Local Biodiversity Outlooks 2 - Draft 1

Draft prepared for submission to UN Convention on Biological Diversity, November 2019

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Part 1: Executive summary

Overview and introduction

Nature is decreasing worldwide at an alarming rate, and it is time to look to indigenous peoples and local communities to help find solutions.

This was one of the key conclusions reached in the IPBES Global Assessment of nature and biodiversity, released in Paris in May 2019. This conclusion reflects growing evidence of the role of indigenous peoples and local communities in combatting biodiversity loss and climate change. A large proportion of global land area is traditionally owned, managed, used or occupied by indigenous peoples, and most of the world’s most biodiverse areas are found within these lands. There is also mounting evidence that biodiversity is declining less rapidly on these lands than elsewhere. In addition, there are countless examples of collective actions by IPLCs to defend their lands against environmental degradation by outsiders and to manage the species, habitats and ecosystems that these lands contain.

Local Biodiversity Outlooks (LBO) presents the perspectives and experiences of indigenous peoples and local communities (IPLCs) on the current environmental crisis. The first edition was produced in 2016 as a complement to the Fourth Edition of the Global Biodiversity Outlook (GBO4) and has become a key source of data about current trends and about concrete options for action in the post-2020 period. In 2017, Parties at the 13th Conference of the Parties (COP13) welcomed preparation of a second edition, to be launched in conjunction with GBO5 in mid-2020. Local Biodiversity Outlooks 2 (LBO2) is being prepared in response to that request through a collaboration of the International Indigenous Forum on Biodiversity (IIFB), the Indigenous Women’s Biodiversity Network (IWBN), the Centres of Distinction on Indigenous and Local Knowledge (COD-ILK), Forest Peoples Programme (FPP) and the Secretariat of the UN Convention on Biological Diversity (SCBD). It brings together information from indigenous peoples, communities and community-based organisations around the world with information from published academic and non-academic sources.

The structure of LBO2 is set out below. Part II is the core of the document and follows a similar format to LBO1: it consists of 20 chapters, each of which presents the perspectives and experiences of IPLCs in relation to one of the 20 Aichi Biodiversity Targets. Each chapter includes a brief outline of what the target means for IPLCs, their contributions and experiences in relation to the target, and enabling conditions for and barriers to their actions. Every chapter presents a key message based on these sections and ends by outlining some opportunities and recommended actions for the post-2020 period.
LBO2 structure

- Part I: Introduction
- Part II: Progress during the UN Decade for Biodiversity 2011-2020
- Part III: IPLCs and the global agenda for biodiversity, climate change and the Sustainable Development Goals
- Part IV: Realizing the Vision: Enabling conditions for IPLCs’ contributions and innovations
- Part V: Transitions to a World in Harmony with Nature

Parts III, IV and V, which are new to this second edition of LBO, will build on the information assembled in Part II. Part III will illustrate the holistic views and approaches of IPLCs in addressing the inter-related crises in biodiversity, climate change, and the sustainable development goals. It will elaborate on how a human-rights based approach and an ecosystem-based approach can converge to provide solutions. Part IV consists of a deeper analysis of enabling conditions and leverage points for contributions and innovations of IPLCs. Part V builds further on this analysis to outline what is needed, from the perspective of IPLCs, in terms of the transformations needed to achieve the 2050 vision, based on integrated nature-culture solutions at multiple scales, from the local to the global.

Finally, a cautionary note: among Indigenous Peoples, it is a common protocol of respect that peoples be allowed to tell their own stories in their own ways. In a global assessment this is not possible. There are seven Indigenous regions recognized in the United Nations, and within these regions there is considerable diversity. It is precisely this diversity that we wish to protect and nurture, but that is difficult to reflect fairly in brief reviews.

Whilst these analyses reflect the experience of the writers and collators of Local Biodiversity Outlooks 2, and the views and policy recommendations that have been received from IPLCs across the world, readers should consult directly with those whose stories these are in order to understand their concepts, interpretations and needs, and ensure their direct participation in designing and implementing policies.
Part II: Progress during the Decade for Biodiversity 2011-2020: Key messages on the five Strategic Goals of the Strategic Plan for Biodiversity from the perspectives of IPLCs

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Respect for the natural world, reciprocity and ethical living are IPLC values that have much to contribute to addressing the underlying causes of biodiversity loss. Similarly, IPLCs’ local production systems offer alternatives to high-impact large-scale commodity production. Yet IPLCs continued marginalization in decision-making processes, and continued displacement on the ground, work to the detriment both of biodiversity and of local wellbeing. As a result, the potential gains to be made by building on their values and practices are being grossly under-realised. Biodiversity mainstreaming requires integrated, holistic planning, implementation and reporting across all sectors and cultures, including those of IPLCs. It also requires empowerment of IPLCs, women, youth and social actors as agents of change, innovation and transformation. As part of this process, radical action is required urgently to mainstream effective incentives and phase out those that are counterproductive.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Natural habitats, living resources and ecosystem services are declining at an alarming rate, partly as a direct result of the expansion of agribusiness and extractive industries. They are declining less rapidly in the lands and territories of indigenous peoples than elsewhere. But IPLC lands, habitats and biodiversity are still under great pressure and IPLCs in many countries are paying a high price for conserving their lands, with high levels of conflict, violence and loss of life. IPLCs are central actors in rural development and a radical transformation in governance is required that fully recognises their role and contributions, which are currently underreported and undervalued. Measures are needed to secure their land and water tenure, to uphold their resource rights, and to develop and upscale innovative multi-stakeholder collaborations for adaptation to change, based on co-production of knowledge. This will also require the reversal of long-standing laws, policies and programmes that are barriers to their effective actions.

Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Given that at least 50% of the global land area is held under customary or community-based regimes, and in the light of mounting evidence that these areas conserve biodiversity effectively, a major opportunity to boost global conservation is being missed under current conservation regimes. The proportion of land and oceans designated as protected and conserved areas is likely to reach the 2020 target, but progress on effectiveness and equity lags far behind. This has resulted in continued conflict with IPLCs, both in relation to state protected areas, and more widely in relation to the mainstream concept of conservation. IPLCs have their own diverse concepts and values to do with the natural world. Relational values, not instrumental ones, often motivate them to protect and restore threatened species. They have also nurtured agricultural biodiversity for millennia - for food and medicines and also based on deeper spiritual and cultural relationships. A radical transformation in conservation policy and practice is needed: from conservation that excludes and alienates IPLCs to
rights-based and collaborative approaches that build on their traditional knowledge and practices and their strong relationships with their traditional lands and territories. Partnerships must ensure mutual respect, reciprocity, benefit-sharing, and accountability. Given that root causes of environmental degradation change over time, it is also important to recognise that IPLCs have long experience of adapting to change and will best navigate the turbulence if their territorial and species management systems are respected.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

