

DECODE Lessons from the Case Studies

DECODE Internal Reflections

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DECODE's internal reflections relied on presentations by both case study authors and community and Indigenous knowledge holders whose experiences shape the narratives shared in this work. Grounding the discussion empirically in tangible, lived stories, this session highlighted how community-based and Indigenous knowledge systems have provided meaningful layers of protection against the impacts of climate change.

By centring these concrete experiences of resilience and collective action, the reflections reaffirmed the foundational ethos of the DECODE project. The session not only reinforced the value of participatory and community-led knowledge production but also inspired participants to deepen their commitment to advancing this work.

THE PRESENTATIONS

This section of the DECODE internal reflections began with the Case Study from Ivory Coast which was shared by Professor Timpoko Héléne Kiénon-Kaboré.

Bliéron Fisherfolks' Knowledge for Climate Resilience; Blieron, Côte d'Ivoire

Professor Kiénon-Kaboré presented the case study from the village of Bliéron, located in the coastal south-west of Côte d'Ivoire, highlighting how fisherfolk draw on endogenous knowledge systems to sustain resilience in the face of accelerating climate change.

Situated at the geographical intersection of the Cavally River and the Atlantic Ocean, Bliéron represents a frontline site for climate vulnerability within the DECODE Project. The local Kroumen community- historically renowned as skilled sailors and fishermen- now find itself between rising sea levels from the south and recurrent riverine flooding from the northwest. This dual pressure has transformed everyday life into a continuous process of ecological adaptation.

Professor Kiénon-Kaboré emphasised that community understandings of environmental change are grounded in lived experience rather than abstract data. Residents have observed a steady retreat of the coastline, the destruction of ancestral homes, and the loss of coconut plantations due to increasingly violent tides and high swells. These visible changes are compounded by less apparent but equally severe impacts, including the salinisation of freshwater aquifers, declining fish stocks, and disruptions to long-established fishing cycles.

These challenges have been further intensified by external industrial shocks. The 2024 cyanide leak from the Ity gold mine, which resulted in widespread fish mortality and local poisoning, was cited as a particularly stark example of how environmental crises intersect with political marginalisation, as affected communities were largely excluded from administrative decision-making processes.

In response, the Kroumen community has mobilised a sophisticated system of coping



Professor Timpoko sharing reflections from her work in Cote D'Ivoire

strategies that combine technical expertise with spiritual governance. Fisherfolk employ specialised tools- such as bamboo fish traps for Djisrôh and various creels for shrimp and catfish- while reading ecological indicators including bird behaviour and changes in water colour to track shifting currents. These practices are deeply intertwined with spiritual relationships of the people to the landscape, including ritual sacrifices to sacred rocks in the Cavally River to prevent flooding, and the nightly lighting of a ritual fire in the northern part of the village to ward off the encroachment

of the sea and river.

Central to this resilience is a detailed botanical knowledge of local flora. Plants such as Glofio (*Dracaena liberica*) are used both to stabilise sandy coastal soils and as ritual fishing bait, while Gnanhin (doum palm) and Wehi (*Ipomoea pes-caprae*) play critical roles in dune stabilisation and protection against salt winds and marine regression. These ecological practices are embedded within local mythology- such as the legend of the turtle- reflecting a longstanding integration of environmental knowledge into cultural identity.

Professor Kiénon-Kaboré concluded by arguing that sustainable climate resilience requires formal recognition of these endogenous knowledge systems within public policy. She recommended the establishment of community schools to support intergenerational knowledge transmission, as well as greater investment in participatory research to bridge traditional wisdom and scientific approaches. The case of Bliéron, she noted, demonstrates that effective responses to climate change must respect and elevate the expertise of communities that have lived in close relationship with their environments for centuries.

PACHAGRAMA- A Bridge Between Andean and Western Sciences

PROSUCO's work was introduced by Eleodoro Baldiviezo Estrada, who together with Aymara agronomist and project lead María Quispe, implemented the organisation's community-centred approach to democratising access to knowledge concerning local ecosystems and weather forecasting.

