

# Normative scenarios of landscape change for Nature-Positive futures in Peru

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**NASCENT**  
PERU

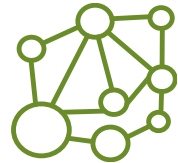


# Nature-positive **SC**enarios for **EN**vironmental **T**ransitions-Peru



## **Create normative scenarios**

Nature-positive future landscape development



## **Model scenario impacts**

Land use, biodiversity and ecosystem services



## **Summarize environmental impacts**

Effect on economic sectors of interest

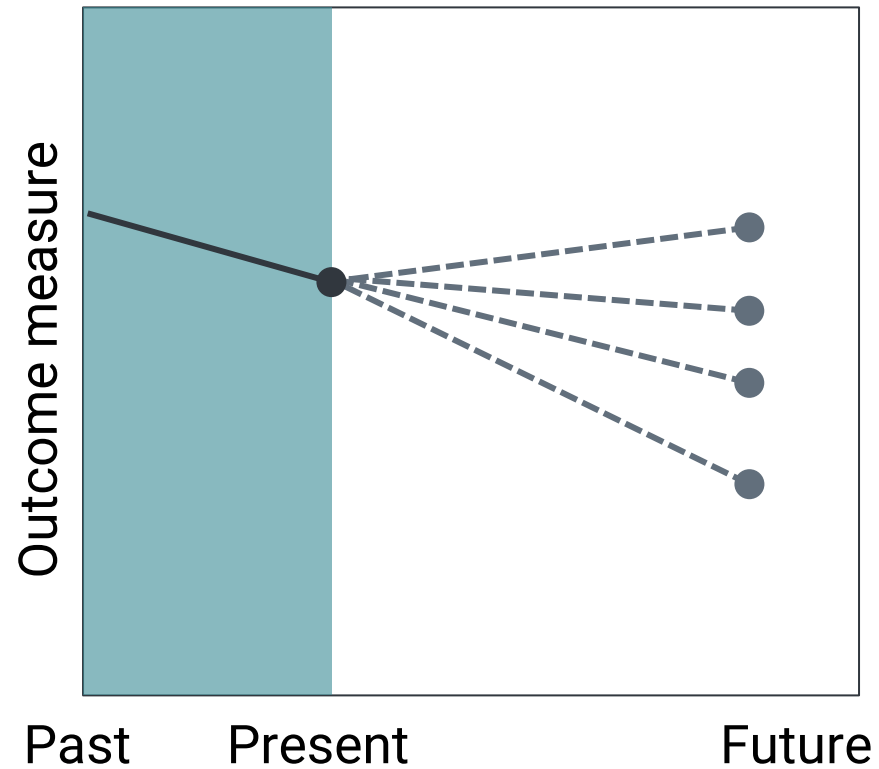


## **Communicate results**

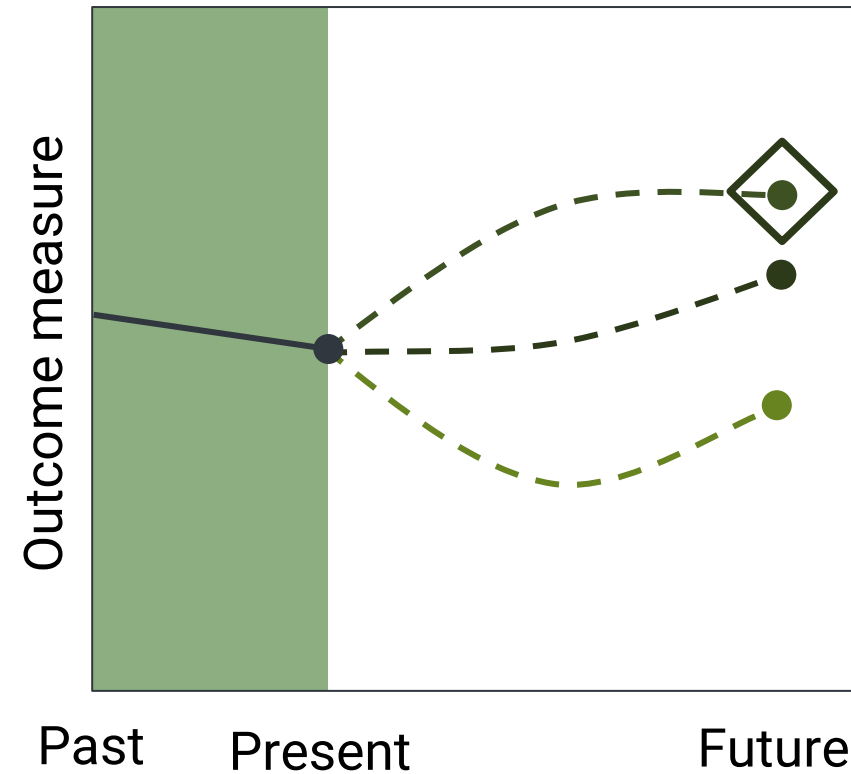
Relevant outputs for different stakeholders