The lands and territories owned, used and occupied by indigenous peoples cover a large part of the world’s remaining natural and semi-natural ecosystems and habitats, and therefore provide critical benefits to all in terms of biodiversity, ecosystem services, and nature’s contributions to people. At least 293,061 million metric tons of carbon are stored in the collective forestlands of IPLCs and despite recent evidence of unprecedented climate change impacts around the world, these systems still play a vital role in maintaining carbon stocks and in climate change mitigation and adaptation. Supporting IPLCs to safeguard these ecosystems is a top priority, requiring land tenure security. At the global level, embedding the Nagoya Protocol within a holistic post-2020 biodiversity framework, implemented in synergy with other global instruments, opens new opportunities for multiple benefit-sharing arrangements with IPLCs. Innovative approaches include respect and legal recognition for diverse community protocols and customary law.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity-building

Over the past ten years there has been increased recognition in global policy and mounting evidence about the role and contributions of IPLCs in maintaining biodiversity and healthy ecosystems. Increased collaboration between governments, scientists and IPLCs has strengthened our overall knowledge base about biodiversity values, functions, status and trends. Yet this is still poorly reflected in most national planning and reporting processes and in many national laws, policies and programmes. Financial resources to support IPLCs’ actions remain largely ad hoc, local in scale, and insecure. Appropriate institutional mechanisms to ensure due recognition and respect for traditional knowledge, innovations and practices, and to foster IPLCs’ full and effective participation in biodiversity strategies and action plans at all scales, are essential to ensure effective post-2020 progress. Bridging diverse knowledge systems at different scales and integrating indicators relevant for IPLCs in monitoring systems require a fundamental change in programming and capacity-building. At the same time funding needs to become more accessible for IPLCs, through greater information-sharing, a review of technical requirements, a greater prevalence of small grants schemes and a greater proportion of funding earmarked for IPLCs.
PART III: Biodiversity, climate and sustainable development

Biodiversity is declining at an unprecedented rate, and none of the Aichi Biodiversity Targets has been fully met. This in turn threatens the achievement of the Strategic Development Goals (SDGs) and climate-related goals. Major gaps are still evident in relation to integrating IPLCs’ values and traditional knowledge into development policies and programs, and in terms of inclusion of IPLCs in processes and in planning of the development agenda. Democratic and open planning processes could foster diverse local economies and resource management systems, sacred relationships with nature, customary governance institutions building community solidarity and resilience and fairness and equity across society. The positive contributions of IPLCs to sustainability can be facilitated through national recognition of land tenure, full application of FPIC requirements, special measures to address IPLCs’ distinct needs, and fair and equitable benefit-sharing from use of IPLCs lands, resources, ecosystem and cultural services and knowledge.

The transformative agenda of the SDGs aspires to “leave no one behind” and therefore should not repeat negative experiences on national development processes and further marginalization of the poor and excluded groups. Rather, to take this opportunity to scale up at all levels, addressing inequalities long suffered by IPLCs, women and youth, protecting and enhancing nature’s contribution to people and taking urgent actions to combat climate change in partnership with IPLCs.
PART IV: Realizing the vision: Enabling conditions for IPLCs’ contributions and innovations

Myriad collective actions contributing to the objectives of the Convention, to achieving the SDGs and to address climate change are carried out on a daily basis by IPLCs. However, these are local and are not able yet to make the difference needed to achieve Vision 2050. Leverage points that would enable IPLCs to significantly upscale their contributions include:

- **Secure their rights to land, territories and resources.** At least 25 per cent of the global land area in traditionally managed, owned, used or occupied by indigenous peoples and when local communities are included; land tenure security would strengthen their capacity, determination and commitment to sustainably use and conserve these areas and to protect them from unsustainable development.

- **Embrace and support diverse visions of a good life** based on values leading to “living in harmony with nature”. Develop policies, laws and programmes to support and multiply IPLCs’ visions and practices such as Lifeplans and “buen vivir”, based on values of respect, reciprocity, mutuality, common good.

- **Promote culturally-appropriate education**, building on indigenous and local knowledge.

- **Respect and promote diverse knowledge systems**

- **Reduce inequality and promote equity.** Promote gender equality and inter-generational equity. Address discrimination through use of indicators and collection of disaggregated data on social status, gender, age and location, indigenous identity and ethnicity. Establish proper baselines, develop and implement targeted policies to address the well-being of the most vulnerable, and monitor progress on “leaving no one behind.”

- **Promote inclusive and participatory (environmental) governance**

- **Adopt and implement a human rights-based approach**

- **Practice justice and inclusion in conservation**

- **Implement holistic planning and management.** Mainstreaming should imply holistic and joined up planning, implementation and reporting across government, economic sectors and society, building on ecosystem and human rights approaches.

- **Promote and support partnerships.** Partnerships will be vital at all levels, from among IPLCs to widely among all relevant actors.
PART V: Transitions to a World Living in Harmony with Nature

Achieving the 2050 vision is predicated on integrated nature-culture solutions at multiple scales, from the local to the global. Diverse cultures and values shape individual and collective relations with nature and inform day to day behaviour and practices. Making progress towards societies living in harmony opens up opportunities for broad nature-culture dialogues across societies. In this dialogue, the values, cultures, rights and wellbeing of IPLCs should be key indicators in measuring progress towards social and cultural transformation.

A radical shift in conservation policy and practice from excluding and alienating IPLCs towards embracing IPLC land and waters as territories of life, respecting their rights and building on their traditional knowledge, practices and institutions. IPLCs are critical, permanent partners in environmental governance at all levels, including in renewed planning, monitoring, reporting and review of commitments in the post-2020 global biodiversity framework.

Actions by governments will strongly determine success at local and global levels. An enabling policy environment at the national level is critical. State recognition of IPLCs’ customary land tenure systems and support for traditional resource rights and collective actions in the next decade will be fundamental building blocks towards greater success in the future. Empowering the agency and voice of IPLCs, women and men, elders and youth will mobilise their collective actions as key actors for change.

IPLCs are working on mutual inter-generational learning between elders and youth, valuing the contributions of women and men, and transforming educational systems to include indigenous values and contributions to nature and society. Revitalization of indigenous food and production systems alongside broad social movements for food sovereignty and agroecology and giving greater value to local small-scale sustainable production will contribute to transformation in unsustainable global agro-industrial food and production systems.

Building bridges across sciences and indigenous and local knowledge systems will strengthen the knowledge base for decision-making. Inclusion and use of indicators relevant for IPLCs, and support for community-based monitoring and information systems will be important tools in strengthening adaptive management leading up to 2050. Redirection of funding, programming and capacity-building towards significant support for IPLCs collective actions in the coming decades will sustain equitable partnerships in the post-2020 global biodiversity strategy.
Part 2: Aichi Biodiversity Targets

Target 1: Awareness of biodiversity increased

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Key message

Values and cultures shape individual and collective actions towards living in balance with nature. Respect, reciprocity and ethical living are IPLC values central to sustainable societies, fostered in culturally sensitive learning spaces, community-based nature and cultural activities, inter-generational learning programmes and co-production of knowledge products. Inclusion of indigenous and local knowledge in school curricula, youth programmes, information and education campaigns, social media and public communications are important for raising broad public understanding about the linkages between biodiversity values and cultural values across society.