Building on the themes of data sovereignty and decolonisation, Eleodoro, presented one of the DECODE Project's most compelling examples of Indigenous-led knowledge mobilisation through the PACHAGRAMA initiative. Located in the high-altitude landscapes of the

Bolivian Altiplano, this case study illustrates how ancestral Andean knowledge systems can be meaningfully bridged with contemporary climate science to strengthen food security in one of the world's most climatically volatile regions.

The project centres on the Yapuchiris, indigenous Aymara and Quechua knowledge keepers who have, over generations, developed highly refined systems of environmental observation. The term PACHAGRAMA, a combination of Pacha (Earth/Time in Aymara and Quechua) and Grama, refers to a structured method of “reading” the landscape through the interpretation of natural indicators. These include the behaviour of flora and fauna, the positioning of stars, and patterns of wind and cloud movement, which are used to predict frost, drought, and heavy rainfall months in advance. For example, the density of flowering in specific shrubs or the nesting height of local birds provides actionable guidance on the timing of potato and quinoa cultivation.

Eleodoro explained how PROSUCO has supported the formal documentation of these observations through the Pachagrama- an agricultural and climatic record that translates Indigenous knowledge into a systematic, visual format. In doing so, the project challenges the tendency to dismiss such practices as folklore, demonstrating instead their empirical rigor and predictive value.

A defining feature of PACHAGRAMA, he noted, is its strategic use of digital technology to protect and strengthen traditional livelihoods. The project has evolved from physical charts to

a digital application that allows farmers to record, store, and share climate observations in real time. Importantly, this platform is governed by the community itself, exemplifying Indigenous data sovereignty. Rather than serving as an extractive research tool, the application of the PACHAGRAMA functions as a shared knowledge repository owned and controlled by farmers. By placing ancestral climate predictions in dialogue with Western meteorological forecasts, the project produces a hybrid knowledge system that is both scientifically robust and culturally grounded.



Eleodoro Baldivezo sharing his reflections from his work with PROSUCO in Bolivia

Eleodoro further propounded that PACHAGRAMA should be understood not only as a climate adaptation strategy, but also as an act of cultural and epistemic resistance. Through tools such as the “Line of the Heartbeat” (Línea del palpito), which captures community well-being alongside climate risk, the initiative ensures that emotional and spiritual relationships with the land remain integral to data and decision-making processes. In this way, PACHAGRAMA advances a core objective of DECODE: a future in which an Aymara farmer’s reading of a the ecosystem is recognised as epistemically equal to satellite imagery

produced by global weather agencies, and where those most affected by the climate crisis are empowered to lead the response.

Regenerating Acholi Traditional Knowledge; Gulu, Uganda

Following the presentation on PROSUCO, Dr. David Monk and Juliet Adoch, founder of Wise Woman Uganda, shared insights from their work in Uganda, focusing on the regeneration and revitalisation of Indigenous and community-based knowledge systems.

This case study presented a profound examination of how Wise Women–Uganda (WWU) is reclaiming ancestral wisdom to advance environmental and social restoration in northern Uganda. Dr. David Monk highlighted that this initiative, situated within the broader DECODE Knowledge Project, demonstrates that the recovery of traditional African knowledge is not merely a cultural endeavour but a strategic necessity for addressing contemporary climate and biodiversity crises. The study centres on the Acholi people, whose heritage is rooted in a deep spiritual and practical relationship with the land- one that was systematically disrupted by British colonial rule, missionary influence, and the devastating twenty-year insurgency led by the Lord’s Resistance Army (LRA).

In the aftermath of prolonged conflict and displacement, the Acholi community has prioritised the revival of experiential knowledge as a foundation for post-conflict healing and regeneration. Central to this effort is WWU, founded in 2018 by Juliet Adoch in Gulu. Juliet emphasised that the initiative focuses on documenting and revitalising local botanical knowledge, including the creation of medicinal gardens that function as living repositories of Acholi herbal traditions. This ecological knowledge is inseparable from social and cultural life; for instance, the Oppo tree holds particular significance in reconciliation and conflict resolution practices, illustrating how environmental stewardship and social harmony are deeply intertwined in the Acholi worldview.