# Normative scenarios?

## Exploratory

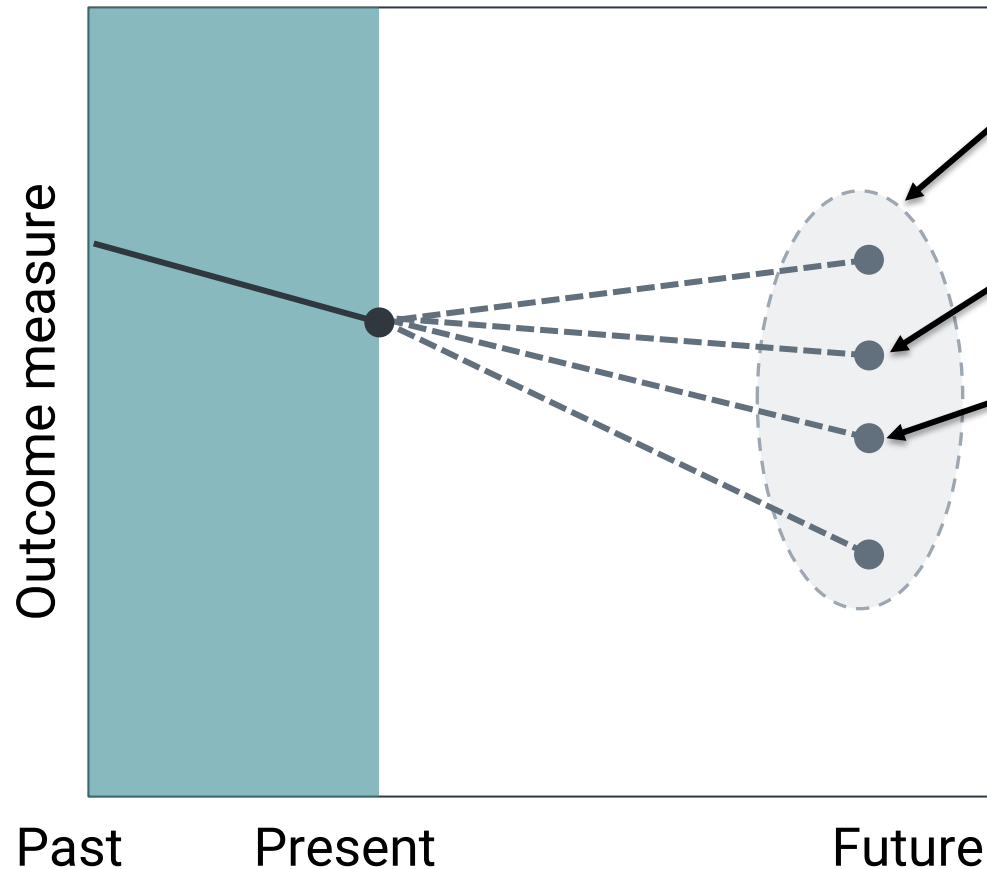


## Normative



# Normative scenarios?

## Exploratory



Range of probable outcomes

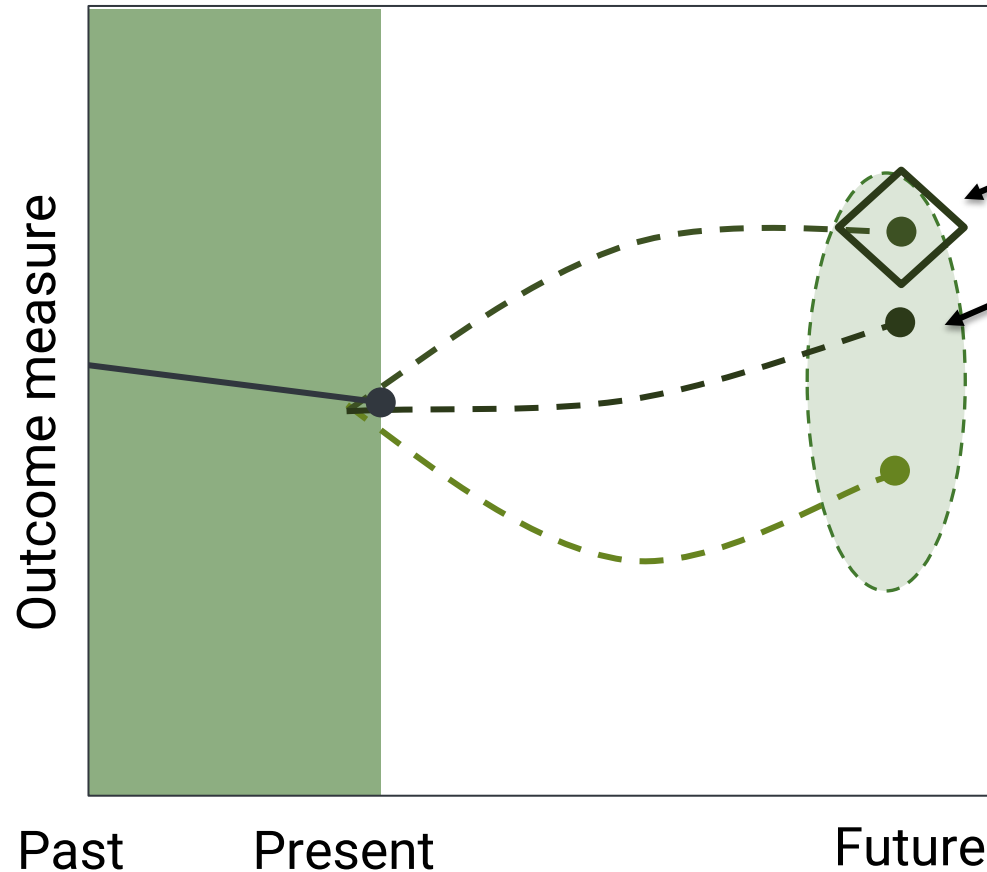
Business as Usual: Extrapolation of current trends

Increasingly predict negative outcomes

**Often devised  
without  
participation** = **No indication  
of societal  
desirability**

# Normative scenarios?

## Normative



Specify desirable end-points

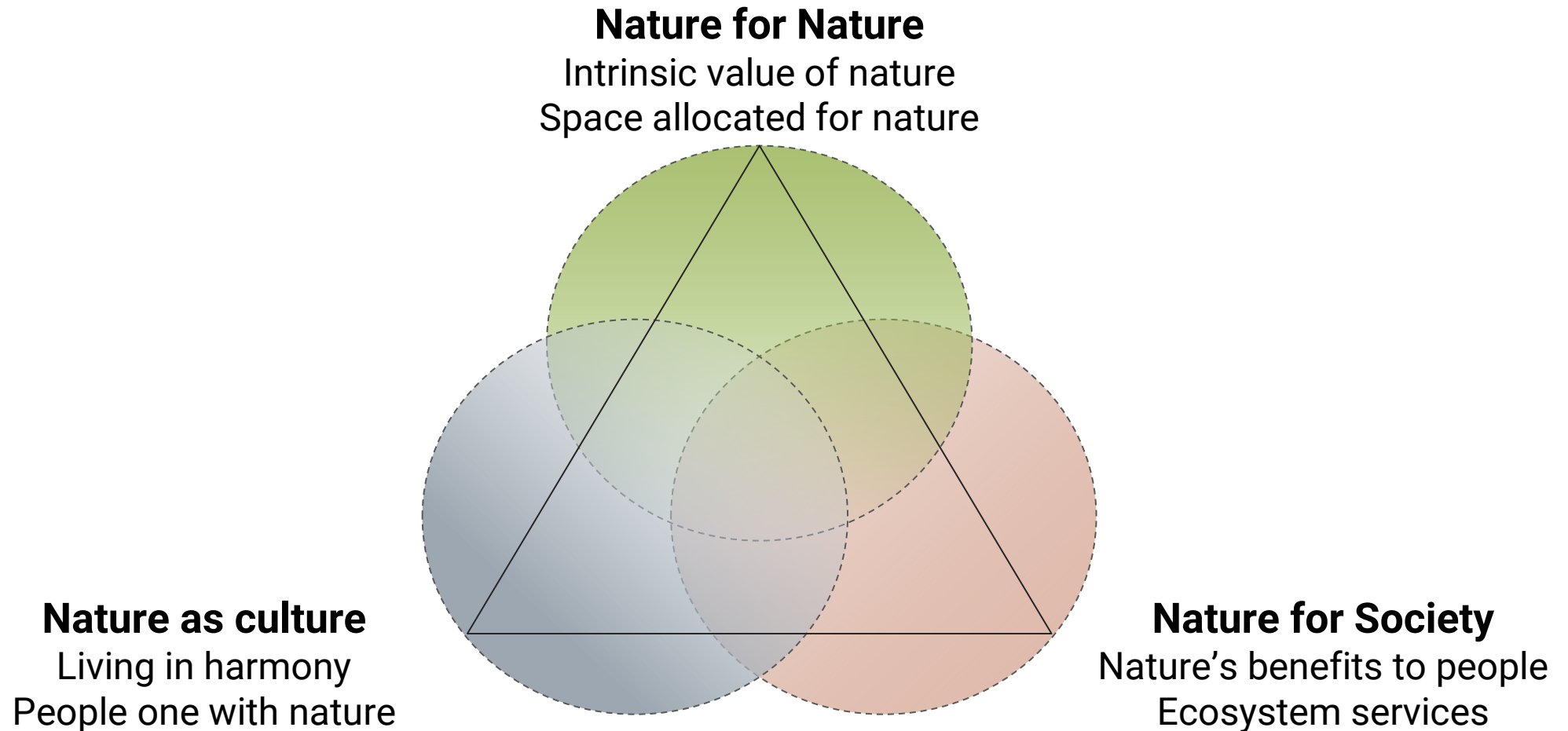
Space to imagine transformative change

**When devised with stakeholder participation:**

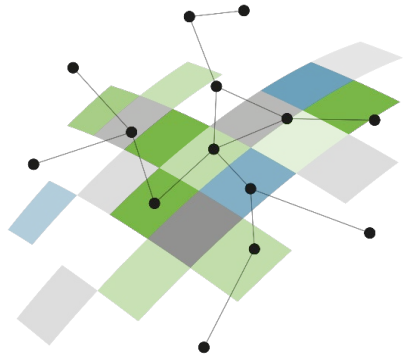
- **Inclusive of different value systems**
- **Mobilise actors and encourage stewardship.**

Nature positive?

