



# Assessment Report on the Diverse Values and Valuation of Nature

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The Intergovernmental Science-Policy Platform  
on Biodiversity & Ecosystem Services



**#ValuesAssessment**



Food and Agriculture  
Organization of the  
United Nations





**Decisions based on narrow set of market values of nature underpin the current global biodiversity crisis.**

**Many opportunities exist to embed the diverse values of nature into decision making for navigating towards more just and sustainable futures.**



# 1

## ■ The relevance of this report



# **Economic and political decisions have predominantly prioritised market-based instrumental values of nature.**

Many of nature's values are often ignored in favor of short-term profits and economic growth.

Conservation policies also risk downplaying the values of local communities that depend on nature for their livelihoods.



**Ignoring, excluding or marginalizing local values often leads to socio-environmental conflicts linked to value clashes, especially in the context of power asymmetries, which undermines the effectiveness of environmental policies.**





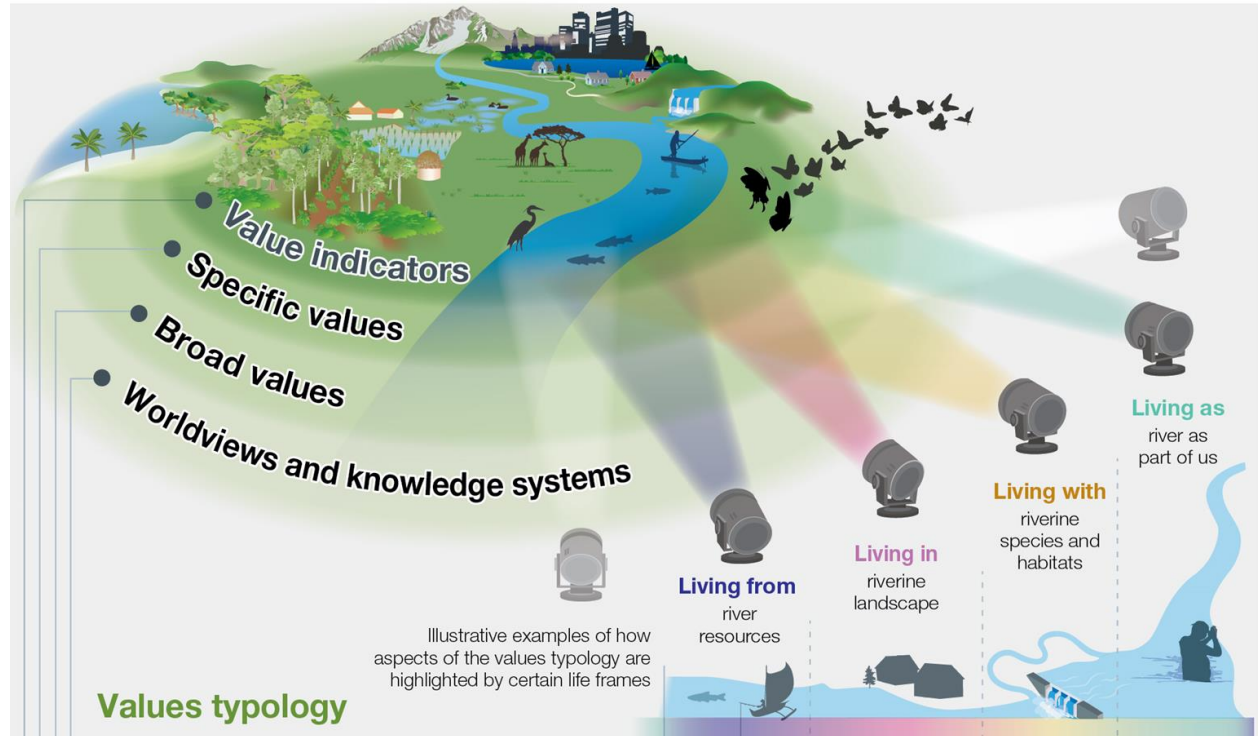
**Achieving sustainable and just futures requires the recognition and integration of diverse values of nature into political and economic decisions.**

Recognising the values of local people affected by decisions results in better outcomes for people and nature.



People value nature in different ways depending on their knowledge systems, languages, cultural traditions and environmental contexts.

A novel typology of nature's values can help guide decisions.

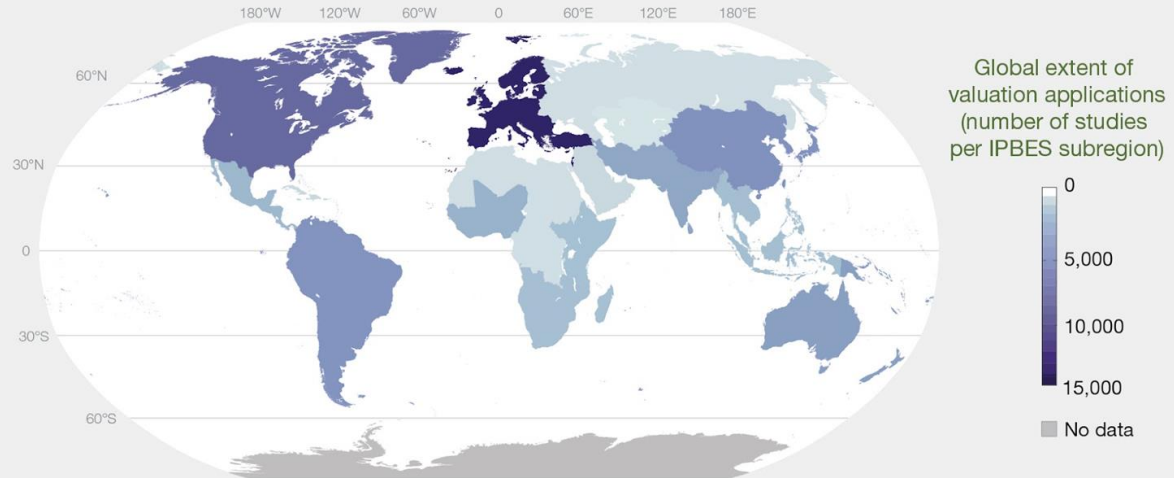


# There is no shortage of methods and approaches to value nature, yet their uptake into decisions remains limited.

Less than 5% of published valuation studies report uptake in policy decisions.

