





2025 National Landcare Conference

Landcare: Nature, Agriculture, Land and People Positive

Sunday 21 to Wednesday 24 September, 2025 Gold Coast Convention and Exhibition Centre

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National Environmental Science Program

What does success look like?

Partnering with practitioners to identify factors that help generate positive outcomes for Landcare and threatened-species recovery-team projects

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Special Acknowledgement

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²National Landcare Network

³University of Queensland

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⁶The team from NSW DCEEEW and Western Sydney university

What does success look like? Factors resulting in positive outcomes for Landcare and threatened-species recovery-team project

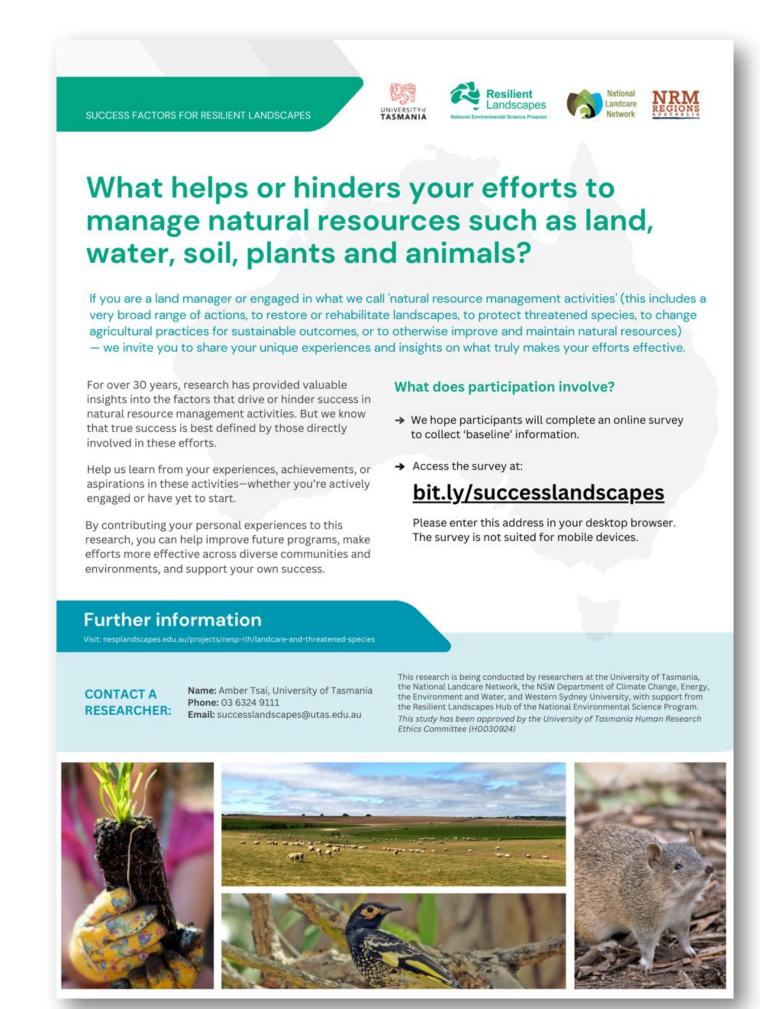
Project information



National Environmental Science Program

Key research areas

- 1. Locally and nationally relevant indicators that can be used to assess ecological, social, and economic outcomes across scales.
- 2. Trade-offs and synergies in **objectives and perceptions of success across different actors** (e.g. farmers, volunteers, coordinators, managers).
- 3. Trade-offs and synergies **between different types of success** (e.g. social capital vs habitat condition).
- 4. Social, economic, ecological factors that contribute to, or detract from different types of success in varying contexts.



The multi-layered system of natural resource management: actors, groups, programs and scales of decision-making



National Landcare Network
NRM Regions Australia
Environmental Stewardship Program
Saving Native Species Program
National Soil Conservation Program
Natural Heritage Trust
Caring-for Country
Citizen Science Association
Greening Australia



Landcare
Coastcare
Dunecare
Bushcare
Catchment care
Waterwatch
Threatened species recovery teams

Social and ecological context Federal NRM organisations State and Territory NRM organisations Regional NRM organisations **Community NRM** groups Family/Friends Individuals

Actors:

Landowners
Community volunteers
Coordinators
Expert advisors
Project managers
Fund managers
Traditional Owners



Doing natural resource management activities such as...

Plant native trees
Erosion control
Fire management
Co-ordinating volunteers
Invasive weeds control
Construct wetlands
Introduce logs or woody debris
Monitor invasive pests and weeds
Set aside land for conservation
Build nesting boxes

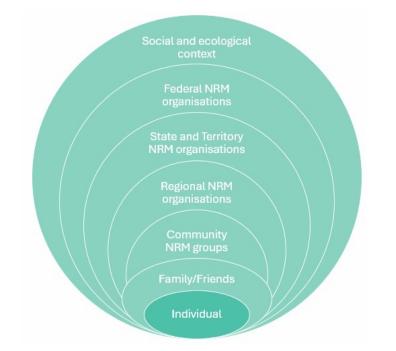
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Different people tend to use different types of data when making decisions relevant to different scales

to make

decisions

about



Federal Government

State/Territory
Government

E.g. People in

Regional Organisations

may

use

Volunteer and community groups

The community

Data and metrics that are available at continental scale

Data and metrics that are available at state/territory scale

Data and metrics that are available at **regional** scale

Data and metrics that that are available for volunteer and community groups

Data and metrics that are available to individuals, inc. personal observations

The design, funding, and allocation of funding for Federal programs

The design, funding and allocation of funding for **State programs**How (if) to participate in/apply for Federal Programs

The design, funding and allocation of funding for **Regional programs**How (if) to participate in/apply for State & Federal Programs

The design, funding and allocation of funding for Community programs
How (if) to participate in/apply for Regional, State & Federal Programs

How (if) to participate in/apply for Community, Regional, State & Federal Programs

Staff involved in Federal programs

Staff involved in State/Territory programs

100's of staff involved in Regional programs

1000's of Landcare groups; hundreds of unregistered recovery teams

100's of 1000's of individuals involved in natural resource management activities

Good outcomes are most likely when objectives align across scales – so all are working together to achieve shared goals.