## IPBES Nature Futures Framework

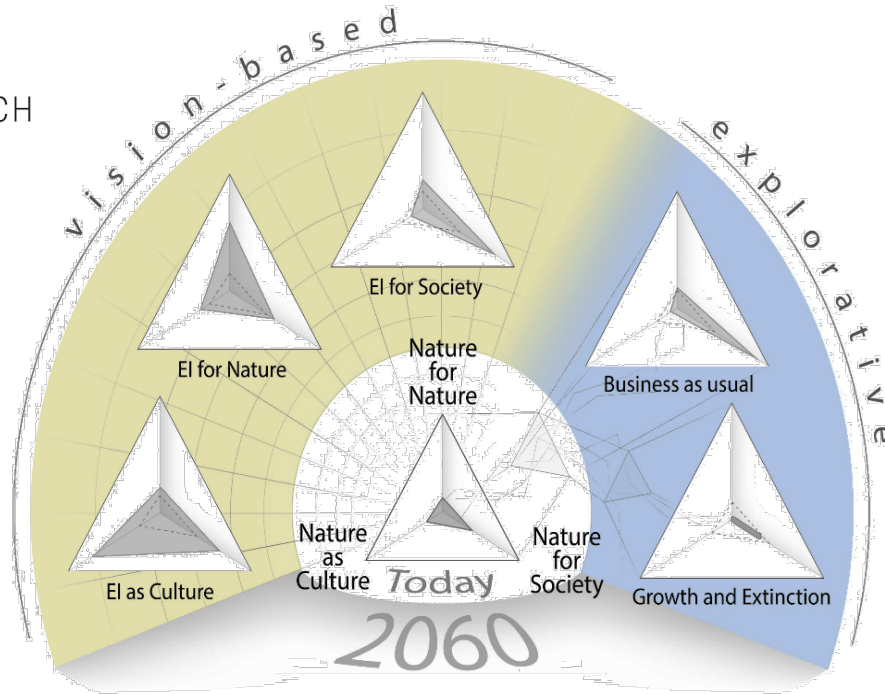


# Previous application

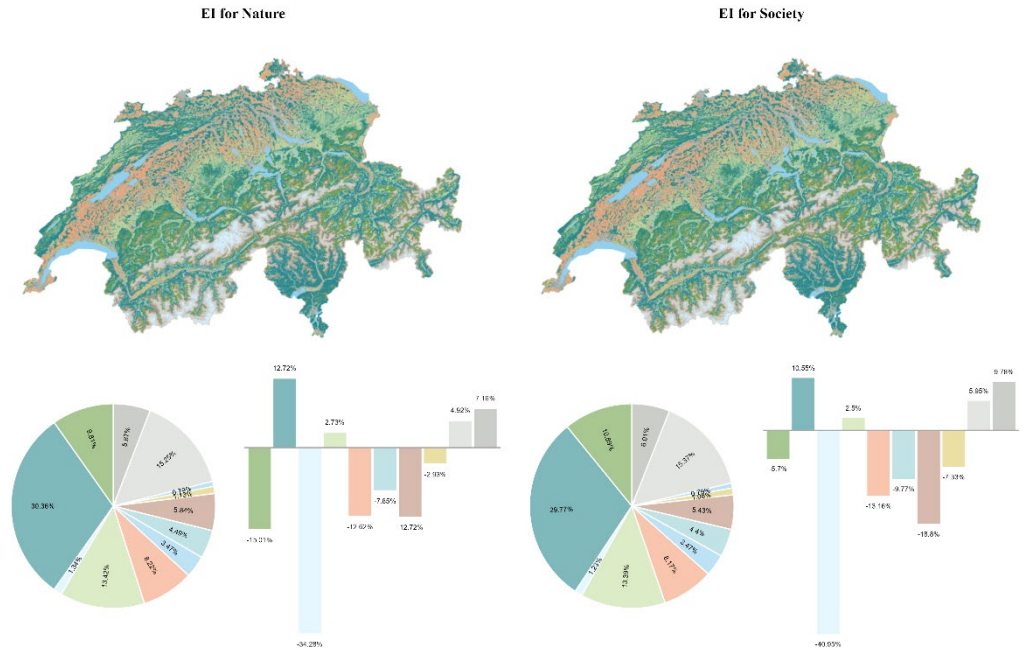


ValPar.CH

## Normative scenarios of future landscape development in Switzerland between 2020-2060



Mayer et al. 2023



Black et al. 2024

# Environmental change in Peru











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Check for updates

## A future of extreme precipitation and droughts in the Peruvian Andes

Emily R. Potter <sup>1,2,3</sup>✉, Catriona L. Fyffe <sup>4</sup>, Andrew Orr<sup>2</sup>, Duncan J. Quincey <sup>1</sup>, Andrew N. Ross <sup>5</sup>, Sally Rangelcroft<sup>6,7</sup>, Katy Medina <sup>8,9</sup>, Helen Burns <sup>5</sup>, Alan Llacza<sup>10</sup>, Gerardo Jacome<sup>10</sup>, Robert Å. Hellström<sup>11</sup>, Joshua Castro<sup>12</sup>, Alejo Cochachin<sup>13,15</sup>, Nilton Montoya<sup>12</sup>, Edwin Loarte <sup>8,9</sup> and Francesca Pellicciotti <sup>4,14</sup>