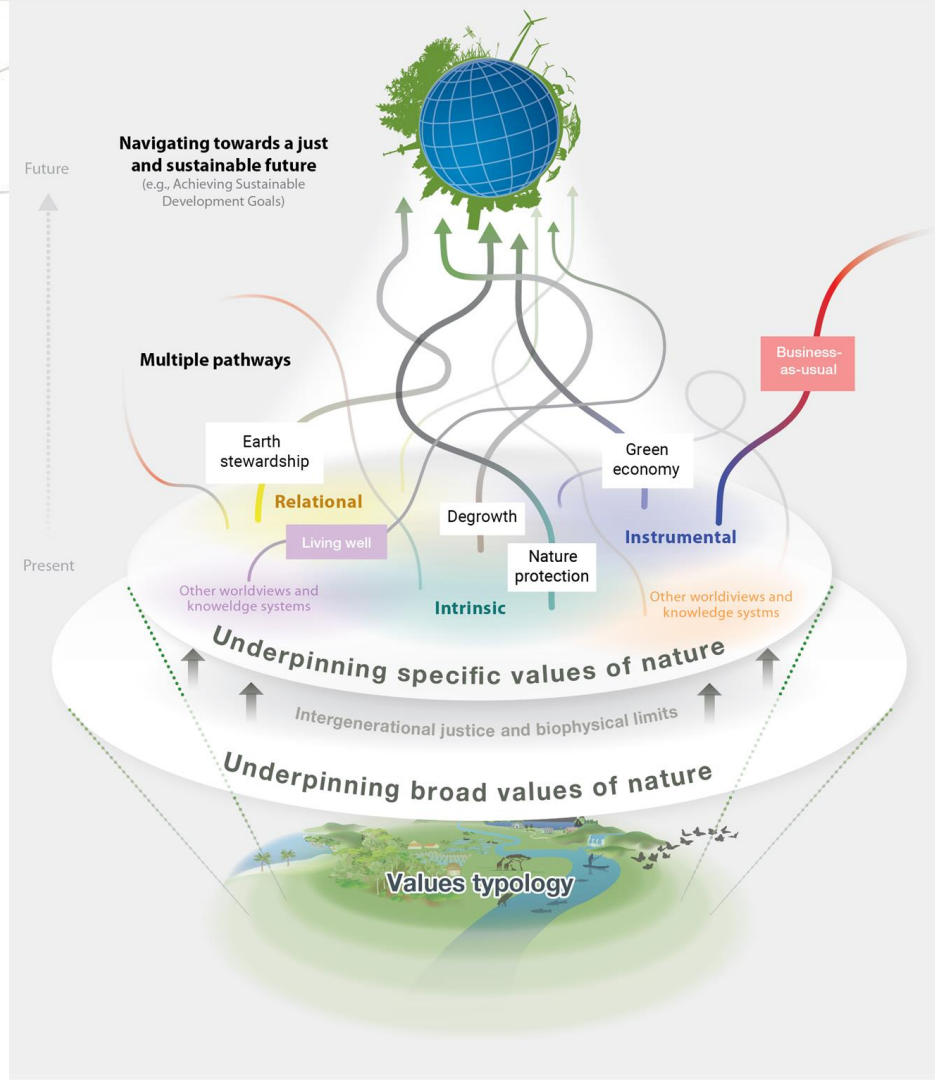


**A** Global distribution of valuation studies

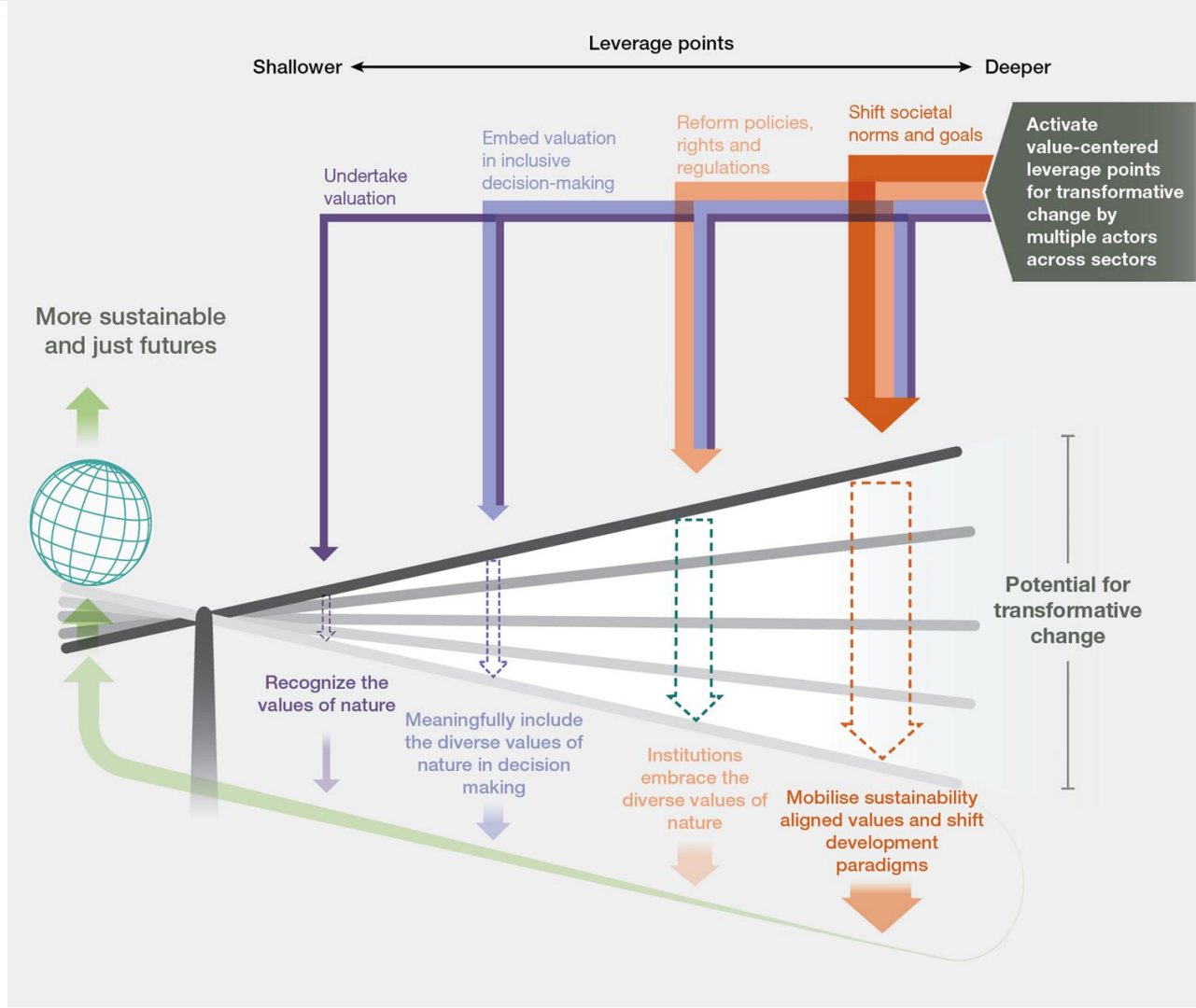




**Transformative change needed to address the global biodiversity crisis relies on shifting away from values that over-emphasize short term and individual material gains to nurturing sustainability-aligned values across society.**



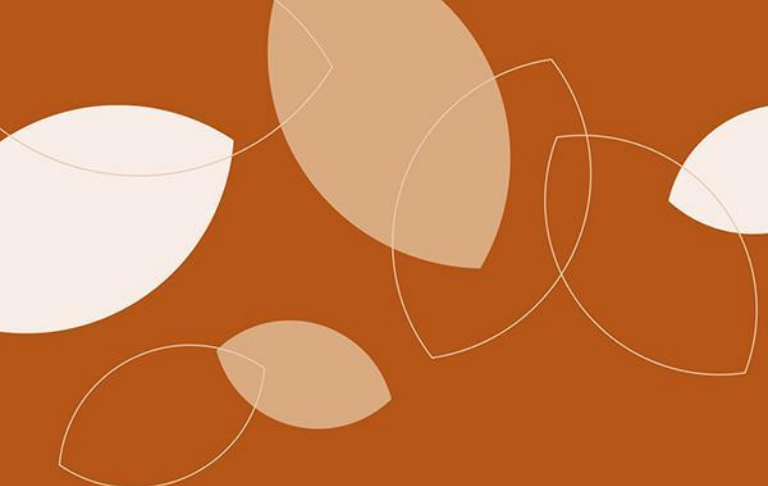
Four key *leverage points* can help catalyze transformation towards sustainable and just futures.



**Capacity building and collaborations among a wide range of stakeholders can facilitate transformative change to address the current biodiversity crisis.**





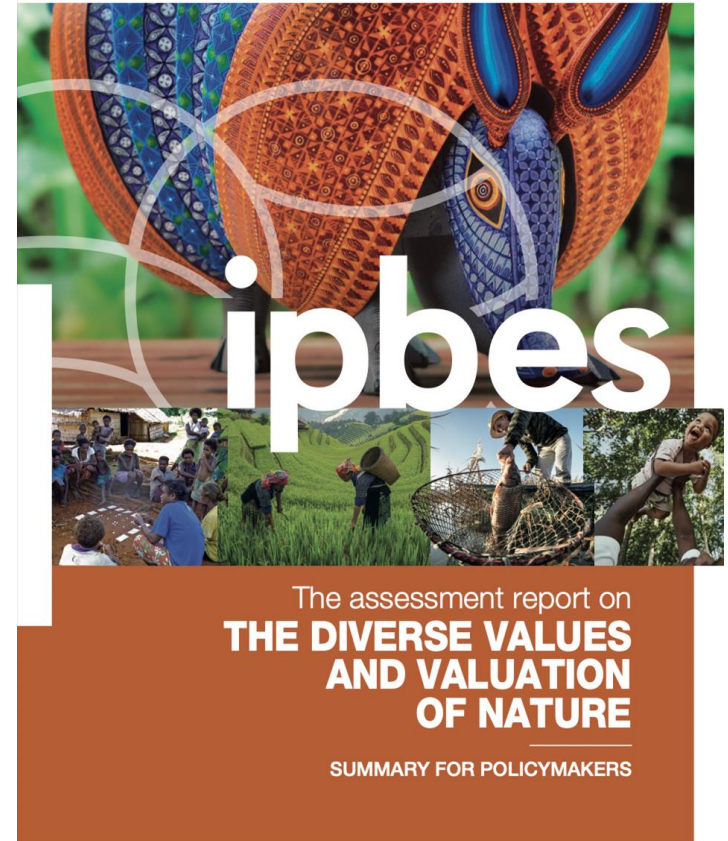


# 2. ■ Expected impacts



The findings of the values assessment are expected to contribute to ongoing and future IPBES assessments:

- Biodiversity-Food-Water-Health Nexus,
- Transformative Change, and
- Biodiversity and Business.





**The findings of the values assessment are expected to contribute to achieving the shared visions for prosperity for people and nature such as:**

- the 2050 Vision for Biodiversity,
- the 2030 Agenda for Sustainable Development, and
- the future post-2020 global biodiversity framework.





**The findings of the Values Assessments are expected to empower the voices of emerging social actors such as women, youth, and Indigenous Peoples and Local Communities to promote their role in transformative change.**



3



The team behind the assessment





## ■ The process

- 3 Authors meetings (Mexico City, Vitoria-Gasteiz, online),
- 2 External reviews, and
- 1 Additional review by governments.
- In the context of COVID-19 pandemic.

## ■ Engagement with Indigenous and Local Knowledge (ILK)

- Liaison group,
- Identification of key guiding messages,
- call for contributions,
- ILK experts and holders as contributing authors, and
- 3 ILK dialogue workshops (Paris, Mexico, online).

## ■ The evidence behind

- + 13,000 documents reviewed in depth and,
- + 200,000 pieces of evidence considered.





- Result from **19 years** of in-kind voluntary contributions **by more than 300 people**:
  - **95 Experts nominated by IPBES** (18 ILK experts/holders) from **47 countries**,
  - **+ more than 200 contributing authors** (25 ILK experts/holders).
- **Diverse disciplines represented.**
- Supported by a **Management Committee.**
- **Technical Support Unit** based in Mexico (Ecosystems and Sustainability Research Institute of the National Autonomous University of Mexico).