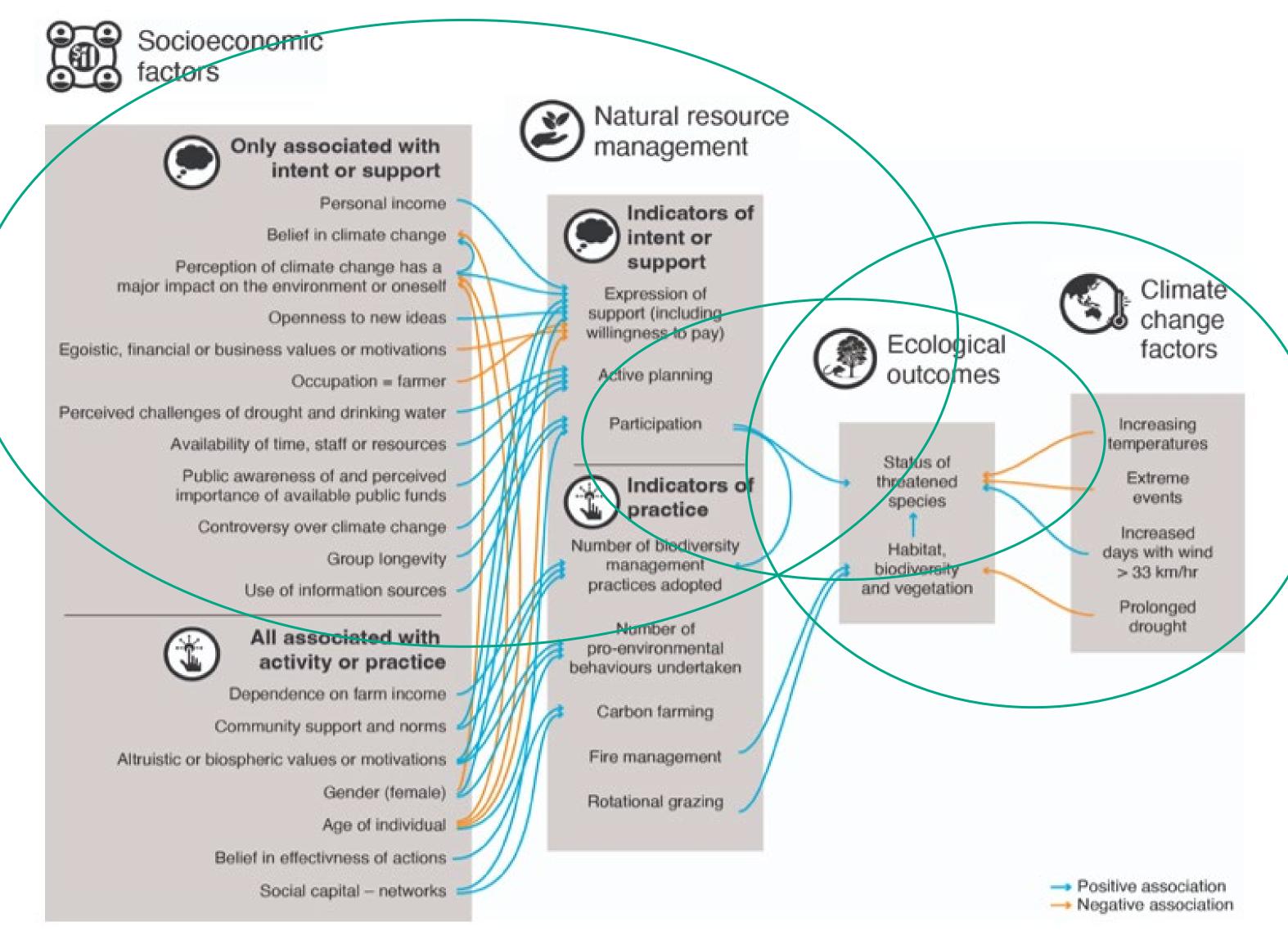
It may be possible to improve alignment or identify co-benefits by using metrics/measures that are meaningful across scales.





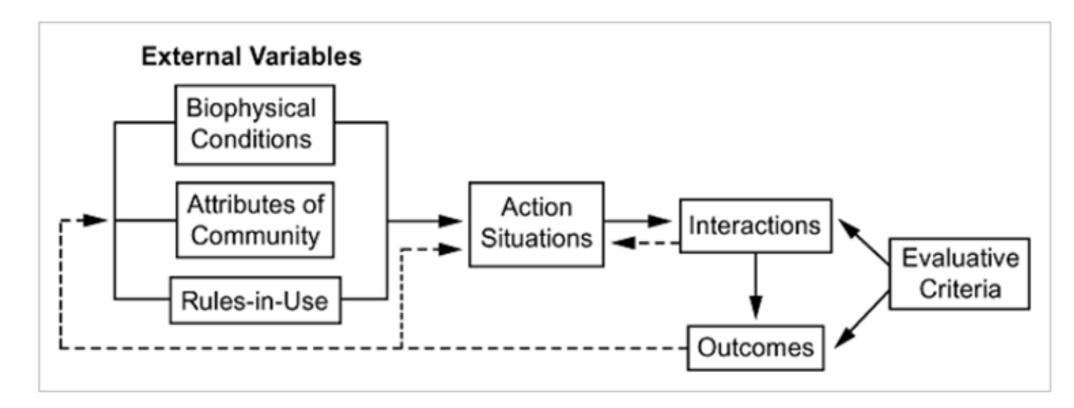
Pathways to 'success' identified from the literature

- 1. Social and economic studies tend to focus on social outcomes (e.g. attitudes, desire to participate) of social interventions (e.g. communications, carbon markets)
- 2. Biophysical science studies tend to focus on biophysical outcomes of biophysical interventions
- 3. Relatively few evaluate the ecological outcomes of 'on ground' activities



