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# CAP-SHARE

Building bridges of shared capacity between  
scientists, policymakers, and communities

## SECOND STRATEGY SECTION

### RECOGNIZING LOCAL AND INDIGENOUS KNOWLEDGE

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**ARCTIC  
FRONTIERS**



NÁTTÚRU  
MINJASAFN  
ÍSLANDS | Icelandic  
Museum  
of Natural  
History



LAPIN YLIOPISTO  
UNIVERSITY OF LAPLAND

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**CAP-SHARE**

## SUMMARY OF OUTCOMES

The second CAP-SHARE online workshop, Recognising Local and Indigenous Knowledge (9 December 2024), explored how knowledge systems rooted in lived experience, land-based practices, and intergenerational transmission can strengthen biodiversity governance in the Nordic and Arctic regions. Keynote speakers highlighted Arctic biodiversity, community resilience, Sámi perspectives, youth engagement, and the cultural dimensions of environmental change. Group discussions identified five central themes: the importance of intergenerational knowledge exchange, the vital role of youth in environmental stewardship, the need for culturally responsive and locally grounded education, the significance of Indigenous knowledge and local culture for biodiversity action, and the value of inclusive learning spaces that foster dialogue. The workshop theme is essential for just and sustainable biodiversity governance. Supporting intergenerational exchange, youth participation, and community-driven approaches is crucial for building resilient Arctic futures.

## INTRODUCTION

The CAP-SHARE online workshop, held on 9 December 2024 and led by the University of Lapland, focused on Recognising Local and Indigenous Knowledge. The workshop examined the importance of integrating these knowledge systems into biodiversity discussions and decision-making across the Nordic and Arctic regions. Local and Indigenous knowledge, emerging from lived experience, land-based practices, and intergenerational transmission, constitutes a vital foundation for sustainable environmental governance. It supports biodiversity conservation, strengthens community resilience, and provides culturally grounded perspectives on adaptation, stewardship, and wellbeing. Recognising such knowledge is therefore not only a matter of inclusion, but a pathway towards more just and effective environmental action.

The workshop brought together a diverse group of stakeholders to reflect on how local and Indigenous knowledge can inform biodiversity policy and practice. Special emphasis was placed on co-creation with local knowledge holders in the Nordic and Arctic regions, on intergenerational knowledge transmission as a foundation of sustainability, and on the role of Sámi and other Indigenous knowledge systems in shaping place-based, future-oriented environmental decisions.

## **WORKSHOP DESIGN AND CONTRIBUTIONS**

This CAP-SHARE online workshop, held on 9 December 2024 and hosted by the University of Lapland, focused on how local and Indigenous knowledge systems, rooted in land-based practices, lived experience, and intergenerational transmission, can strengthen biodiversity governance in the Nordic and Arctic regions.

The workshop consisted of two parts: keynote presentations by invited speakers and facilitated group discussions among participants. The insights presented here draw from both components and were compiled by the CAP-SHARE project team.

In this online workshop, perspectives were offered on youth advocacy, ecological change, and sustainable practices. Niila-Juhán Valkeapää, Vice-Chair of the Sámi Parliament's Youth Council in Finland, underscored the need for cultural continuity, language revitalisation, and the inclusion of Indigenous youth voices in Arctic policymaking. Theresa Henke, a PhD candidate at the University of Iceland, presented research on the establishment of the alien European flounder in Icelandic waters, illustrating the importance of stakeholder engagement and community perspectives in adaptive marine management. The workshop was led by Rauni Äärelä-Vihriälä, a postdoctoral researcher at the University of Lapland and leader of the CAP-SHARE Finnish group. In her presentation, she addressed intergenerational justice, community resilience, and the integration of local knowledge into biodiversity action. She also guided the dialogue toward identifying actionable strategies that link biodiversity conservation with regional development.

## WHAT DID WE LEARN?

### Knowledge gained from the online workshop

The online workshop included interactive group discussions held in five breakout rooms, each facilitated by a member of the CAP-SHARE project team. Participants represented key stakeholder groups, including youth, policymakers, researchers, and Indigenous representatives. Two guiding questions framed the discussions:

1. How can local and Indigenous knowledge be better integrated into biodiversity decision-making?
2. What are the opportunities and barriers to intergenerational knowledge sharing in your region?