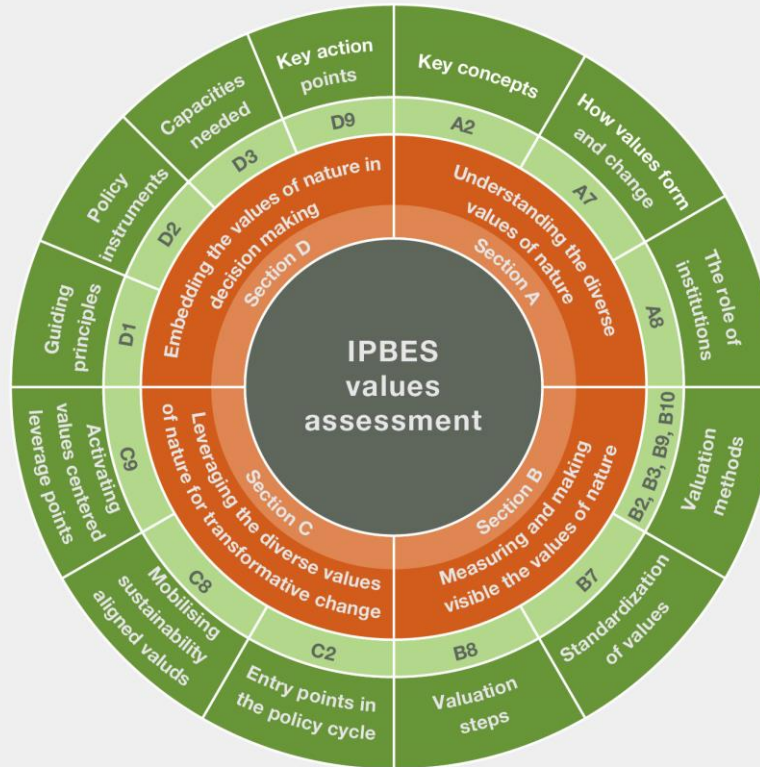
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**#ValuesAssessment**

**Thank you!**

**¡Gracias!**

**Merci!**



SPM background sections



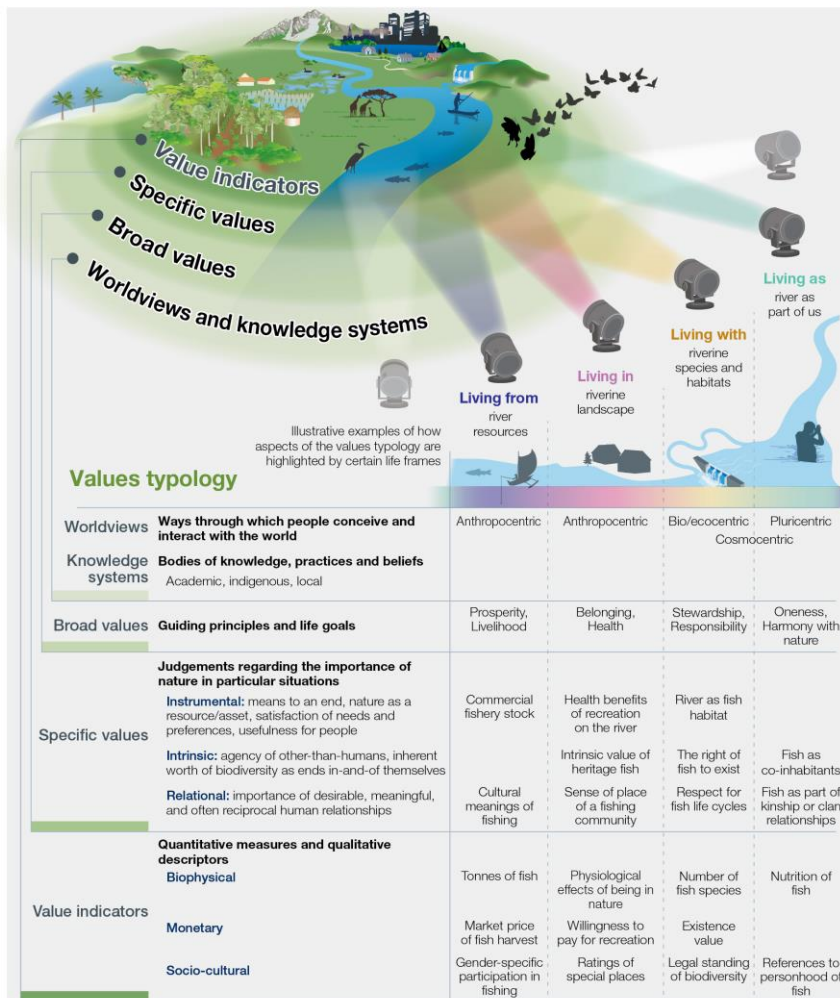
Background section topics



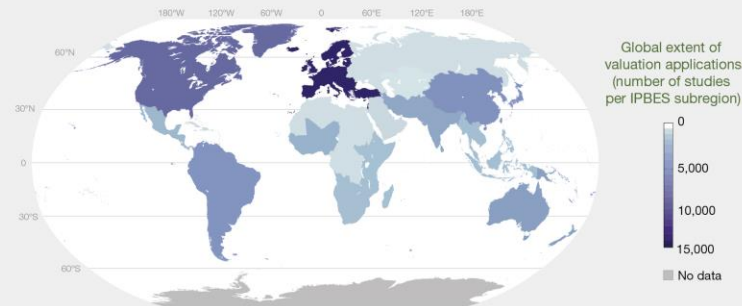
Main SPM background messages



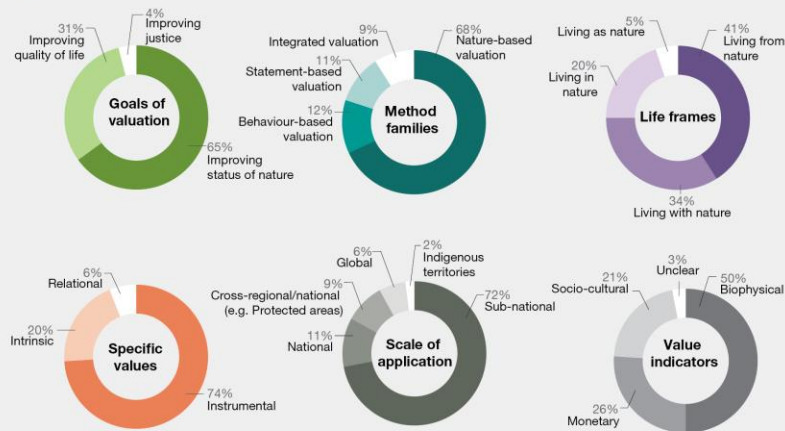




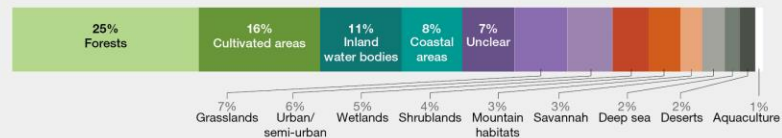
## A Global distribution of valuation studies