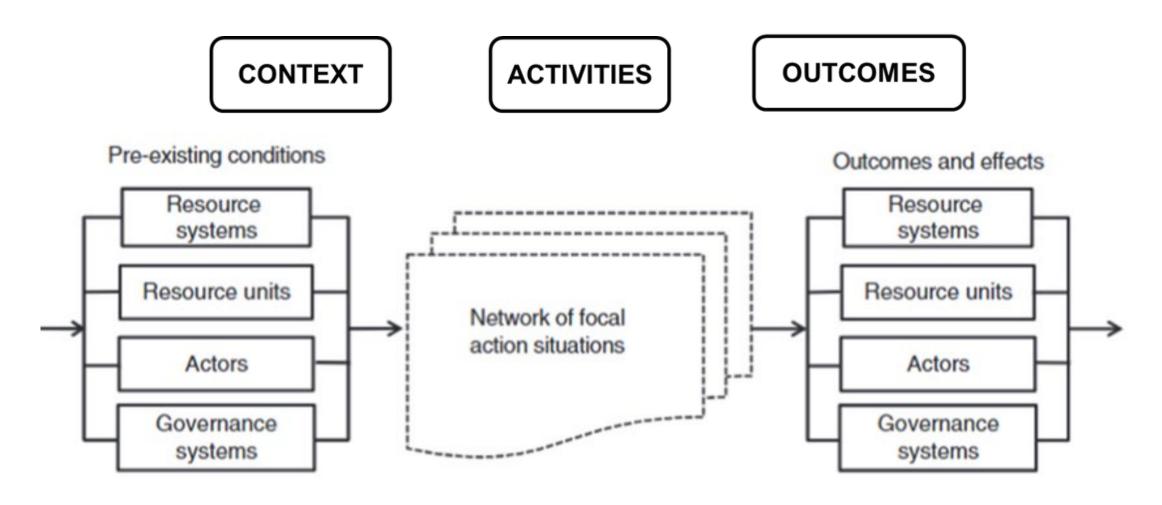
Limenih, B., Stoeckl, N., Larson, S., Tsai, A., Adams, V., & Dean, A. J. (n.d.). *Pathways from socioeconomic values to natural resource management practices to ecological change: A systematic review* (Manuscript under review).

A Framework for Institutional Analysis and Development



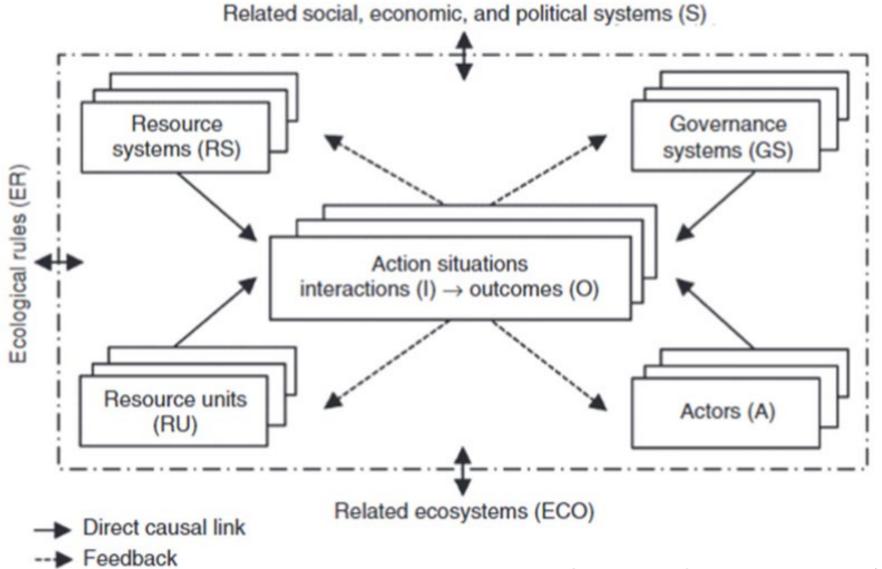
Ostrom, Elinor. "Background on the institutional analysis and development framework." Policy studies journal 39, no. 1 (2011): 7-27.

IAD-SES framework



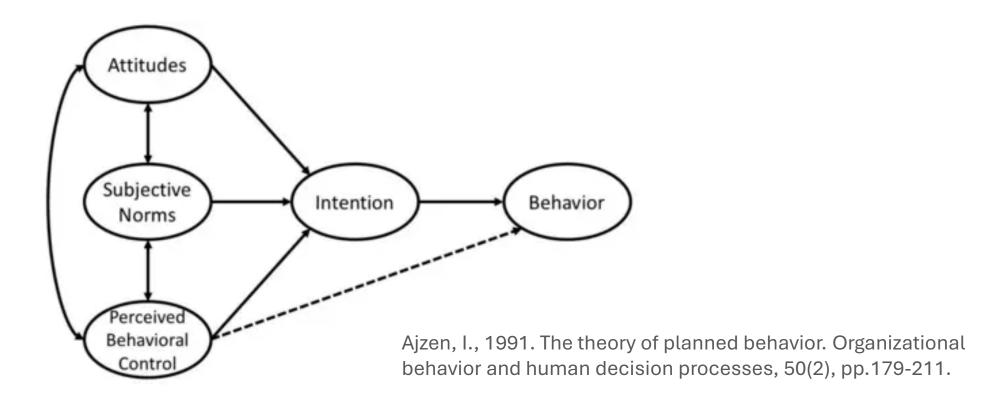
Cole DH, Epstein G, McGinnis MD. Combining the IAD and SES frameworks. International Journal of the Commons. 2019 Jan 1;13(1):244-75.

The SES framework



Adapted from Ostrom and Cox (2010) and Epstein et al. (2013)

The theory of planned behaviour





Pre-existing conditions (CONTEXT of place, actor, activity)

Broad

Characteristics of the wider social, institutional, economic and biophysical environment

Specific

Characteristics of the 'place' in which the proposed activity/intervention will take place (social, institutional, economic and biophysical environment)

Characteristics of the 'actor' (people involved in the activity), including their values, beliefs – and perceived barriers/enablers to participation

Characteristics of proposed activity (including objectives/purpose, funds available, governance/institutional arrangements)

Action situation/arena and "interactions"

Behavioural Intention

Decision about

whether to
participate in a
particular activity
(e.g. joining a
Threatened Species
Recover Team)

What is supposed to get done, by whom and how

e.g. specific activities (planting trees, building nesting boxes), people involved in those activities (locals only; external 'experts') the way in the activities are undertaken, and the interactions between those who are involved (includes the framing of communications, sharing of information, exchange of money)

Actual Behaviour / Change

What gets done (e.g. people signing up but not engaging versus numerous trees planted)

Outcomes

What are the resultant outcomes

- Ecological
- Social (community or personal level)
- Financial

Evaluations

What gets measured or recorded

(e.g. ecological, social, financial changes)



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National survey

(e.g. objectives, perceived success, barriers and enablers)
Co-design with Landcare, NRM,
Threatened Species Recovery
Teams, NSW DCCEEW