## Peru glaciers decimated by climate change - report

By Marco Aquino

November 24, 2023 5:17 AM GMT+1 · Updated 6 days ago

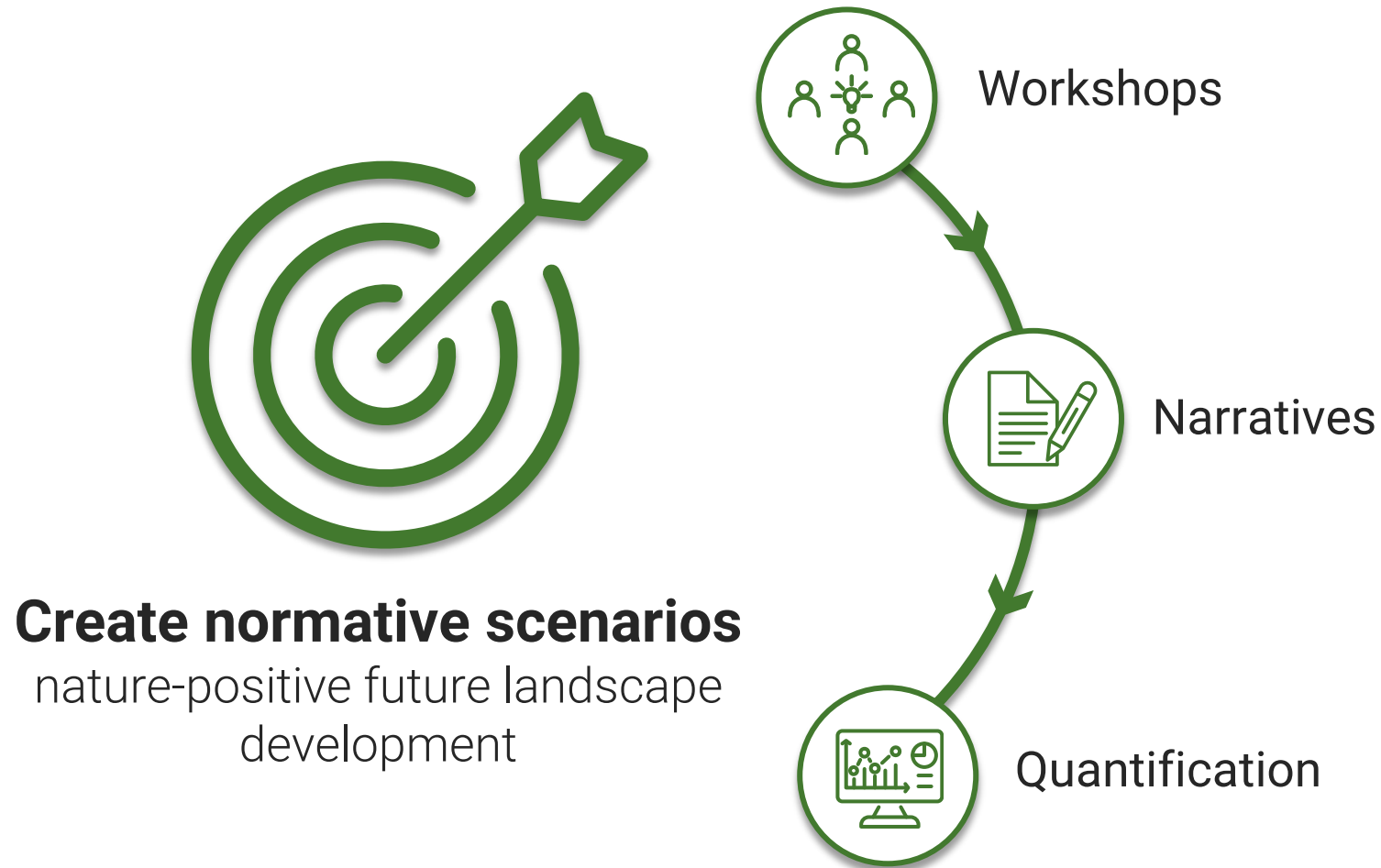


## Peru: Fifth highest rate of deforestation in the world in 2022

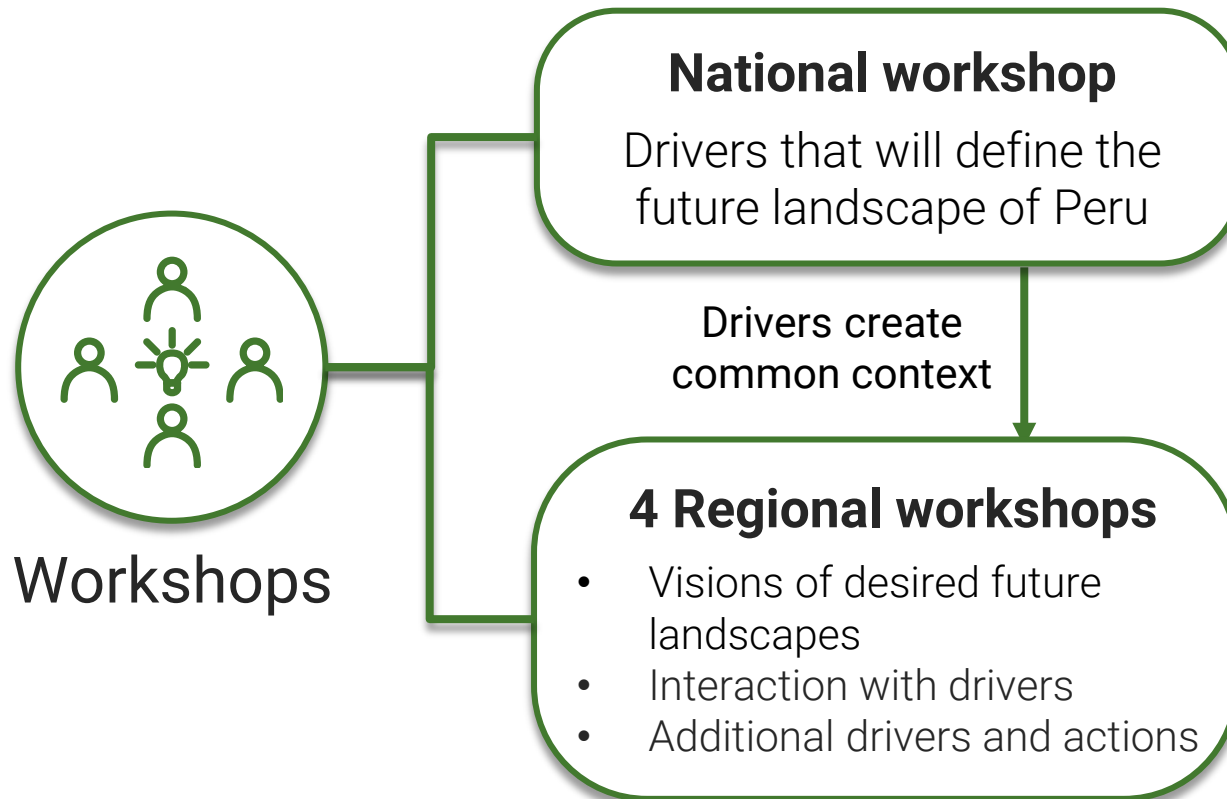




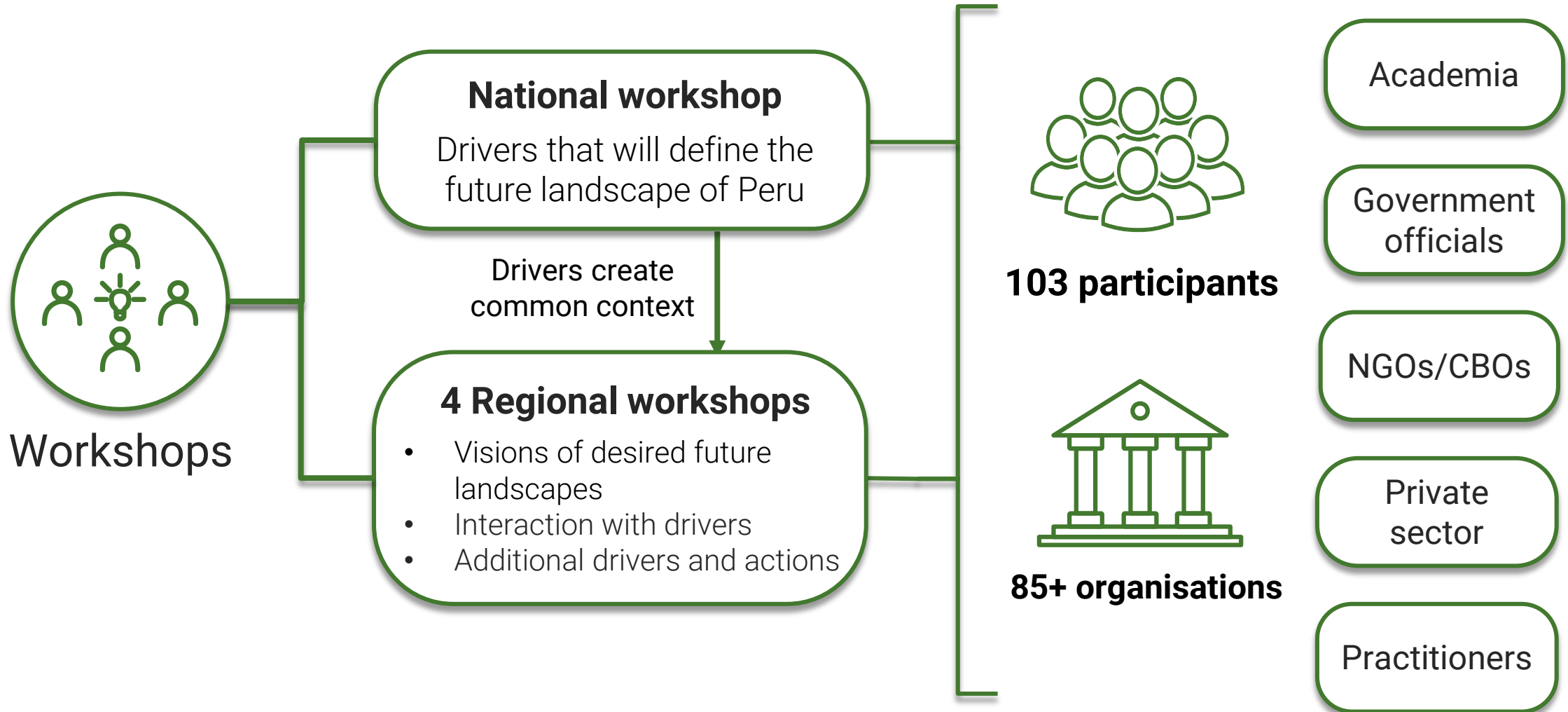