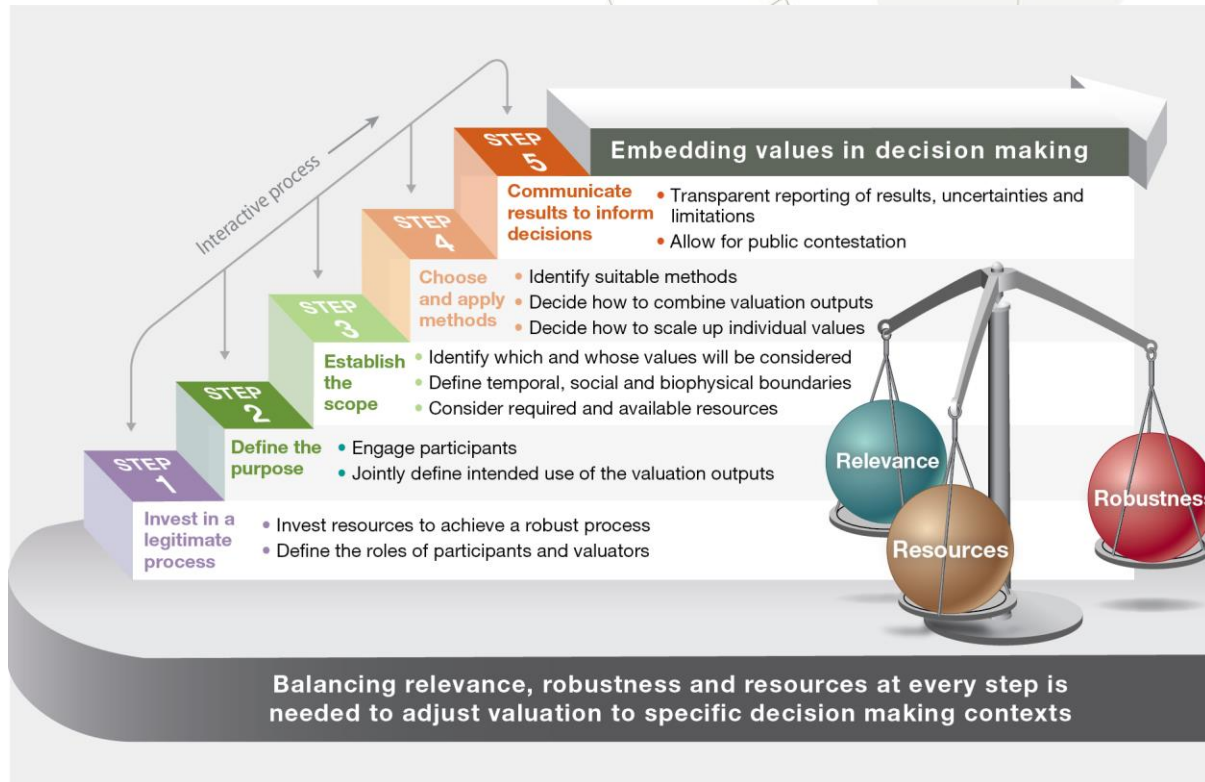


## B Characterization of nature valuation studies reported

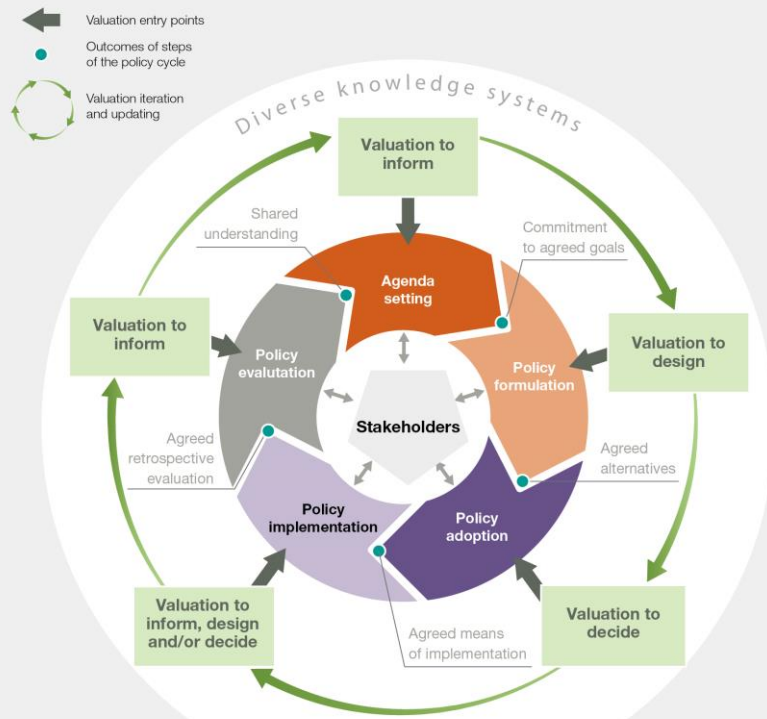


## C Habitats in which valuation was applied









#### VALUATION PURPOSES AND EXAMPLES

##### To Inform

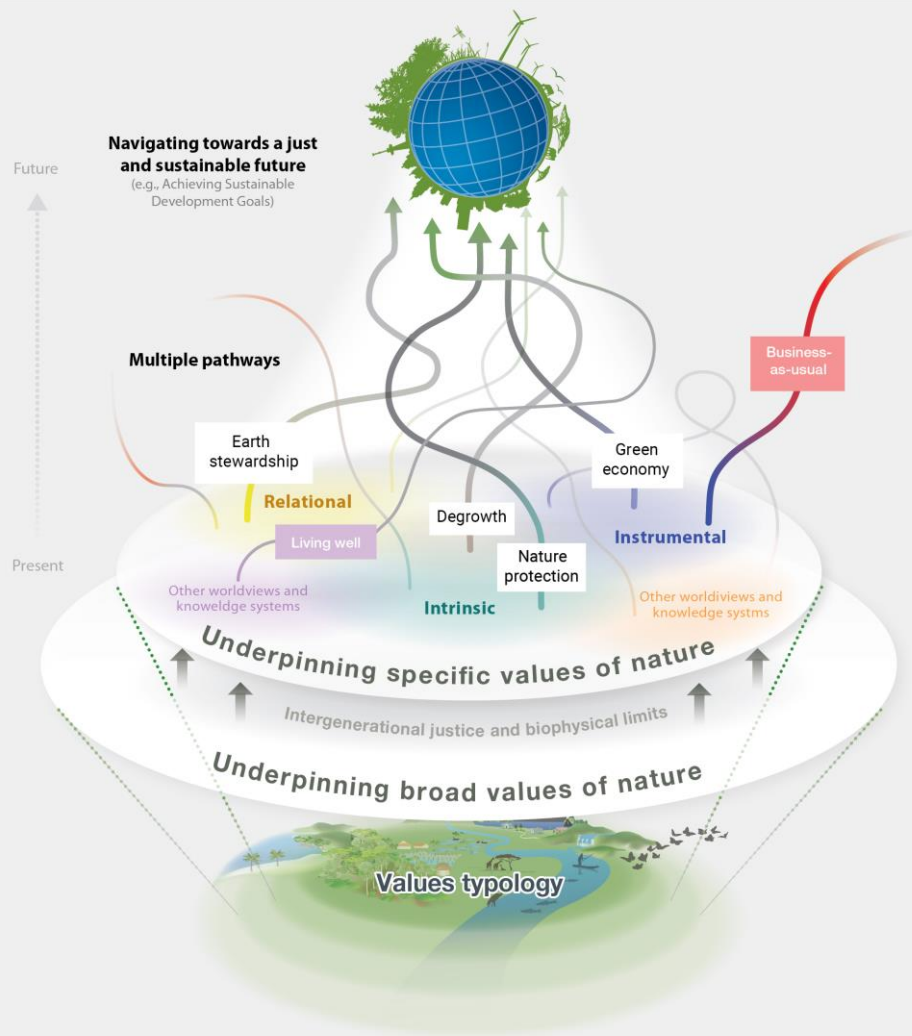
- Awareness raising, formative, affirmative