These conversations enabled participants to share local experiences, identify community needs, and co-develop ideas for more inclusive and sustainable biodiversity practices across the Arctic and Nordic regions. Participants across the five breakout rooms collaboratively explored the two central discussion questions, and their reflections highlighted several shared insights. The group discussion resulted in two key takeaways:

#### 1. Biodiversity Discussions at the Local Level

Biodiversity work must be rooted in the ecological, cultural, and social contexts of each region. Generic or top-down approaches risk overlooking local priorities and lived realities. Meaningful community engagement emerged as essential: when local actors are involved early in decision-making, solutions are more likely to be accepted, effective, and sustainable.

#### 2. Considering Intergenerational Perspectives

Integrating the knowledge of different generations enriches biodiversity strategies and strengthens their long-term resilience. Understanding both older and younger generations' values supports more inclusive and holistic governance processes<sup>1</sup>.

## Online Workshop Insights

Figure 1 presents the needs identified by participants, which centred on improving collaboration and connection – specifically by improving knowledge sharing between stakeholders, fostering closer relationships with nature and community, and ensuring ethical and respectful engagement with local and Indigenous communities. Guided by the discussion questions, five key themes emerged across all groups. These insights point toward concrete strategic directions for strengthening the recognition of local and Indigenous knowledge in biodiversity governance. Recognition in this context refers not only to acknowledgment, but to the inclusion of local and Indigenous knowledge in decision-making authority, governance structures, and knowledge production processes.

### 1. Intergenerational Knowledge Sharing

Participants stressed the need to encourage contributions from all age groups. Younger and older generations each hold valuable knowledge that should be equally recognised in biodiversity decision-making. Dedicated platforms for intergenerational dialogue—supported through mobility, facilitation, and collaboration funding—are needed. Intergenerational knowledge sharing is not only a cultural practice, but also a key dimension of intergenerational justice in sustainability governance. This requires a shift toward more inclusive governance, where intergenerational participation is embedded in decision-making roles and processes.

### 2. Youth Participation

Youth involvement was seen as crucial, as young people are both current and future stewards of the environment. They serve as bridges between generations and between local realities and global goals. Youth participation can strengthen both dialogue and practical engagement. To strengthen youth participation in biodiversity and climate policy discussions, targeted learning opportunities, training, and supportive participation structures are needed. Existing funding mechanisms and dedicated support schemes can help enable youth participation in political processes, conferences, and climate and biodiversity initiatives.

### 3. The Role of Education

Education plays a central role in fostering awareness and engagement. It must be intergenerational, culturally responsive, and locally relevant. Both formal educational systems and informal learning spaces should enable collaboration between scientists and communities to make complex issues more accessible. Out-of-classroom and informal education experiences in Arctic and northern contexts have been shown to support young people's sense of belonging and agency, while also helping them identify pathways to further education and careers connected to their home regions<sup>2,3</sup>. A crucial aspect for the success of educational programs —particularly in school settings —is to deliver lectures, workshops and activities in local and Indigenous languages<sup>4</sup>.