Existing ecological, socioeconomic databases

e.g. species richness, habitat conditions, ABS

Ecologists' site visits & interviews

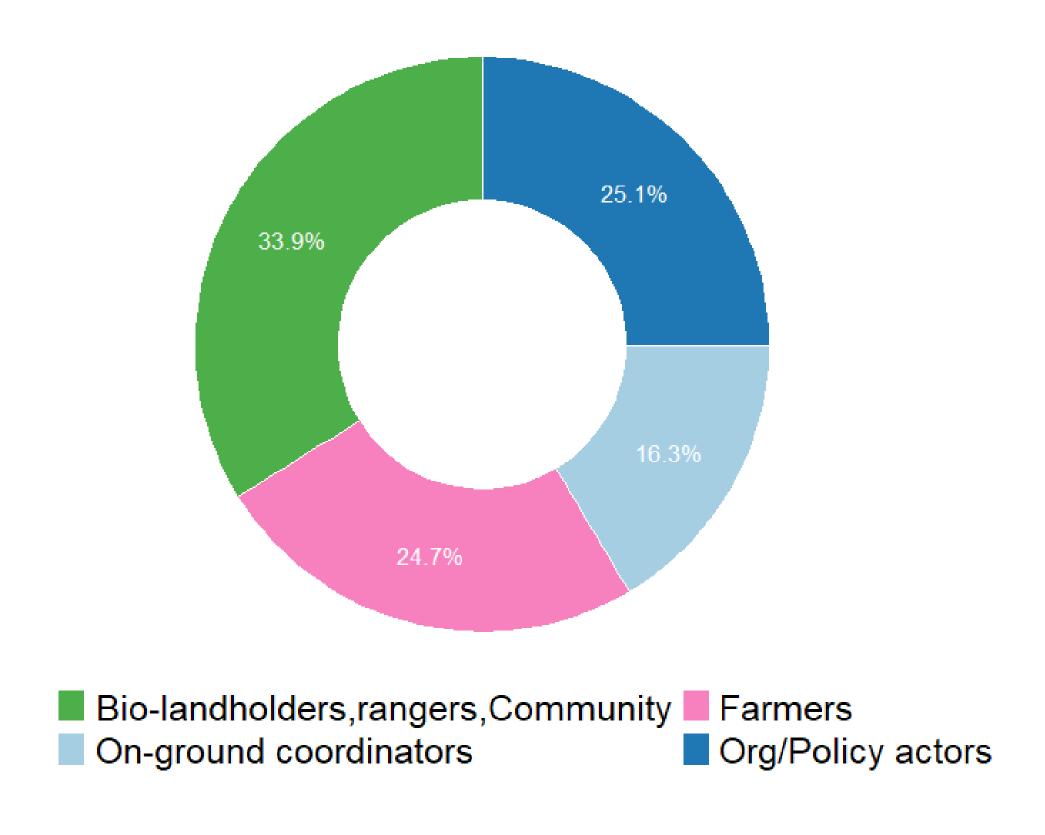
Compare perceptions of success (survey data) with observed ecological outcomes.

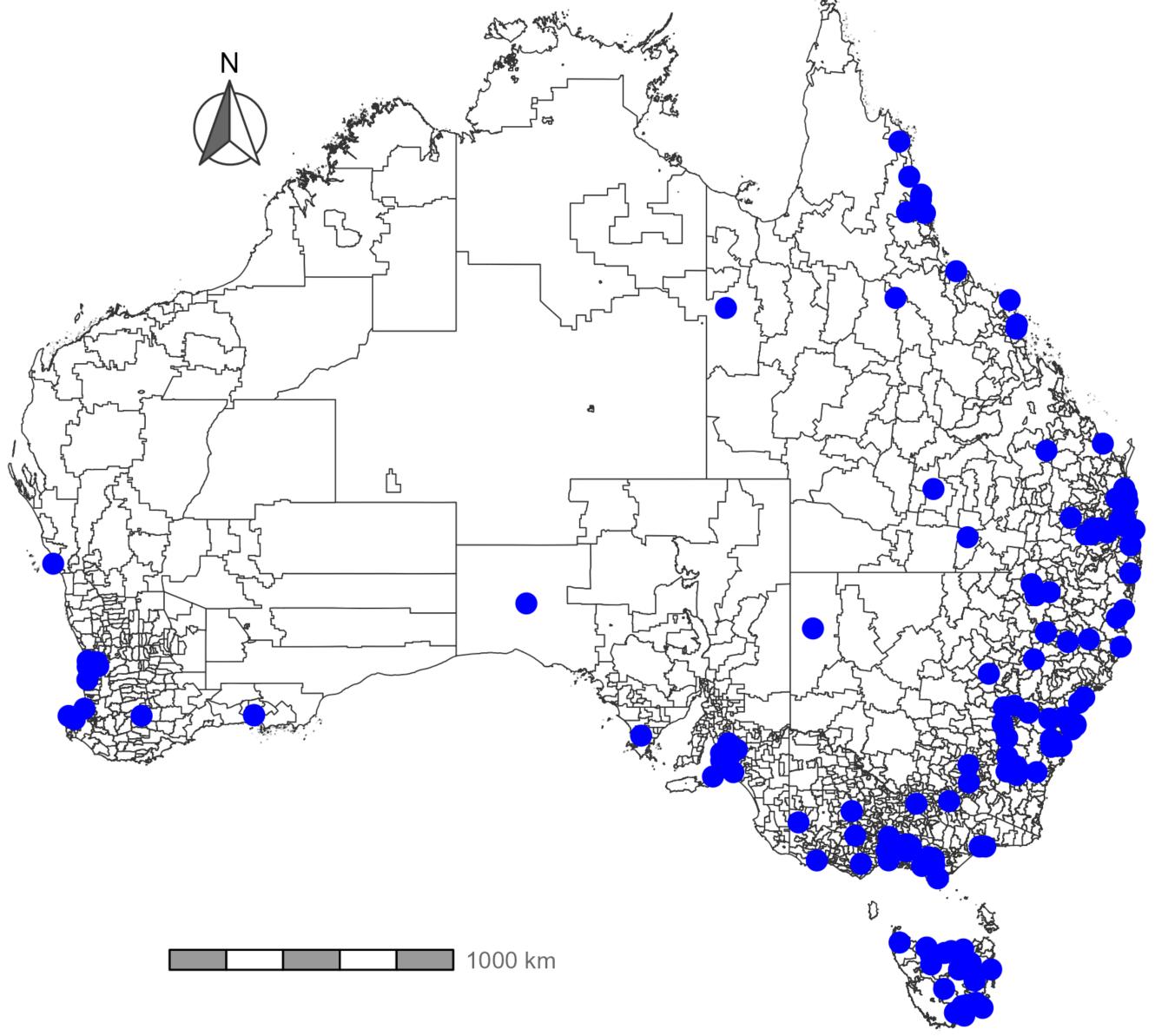
Social data (Quantitative + Qualitative) + Ecological data