- Advocacy (before decision)
- Justification (after decision)
- Accounting and indicators
- Impact evaluation

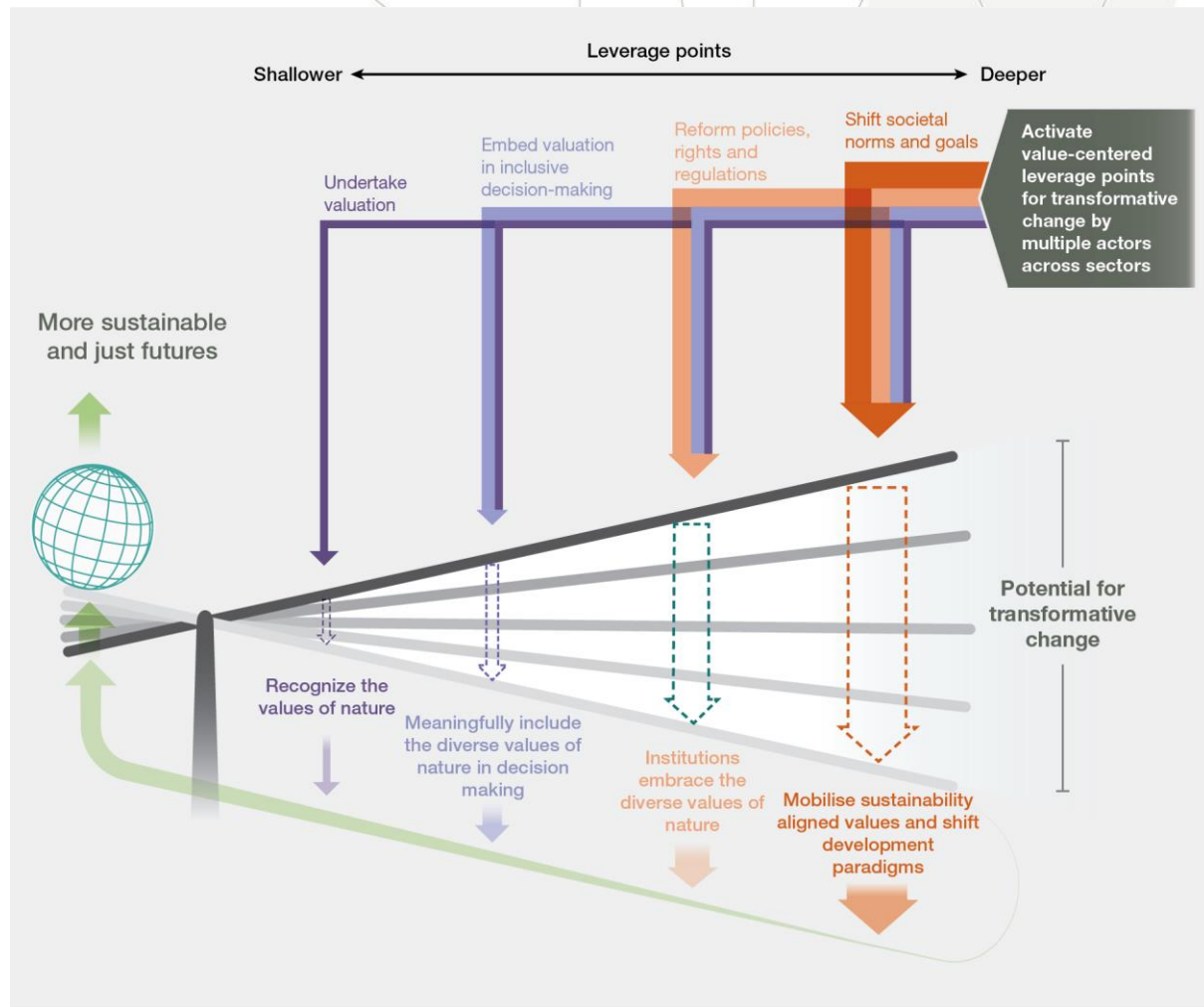
##### To decide

- Decision-support guidance
- Participative
- Benefit-cost, feasibility
- Prioritization and ranking
- Environmental management criterion