# Scenario creation approach



# Workshop locations



# Workshop participants



# National workshop results

## National workshop

Drivers that will define the future landscape of Peru

Drivers create common context

## 4 Regional workshops

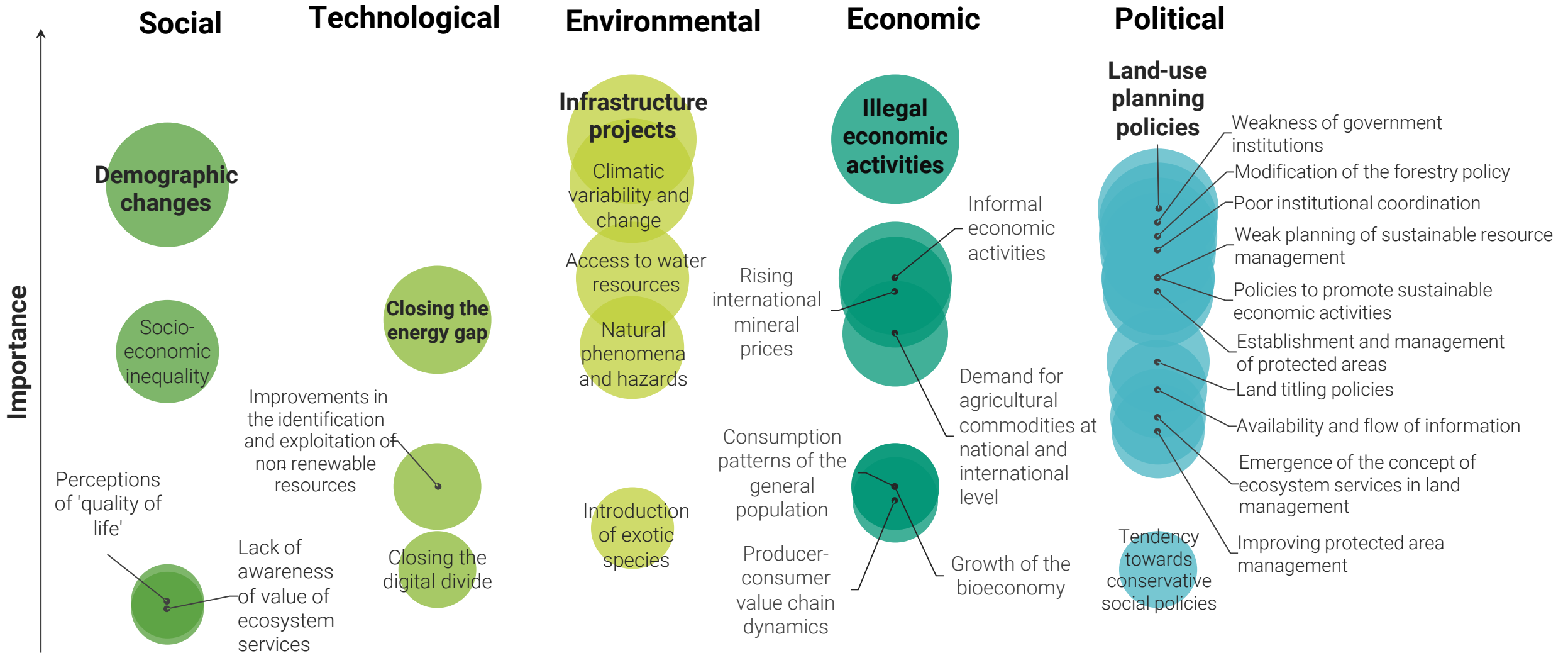
- Visions of desired future landscapes
- Interaction with drivers
- Additional drivers and actions