What does this target mean for IPLCs?

“Lack of public awareness contributes to the relatively low political priority given to biodiversity issues.” This view parallels the lack of deeper understanding about the multiple values of biodiversity, which is one of the main drivers of the current conservation crisis.2 “Monetary valuation of biodiversity and [nature’s contribution to people] NCP is increasingly emphasized in policy reports whereas the intangible benefits of biodiversity continue to be largely overlooked.”3 (See Target 14) This is further linked to the cultural and economic pressures that threaten IPLCs connections with their environment contributing to the erosion of their knowledge and values.

But IPLCs have been active in revitalizing and protecting their knowledge and values through intergenerational learning and knowledge-sharing within their communities. These initiatives help in the general awareness of biodiversity, which can also help in having their values to nature and its contribution properly recognised and reflected in policies.4

Awareness is a crucial initial step towards recognition, understanding and respect as “[y]ou cannot value what you do not know.”5 Awareness of IPLCs’ values and knowledge regarding sustainable use

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1 Quoted from Dr. Stanley Asah of the University of Washington at a side event at WGRI5 in Montreal, Canada. Watch his (interactive) presentation on https://www.youtube.com/embed/oKrTkwbM0yg
2 IPBES report Chapter 3, p. 61.
3 IPBES report Chapter 3, p. 61
4 See Target 14 and Mainstreaming indigenous and local communities’ connections with nature for decision-making policies Sangha et. al (2019)
5 “We base our activities on the principle that you cannot value what you do not know and therefore our work has focused on explaining what biodiversity is in order that people should be familiar with all its components and their interrelationships.” Florina Lopez, Coordinator of RMIB-LAC From LBO1
and conservation of biodiversity is vital not only for IPLCs’ own revitalisation of their knowledge and values but also towards better recognition and respect for their contributions as effective solutions to biodiversity concerns. Awareness-raising within IPLC communities through ensuring their values and knowledge are kept alive and transferred to younger generations as among the initial crucial first steps for achieving and going beyond the objectives of this Target. These initiatives within IPLCs are crucial in wanting to also raise the awareness of general public outside their communities.

Contributions and experiences of IPLCs towards the target

IPLCs initiatives on intergenerational learning and transmission of knowledge address contemporary revitalization of their values and contribute in achieving this target. Specific activities include inter-generational learning programmes, creating culturally sensitive learning spaces, community-based nature and cultural events, co-producing educational resources and indigenising of curriculum in partnership with the government.

Creating culturally sensitive learning spaces and cultural events:

• In Malaysia, through the help of an indigenous organisation called Partners for Community Organisation in Sabah (PACOS) Trust, 6 community learning centres are being set up, responding to requests from villages. Around 22 active centres throughout Sabah and Sarawak have been established since the project started in 1993. The centers aim to introduce community kindergartens where the teachers and students are the villagers themselves. Today, many of the centres act not only as kindergartens but also as libraries and spaces for community engagements and activities such as talks, village meetings, workshops, and relief centres. PACOS helps to design and develop the centre while the villagers ensure its completion, maintenance and full usage.

• International Day of the World’s Indigenous Peoples is celebrated annually on August 9, providing a common time and space for many indigenous communities to share their knowledge and values within their communities and with others through cultural and food festivals e.g. Suriname, Cambodia, northeast India, while Vietnam and Timor-Leste held workshop on mother tongue and its inter-generational transfer. Some, like Bangladesh and Nepal, organised roundtable discussions and meeting with government officials. 7 In USA, there is a rise in appreciating the significance of celebrating Indigenous Peoples Day in place of Columbus Day. Around 10 states (i.e. Alaska, Louisiana, Maine, Michigan, Minnesota, Nevada, New Mexico, Oregon, South Dakota, Vermont Wisconsin) observe some version of Indigenous Peoples Day, along with more than 100 cities, including Washington D.C. 8

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6 More on PacosTrust: https://pacostrust.com/about/who-are-we/
7 See link for celebrations of IP day in some countries in Asia: https://iphrdefenders.net/the-international-day-worlds-indigenous-peoples-2019/
Case study: Environmental Leadership Workshops for Indigenous Youth in Mountain Province, Philippines

By Josefa Cariño-Tauli, Ibaloi-Kankanaey indigenous youth from the Philippines

Many indigenous youth-led and indigenous youth-targeted initiatives are contributing to achieving the Aichi targets. With a group of friends, we organised a series of seminar-workshops for senior high school students in the municipalities of Besao and Sagada on environmental leadership and the role of indigenous youth in biodiversity conservation and sustainable use of biodiversity. This was done under Conservation International’s Indigenous Leaders Conservation Fellowship 2017. The workshops started with a session to appreciate the rich Philippine biodiversity, followed by case study presentations on youth-led environmental projects in the country, which was followed by sessions providing guidance on planning and managing environmental advocacy projects implementable by youth. Students were then grouped and tasked to come up with their own initiatives and pitch them to the group. Everyone came up with commendable plans providing solutions to environmental issues they observe in their municipality—from songs written in the indigenous language to raise awareness on the effects of climate change, to gardens and greenhouses for indigenous medicinal plants, to educational guided nature walks around the municipality. This shows that indigenous youth take to heart their role as inheritors of the land and resources passed on to them by their ancestors as well as the indigenous knowledge systems and practices which we rely on greatly in achieving our 2050 vision, while having great potential to innovate culturally-appropriate solutions to emerging environmental problems. This initiative is called Project Tawid, “tawid” being a Kanakanaey word meaning “heritage”—and many indigenous youth know and appreciate that our land, our resources, and our culture are our heritage from ancestors which we pass onto the next generations.