Further, reflecting on the research approach, Dr. Monk explained that the methodology adopted by DECODE researchers in collaboration with WWU represents a deliberate shift toward knowledge democracy. Recognising that linear, Western research frameworks often fail to capture the complexity of Indigenous experiences, the project employed “Timescapes” in place of conventional chronological timelines.



Dr David Monk and Juliet Adoch (online) sharing reflections from their case study in Gulu, Uganda

This landscape-based approach enabled community members to map collective activities, emotions, and concerns, allowing them to visualise change over time in relation to traditional healing practices.

Importantly, this process repositioned participants not as subjects of research, but as active knowledge keepers and co-producers of knowledge.

The presentation concluded by asserting that the work of WWU offers a scalable model for climate resilience and sustainable development. By foregrounding women’s roles as primary custodians of traditional medicine and agricultural knowledge, the initiative contributes to the decolonisation of conservation practices. It underscores that environmental sustainability is inseparable from cultural continuity, and that pathways toward a resilient future in northern Uganda lie in the enduring “fire-circle” wisdom that has sustained the Acholi people for generations.



Paloma Aguilar (Left), Olivia Andrade De Almeida (Middle) and Waldina Muñoz (Right) sharing the Guardians of the Forest Case Study

Guardians of the Forest; Putumayo, Columbia

Waldina Muñoz and Paloma Aguilar Forero introduced the Guardians of the Forest case study, highlighting their extensive work in Putumayo, Colombia. Guardians of the Forest

documents a powerful Indigenous-led initiative based in Villagarzón, Putumayo, which centres on empowering Indigenous women to protect ancestral territories and sustain traditional botanical knowledge. The narrative foregrounds the intersection of gender, territory, and environmental stewardship.

Situated in the Andean–Amazonian foothills, this biodiversity-rich region is home for many Indigenous communities. The project specifically engages three communities- the Embera Chamí, Yanaconas, and Pastos- all of whom have experienced forced displacement due to Colombia’s protracted internal armed conflict, colonial legacies, and extractive industries such as mining, oil, and industrial agriculture.

Despite displacement, these communities have forged renewed relationships with their current territories, reshaping land stewardship as both survival and resistance.

The presenters emphasised that Indigenous women, as custodians of cultural and medicinal knowledge, are particularly vulnerable to intimidation and violence from actors seeking control over land and resources. Founded in 2022 by Waldina Muñoz, Coordinator of the Fundación Mujeres Hiladoras de Vida, the Guardians of the Forest project follows a three-phase methodology:

- **Theoretical Knowledge Sharing:** Participatory workshops where Indigenous women and forestry engineers engage in dialogue between Western scientific approaches and Indigenous ecological knowledge.
- **Walking Tours:** Inter-community visits that enable participants to identify sacred sites and medicinal plants. These tours include harmonizations—spiritual rituals led by elders to communicate with the spirits of the forest and Pachamama (Mother Earth).
- **Training Future Guardians:** Intentional involvement of children (guaguas) to ensure the intergenerational transmission of ecological and cultural knowledge.

A central insight emerging from the presentation was the Indigenous understanding of “territory” as a holistic concept. Unlike the Western notion of “environment,” territory encompasses all living beings, spirits, ancestors, and relationships. Within this worldview, forest conservation is framed as a spiritual responsibility, where plants are recognised not as resources but as beings with souls. During walking tours, women from different communities shared varied medicinal applications of the same plants—ranging from treatments for menstrual pain to natural hair dyes—collectively co-creating a regional repository of botanical knowledge.

Paloma Aguilar Forero further explained that, through participatory mapping and support from the DECODE project, women systematised their oral traditions into illustrated booklets. This process of documentation was described as an act of critical consciousness, enabling communities to affirm their knowledge as legitimate and authoritative alongside Western science. The project also adheres to ethical reciprocity, with tangible benefits returned to participating communities—for instance, guitars provided to the Embera community to support musical harmonisation rituals, and wool supplied to the Yanaconas to sustain traditional weaving practices.