## 31 Drivers:

- Classified according to STEEP
- Rated for importance



# National workshop results

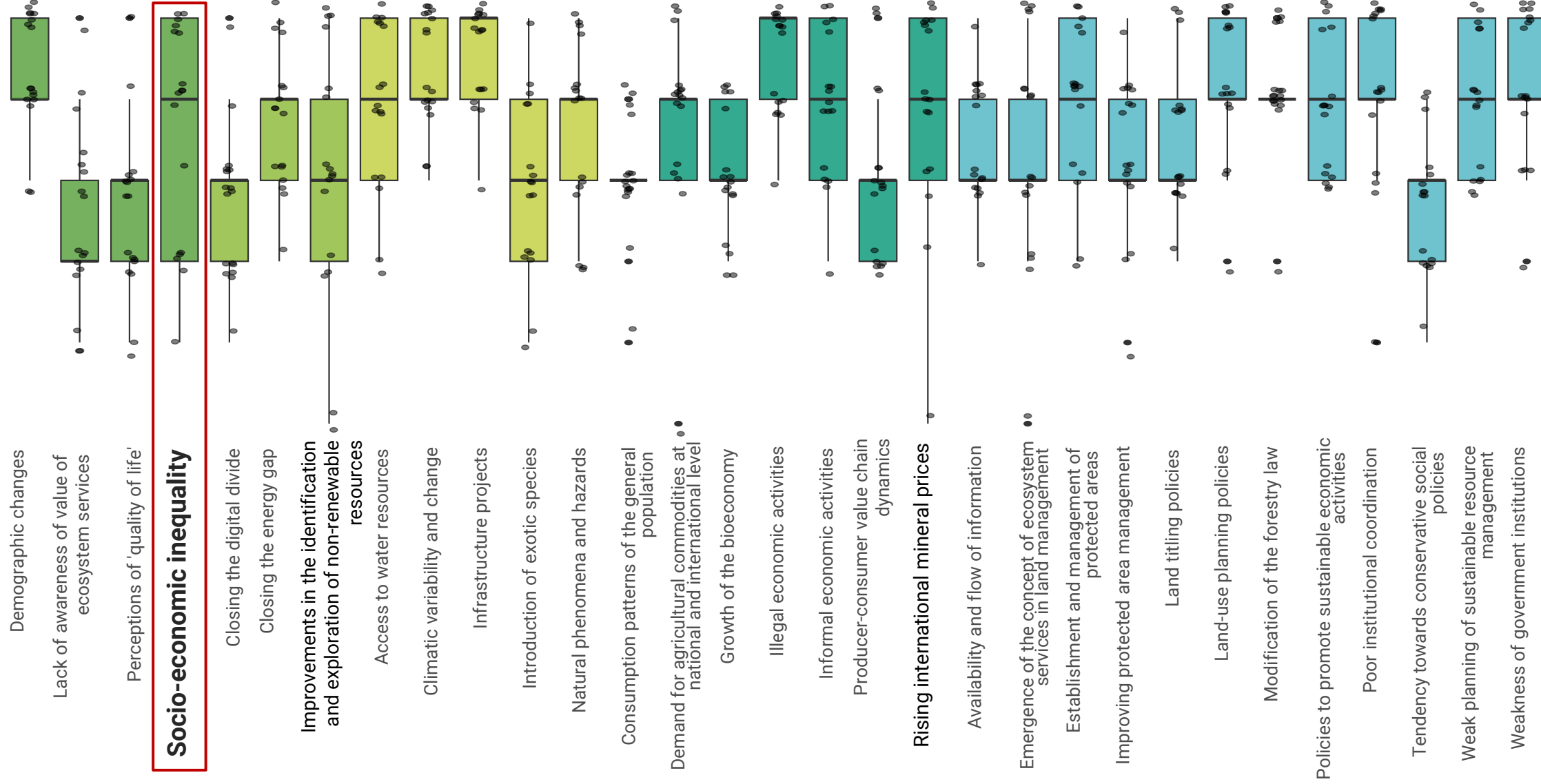


# National workshop results



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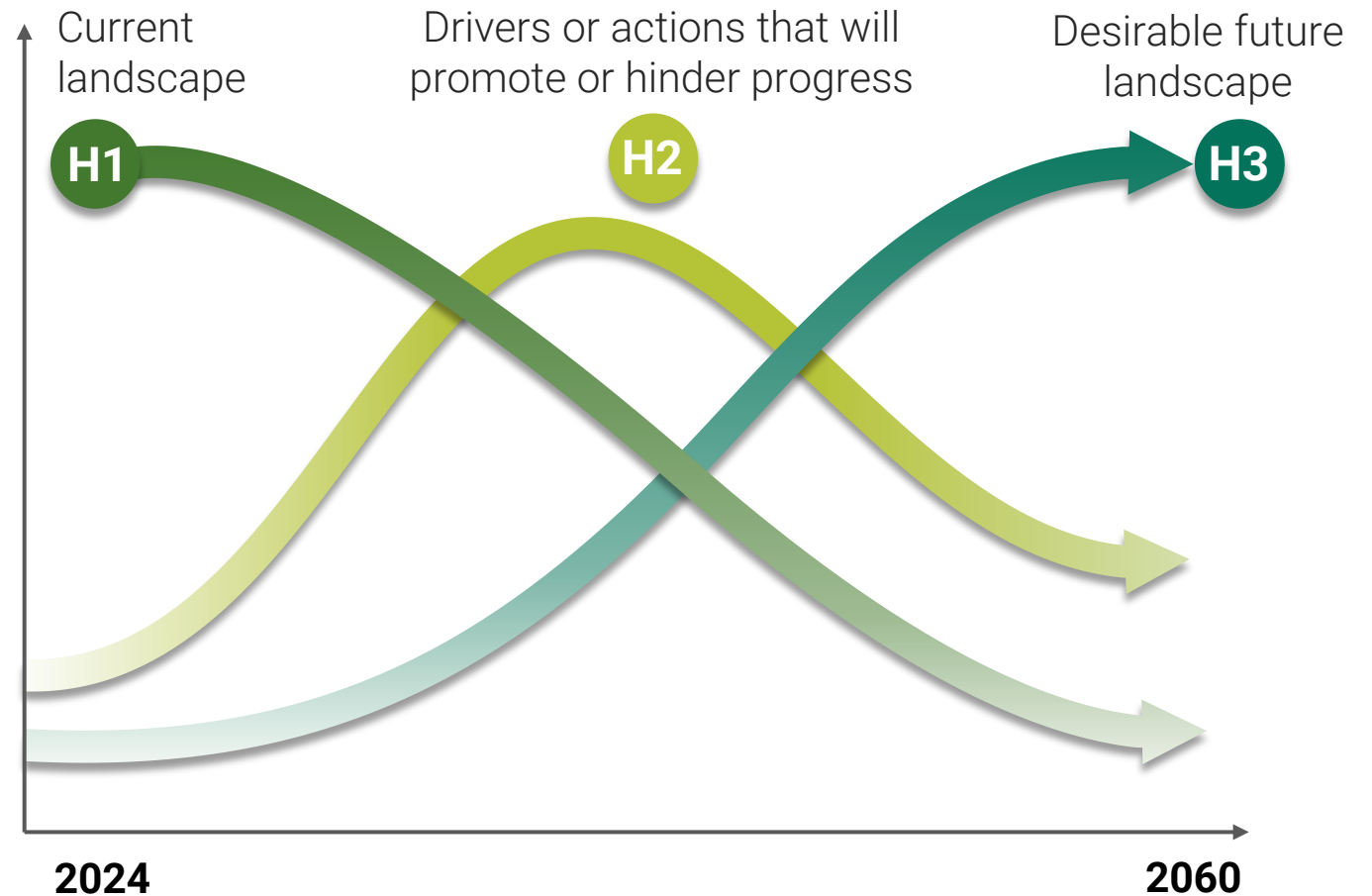
## Importance



# Regional workshop method



## Three horizons Framework:



# Regional workshop results

## National workshop

Drivers that will define the future landscape of Peru

Drivers create common context

## 4 Regional workshops

- Visions of desired future landscapes
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# Regional workshop results

## National workshop

Drivers that will define the future landscape of Peru

Drivers create common context

## 4 Regional workshops

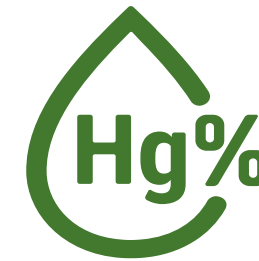
- Visions of desired future landscapes
- Interaction with drivers
- Additional drivers and actions

### Northern Amazon



**Increased agricultural production:**  
*Industrialisation, technological innovation.*

### Southern Amazon



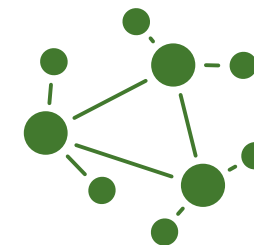
**Pollution free:**  
*Levels of mercury, plastics and metals in water bodies are lowered*

### Mountain



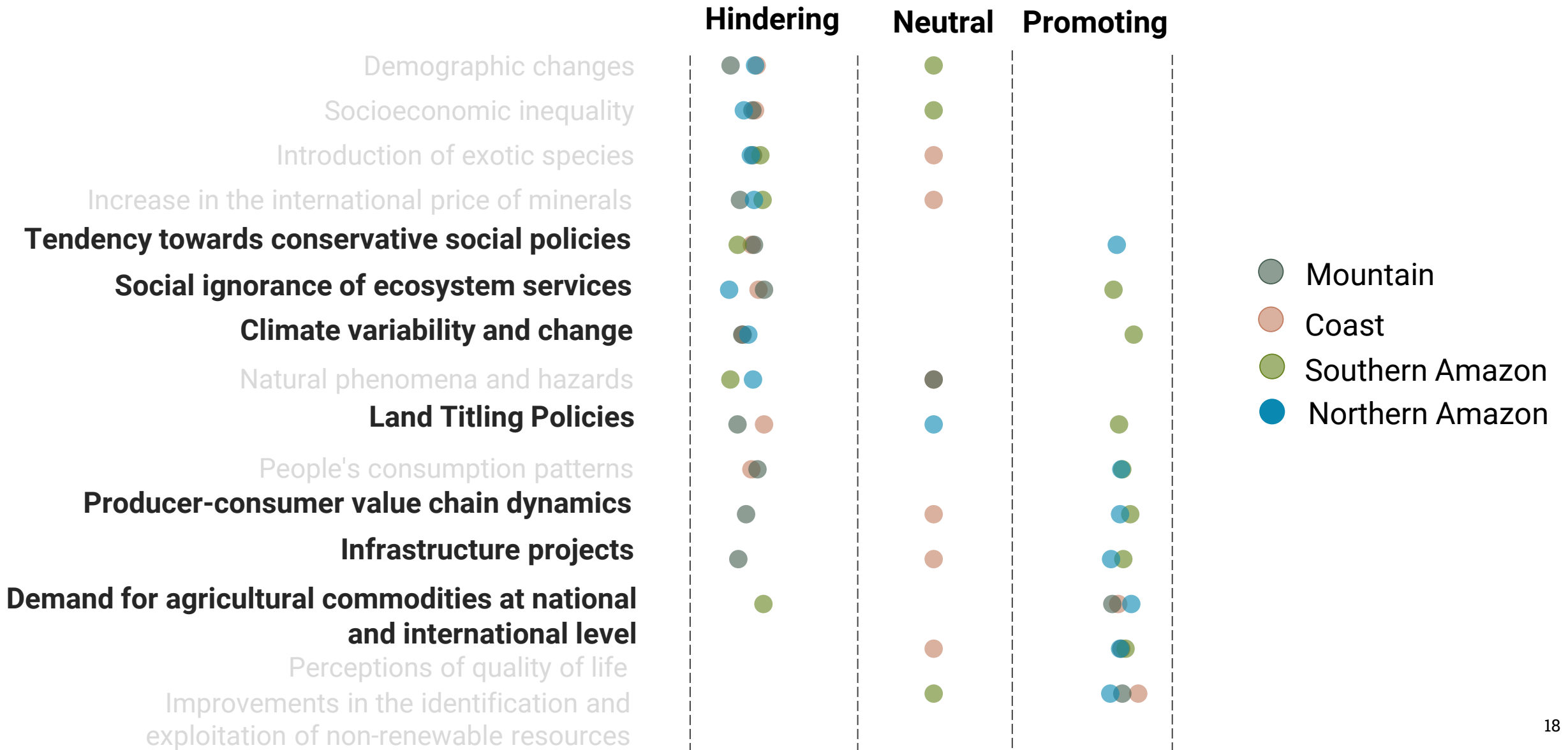
**Improved water management:**  
*Harnessing water in rainy season.*