Co-producing educational resources and indigenising of curriculum

- In Russia, the world’s first nomadic kindergarten was initiated by reindeer herders and their communities in Yakutia in 1992. The initiative is designed with the teachers moving with the herders as they travel across the tundra. At that time, Yakutia was very autonomous (now, it is an autonomous okrug) from the Federal Government and the communities did what it considered necessary for their children. Local authorities supported the initiative and allocated money for teachers' salaries but all other expenses (e.g. transportation, gas, accommodation, study chum, special books, training consumables) were covered by the communities themselves. By the end of the 1990s, there were 7 nomadic schools in Yakutia. In the beginning of the 21st century, their initiative was gradually replicated in other Arctic regions of Russia i.e. the Yamal-Nenets and Khanty-Mansi Autonomous Districts, in the Republics Komi and Sakha and in the Arkhangelsk region. Since 2003, these schools begin to receive small support from UNESCO and foreign foundations, which also gave access to the

Leila Fadel. 14 October 2019. Columbus Day or Indigenous peoples’ Day? (see: https://www.npr.org/2019/10/14/769083847/columbus-day-or-indigenous-peoples-day)
international arena to popularise and raise the status of these schools. The international attention has led to the allocation of more funding within the regions and authorities themselves. The schools have shown excellent results and raised the awareness in the significance of reindeer herders leading a nomadic lifestyle.\textsuperscript{9}

\textsuperscript{9} Story contributed by Polina Shulbaeva, Russian Indigenous coordinator for IIFB at the CBD process/Center for support of indigenous peoples of the North (CSIPN); See also: https://tass.com/economy/941370>> list of case studies has the same information as in this link. See also: https://www.sdwg.org/activities/sdwg-projects-2017-2019/arctic-preschool-education/;
Case study: Salmon Conservation, Indigenous Education, and Knowledge Co-production in Kamchatka

By Tatiana Degai of Council of Itelmens “Tkhsanom”

Kamchatka peninsula on the North Pacific coast of Russia is home to 12 species of salmonid fish including six species of Pacific wild salmon. It is the last region that “can be considered as a global reserve of the gene pool and natural reproduction of salmon.” Salmon is the wealth of Kamchatka and its peoples and its sustainability determines the economic, spiritual and cultural domains of local life. Indigenous communities in Kamchatka concerned with the ecological situation around salmon actively worked on ethno-ecological education from 2004 to 2016, together with an indigenous NGO “Ethno-Ecological Information Centre “Lach”. I coordinated educational programmes fostering awareness and understanding about contemporary threats to salmon and its environment in three directions:

1) Creative Ethno-Ecological Contests were organized to introduce children and their parents to study traditions of their ancestors associated with respect for the environment through literature and art. Several literary and art contests for Kamchatka children were organized. In their submissions, participants vividly highlighted the problem of poaching in various regions of the peninsula, referred to traditional subsistence fishing and portrayed the rational use of the natural resources in their home areas. The organizers sought to ensure that the children began to cooperate with the elders, writing down their stories and legends related to salmon.

2) Through Ethno-Ecological Youth Camps and Festivals, we tried to raise awareness about the environmental issues of the peninsula. During these camps indigenous youth studied the biology of salmon, its habitat, monitored spawning rivers and the ecological state of the environment, also enhancing knowledge sharing between elders and the youth. The Salmon Keepers Festivals were organized in the villages to follow the camps, so camp participants had a chance to share what they have learned with their families and friends.

3) A number of Ethno-Ecological Publications for Children and Their Parents were published and shared among schools and libraries in Kamchatka. These publications brought together indigenous and scientific knowledge about salmon in an entertaining, yet educational way. These are activity books that introduce young readers to the world of salmon, its lifecycle, its place in indigenous cultures and cultural values.

Our program directly co-relates with UN SDG #4 on inclusive and equitable education. Many children on our planet do not have access to formal education providing the basic skills, and in many places, children and youth are deprived of their right to indigenous education on how to live on their homelands in balance with the self, community, and the environment. If we want to achieve visible results in reaching SDGs, this gap should be seriously considered in planning post 2020 agenda. In this process one should not underestimate the role of ethno-ecological education that offers expertise from both indigenous and western knowledge systems.
Case study: TAWID Indigenous Knowledge Learning Festival
Contributed by: Partners of Indigenous Partners in the Philippines (PIKP)

On August 28-31, 2019, 100 indigenous educators from schools and communities converged for the celebration of TAWID Indigenous Knowledge Learning Festival. In attendance were Department of Education (Dep Ed) officials with key roles in Indigenous Peoples Education (IPEd), teachers and principals from public and private schools, state colleges and universities. Equally represented were NGOs, people’s organizations and individual artists, writers and artisans to share their community-based initiatives for the transmission of indigenous knowledge.

Indigenous Peoples Education (IPEd) in schools
Recent Philippine education policies open opportunities for the teaching of indigenous knowledge in schools. Department of Education Order 62, series of 2011, recognizes the right of indigenous peoples to culture-rooted education. Dep Ed Order 32, Series of 2015 adopts the Indigenous Peoples Education Framework that provides guidance to schools as they engage with indigenous communities in localizing, indigenizing and enhancing the curriculum.

Saint Mary’s School of Sagada, Mountain Province, is now in their third year of doing heritage mapping, as a requirement for students in research classes. In line with the school’s principle of student-centered learning, students are given the opportunity to go to the community, join in traditional community activities in agriculture, sleep in the dap-ay and do foot massage for the elders while interviewing them on a subject of their own choosing. These experiences show that youth have the energy and thirsting to learn when given a push to visit their elders. These learning activities are documented in field notes and research papers which are then compiled into newsletters made available to the school and to the community.

The Department of Education has drafted a roadmap for the implementation of IPEd in the region, so that each school in each district will be able to localize, indigenize, and enhance the curriculum. However, many schools face challenges in getting IPEd off the ground, such a limited knowledge and appreciation for IK among teachers and students; lack of contextualized learning materials; and fundamentalist religious beliefs held by teachers who are tasked to implement IPEd in the school.

Community-led initiatives for the transmission of Indigenous Knowledge
Meanwhile, outside the schools, there is a growing, vibrant movement to revitalize the indigenous culture and the values of caring for the land and community, and respect for the unseen; and to strengthen the transmission to the younger generations.

TAWID Indigenous Knowledge Learning Festival featured fourteen Indigenous Learning Stations showcasing community-led initiatives to strengthen and promote the learning of Indigenous Knowledge. These included the Schools of Living Tradition in Wangal, Trinidad, Benguet and Loakan, Baguio City; heirloom recipes and indigenous health, the traditional crafts of weaving and woodcarving; performances of indigenous music, dance and visual arts; exhibit and talks on the making of comic books and other publications; community radio and film shows. It was a grand display of the wide range of indigenous learning activities going on in communities. It showed the possibilities for youth-friendly learning, that could be adapted in schools.
Towards stronger partnerships

Teachers expressed their pleasure in being invited to the learning festival, because their questions on IPEd were answered. Many teacher participants were newly appointed as IPEd Coordinators for their school, and they said it helped them make concrete plans for IPEd in their schools. Some principals plan to include indigenous weaving to be offered as a track in Senior High School. Many teachers found the community led initiatives inspiring and practical and to possibly adapt these for their schools.

On the other hand, the community educators saw the great potential of partnering with schools, as their initiatives could be integrated into school IPEd learning activities and thus scaled up. All in all, it was a great learning event and the start of stronger partnerships between school based and community-led indigenous learning.

Enabling Conditions and Remaining Barriers

▪ Initiatives of indigenous peoples regarding intergenerational knowledge transfer and production of knowledge products can be more sustainable with the availability of institutionalised political opportunities supportive of revitalisation of IPLC knowledge and values, including continuous direct funding to indigenous organisations conducting these initiatives.