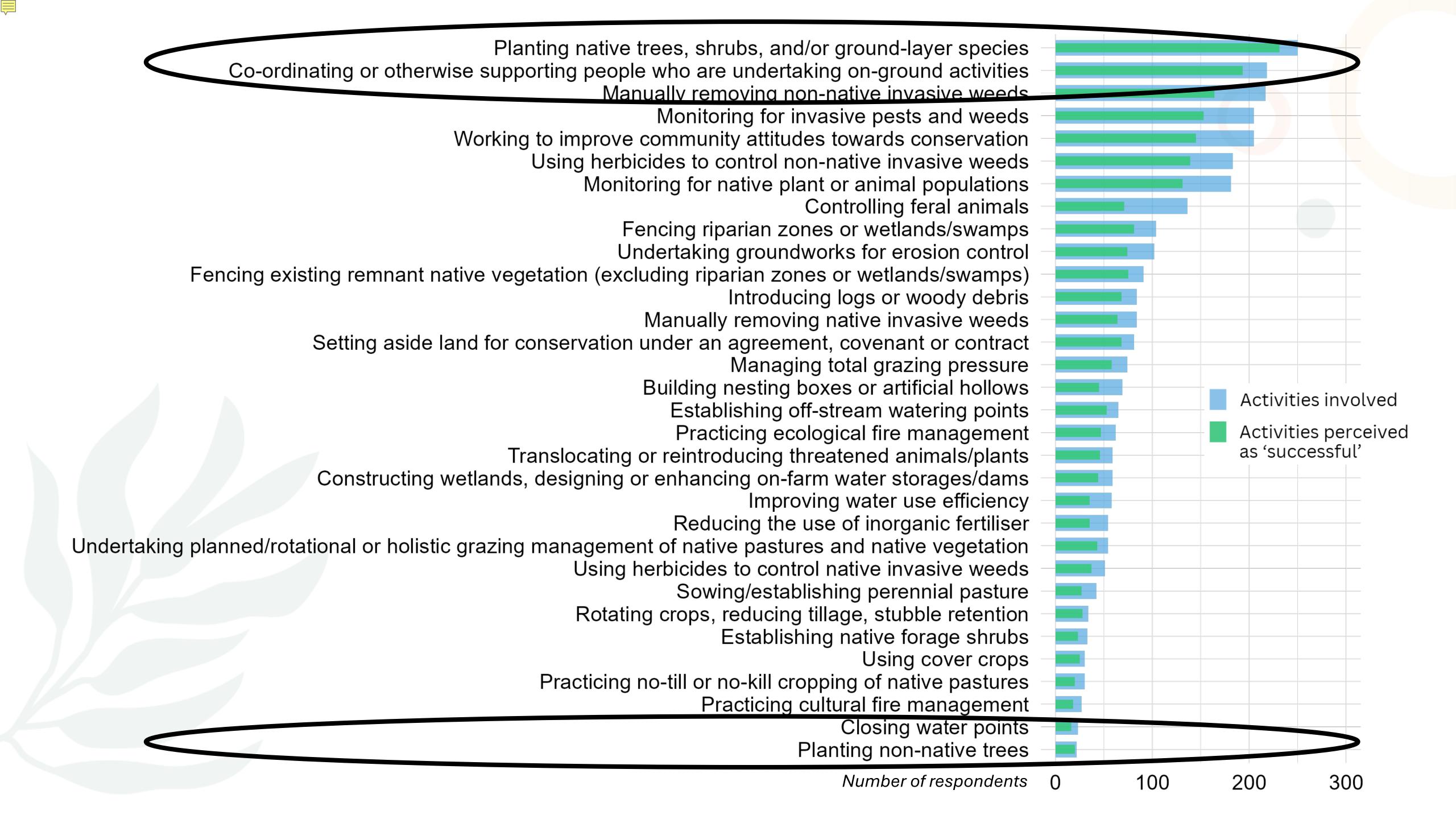


Preliminary findings

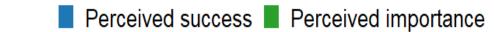
Role and geographic spread of respondents (N=249)