### Coast

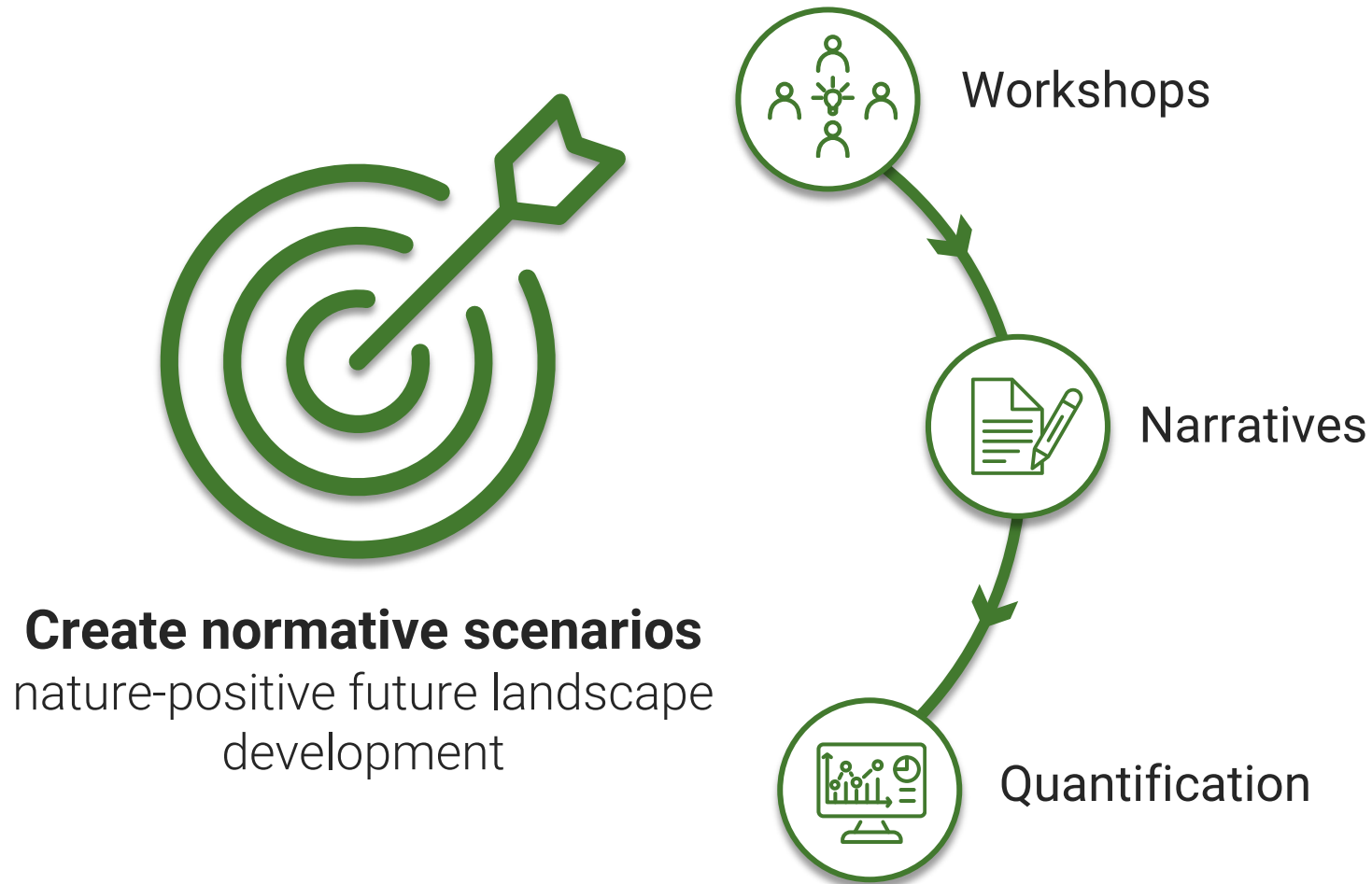


**Biodiversity Connectivity:**  
*Prohibited Areas, Economic and Ecological Zoning.*

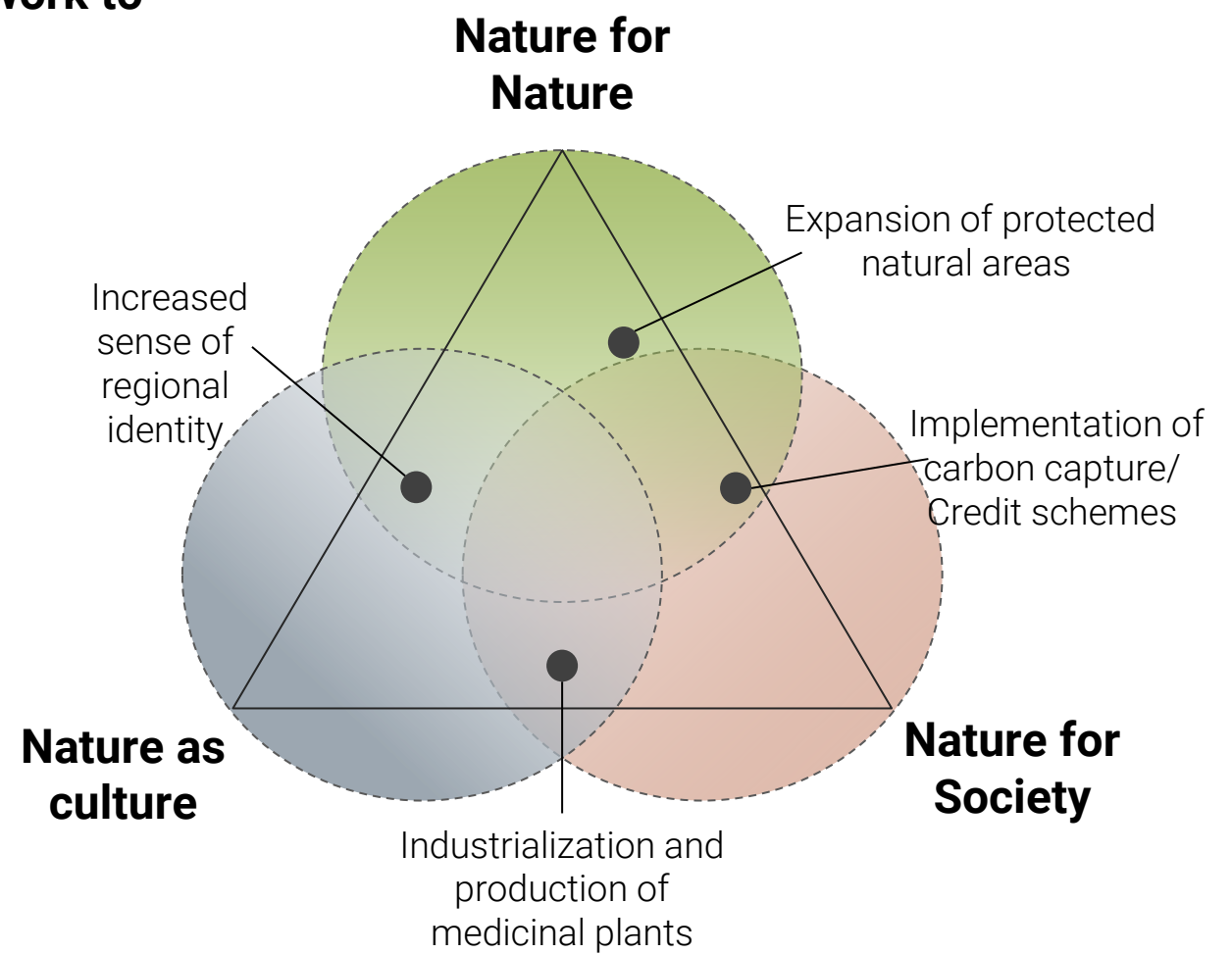
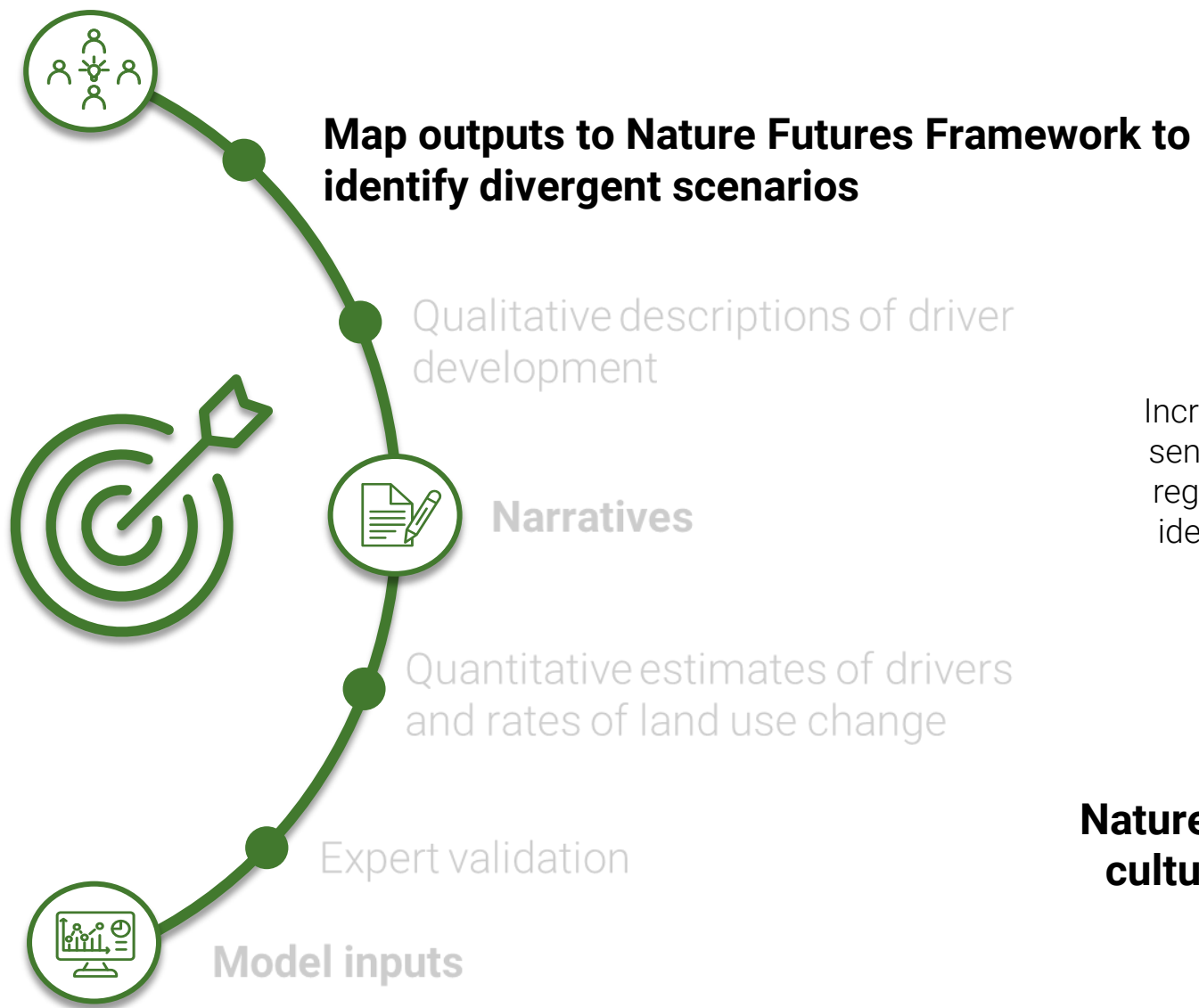
# Regional driver variability



