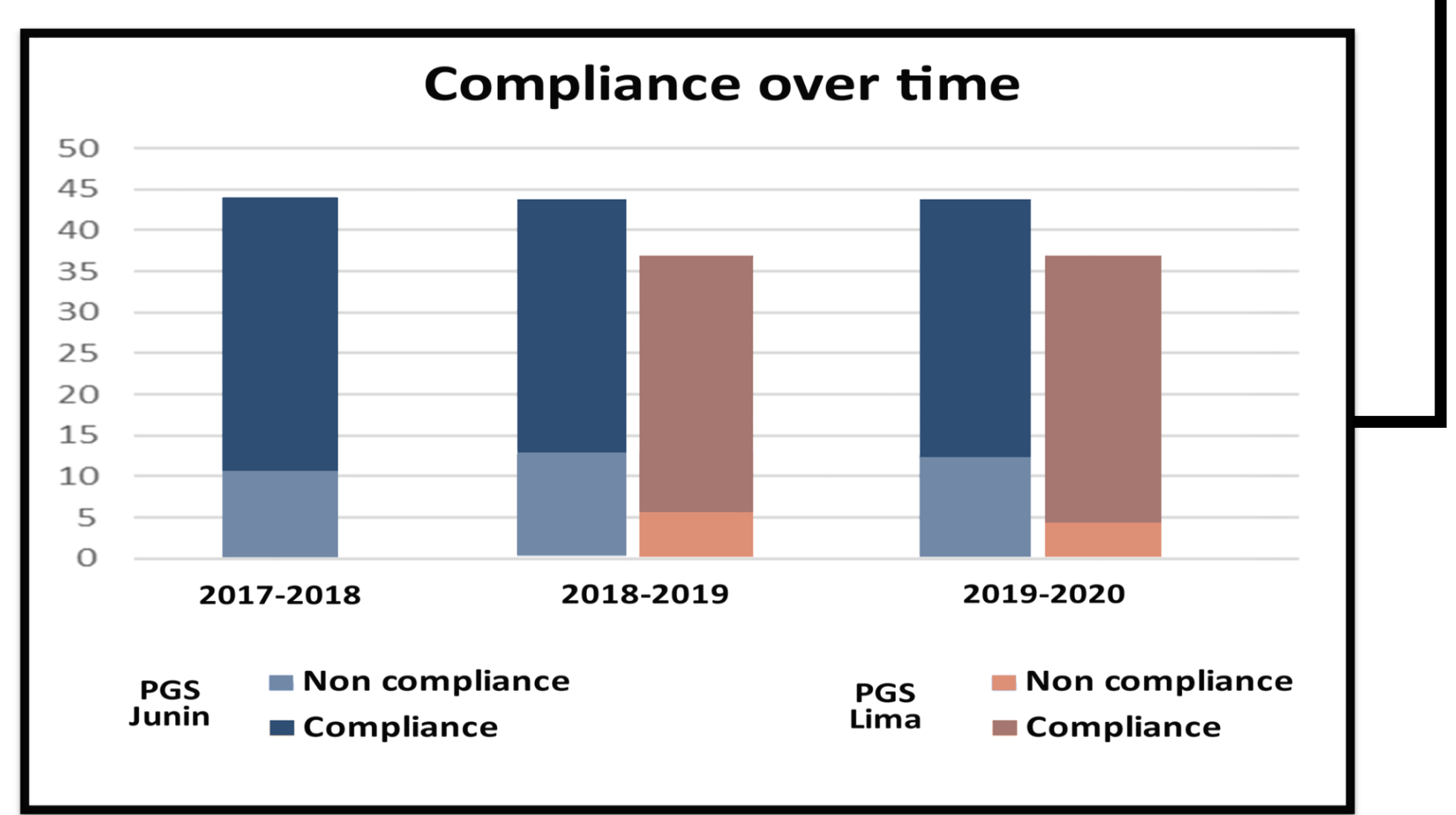


Fig 3. Trend of compliances of production rules. Average number of compliances extracted from farmers' field reports show a sustained number for the case of the PGS Junín and a increase over time for the case of the PGS Lima.

Conclusion

- Through procedures and standard requirements PGS foster organization creation among individuals that want to get certified.
- Internal and external controls as evaluation methodologies of PGS facilitate learning spaces that allow knowledge exchange between farmers and evaluators.
- PGS provide a compulsory framework based on agroecological practices that guide farmers in the development of their practices. The yearly nature of the verification process allow a constant feedback for farmers and an improvement of their practices

Acknowledgements

P. Urbina acknowledges funding from the Alexander von Humboldt Foundation under the International Climate Protection Fellowship program. The platform of Urban Agriculture in Lima and the secretariat of the Regional Direction of Junín collaborated with data necessary for the study. The funder had no role whatsoever in the design, data collection, analysis, decision to publish or preparation of the study.

The Plataforma de Agricultura en Lima and the Dirección Regional de Agricultura Junín provided free access to the data collected for this study.

Presented at Tropentag online conference 2021

¹Technische Universität Dresden, Inst. of International Forestry and Forest Products: Tropical Forestry, Germany

²Technische Universität Dresden, Inst. of International Forestry and Forest Products: Tropical Forestry, Germany