▪ The economic utilitarian valuation of nature is a significant barrier to continuation and protection of IPLCs knowledge and values.

Opportunities and Recommended Actions for Post-2020

Governments and intergovernmental institutions:

▪ Institutionalise political opportunities that support and protect IPLC knowledge and values, including creating safe spaces for IPLCs to share their knowledge and values with regards to nature conservation and sustainable use

▪ Strengthen the inclusion of IPLCs in governance through enhanced processes of knowledge coproduction at local, national and global scales

▪ Explore multiple valuation of nature and its contribution in consideration of IPLCs knowledge and values and incorporate it in policies and programmes

Funding institutions and international NGOs

▪ Continuously provide support and facilitate partnerships between IPLCs with governments with regards protection and promotion of IPLC knowledge and values

Key resources

TBC
Target 2: Biodiversity values integrated

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Key Message
Assessments of poverty reduction strategies to date highlight continuing marginalisation of the poor, including IPLCs in policy and decision-making processes on sustainable development. Those “left behind” call for democratizing decision-making to include diverse biodiversity and cultural values essential for ecological and social justice. Biodiversity mainstreaming should imply holistic and joined up planning, implementation and reporting across government, economic sectors and society, prioritising efforts to empower IPLCs, women, youth and social actors as agents of change, innovation and transformation.

Why is this relevant to IPLCs?
Integrating IPLCs values in national accounting, planning and reporting systems is fundamental to fostering innovative nature and culture-based solutions. Legal pluralism, respect and recognition of customary law, diverse health traditions, diverse educational institutions and diverse local economies and traditional livelihoods are values that should be embedded in all aspects of governance and planning, consistent with biodiversity mainstreaming. Engagement of IPLCs is needed in all phases of a project cycle.

In the Rio+20 Political Declaration, one of the global commitments made is “to enhance the welfare of indigenous peoples and local communities, other local and traditional communities and ethnic minorities, recognising and supporting their identity, culture and interests and avoid endangering their cultural heritage, practices and traditional knowledge and preserving and respecting non-market approaches that can contribute to the eradication of poverty.”

The IPBES Global assessment underscores the multiple values of biodiversity as the foundation of economies, livelihoods, food security, health, and quality of life worldwide [and therefore], needs critical action for its restoration and further damage from all. “The Report also tells us that it is not too late to make a difference, but only if we start now at every level from local to global, emphasized by former IPBES Chair.” A ‘transformative change’ is required to effect better implementation of goals and targets of development with a conscious effort to have a “fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.”

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11 IPBES.
12 IPBES.
Nature is under increasing pressure especially in the lands of IPLCs and this reinforces the aspirations by IPLCs (as already indicated in LBO1) that decision-makers and development planners and bureaucrats will shift gear and increase efforts on small initiatives like supporting diverse economies, incorporating traditional knowledge and values and mainstreaming customary governance systems among others. The IPBES Summary for Policymakers of the GA reveals that, transformations toward sustainability are more likely to happen when efforts are directed in “unleashing existing, widely-held values of responsibility to affect new social norms for sustainability, especially by extending notions of responsibility to include impacts associated with consumption;... accounting for nature deterioration from local economic activities and socioeconomic and environmental interactions over distance (telecouplings – e.g. international trade);... promoting education, knowledge generation and the maintenance of different knowledge systems, including the sciences and indigenous and local knowledge, regarding nature, conservation ad sustainable use.”

Engaging IPLCs as partners throughout the strategic planning cycle opens democratic space for building partnerships, ownership and legitimacy for sustainable development plans. Plural valuation of nature is enhanced by the diversity of IPLCs cultural values - where material and spiritual worlds are often woven together and imbued with use and meaning.

Contributions and experiences of IPLCs towards the target

IPBES GA found that on ABT 2, despite numerous advocacy efforts from IPLCs about environmental governance based upon reciprocity among communities, little or no progress has been achieved in the inclusion of IPLCs biodiversity values into development or poverty reduction. An example is the case of Standing Rock Sioux Tribe members who tried to communicate the importance of their territory in maintaining water flows and local biodiversity levels, but priority has been given to the construction of an oil pipeline that crosses sacred lands.

Other experiences on how some communities managed to mainstream biodiversity values into national development and conservation policies with noted challenges are cited in the IPBES GA and related sources. At the national level, Ecuador and Bolivia have mainstreamed into national development and conservation policies the rights of ‘Mother Earth’ in their constitution. Similarly, New Zealand has taken a bold step when it explicitly granted legal personhood to three environmental landscapes- Te Urewera National Park, the Whanganui River, and Mt. Taranaki. New Zealand is one of the first countries to give mountain, river and national park legal personhood status. India’s Uttarakhand High Court also granted the same legal personhood to the river Ganges. Pittsburgh, USA, has incorporated rights of nature to protect it from fracking and mining after strong

13 IIFB, FPP, and SCBD, Local Biodiversity Outlooks.
community organizing that demanded the passage of the law. While there are progressive and unconventional laws passed to protect the rights of nature, the challenge of representation on behalf of ecosystems in the courts is found to be difficult. Another challenge is simplification of IPLC value systems, when relational values are reduced to rights of nature.

Territorial management and community economies have been strengthened when IPLC principles and values like *Sumak Kawsay* (living well) or *Buen Vivir* (living well in harmony with nature) are observed and enabled; highlighting local sources of food and livelihoods, community solidarity and resilient ecosystems.

Recognition of IPLCs authority, territory, institutions and cognitive and spiritual characteristics is also exemplified by Bolivia when it recognized its local communities in its State policy. At the regional level, the experience of the Arctic Region demonstrates a consolidated effort of communities in the region being granted permanent participants status in the Arctic Council to engage and interact closely with the government and participate in negotiations and decisions. One of the positive gains in this engagement is being able to participate in the development of Environmental Impact Assessment. The Arctic Council has been awarded the 2019 Global Award of the International Association for Impact Assessment (IAIA) in recognition of its efforts for the implementation of the Paris Agreement on climate change and SDGs and its proposal for an Arctic specific environmental impact assessment tool integrating public participation.

21 TEBTEBBA, “Indigenous Peoples Contributions to Sustainable Development.”
Case study: Cultural Poverty: a Dayak Perspective

Seven principles summarize the way in which the Dayak achieve their ideal of life, based on their cultural values:

1. Sustainability (biodiversity) versus productivity (monoculture)
2. Collectivity (cooperation) versus individuality (competition)
3. Naturality (organic) versus engineered (inorganic)
4. Spirituality (rituality) versus rationality (scientific)
5. Process (effectiveness) versus result (efficiency)
6. Subsistence (domesticity) versus commerciality (market)
7. Customary law (locality) versus state law (global)

Failure to achieve these ideals is believed to result in barau (Jalai Dayak): a situation when nature fails to function normally, and thus results in chaos. Barau is a result of Adat transgression, a broken relationship with nature.