The presentation concluded by underscoring that the protection of Indigenous women's rights is inseparable from the protection of forests. By fostering intercultural solidarity and collective memory, Guardians of the Forest ensures that the wisdom of elders remains a living blueprint for the survival of both territory and community.

UNICATA- A University For and With Waste Pickers; São Paulo, Brazil

Following the presentation from Colombia, the conference moved to Brazil, where Professor Jutta Gutberlet presented UNICATA, a transformative educational movement in Brazil, conceived as a university "for and with" waste pickers (*catadores de materiais recicláveis*). Founded in 2023, UNICATA emerged from a collaborative effort among waste picker leaders, academic researchers, and technical experts who collectively recognised the urgent need for a permanent and inclusive learning space responsive to the lived realities of this essential yet marginalised workforce.

Dr. Gutberlet noted that, globally, waste pickers number approximately 20 million, and in Brazil alone they are responsible for processing nearly 90 per cent of all recycled materials. Despite their critical contribution to environmental sustainability and the circular economy, waste pickers continue to face deep social stigma, limited access to formal education, and heightened vulnerability to climate-related risks, including extreme heat and exposure to hazardous pathogens.

She further emphasised that UNICATA's philosophical foundation is deeply rooted in popular education and the pedagogy of liberation articulated by Paulo Freire. This framework deliberately challenges conventional hierarchies of knowledge by recognising the experiential and popular wisdom of waste pickers as equal to academic and scientific knowledge. The university's curriculum is co-created with students to ensure direct relevance to their lives and work, while foregrounding dialogue, critical reflection, and collective social action. A central methodological pillar of UNICATA, she noted, is the practice of pair teaching, in which each course is jointly facilitated by a Catador Educator and a Pro-Catador Educator, typically an academic or technical expert. This approach enables a dynamic exchange between theoretical concepts, such as the chemical composition of plastics, and the practical strategies employed daily on the sorting lines of recycling cooperatives.

UNICATA's flagship programme on participatory solid waste management and governance is structured into six comprehensive modules. The student cohort, predominantly women and largely from mixed-race or Black communities, often makes significant personal sacrifices to attend classes, with some travelling up to ninety minutes each way to learning centres in São Paulo or Brasília. The pedagogical process is highly interactive, incorporating theatrical performances, storytelling circles, and citizen science research projects that enable students to systematically investigate and document their own working and living conditions. These research processes frequently culminate in the production of a Community Journal, a collective medium through which waste pickers assert visibility, articulate their expertise, and challenge dominant narratives.

Dr. Gutberlet argued that UNICATA's impact extends well beyond the classroom, strengthening leadership and social mobilisation within Brazil's recycling movement.

Graduates have gone on to serve as popular environmental educators in schools, while others have established new cooperatives for autonomous waste pickers. The initiative has also garnered institutional recognition, including support from government bodies such as the Ministry for Racial Equality, which has committed funding to sustain UNICATA's activities.

Looking ahead, UNICATA's leadership envisions formal institutional accreditation, with courses co-designed with waste pickers leading to certified academic degrees. Dr. Gutberlet concluded by describing UNICATA as a "school without walls", one that transforms waste pickers from marginalised labourers into recognised frontline environmental stewards and authoritative producers of knowledge.

Foods from the Forest: Bridging Tradition, Science, and Sustainability in the Himalayas; Kaleshwar, India

Ensuing the presentation on UNICATA, Dr. Anshuman Karol from PRIA, India, introduced and discussed in detail the DECODE case study from the Himalayan region.

The "Foods from the Forest" (*Jungle Se Khadya Padarth*) case study presents a compelling account of how Indigenous knowledge can be harmonised with scientific validation to foster sustainable and resilient livelihoods. The case study is situated in the Kaleshwar region of Chamoli district in Uttarakhand, India, and highlights the resilience of mountain communities—particularly women—who have transformed their traditional ecological wisdom into a robust and inclusive economic model.