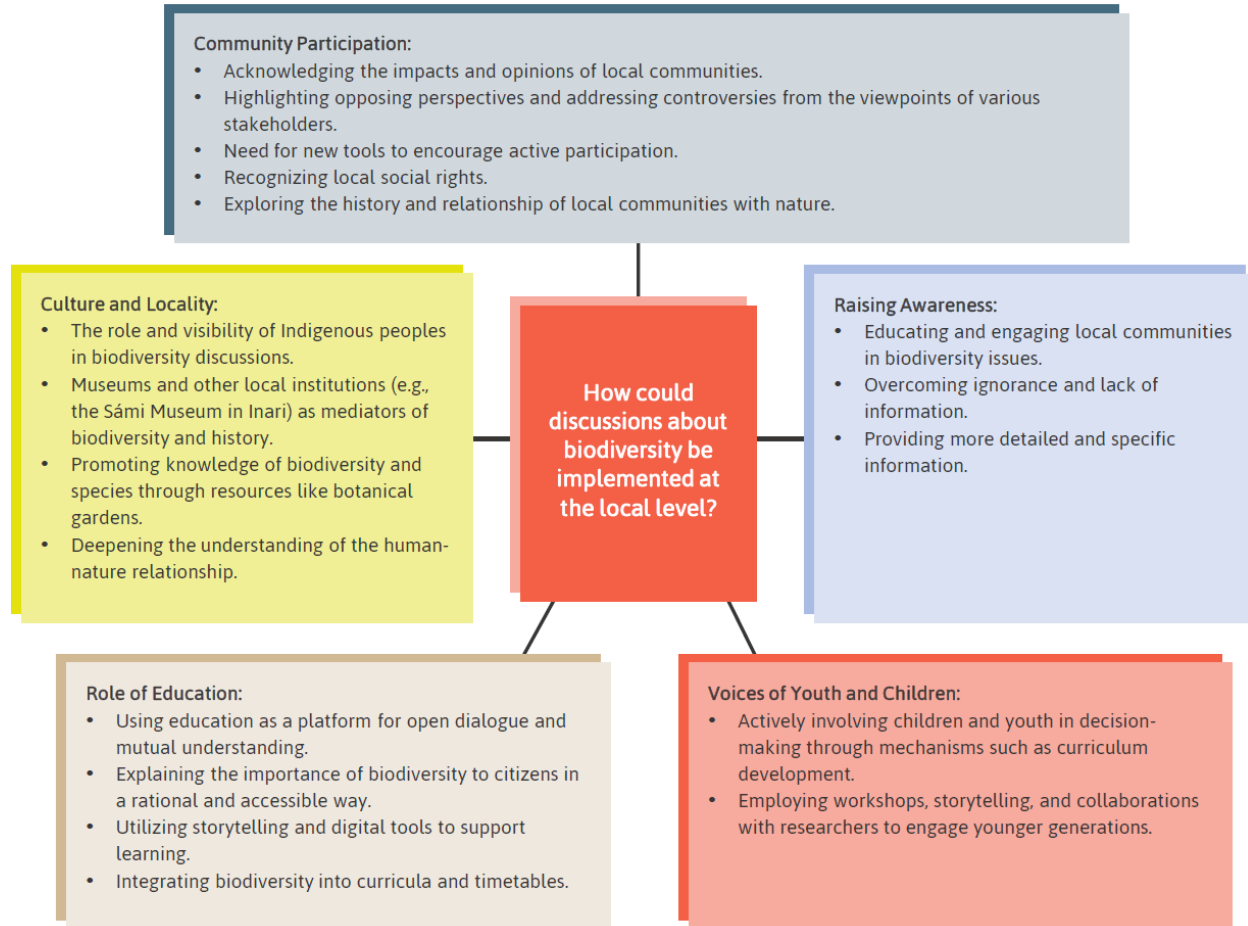
### 4. Local Culture and History

Indigenous knowledge systems and cultural practices were recognised as foundational to understanding and sustaining biodiversity. Institutions such as museums and science centres can function as important hubs for dialogue, awareness-raising, and sustainable development rooted in local values. Acknowledging diverse or conflicting perspectives is important for ensuring equitable and socially just decision-making.