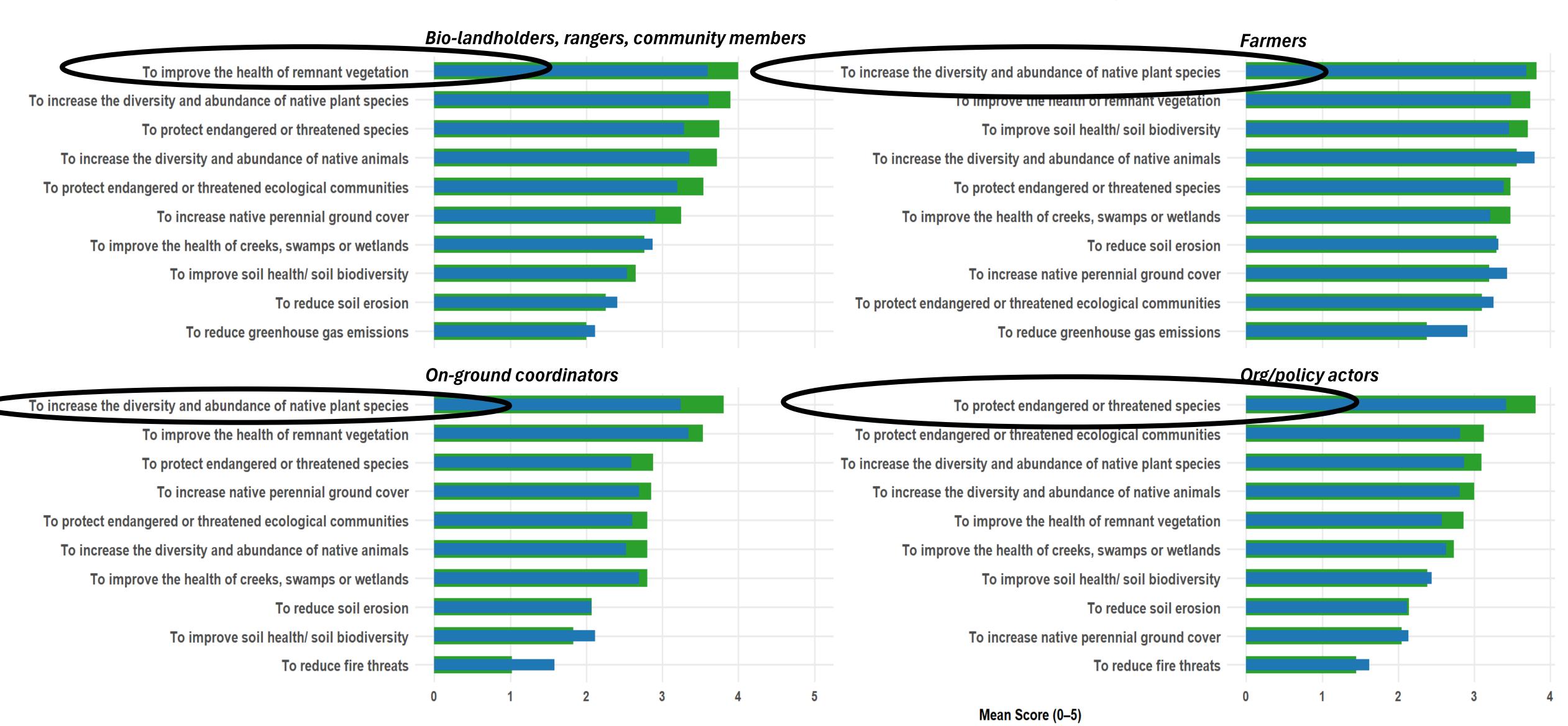






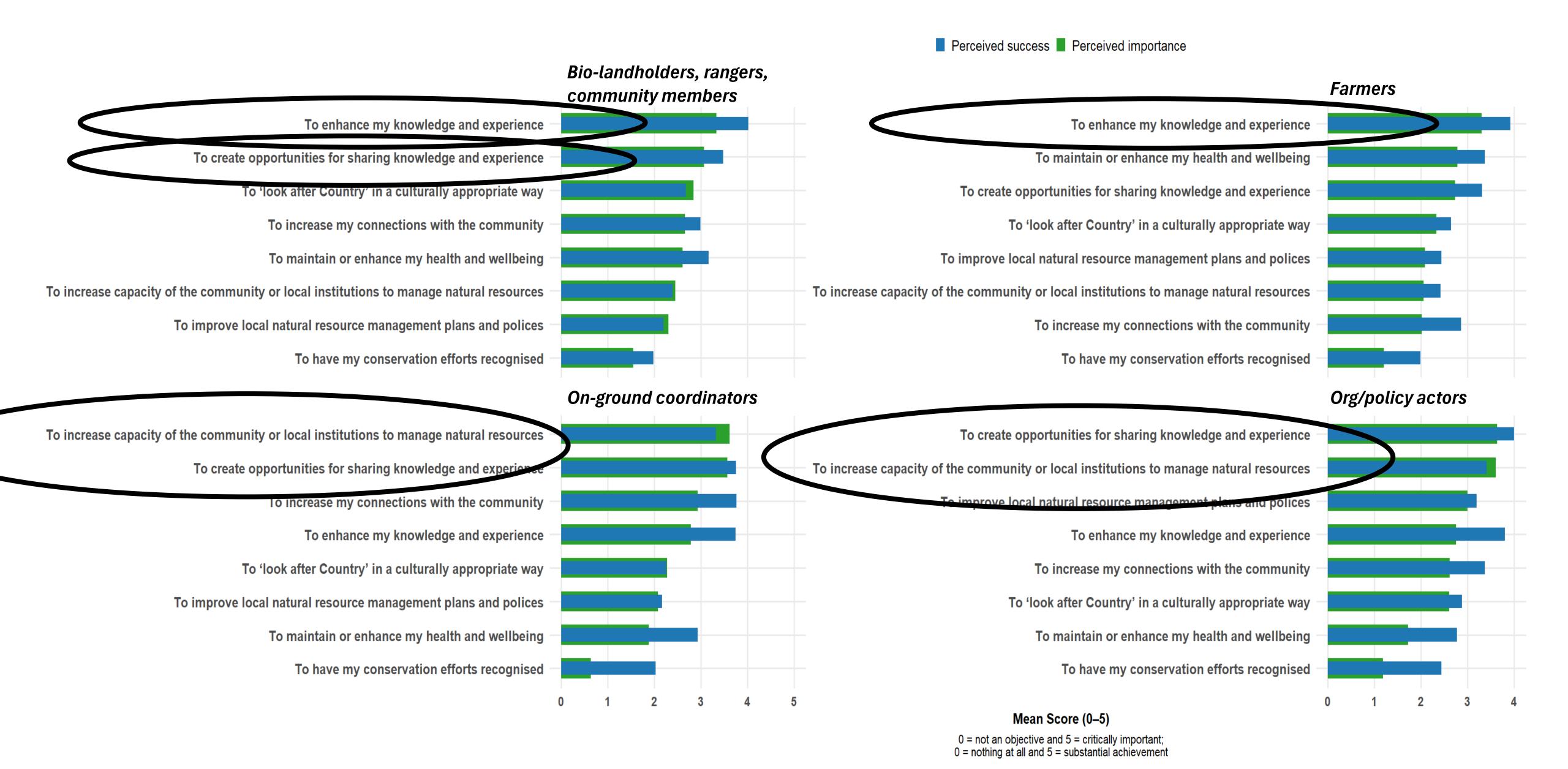
How important were these ecological objectives and which do you feel you achieved?





