

Evidences

Study #4488

Contributing Projects:

- P2139 - Implementing foresight & targeting portfolio for MAIZE AFS, including synthesis/learning, new studies/tools, resource mobilization and inter-CRP collaboration
- P1064 - FP4 planning and coordination of FP/CoA/WP via W-MC, inter-CRP collaboration, maintain/new partnerships

Part I: Public communications

Type: Other MELIA activity

Status: Completed

Year: 2021

Title: Land-sharing or -sparing to minimize trade-offs between agriculture and biodiversity? We need more interdisciplinary R4D!

Commissioning Study: CIMMYT

Part II: CGIAR system level reporting**Links to the Strategic Results Framework:**

Sub-IDOs:

- Increased livelihood opportunities
- Diversified enterprise opportunities
- Closed yield gaps through improved agronomic and animal husbandry practices

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- Increased rate of yield for major food staples from current 1%/year
- Increase in water and nutrient (inorganic, biological) use efficiency in agro-ecosystems, including through recycling and reuse

Description of activity / study: Scientists, particularly ecologists, have looked for strategies to minimize trade-offs between agriculture and biodiversity. Two major limitations of the land sparing/sharing framework are: Relying only on yield-density relationships that focus on trade-offs and overlook synergies between agriculture and biodiversity; and the overemphasis on crop yield, neglecting other metrics of agricultural performance which may be more important to local farmers, and more relevant to positive biodiversity outcomes.

Geographic scope:

- Multi-national

Country(ies):

- Indonesia
- Zambia
- Bangladesh
- Burkina Faso
- Ethiopia
- Cameroon
- Nicaragua

Comments: <Not Defined>

Links to MELIA publications:

- <https://www.slideshare.net/CIMMYTAfricaagronomy/1st-lunch-meeting-18-august-2021-frdric-baudron>
- <https://www.cimmyt.org/blogs/sharing-or-sparing-land/>
- <https://doi.org/10.1016/j.biocon.2021.109167>