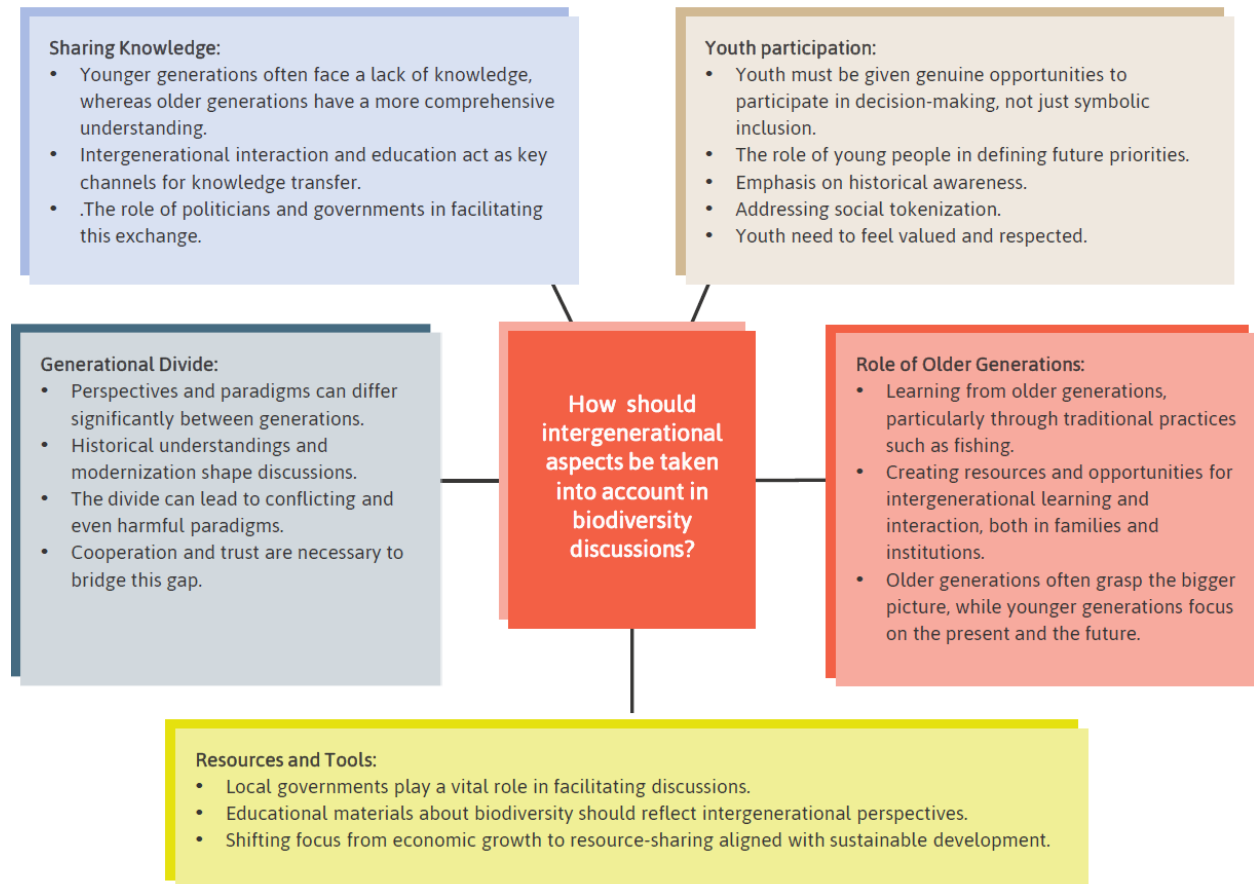
### 5. Resources and Tools

Educational and cultural institutions should be reimagined as inclusive, multigenerational learning spaces. Youth voices must be systematically included in relevant policy discussions, especially in settings where their perspectives have historically been marginalised.

**DISCUSSION OUTCOMES: “Biodiversity at the Local Level”**



## DISCUSSION OUTCOMES: "Considering Intergenerational Perspectives"



## STRATEGIC IMPLICATIONS

The findings highlight that recognising local and Indigenous knowledge requires structural, educational, and participatory transformations. This includes embedding intergenerational dialogue in governance, strengthening youth participation mechanisms, investing in culturally responsive education, and supporting community-based knowledge infrastructures. Such approaches are essential for ensuring that biodiversity governance in the Arctic and Nordic regions is both socially just and ecologically sustainable.

## CONCLUSION

The *Recognising Local and Indigenous Knowledge* online workshop underscored the need to adapt models and frameworks that incorporate regionally specific knowledge related to nature, biodiversity, and sustainable development. The discussions highlighted the importance of intergenerational knowledge transmission and the essential role of collaboration in co-creating sustainable, inclusive, and community-based practices. These insights contribute to the CAP-SHARE objective of fostering participatory and inclusive biodiversity governance across the Nordic and Arctic regions.

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<sup>1</sup> cf. Joonas, T. L., & Äärelä-Vihriälä, R. (2025). Beyond survival: intergenerational climate justice as a conceptual framework for Arctic climate adaptation. *Current Developments in Arctic Law*, vol. 13, 47. <https://urn.fi/URN:NBN:fi-fe20251204114280>

<sup>2</sup> Keskitalo, P., Frangou, S. M., & Chohan, I. (2020). Educational design research in collaboration with students: developing a reindeer herding study programme and a model of vocational Sámi pedagogy. *Education in the North*, 27(1), 58-77.

<sup>3</sup> Turton, J. V., El bani Altuna, N., Weber, C., Dahle, S., Boine Olsen, N., Fosshaug, E., Opheim, K., Morales-Aguirre, J., ... & Wara, A. (2025). From 5 to 35: fostering the next generation of Arctic scientists. *Geoscience Communication*, 8(4), 339-356. <https://doi.org/10.5194/gc-8-339-2025>

<sup>4</sup> cf. Keskitalo, P., Määttä, K., & Uusiautti, S. (2013). *Sámi education*. Frankfurt am Main: Peter Lang.