Dr. Anshuman Karol sharing about the Foods from Forest Case Study

Chamoli district, often revered as the "Abode of the Gods," lies in the Himalayan ranges approximately 439 kilometres from Delhi and close to the Tibetan border. Despite its natural beauty and spiritual significance, the region faces acute challenges arising from remoteness, ecological fragility, and limited market access. Historically, local livelihoods were sustained through barter-based, self-sufficient systems. The gradual introduction of a cash economy after the 1960s disrupted these systems, prompting widespread male outmigration to urban centres. Women were left to manage households, agriculture, forests, and pastures, rendering the hill economy largely women-centric, yet without commensurate economic or social recognition.

To address these structural challenges, the Himalayan Action Research Centre (HARC) facilitated the formation of the HARC Alaknanda Krishi Vyavsaya Bahudeshya Swayatt Sahkarita (HAKVBSS), a community-owned cooperative that organised women's Self-Help Groups into a collective economic and governance structure. Designed explicitly to centre women's leadership, the cooperative is governed by a nine-member body comprising six women and three men. It is further supported by specialised sub-committees, including a Monitoring Committee (Nigrani Samiti), a Cleanliness Committee (Swachhta Samiti), and a Quality Control Committee, ensuring transparency, accountability, and professional standards. Today, HAKVBSS directly supports 210 primary members and indirectly benefits more than 4,000 secondary members across the region.

Dr. Karol argued that the core strength of the "Foods from the Forest" initiative lies in its ability to decode traditional knowledge and validate it through scientific research, thereby creating high-value products without undermining cultural or spiritual values. A key example of this approach is the cultivation of Tulsi (Holy Basil). While the community recognised Tulsi as a climate-resilient crop well suited to local conditions, its sacred status posed ethical concerns regarding its sale. To address this, HARC and technical experts introduced a commercially viable Tulsi variety distinct from the sacred household plant. This scientific differentiation enabled women to cultivate Tulsi for income generation without violating religious beliefs. The cooperative now processes Tulsi into green and masala teas, products that experienced heightened demand during the COVID-19 pandemic due to their perceived immunity-enhancing properties.

The initiative has also transformed the use of wild edibles traditionally consumed for subsistence or medicinal purposes. Plants such as Amla (Indian gooseberry), Ber, Rhododendron, and wild mint were systematically processed into value-added products including juices, jams, and pickles. Through access to machinery such as pulpers and boilers, women were able to diversify their product range and significantly enhance household incomes.

Another critical intervention focused on the sustainable harvesting of Bay Leaf (Tejpatta) in the Najmola Valley. Dr. Karol, drawing on the work of Dr. Dyutiman Choudhary, explained how harvesting rights were shifted from private contractors to local Van Panchayats, restoring community control over forest resources. A scientifically informed code of conduct was co-developed, mandating that leaves be harvested only from the lower two-thirds of trees and limited to 40 per cent of the estimated yield. This approach ensured ecological sustainability while providing a stable source of income.

Moreover, the social and economic transformation resulting from the initiative has been profound. Cooperative member Ms. Bhavani Devi reflected on the early social resistance women faced, including ridicule for working outside the home. Over time, however, women transitioned from reluctance to even state their names in public to confidently managing production processes and negotiating with markets. Additionally, the financial impact is equally striking, with the cooperative's turnover growing from an initial ₹2–2.5 lakh to approximately ₹3–4 crore. The initiative has also nurtured a cadre of 131 women leaders who now train others in decision-making, leadership, and community development, strengthening the region's social fabric. Dr Karol further propounded that the reintroduction of crops such as Tulsi not only generated income but also allowed women to reclaim their identities as farmers amid increasing climate uncertainty.

Overall, the “Foods from the Forest” case study exemplifies the DECODE project's core philosophy: that community knowledge and academic science are not oppositional but mutually reinforcing. By validating traditional practices through scientific rigour—whether in sustainable harvesting protocols or botanical differentiation—the initiative offers a model of development that is inclusive, culturally grounded, and ecologically resilient. It demonstrates that when women's knowledge is respected and supported, they can lead the creation of sustainable economies even within fragile mountain ecosystems.