“Poverty” for the Dayak is linked directly with failure to exercise the Adat that governs the way in which the people should live.

From: John Bamba “Seven Fortunes and Seven Calamities”

Source: Indigenous peoples, Human rights and Poverty by Joji Carino, Indigenous Perspectives, Volume 7, Number 1, April 2005. Published by Tebtebba Foundation

In addition, the Global Partnership and the International Indigenous Peoples Forum on Climate change (IIPFCC)23 engaging in the UNFCCC process have consistently argued and asserted the inclusion of non-carbon benefits (NCBs) in REDD+ implementation. In the submission on Providing Incentives and Addressing Methodological Issues Related to NCBs resulting from the Implementation of REDD+ Activities made by the IIPFCCC25 it was reiterated that REDD+ implementation should not only focus on reducing emissions from forest degradation and deforestation but the implementation of conservation, sustainable management of forests and enhancement of forest carbon stocks... that forests cannot be valued only in relation to the carbon benefits that these provide...the way forests

23 The IIPFCC is the indigenous peoples’ caucus, which regularly meets during UNFCCC processes to unite on common positions of indigenous representatives coming from the Africa, Arctic, Asia, Latin America and the Caribbean, North America, Pacific and Russia/Eastern Europe/Transcausia.
24 The NCBs were introduced in REDD+ at the UNFCCC COP16 conference in Cancún 2010. The Cancún Safeguards Agreements determined that REDD+ activities should enhance social and environmental benefits, incentivize the conservation of natural forests and their ecosystem services, and promote effective forest governance mechanisms. The Cancún Agreements also recognize that the UNFCCC Parties are obliged to fully respect human rights and, particularly, the rights of indigenous peoples in all climate-change related decisions and actions. Source: https://www.iwgia.org/images/publications/0639_REED_Final_solved_eb.pdf
25 The full document can be accessed from: http://www.tebtebba.org/index.php/content/293-submission-on-non-carbon-benefits
have been commodified and reduced to single values, e.g. timber, carbon, among others, is one of the root causes of the gross mismanagement and destruction of forests and violations of indigenous peoples rights to their forest ecosystems and biodiversity. Such multiple ways to incentivize REDD+ is considered as an opportunity to broaden forest policy objectives beyond carbon to promote sustainable forest management and conservation, enhance carbon sinks and address the many direct and indirect drivers of deforestation and forest degradation.
Case study: Good Practices for Environmental Impact Assessment and Meaningful Engagement in the Arctic
A project of the Arctic Council Sustainable Development Working Group (SDWG)¹

Finland lead the project “Good Practices for Environmental impact Assessment and Meaningful Engagement in the Arctic – including Good Practice Recommendations” under the auspices of the Sustainable Development Working group during the Finnish chairmanship of the Arctic Council 2017-2019. The first attempt to do so was the Arctic EIA Guidelines from 1997. Each Arctic state already has national legislation on EIA.

The Arctic is undergoing rapid environmental and economic change connected with climate change. The ongoing warming has made the region more accessible; for example, melting ice and longer periods of open water are resulting in longer marine shipping seasons. There are many areas where the growing interest in the north and its resources is evidenced through an increase in the number of large-scale infrastructure and natural resource development (e.g., mining and oil extraction) projects. If the planning and design of such projects are not done in a competent and respectful way, Arctic ecosystems and their people would be harmed seriously and the project itself does not benefit. EIA as a planning tool can help to balance environmental and economic considerations and facilitate making sustainable development decisions in the context of the changing Arctic.

The aim of the project was to improve the application of EIA in the Arctic region and to identify a common framework across the Arctic. The project focused on issues that were found to be Arctic specific, or that deserve additional emphasis compared to the earlier guidelines and in the general EIA framework in the states. The findings of the project are gathered in the report for wider application.

The project developed five recommendations for good practice:

1. Seek true dialogue to meaningfully engage
2. Utilize Indigenous knowledge and local knowledge
3. Build internal capacity and provide resources to meaningfully engage in EIA
4. Allow EIA to influence project design and decision-making process
5. Strengthen circumpolar cooperation on transboundary EIA

During the development of the Arctic EIA report, the Arctic Indigenous Peoples emphasized that models for meaningful engagement are important. Early engagement in the various processes is essential. The Arctic EIA project identifies several models of meaningful engagement of Indigenous Peoples: Indigenous-led Impact Assessment, Indigenous Knowledge-based Impact Assessment, Specific Impact Assessments (Health-, Ethnological- and Cumulative Impact Assessment) and Collaborative Mitigation.

For the purpose of this report meaningful engagement refers to a process of participation that is promoting and sustaining a fair and open dialogue. It recognizes the needs, concerns and values of the public and provides the public a genuine opportunity to influence decisions made during EIA.¹

The Report presents 17 cases which are meant to highlight elements considered by the team as good practices. One of the cases is on the expansion of Raglan Nickel Mine in Arctic Quebec, Canada.
This case represents an Indigenous co-developed impact assessment assuring meaningful engagement and utilization of Traditional Knowledge. The Raglan Nickel Mine in Arctic Quebec has been in operation since 1997 and is currently owned and operated by Glencore. In 2016 the company proposed to extend the mine life by over 20 years, until 2041. A Committee was formed to review the environmental and social impact assessment measures of an extension project, as drafted by the proponent. The committee was comprised of participants from the Inuit Parties (land claim Inuit organization, Makivik Corporation and two Inuit communities in close proximity to the project, Salluit and Kangiqsujuaq) and from the proponent, with a mandate that was co-developed by their respective senior leadership. Makivik and Glencore funded the process.

The Impact assessment review was done in cooperation with the proponent and the Indigenous government. The joint review allowed the Inuit and the company to integrate cultural information, revise the project, co-develop mitigations and monitoring measures, and jointly define levels of significance for each impact after mitigation and eventually settle on a decision with support for the project development. The case is also an example of a retrospective impact assessment that looked at changes that had occurred during the existing project’s lifetime and compared them to predictions made prior to the project’s approval, as well as (in cases like this where an expansion changed the original project) provided valuable insight into the ways that project management and monitoring should be changed in the future.

Following-up on positive gains mentioned, IPLCs have moved forward in the development of indicators relevant for indigenous peoples especially in monitoring UNDRIP and commitments of governments in the implementation of SDGs and the WCIP document. As also seen in the development of Indicators relevant to IPLCs one of the achievements was the adoption of traditional knowledge indicator, which is trends in which traditional knowledge and practices are respected through their full integration, safeguards and full and effective participation of IPLCs in the national implementation of Strategic Plan. In relation to this, the Indigenous Navigator (IN) is launched in 2014 as a framework and set of tools for indigenous peoples to systematically monitor the level of recognition and implementation of their rights. A questionnaire was used as a tool to gather relevant data at the community level. Together, the data highlighted how the implementation of laws and policies – and absence thereof – impacts their lives and integrity. It serves as a framework through which indigenous peoples can monitor their rights and development.

