

Evidences

Study #3325

Contributing Projects:

- P662 - 5.2.1 Governing Shared Landscapes

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: New

Year: 2019

Title: Payments for agrobiodiversity conservation scaled up in Peru

Short outcome/impact statement:

Payments for agrobiodiversity conservation services (PACS) provide a mechanism to compensate farmers for conservation of genetic diversity. Following pilot testing by Bioversity International in quinoa, PACS are being scaled up by the Ministry of the Environment to four regions in Peru through a Global Environment Facility program.

Outcome story for communications use:

In the context of the unprecedented and irreversible loss of agrobiodiversity which is occurring at ecosystem and species levels [1], many developing countries are faced with a major challenge: how to safeguard biodiversity in the fields of the rural poor – which constitutes a global public good – while at the same time meeting those farmers' development needs and rights? To incentivize farmers to preserve agricultural biodiversity, Bioversity International has pioneered the implementation of a specific type of payments for ecosystem services, payments for agrobiodiversity conservation services or PACS, in Bolivia, Ecuador, India, Nepal and Peru [2], [3]. PACS is composed of several elements that make the approach effective, including setting conservation targets, facilitating access to threatened seed varieties, exploring value chain development for conserved varieties, and motivating and rewarding farmers for conservation services.

In Peru, the need to conserve on-farm crop diversity is included in the national biodiversity strategy and regulatory framework; however, until recently there was a lack of mechanism for implementation of this principle. In 2014, the Ministry of the Environment decided to expand Bioversity International's small-scale applications of PACS in quinoa to several Andean locations, first for quinoa and amaranth and then for potato. PACS implementation was widely reported in Peruvian media [4], [5], [6].

Since 2019, the Ministry is scaling up the use of PACS in four Andean regions through the Global Environment Facility project "Sustainable Management of Agrobiodiversity and Vulnerable Ecosystems Recuperation in Peruvian Andean Regions Through Globally Important Agricultural Heritage Systems Approach" [7]. Scheduled for the period 2020-2022, this project aims to implement PACS in 130 communities involved in cultivation of three highly diverse native crops of importance for food security and climate change: maize, potato and quinoa. Participating farmers are compensated through in-kind rewards identified by farmer groups, training, and social recognition.

Links to any communications materials relating to this outcome:

- <http://bioversityinternational.org/pacs>
- <https://tinyurl.com/yacewe29>
- <https://www.facebook.com/GobiernoRegionalPuno/posts/1020482631379022>
- <https://tinyurl.com/yc4ow4a7>

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution:

- 463 - Based on PIM's pilot work on payments for agrobiodiversity conservation services, Peru's Ministry of Environment is scaling up the approach into four regions through a Global Environment Facility grant. (<https://tinyurl.com/2fpd9myp>)

Stage of maturity of change reported: Stage 2

Links to the Strategic Results Framework:

Sub-IDOs:

- Increased conservation and use of genetic resources
- Increased genetic diversity of agricultural and associated landscapes
- Agricultural systems diversified and intensified in ways that protect soils and water

Is this OICR linked to some SRF 2022/2030 target?: Too early to say

Description of activity / study: <Not Defined>

Geographic scope:

- Sub-national

Country(ies):

- Peru

Comments: <Not Defined>

Key Contributors:

Contributing CRPs/Platforms:

- RTB - Roots, Tubers and Bananas
- PIM - Policies, Institutions, and Markets

Contributing Flagships:

- F5: Governance of Natural Resources

Contributing Regional programs: <Not Defined>

Contributing external partners:

- Ministerio del Ambiente / Ministry of Environment (Peru)
- GEF - Global Environment Facility

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

See below.

Innovations:

- 317 - Valuation of the general public's willingness to pay for the ecosystem services generated by on farm conservation of quinoa agrobiodiversity (<https://tinyurl.com/2jujau4u>)
- 1470 - Payments for agrobiodiversity conservation services in Peru (<https://tinyurl.com/2paufrfk>)

Elaboration of Outcome/Impact Statement:

To incentivize farmers to preserve agricultural biodiversity, Bioversity International has pioneered the implementation of a specific type of payments for ecosystem services, payments for agrobiodiversity conservation services or PACS, in Bolivia, Ecuador, India, Nepal and Peru [2], [3]. PACS is composed of several elements that make the approach effective", including setting conservation targets, facilitating access to threatened seed varieties, exploring value chain development for conserved varieties, and motivating and rewarding farmers for conservation services.

In Peru, the need to conserve on-farm crop diversity is included in the National Biodiversity Strategy 2021 and regulatory framework; however, until recently there was a lack of mechanism for implementation of this principle. In 2014, the Ministry of the Environment decided to expand Bioversity International's small-scale applications of PACS in quinoa to other Andean locations. In a first stage, PACS contracts were extended to 270 farmers in 22 communities in quinoa and amaranth. The Ministry then established a PACS operation for potato in a third location involving 8 communities and 160 farmers. PACS implementation was widely reported in Peruvian media [4], [5], [6].