Modernisation of Apong Production; Sarawak, Malaysia

Following the presentation from India, the discussion moved to Malaysia. This case study was presented through a video prepared by the case study team and was further elaborated upon by Dr. Asyirah Abdul Rahim and Dr. Mahazan Mutalib, both of whom have been closely involved in the work. This case study provides a deep exploration to the Modernization Project in Sarawak, Malaysia. Much like the previous narratives in the DECODE series, this story highlights the intersection of ancestral stewardship and modern innovation, focusing on the *penuak*- the traditional harvesters of the Apong (*Nypa*) palm.

The video began by establishing the *penuak* as the essential guardians of Sarawak's mangrove ecosystems. For over a century, these harvesters have extracted sap from the *Nypa fruticans* palm to produce Gula Apong, a culturally significant palm sugar. This is not merely an extractive industry; it is a complex system of ecological management. The *penuak* practice a "selective harvesting" method, tapping only one stem per tree to ensure the plant's health, and they operate under a strictly inherited territorial system that prevents overharvesting. This stewardship is vital for climate resilience, as the apong forests stabilize riverbanks, prevent soil erosion, and act as massive carbon sinks.



Dr. Asyirah Abdul Rahim presenting the Apong Modernization Case Study

The core of the presentation detailed the Apong Modernization Project, a CBPR initiative involving researchers from Universiti Malaysia Sarawak (UNIMAS). This project sought to solve a critical labor challenge as traditional harvesting was grueling, often requiring *penuak* to work from sunrise to sunset.

Through a process of "co-design," researchers and *penuak* developed new tools and technological solutions—such as specialized evaporation systems—to

produce high-value Apong Nectar.

Dr Abdul Rahim argued that this modernization was not forced upon the community; rather, it followed the DECODE project's principles of inclusivity and autonomy. Harvesters like Nasir, Edi, and Sabli were central to the decision-making process, ensuring that the new technologies complemented rather than replaced their cultural heritage. The result was a dramatic increase in efficiency, allowing harvesters to finish their tasks by midday, thereby improving their quality of life and enabling them to diversify their income.

A specific highlight of this case study is the establishment of Community Cooperatives. By moving from individual production to a cooperative model, the *penuak* gained better market access and the ability to set shared protocols for product quality. This shift is a practical application of Indigenous Data Sovereignty; the community now controls the "narrative" and the "brand" of Gula Apong, ensuring that the economic benefits of their ancestral knowledge stay within the village.

The presentation concluded with establishment of the fact that the *penuak* are living proof that sustainability is not a modern invention but an ancient practice woven into the social fabric of Indigenous communities. By documenting these "Penuak Stories" through the DECODE framework, the project demonstrates how rural communities can lead their own economic transformation. It positions the *penuak* not just as laborers, but as sophisticated environmental scientists whose "daily harvesting" is the key to maintaining the delicate balance of the Sarawak mangroves in a changing global climate.

Nanuk Narratives, Arctic, Western Canada

The next case study was shared by Olivia and Dr. Hall, who shared the stories, media and learnings from the Nanuk Narratives project, which takes place in the Davis Strait region. Nanuk Narratives represents a significant shift in conversation concerning research in the Arctic, moving away from top-down scientific approaches toward a collaborative, Inuit-led model of wildlife co-management. As a central case study within the DECODE Knowledge

Project, the initiative explores the enduring relationship between the Inuit and *nanuk* (polar bears) in the Davis Strait region, spanning Nunavut, Nunavik, Nunatsiavut, and Greenland. At a time when the Arctic is warming at nearly four times the global average, the project documents how Inuit communities are adapting alongside polar bears, recognising the species not merely as an object of study but as a cultural keystone integral to spiritual identity, food security, and ancestral livelihoods.



Olivia Andrade De Almeida present Nanuk Narratives

Olivia emphasised that the project is anchored in a sustained dialogue between Western scientific frameworks and Indigenous knowledge systems. While scientific estimates of the Davis Strait polar bear subpopulation have varied, ranging from approximately 700 bears in the 1970s to around 2,015 in the 2017–2018 survey, Inuit knowledge holders offer a more localised and experiential perspective. Elders and hunters from communities such as Inukjuak and Pangnirtung consistently report an increase in bear abundance and an expansion of their geographical range since the 1970s. These differing assessments underscore the importance of the project’s place-based approach, which combines contemporary scientific tools, including non-invasive genetic biopsy mark–recapture methods, with multi-generational observations grounded in everyday lived experience.