##### To design

- Permitting, standard setting
- Pricing
- Damage compensation estimation







	Valuation method families				Considerations for valuation by IPLCs
	Nature-based valuation 	Statement-based valuation 	Behaviour-based valuation 	Integrated valuation 	
What is assessed? What is the source of information	Nature, physical or ecological components of nature and nature's contributions to people	What people say or express when asked about the importance of nature and nature's contributions to people	What people do in nature, for nature, with nature, to nature or nature's contributions to people	Different outputs from one or more methods to support decision-making	Indigenous peoples and local communities gauge nature and its interdependencies with people by also gathering information from ancestors, future generations, non-human beings, the cosmos and the spiritual world.
Examples of methods and approaches	Biodiversity inventory, ecosystem services mapping, Delphi method, participatory mapping of ecological values	Group discussions, Q-methodology, contingent valuation, choice experiments, deliberative methods	Participant observation, travel cost method, cost-based methods, hedonic pricing, livelihood dependence, photo-series analysis	Ecosystem service valuation, cost-benefit analysis, multi-criteria decision analysis, integrated modelling, scenario building, deliberative decision methods	Information gathering through territory patrols, natural resources monitoring or communal assemblies can entail rituals and ceremonies undertaken by specialized traditional experts.
How is information about values generated?	Directly measuring nature, remote sensing, consulting experts Consulting users/experts/local communities as knowledge holders	Asking questions to people (interviews, surveys), undertaking activities with people (e.g., discussions, games, art), analyzing narratives (e.g., twitter posts)	Observing people, assessing records of people's behaviors (e.g., park visits, house purchases), assessing records of policy choices, assessing (non-) market exchanges	Synthesising, comparing, contrasting, deliberating, consolidating or aggregating multiple values for decision making or decision support	
'Specific values' elicited and examples of value indicators	Mainly intrinsic and instrumental values Species counts, carbon stored, ecological health indicators	Instrumental, intrinsic and relational values Subjective well-being indicators, narratives of human-nature relationships, willingness to accept compensation for setting aside land, willingness to pay for access to nature	Mostly instrumental values Time spent, share of household income, prevalence of disease, price on a hectare of land, use of indigenous plants	Instrumental, intrinsic and relational values Strength of support or objections to policy options, welfare gains or losses from projects of indigenous plants	Valuation is often a collective process that considers all members of a community (including children or those who are not visibly present), as legitimate generators of information. Understanding the richness and depth of indigenous peoples' and local communities' valuation approaches implies deconstructing disciplinary definitions of methods and concepts such as 'evidence' and recognizing that integration of knowledge systems is not always possible, desirable or necessary.
Type of stakeholder inclusion	Inclusive methods exist (e.g., community monitoring of biodiversity) but most methods do not include stakeholders	All methods include stakeholders to some extent (e.g., surveys) and inclusion is often integral to the methodology (e.g., deliberative valuation)	Most methods have limited or no stakeholder inclusion (e.g., analysis of market accounts), but encompass observations of diverse stakeholders	Some methods can be non-inclusive (e.g., desktop multi-criteria decision analysis) but often, inclusion is key to the decision support aspect (e.g., participatory scenario building)	
Examples of typical valuation 'products'	Biodiversity indices, maps of pri-orty areas for policy/management action Improved understanding of the importance of components of nature	Ranked importance of nature's contributions to people Monetary value for protection of areas of biodiversity significance Explanations for why people value nature	Ranked importance of nature and nature's contributions to people Additional costs due to degradation (e.g., changes in time to collect fuelwood) Explanations for how people value nature	Ranked policy options of nature and nature's contributions to people Evaluation of socio-economic and environmental impacts of policy options Improved understanding of conflicts/shared values of nature	
Limitations	Impact on people assumed but not assessed Dependence of nature is not assessed by those directly living from, living as and living with nature	Potential large variability in the reliability of statements (i.e., do people respond truthfully?) Power disparity can reduce the validity of group-based (e.g., deliberative) methods Representativeness in selection of respondents biases results	Requires conceptual and empirical understanding of the relationships between behavior, nature and its contribution to well-being Cannot reveal in-depth understanding of motivations behind behaviour	Aggregation of values across groups of people can reduce representation of values, combining multiple value types creates incommensurability concerns	

Balancing relevance, robustness and resources

Possibility to elicit values in diverse contexts  
Higher ↔ Lower

Robustness of the method  
Higher ↔ Lower

Affordability and ease of use  
Higher ↔ Lower

Well established  
Established but incomplete


## A Valuation methods

Examples of valuation methods		Relevance Ability to elicit of diverse values in multiple socio-ecological contexts		Robustness Ability to ensure reliable (accurate and valid) and fair representation of stakeholders		Resources Affordability and ease of use		Level of confidence
		Diverse values	Diverse contexts	Reliability	Representation	Ease of implementation	Ease of operation	
Nature based valuation	Ecosystem services mapping	●	●	●	●	●	●	✓
	Biodiversity mapping	●	●	●	●	●	●	✓
Statement based valuation	Stated preferences	●	●	●	●	●	●	✓
	Q method	●	●	●	●	●	●	~
Behaviour based valuation	Revealed preference	●	●	●	●	●	●	✓
	Livelihood assessment	●	●	●	●	●	●	✓
Integrated valuation	Integrated modelling	●	●	●	●	●	●	~
	Participatory mapping	●	●	●	●	●	●	✓
Decision making tools based on integration of values	Cost-benefit analysis	●	●	●	●	●	●	✓
	Multi-criteria decision assessment	●	●	●	●	●	●	✓
	Deliberative integration methods	●	●	●	●	●	●	~
Methods that do not elicit value information	Benefit transfer	●	●	●	●	●	●	~
Examples from valuation by indigenous peoples and local communities	Forest health monitoring (forest walks, territory patrols)	Capable individuals (i.e. human resources to conduct validation) are entrusted (i.e., assurance of robustness) to assess forest recovery using communally accepted indicators relevant for multiple uses by the community (i.e., representation and diverse values).						✓
	Community assemblies for deliberations	Community meetings to gather all members' opinions (including women's and children's) about nature (i.e., representation/robustness, relevance) and to jointly interpret the opinions and deliberate on how to move forward (i.e., capacities to conduct valuation). Community members are trusted to speak based on their knowledge and lived experiences (i.e., reliability).						✓