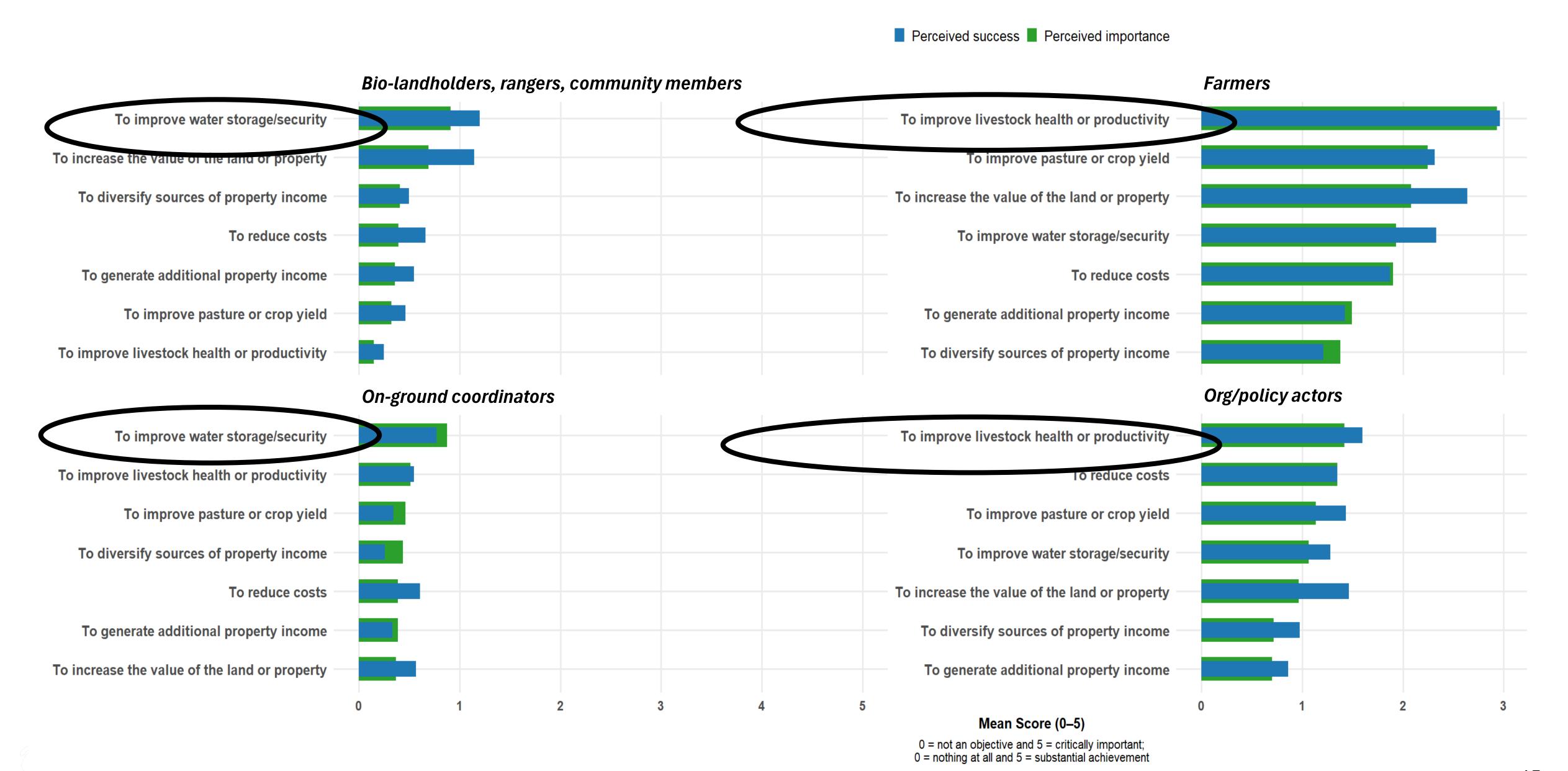
0 = not an objective and 5 = critically important; 0 = nothing at all and 5 = substantial achievement

How important were these personal, social, institutional or cultural objectives and which do you feel you achieved?

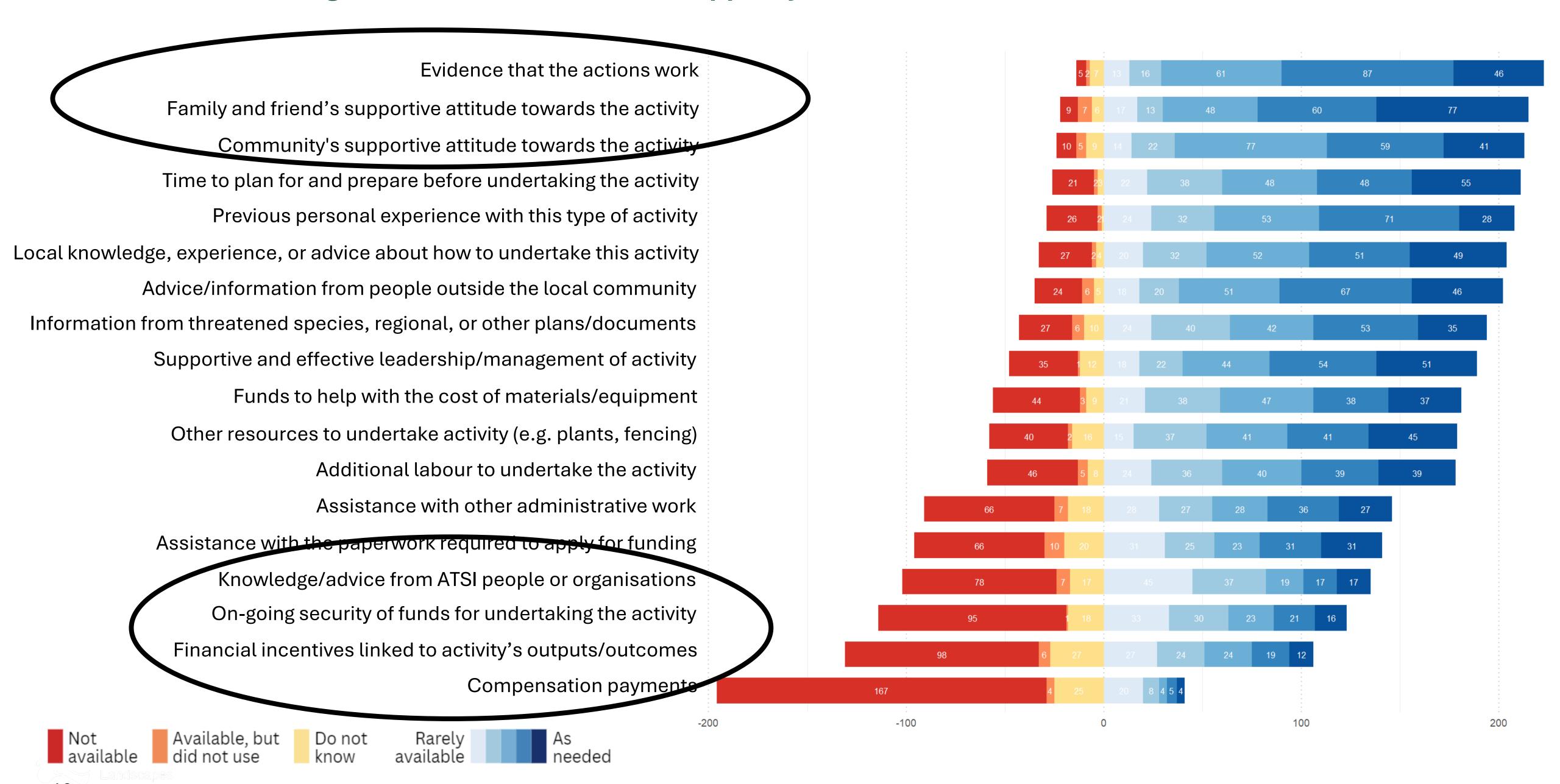


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How important were these farm, business or property objectives and which do you feel you achieved?