Olivia further highlighted that the project’s methodology is as consequential as its findings, with a strong emphasis on the co-creation of knowledge through video storytelling. Working in partnership with local filmmakers and organisations such as the Torngat Secretariat and regional Wildlife Management Boards, the initiative produced a docuseries of more than twenty short films released in late 2024. These films document a wide spectrum of Inuit experiences, ranging from hunting practices and tracking skills to survival encounters with bears, as well as communal traditions of preparing and sharing harvests. By privileging film

as a primary medium, the project honours Inuit oral traditions while making their knowledge accessible to researchers, policymakers, and wider audiences.

Ultimately, Nanuk Narratives advances a holistic vision of environmental stewardship rooted in respect, reciprocity, and adaptability. Beyond the film series, the project has developed a free online course aimed at supporting non-Inuit researchers in engaging ethically and responsibly with Indigenous knowledge systems. In documenting Inuit narratives across the Davis Strait, the initiative does more than monitor a species; it affirms a way of life and reinforces the principle that effective conservation must be shaped through shared understanding- one that values both scientific data and the lived wisdom of those who coexist with the Arctic landscape.

Tsilhqot'in Case Study

Following the presentations from Davis Strait, the conference moved to the presentation from the Tsilhqot region of British Columbia. Presented by Dr. Hall, this case brought into sharp focus the critical importance of adult education and the preservation of Indigenous knowledge systems. One of the core concerns that was raised during the presentation was the profound loss of traditional knowledge – a symptom of what was termed the "rogue primate" phenomenon, where humanity has become dangerously disconnected from the natural world. This loss is particularly acute within Indigenous communities, yet their wisdom offers vital solutions to contemporary global crises.

He shared a bit about the region, the Tsihlqot people of British Columbia, and elaborated on their preservation and application efforts. The project's success is deeply rooted in the fact that the participating group is Tsilhqot-speaking, underscoring the intrinsic link between language, identity, and the transmission of knowledge. This traditional wisdom is being actively deployed to mitigate the devastating effects of climate change, specifically concerning water management and the escalating threat of forest fires.

The case study revealed that modern, scientifically-driven approaches to forest fire management are often insufficient, and deforestation has ironically contributed to the problem's severity. In contrast, Tsilhqot traditional knowledge offers sustainable, holistic methods for health and safety. The project's methodology is deeply embedded in Indigenous research methods, utilizing practices like healing circles and traditional teas, which foster a deeper, more comprehensive understanding of wellness.

The presentation ultimately culminated with strong recommendations, most notably urgent need for the establishment of wellness centers dedicated to the preservation, practice, and sharing of Indigenous knowledge. Such centers would serve as vital institutions for adult education, not merely to document what has been lost, but to actively integrate this invaluable wisdom into contemporary efforts to address ecological and social challenges, thereby beginning the essential work of decolonizing knowledge for a healthier planet.

Lastly Dr.Hall discussed about “International visibility” which he explained as getting in touch with other indigenous communities and sharing knowledge regarding climate resilience.



Dr Hall sharing the Tsihqot'in Case Study

The reflections were ultimately distilled into a set of core messages articulated by Dr Catherine Etmanski and Waldina Muñoz, such as the importance of the protection of environments and territories; the recovery and transmission of Indigenous knowledge systems and education; the affirmation of traditional sciences and medicinal knowledge; the articulation of locally grounded solutions to global challenges; and the central role of women in sustaining communities and ecosystems. Dr Etmanski further affirmed that the DECODE case studies offer concrete and verifiable evidence that Indigenous knowledge is valid knowledge.

This section powerfully underlined the core purpose of the DECODE knowledge project by empirically demonstrating how community and Indigenous knowledge systems- when engaged with respectfully, dialogically, and on their own terms, lead to deeply effective and contextually grounded outcomes for climate resilience.