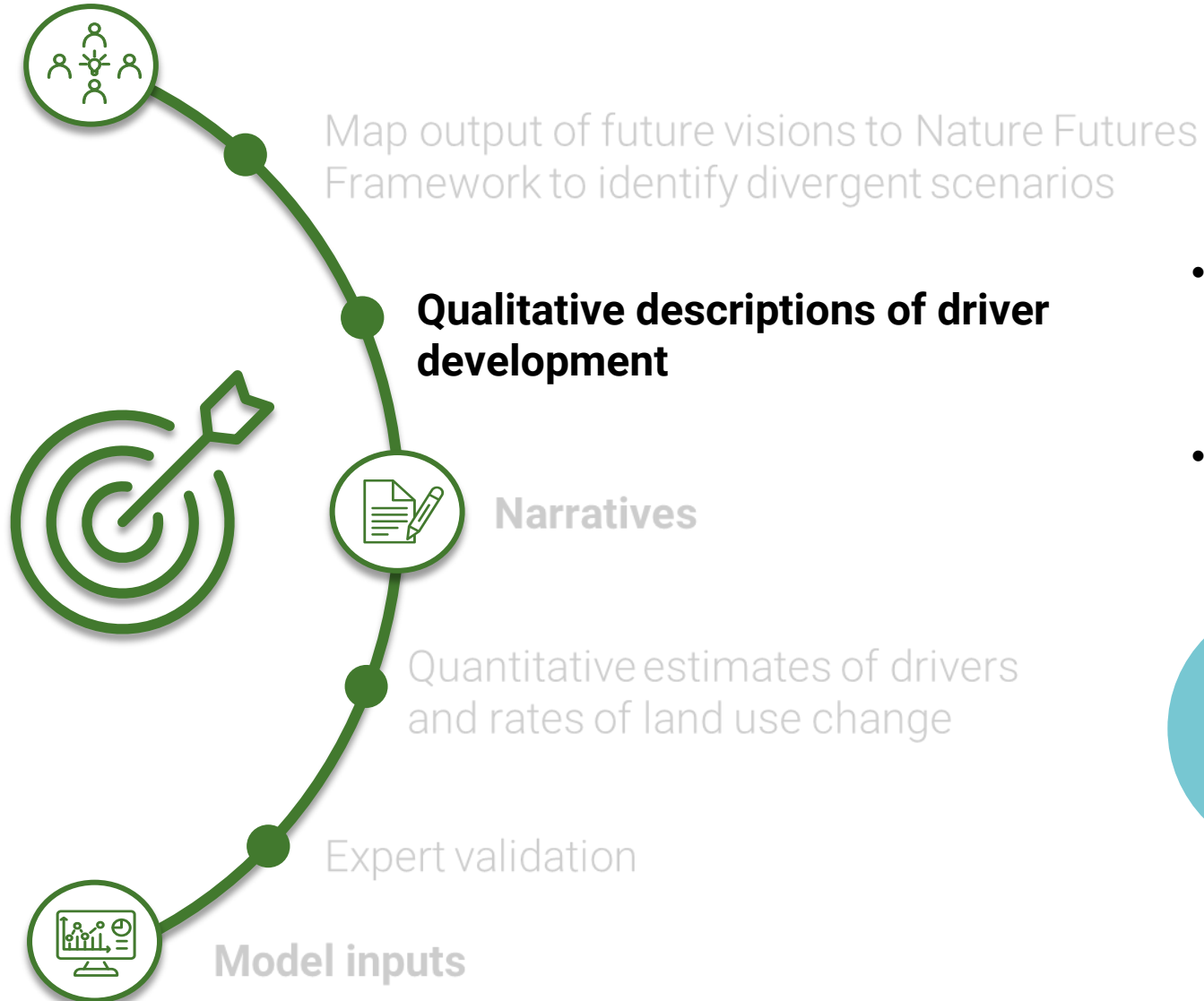
# Next steps



# Next steps



## Next steps



- Links to existing global and national projections: *"Under this scenario climate change occurs according to RCP 4.5"*
- Expert validation of coherency given interactions between drivers:



**Thinking creatively and optimistically  
about the future is challenging**



**Re-think communication**



# Acknowledgements

We would like to thank the Swiss Re Foundation, Swiss Re Institute, EY, WWF, AXA Research Fund, and Swiss Re Corporate Solutions for financial support of this project





**Thank you for  
listening!**



<https://nascent-peru.github.io/>



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