Enhancing "Greening" of the Common Agricultural Policy for biodiversity conservation in a collaborative way: The case of Spanish dry-cereal croplands

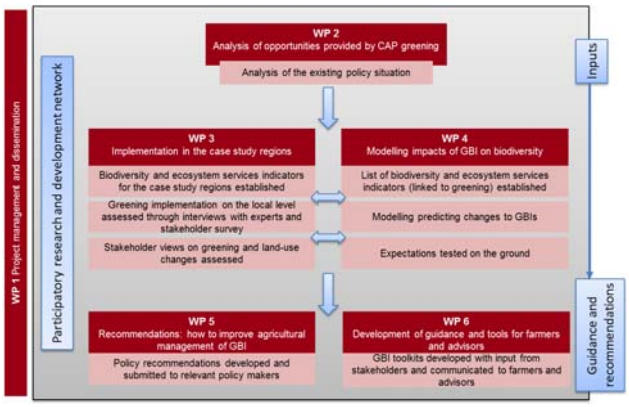


Elena D. Concepción[1], Yanka Kazakova[2], Vyara Stefanova[2], Katrina Marsden[3] & Mario Díaz[1]

[1] Biogeography and Global Change Department, National Museum of Natural Sciences, Spanish National Research Council, MNCN-CSIC, Madrid, Spain

[2] Economics of Natural Resources Department, University of National and World Economy, UNWE, Sofia, Bulgaria [3] Adelphi research, Berlin, Germany

BIOGEA - Testing BIOdiversity Gain of European Agriculture with CAP greening (https://www.biogea-project.eu/)

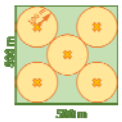


→ **HABITAT**

Mapping of habitat features within plots (25 ha – 500 m x 500 m) and subsequent contrast in field

→ **BIRDS**

5 count points (100 m radius, 5 minutes, 3 visits)



→ **PLANTS**

4 transects (30 m length, 2 m wide)





→ ***Valuable GBI:***

SMALL SCALE LANDSCAPE ELEMENTS



Isolated trees | Tree groups

IN FIELD ELEMENTS



Fallow land | Grassland

OTHER OPTIONS



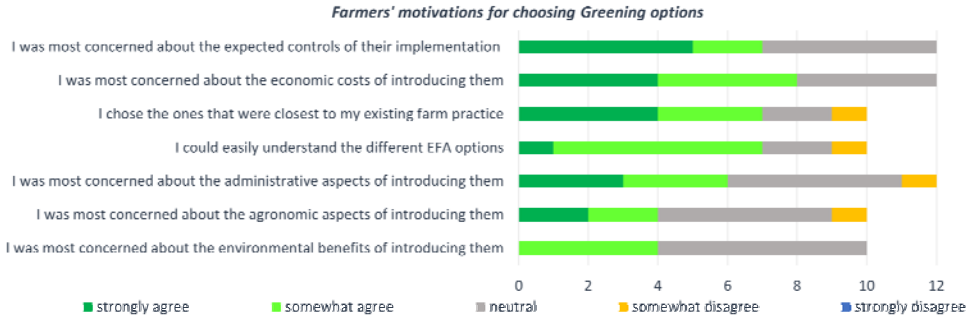
Preventing field enlargement

→ ***Farmers' preferences:***

IN FIELD ELEMENTS



N-fixing crops | Fallow land



→ ***Synthesis and Policy recommendations:***

- ***Farmers are concerned about controls and economic costs, and choose options closest to their existing farming practices.***
- ***Current advice is not encouraging uptake of the most environmentally beneficial options:***
  - ✓ ***Maintenance of tree groups and isolated trees.***
  - ✓ ***Promoting grassland, fallow land (especially covered fallow) and preventing field size enlargement.***
  - ✓ ***Preventing field size enlargement***
- ***Advice to farmers should explain the biodiversity benefits of available options.***



BIOGEA Policy recommendations 2020: A Green Architecture for Green Infrastructure. How the future CAP could support Green and Blue Infrastructures

→ ***More info:***

- Concepción, E.D., Amera, I., Jay, M., Lukanov, S., Marsden, K. Moreno, G., Oppermann, R., Pardo, A., Pinkol, S., Rolo, V., Schraml, A. & Díaz, M. (2020). Optimizing biodiversity gain of European agriculture through regional targeting and adaptive management of conservation tools. *Biological Conservation* 241: 108384. https://doi.org/10.1016/j.biocon.2019.108384
- Concepción, E.D. & Díaz, M. (2019). Varying potential of conservation tools of the Common Agricultural Policy for farmland bird preservation. *Science of the Total Environment* 694: 133618. https://doi.org/10.1016/j.scitotenv.2019.133618

Acknowledgements:

Elena D. Concepción, Ph.D, elenadconcepcion@gmail.com is recipient of a Juan de la Cierva - Incorporación postdoctoral fellowship (IJCI-2016-30964) from the Spanish Ministry of Science and Innovation

TESTING BIODIVERSITY GAIN OF EUROPEAN AGRICULTURE WITH CAP GREENING BIOGEA

This research is funded through the 2015-16 BiodivERsA Co-fund Call for research proposals, with:

biodiversa | Ministerio de Economía y Competitividad | Bulgarian Science Fund | Federal Ministry of Education and Research

PROJECT PARTNERS:

adelphi | ifab | UEX | csic mncn