## B Economic valuation approaches to embed the values of nature in policymaking

Economic approaches to embed values in economic decisions		Relevance Ability to elicit of diverse values in multiple socio-ecological contexts		Robustness Ability to ensure reliable (accurate and valid) and fair representation of stakeholders		Resources Affordability and ease of use		Level of confidence
		Diverse values	Diverse contexts	Reliability	Representation	Ease of implementation	Ease of operation	
The Economics of Ecosystems and Biodiversity (TEEB)		●	●	●	●	●	●	✓
United Nations System of Environmental Economic Accounting - Ecosystem Accounting (UNSEEA - EA)		●	●	●	●	●	●	✓
Inclusive/comprehensive wealth approaches		●	●	●	●	●	●	~

Illustrative policy instruments		Potential for transformative change					Relevant decision-making scales	Key stakeholders to act
		Representing diverse values	Addressing direct and indirect drivers	Stimulating institutional change	Enhancing capacities	Being integrative and adaptive		
More transformative	Co-management regimes	●	●	●	●	●	🚩📍	Resource users NGOs Governments
	Eliminating harmful subsidies	●	●	●	●	●	🌐🚩📍	Governments Intergovernmental organizations
	Payments for ecosystem services	●	●	●	●	●	🌐🚩📍	Governments NGOs Business actors
	Other effective area-based conservation measures	●	●	●	●	●	🚩📍	IPLCs Donors Governments Intergovernmental organizations
	Rights of nature	●	●	●	●	●	🚩📍	Governments
Less transformative	Certification schemes	●	●	●	●	●	🌐🚩📍	Business actors Governments Intergovernmental organizations
	Environmental accounting	●	●	●	●	●	🚩	Intergovernmental organizations Governments Business actors
	Legally protected areas	●	●	●	●	●	🚩📍	Governments Intergovernmental organizations NGOs
Business-as-usual	Biodiversity offsets	●	●	●	●	●	🚩📍	Governments Business actors
	Trade bans	●	●	●	●	●	🌐	Governments Intergovernmental organizations Business actors


 More transformative ← → Less transformative



International





















National



Sub-national/Local










Capacities of decision-makers	STAKEHOLDERS					
	Inter-governmental organizations 	National and subnational governments 	Non-governmental organizations 	Citizen groups /IPLCs 	Private sector 	Media 
Motivational						
Analytical						
Bridging						
Negotiation						
Social networking						
Governance						

Capacity needs   

More ← Less

Most pressing issues	Potential solutions
<b>Conceptualisation of nature's diverse values</b>	Document the diverse values of nature for different socio-demographic groups, social-ecological contexts, spatial and temporal scales, and knowledge systems
<b>Choice of valuation methods to support decision-making</b>	Design valuation processes to fit decisions that lead to specific outcomes
<b>Understanding notions of 'value' and 'valuation' within indigenous peoples and local communities</b>	Make visible the values of indigenous peoples and local communities in their own terms
<b>Uptaking valuation results in decision-making</b>	Document the uptake of valuation into decisions, the barriers and enablers of uptake, and the outcomes derived from uptake
<b>Designing and operationalising policy tools that consider nature's diverse values.</b>	Document best-practice policy tools and their transformative change potential
<b>Considering values and valuation as leverage points for transformative change</b>	Assess how institutions can better embrace nature's diverse values and how sustainability-aligned values can be further mobilized
<b>Understanding the role of values in futures scenario planning and development</b>	Document how nature's values play a role in future scenarios, and the role of sustainability-aligned values in shaping sustainability pathways
<b>Considering justice perspectives in valuation</b>	Analyse the role of power in value expression and how justice dimensions are influenced by valuation

Values-centered action points	STAKEHOLDERS						
	Inter-governmental organizations 	National and subnational governments 	Non-governmental organizations 	Academia 	Citizen groups/ IPLCs 	Private sector 	Media 
<b>Embed diverse values into decisions</b>	Promote the incorporation of diverse values into national biodiversity strategies	Implement policies that articulate diverse values	Develop values-centred safeguards	Address knowledge gaps	Mobilise sustainability-aligned values	Implement standards for values-based corporate responsibility	Communicate on the diversity of values of nature
<b>Foster policy coherence across sectors based on sustainability-aligned values</b>	Align policy with value diversity	Establish coordination mechanisms among sectors around shared values	Foster initiatives to make visible diverse values	Advance inter and trans-disciplinary research on values	Advocate for recognition and respect for diverse values	Engage in cross sectoral dialogue to build shared values	Highlight stories of successful values alignment
<b>Ensure representation of stakeholders' values</b>	Develop standards for inclusive participation in decisions	Encourage participatory policy design	Support valuation uptake in policy decisions	Assess representation in valuation and outcomes	Promote respect for marginalised worldviews and values	Adopt practices of inclusive participation	Promote public debates on the diverse values of nature
<b>Enable capacities to embed diverse values into decisions</b>	Address barriers (e.g. understanding of trade-offs) to develop capacities of stakeholders	Enable mechanisms for policy uptake of plural valuation	Support capacity development activities based on nature's values	Build research programmes to strengthen the transformative potential of values-centred leverage points	Network to foster peer to peer learning	Support capacity development on values-based corporate sustainability standards	Train communication experts (including local communicators) on the role of nature's values
<b>Strengthen co-learning among stakeholders to develop shared values</b>	Promote projects that entail cross sectoral planning by highlighting best practices	Encourage collaborative learning across scales and sectors	Document good co-learning practices across actor groups	Promote research on values incorporating different knowledge systems	Support awareness raising among peers	Promote co-learning with affected stakeholders	Communicate on how shared values are built
<b>Enhance resource mobilisation for plural valuation and policy uptake</b>	Foster international commitments to undertake plural valuation and uptake	Allocate resources for capacity building to support uptake of valuation	Ensure project funding is targeted to addressing key gaps	Channel resources for plural valuation research	Support crowdfunding to enable wider participation in decision making	Allow for plural valuation and its uptake	Highlight gaps in resource availability