SHOWCASE

FACTSHEET

# FARMLAND BIODIVERSITY MONITORING THROUGH CITIZEN SCIENCE

## Insights from a global review of 106 programmes

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## Why does farmland biodiversity matter?

- Agriculture covers over one third of global land.
- Biodiversity supports pollination, pest control, soil health & resilience.
- Loss of biodiversity threatens farm productivity & ecosystem services.

## What is citizen science?

Citizen science involves farmers, volunteers and the public in biodiversity monitoring alongside scientists.

It can:

- Generate large volumes of data.
- Be cost-effective with modern apps.
- Boost awareness and engagement in biodiversity.

## Eight citizen science approaches

1. **General programmes:** large-scale biodiversity trends, but farmland often underrepresented.
2. **Farmland-specific:** farm-focused monitoring, linking biodiversity to practices.
3. **Farmer-centred:** co-created projects empower farmers, but smaller in scale.

## Benefits for farmers

1. **General programmes:** large-scale biodiversity trends, but farmland often underrepresented.
2. **Farmland-specific:** farm-focused monitoring, linking biodiversity to practices.
3. **Farmer-centred:** co-created projects empower farmers, but smaller in scale.

## Challenges

- Spatial and species biases in data.
- Many records from few skilled volunteers.
- Farmer involvement often limited to data collection.
- Farmer-led projects may lack policy uptake.

## Recommendations for Policymakers & Developers

- Co-create programmes with farmers.
- Provide timely feedback to participants.
- Invest in simple tools and apps.
- Scale successful models regionally.

## Take-home message

Citizen science empowers farmers and communities to safeguard biodiversity while producing food sustainably.

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