Outstanding indicators included in the IN related to target 2 include: (1) National action plans developed by States, in consultation and cooperation with indigenous peoples, to achieve the ends of the UNDRIP; (2) National action plans developed by States, in consultation and cooperation with indigenous peoples, to achieve the ends of the UNDRIP; (3) Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes; (4) Proportion of men, women and children of all ages living in poverty in all its dimensions according to national

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27 This indicator is related to SDG and based on Q79 (LNS) of the IN- What is the proportion of resources allocated by the government directly to poverty reduction programmes for indigenous peoples?
definitions. These indicators are supposed to reflect realities of IPLCs situation and data that will inform policy development and delivery of better services to the people.

Enabling conditions

Cultures underpin IPLCs values, moral and ethical actions and to sustain these is to address the barriers and risks regarding acceptance and implementation of strategic plans following a nested governance approach. Values such as respect, reciprocity, and ethical concerns need to be promoted and exercised fully especially in all phases of project implementation. In addition, assessing and establishing the value of biodiversity must take into account the perspective of all. Inclusion of IPLCs, women and marginalized actors throughout the strategic planning cycle avoids the risk of disastrous projects proceeding, and subsequent conflicts and direct harm to communities. Economic, environmental, social and cultural assessments which are tool for strategic planning and project design must be participatory, rather than expert technical exercises, fully taking into account the values, rights and perspectives of IPLCs.

Opportunities and recommended action for the post-2020

The transformative vision of “living in harmony with nature” means a radical paradigm shift towards respecting and embracing plurality of values towards a just and sustainable society. It also entails a change from a top-down environmental governance towards inclusive, nested, and democratised planning and governance. This means there should be conscious effort by the government to improve not only on the policies but on the processes of engaging IPLCs in decision-making and governance.

Values without actions will not be enough to affect change. The following are needed to amplify the concern for improving sustainability:

- Institutionalize mechanisms for meaningful engagement in all phases of project cycle in line with the respect and protection of IPLCs individual and collective rights including Free Prior and Informed Consent
- Recognize and utilize local and indigenous knowledge in the design and development and implementation of programmes on poverty reduction, environmental valuation and management, monitoring among others.
- Respect and create mechanisms to widely transmit and expand value system of IPLCs based on relational values and worldviews such as a quality life where nature is respected and not exploited.

28 This indicator is related to SDG and based on the following: Q90 (LCS) Approximately, how many men in your community/people do you consider poor? Q91 (LCS) &Q93 (LCS) What are the main characteristics of the men/women that you consider poor (tick as many boxes as relevant)? 1: Landlessness, 2: Limited access to traditional lands or resources; 3: Low monetary income; 4: No monetary income; 5: Illiteracy; 6: Low levels of education; 7: Unemployment; 8: Irregular or under-employment; 9: Food shortage; 10: Malnutrition; 11: Health problems; 12: Others Q92 (LCS) Approximately, how many women in your community/people do you consider poor?
In the issue of implementation, full and effective participation is imperative. The inclusiveness of development lies very much when there is inter-cultural dialogue and respect.

**Key Sources**

- https://sustainabledevelopment.un.org/content/documents/18277CBD_input_to_2018_HLPF.pdf
- Scientific Advisory Board of the UN Secretary-General. “Indigenous and Local Knowledge(s) and Science(s) for Sustainable Development: Policy Brief by the Scientific Advisory Board of the UN Secretary-General,” 2016. https://unesdoc.unesco.org/ark:/48223/pf0000246104?posInSet=2&queryId=N-EXPLORE-5eca00bf-f5af-4b6f-8bca-9fd4a89b6dfc.
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Target 3: Incentives reformed

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socioeconomic conditions.

Key message:

The potential benefits from getting incentives right - for biodiversity, for climate-change and for sustainable development – is huge. However, progress over the last two decades has remained poor. For example, IPLCs continue to suffer from the impacts of damaging subsidies for fossil fuels and for biofuels from palm oil. They also continue to suffer from the failure to implement and scale up effective positive incentives, where they exist, related to climate change mitigation or local sustainable livelihoods. Radical action is urgently required to mainstream effective incentives and phase out those that are counterproductive.

Context:

There has been a continued lack of progress in eliminating or phasing out incentives, such as certain subsidies, which have proven to be harmful to both biodiversity, and impactful on IPLCs. The 2019 IPBES Global Assessment report states “Economic incentives have generally favoured expanding economic activity, and often environmental harm, over conservation or restoration.” The report highlights poor progress on a global scale, citing EU biofuels targets for transport and renewables as a particular failure, as well as failures in applying positive incentives for conservation. “While agri-environment schemes (in which farmers receive payments to implement biodiversity-friendly agricultural techniques) have been applied in many countries worldwide, and REDD+ schemes have been implemented to reduce greenhouse gas emissions from deforestation and forest degradation, these initiatives are insufficient in scale to deliver substantial progress towards Target 3”. This failure is fundamentally important for IPLCs as their reliance on their local environment for their livelihoods makes them particularly vulnerable to harmful incentives, which can have disastrous impacts, not only on biodiversity, but also on their right to life.

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29 Díaz et al., “IPBES Global Assessment on Biodiversity and Ecosystem Services: Summary for Policy-Makers.”
31 Rundle, “Indigenous Knowledge Can Help Solve the Biodiversity Crisis.”
Contributions and experiences of IPLCs towards the target:

Despite some improvements, the value of biodiversity is still not reflected in broader policies and incentive structures with regard to IPLCs. Significant changes to subsidies and other incentives that are harmful to biodiversity are required to ensure long term sustainability and biodiversity.

Incentives fall into two general categories; incentives that are harmful for biodiversity and incentives with positive effects on biodiversity.

Harmful incentives

Incentives, including subsidies, harmful to biodiversity are defined as generally emanating from policies or programmes that induce unsustainable behaviour, often as unanticipated and unintended side effects of policies or programmes designed to achieve other objectives. Examples include subsidizing monoculture plantations, biofuels, use of chemical inputs for food crops and infrastructure projects. As long as scarce public funds are spent on incentives that are harmful to biodiversity the effects of any positive incentives will likely be significantly undermined.

At the international level, the EU Renewable Energy Directive (RED 2009) has encouraged greater use of biofuels, and thus been an important driver of EU palm oil imports in recent years, with significant impacts on IPLCs and biodiversity. In 2017 imported palm oil makes up one third of all biodiesel produced and consumed in the EU. To redress the situation, the European Parliament is proposing to end incentives for palm oil biodiesel in the revision of the EU RED. This would mean palm oil would not count towards the EU’s renewable energy targets. However, this is only a Parliamentary proposal at this stage, and not an EU decision.

