The role of PES for agrobiodiversity conservation: Lessons from the Andes

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"Sustainable weighting of ecology-economics tradeoff (SWEET): Agrobiodiversity, sustainability and sustainagility across land use intensification gradients in a global comparative study"

On-farm agrobiodiversity conservation is key for agricultural sustainagility. Agrobiodiversity has mixed local-and global public good characteristics, mainly due to its insurance and options values. Since agricultural markets do not capture such values, agricultural development is associated with crop specialisation at all levels, including individual farmers, communities and agribusiness. One potential policy solution to correct for such market failure may be based on the idea of Payment for Ecosystem Services (PES), so-called Payment for Agrobiodiversity Conservation Services (PACS). PACS consists in rewarding farmers for their voluntary on-farm agrobiodiversity conservation activities. PACS shares similar challenges to PES for wild biodiversity, for instance, the complexity to assess the additionality of the payments. This stems from the scientific uncertainty about the link between farming activities and conservation outcomes. For example, PACS would require targeting crop varieties following a Weitzman type approach to secure a safe minimum standard for most “valuable” or “scarce” landraces, and an adequate selection of farming activities that would maximise the likelihood of achieving such standard. Additionally, besides short term economic efficiency criteria, PACS needs to sustain conservation activities in the long term. Hence, it also needs to take into account economic fairness and equity aspects of the reward mechanism. This paper reflects on these issues and specially focuses on the analysis of social and ecological tradeoffs of PACS. It is based on ongoing experience from the first PACS initiative, which is being piloted in Bolivia and Peru for quinoa and which has been designed through a community-based auction mechanism.