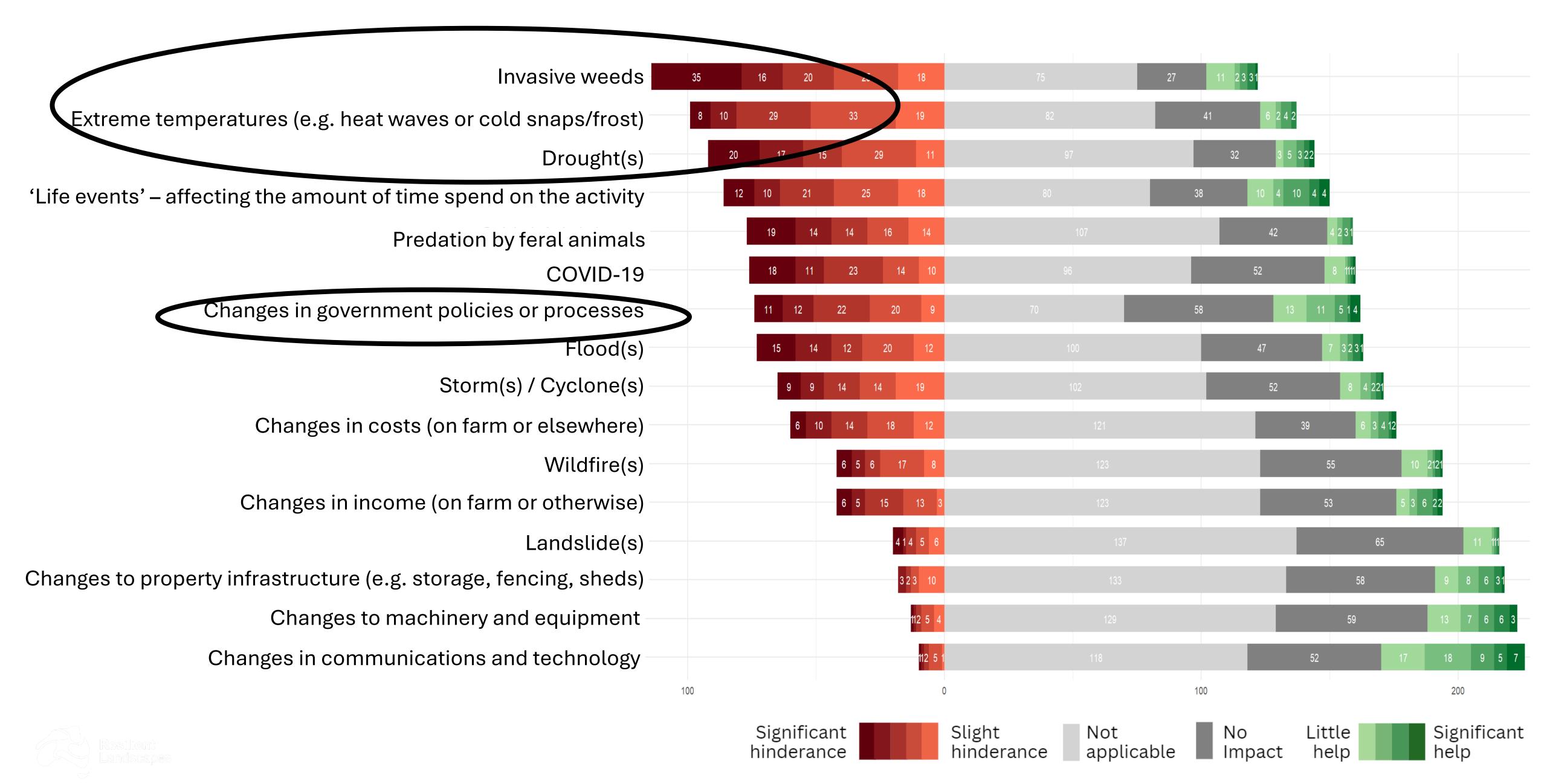


Which of the following factors were available to support your activities?



16

What other external events occurred, and what impact did they have?



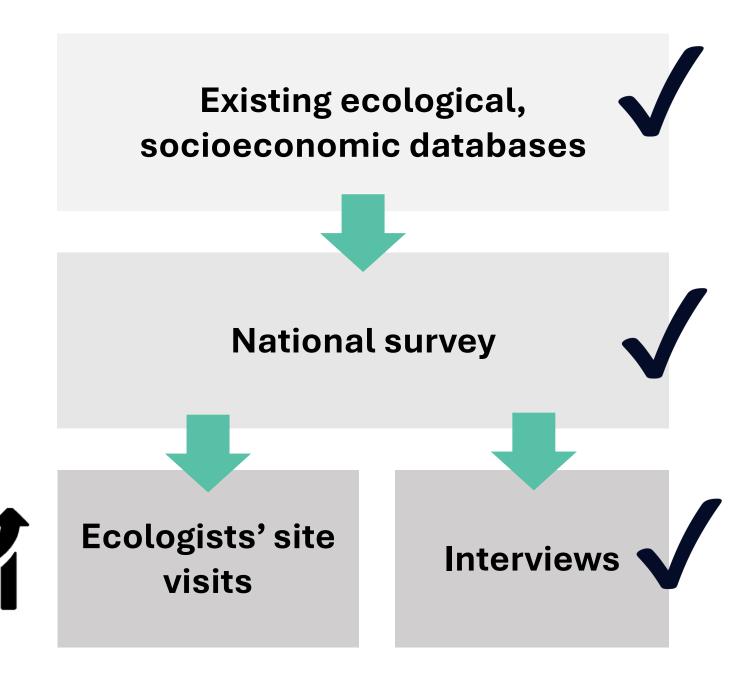
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