Since 2019, the Ministry is scaling up the use of PACS in four Andean regions (Apurimac, Cusco, Huancavelica and Puno) through the Global Environment Facility (GEF) project "Sustainable Management of Agrobiodiversity and Vulnerable Ecosystems Recuperation in Peruvian Andean Regions Through Globally Important Agricultural Heritage Systems Approach" [7]. Scheduled for the period 2020-2022, this project aims to implement PACS in 130 communities involved in cultivation of three highly diverse native crops of importance for food security and climate change (maize, potato and quinoa), with capacity building of the Regional Agrarian Administration (Puno), municipal governments (Acora, Huayana, Lares and Laria), technical staff, extension agents, civil society and universities. Participating farmers are compensated through in-kind rewards identified by farmer groups, training, and social recognition. Participation of women farmers is emphasized and was significant in pilot phases.

Integration of the PIM-supported PACS knowledge platform [8], [9] in the GEF project was facilitated by the PIM-supported session on "Strengthening Common Pool Genetic Resource Governance Multi-stakeholder Dialogue" at the 2019 International Association for the Study of the Commons conference [10], which was attended by a wide range of regional farmer representatives, high-level government decision makers and senior GEF staff.

References cited:

- [1] FAO. 2019. The State of the World's Biodiversity for Food and Agriculture, Belanger, J.; Pilling, D. (eds.). FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. 572 pp. <http://www.fao.org/3/CA3129EN/CA3129EN.pdf>
- [2] Narloch, U., Drucker, A.G., Pascual, U. 2011. Payments for agrobiodiversity conservation services (PACS) for sustained on-farm utilization of plant and animal genetic resources. *Ecological Economics* 70(11): 1837-1845. <https://doi.org/10.1016/j.ecolecon.2011.05.018>
- [3] Drucker, A.G., Narloch, U., Pascual, U., Soto, J.L., Pinto, M., Midler, E., Valdivia, E., Rojas, W. Domestication of Payments for Ecosystem Services: New Evidence from the Andes. CAPRI Working Paper No. 118. Washington, D.C.: International Food Policy Research Institute. <http://dx.doi.org/10.2499/CAPRIWP118>
- [4] <http://www.minam.gob.pe/notas-de-prensa/minam-y-aliados-destacan-y-recompensan-a-comunidades-campesinas-por-preservar-la-variabilidad-de-la-quinua-nativa-en-puno/>
- [5] http://euroecotrader.pe/?sec=noticia-interna&no_url=-se-entregan-incentivos-a-guardianes-de-la-quinua
- [6] <https://www.facebook.com/GobiernoRegionalPuno/posts/1020482631379022>
- [7] <https://www.thegef.org/project/sustainable-management-agro-biodiversity-and-vulnerable-ecosystems-recuperation-peruvian>
- [8] Drucker, A. G., Ramirez, M., Medina, T., Olivares, M., Aréstegui, K., Vargas, J., Estrada, E., Alvarez, A., Céspedes, E., Alvarez, J. 2018. Payments for Agrobiodiversity Conservation Services: A research and development platform for in situ on farm genetic resources conservation and use. A case study of amaranth in Cusco, Peru. Bioversity International. https://www.bioversityinternational.org/fileadmin/user_upload/AA_Publications/PACS_CaseStudy.pdf
- [9] <http://bioversityinternational.org/pacs>
- [10] IASC. 2019. XVII Biennial IASC Conference Program. pp. 46 and 113. https://iasc-commons.org/wp-content/uploads/2020/04/iasc2019program_lima.pdf

Quantification:

Type of quantification: a) Actual counts or estimates from a particular study (please provide reference)

Number: 930.00

Unit: farming households

Comments: References 5, 6 and 8

Type of quantification: b) Extrapolated estimates

Number: 2000.00

Unit: farming households

Comments: Based on assumption that GEF PACS implementation will cover 130 communities during 2020-2022 (REF7). 50% chance of achieving this given current pandemic travel restrictions

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Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 1 - Significant

Main achievements with specific **Gender** relevance: Gender analysis was used to inform the PACS tender selection process a priori in terms of considering the trade-offs involved in selecting bid offers based on explicitly maximizing female farmer participation as opposed to area, community numbers, total farmers or some combination. The generally high level of female participation already existing at the bid offer stage (and as encouraged by the project during the tender launch workshops) has meant that the selection process has asked for additional female participation from the offerers.

Youth relevance: 0 - Not Targeted

CapDev relevance: 1 - Significant

Main achievements with specific **CapDev** relevance: In addition to farmers, capacity building efforts target the Regional Agrarian Administration (Puno), municipal governments (Acora, Huayana, Lares and Laria), technical staff, extension agents, civil society and universities.

Climate Change relevance: 0 - Not Targeted

Other cross-cutting dimensions: No

Other cross-cutting dimensions description: <Not Defined>

Outcome Impact Case Report link: [Study #3325](#)

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