Also, at the international level one of the greatest global concerns is over subsidies for fossil fuels. Indigenous and local communities have been at the forefront of resisting the expansion of fossil fuels, often at the ground level - such as resisting coal mines, and oil and gas pipelines - but have also been involved in the global movement to end fossil fuel subsidies. There are now concerns over potentially new perverse incentives to deal with climate change, which include impacts from subsidies to burn wood pulp that could lead to deforestation of community lands, and subsidies for the expansion of extractive industries for energy transition in the so-called Green New Deals, which are proposed transformational reforms to tackle climate change and economic inequality.

Examples of such harmful incentives at the national level include new tax rules associated with the 2016 Peace Accord in Colombia which incentivise the growing of oil palm and sugar cane for biofuels,

32 White, “More than Half of EU Biodiesel Made from Imported Crops, Study Finds – EURACTIV.Com.”
33 Forest Peoples Programme, “Indigenous Peoples and Forest Defenders Defy Murder and Intimidation to Call on European Governments to Uphold Their Human Rights Commitments and Tackle Deforestation Commodities.”
34 LeBlanc, “Indigenous-Led Movement to Stop Fossil Fuels”; Bassey, “WeThought It Was Oil but It Was Blood: Resistance to the Military - Corporate Wedlock in Nigeria and Beyond.”
while zero deforestation pledges in Peru are contravened by policies that encourage biofuel plantations, agribusiness development and mega-infrastructure projects. LCIPs have been at the forefront of civil society attempts in both countries to rein in the worst side effects of these activities.

Such policy incoherence can also be seen with private and public financial institutions who are promoting agribusiness and industrial infrastructure in highly biodiverse forest areas. For instance, the World Bank funds large-scale road-building programmes in primary forests, while also hosting global funds for reducing deforestation and adopting a Forest Action Plan meant to foster cross sectoral coordination and support for the tenure rights of forest peoples.  

Positive incentives
Positive incentives are defined as economic, legal or institutional measures designed to encourage activities beneficial to biodiversity. They can be financial, but for IPLCs non-monetary incentives, such as legal recognition and protection of their land and territories, and for community-based initiatives, may be equally important. Positive incentives tend to fall into two broad groups: those that tend to focus on the environment/climate change, and those that are more concerned with supporting small-scale producers.

Positive incentive systems focussed on environment/climate change, such as Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Payments for Ecosystem Services (PES), can bring potential benefits for IPLCs, but they have also been shown to bring challenges.

For instance, in Guyana, the REDD funded Amerindian Land Titling project has, after concerted lobbying from indigenous communities, sought to deal with outstanding territorial claims and land title applications before climate investments go ahead on customary forests. This has been beneficial, even if actual progress has been frustratingly slow, and even some increases in deforestation.  

Another example, Vision Amazonia 2020 in Colombia, is part of the REDD Early Movers programme. It contains a component for the extension of the title boundaries of indigenous land, although there have been criticisms of it by Amazonian indigenous peoples’ organisations for failing to apply safeguards like FPIC. Evidence across the globe shows us that that REDD+ schemes must go beyond just carbon capture to ensure communities both cooperate, and benefit, from them.

38 Del Gatto, “MID-TERM REVIEW Protecting Forests Through Protecting Rights in Guyana.”
39 Forest Peoples Programme, “Prensa: Los Pueblos Indígenas Del Territorio de Vida Enviamos Un Mensaje Al Mundo.”
Case study - IPLCs seek to benefit from climate incentive systems, Vietnam

Tebtebba and the Centre for Research and Development in the Upland Areas (CERDA) launched a pilot project in North Vietnam to test whether the carbon sequestration financial incentive systems in REDD+ could respect the rights, wishes and traditional knowledge of IPLCs. The project has provided legal standing to local communities in REDD+ projects, in a way that aims to respect their human rights, traditional knowledge, traditional monitoring systems and collective decision-making. So far it has been a success, improving the local biosphere and ensuring its own sustainability by generating revenues for those involved.

119 communities, made up of over 9,000 people, established Self-Governing Groups. These Groups then set up six community co-operatives, gathered into two ethnic alliances. The legal status of the Groups bestowed them with forest use rights for 50 years over 3,500 hectares of natural forest, as well as the right to work in partnership with local government.

The heads of the Groups received training and capacity building to ensure their full independence as forest owners, in order to contribute to forest ecosystem resilience. Key farmer groups trained technical teams, capable of carbon accounting and community-based monitoring. A demarcation map of community forests was created by the communities themselves, and local forest experts developed tools for monitoring tree diversity and forest biomass. Project funds were allocated for community projects linked to forest regeneration, conservation and sustainable use of biodiversity.

All of this was conducted according to key principles, including: respect of rights to forest and land use; promotion of self-reliance and self-determination of communities; promotion of collective work and collective rights; promotion of traditional governance and traditional knowledge; holistic, horizontal and integrated capacity building; and gender equality and sensitivity.

Overall the project has been a success in terms of building the key institutions, with a final baseline study completed under the community mapping. The cooperatives are functioning successfully, and – most importantly - the community forest area in the two provinces involved has been well protected to date. The forest has become greener, with the presence of more young and valuable tree species, more herbal plants growing, more clean, fresh water visible from the forest and more animals returning. The cooperatives are increasingly becoming actively engaged in state forestry policies and are generating income for forest owners’ communities. As a result of the project in Thanh Hoa province, the District governments has started to sign forest protection contracts primarily through the cooperatives in recognition of their efficacy. So far, the pilot seems successful, and may point the way towards benefitting the climate, biodiversity and local communities.

Small Scale Producers -

One of the key positive incentives for IPLCs focuses on their abilities as small-scale producers, which – with certain preconditions such as secure tenure rights – ensures livelihoods, as well as maintaining their cultural identities and much of the world's remaining biodiversity. IIED estimate that US$125-130 billion of gross value-added may be contributed by small-scale forest-linked producers, with up to 1.5 billion people globally using or trading in non-timber forest products. Yet small-scale forest-
linked producers are often barely visible, so – despite often well-planned market interventions at the local level - the necessary incentives are not always available.

Good examples of interventions include:

- In Vietnam’s northern Yen Bai Province, the Forest and Farm Facility supports the members of the Viet Nam Farmers Union to grow cinnamon, star anise, plants for herbal medicine and mulberry for silkworm farms. Four collectives came together to formulate a business plan to collectively market their forest products. The group started learning and applying organic cinnamon growing techniques to improve the quality of cinnamon and began planting herbal trees under the cinnamon to diversify production options. In 2019 a US$3.5 million cinnamon processing factory was completed so that the cooperatives could supply organic cinnamon to the global market.  

- The FAO supports the global Mountain Partnership Products Initiative to promote high-value mountain products as a means to develop mountain economies and improve the livelihoods of many IPLCs. This initiative focuses on native-crop varieties cultivated by small-scale farmers in remote mountain areas. The Mountain Partnership and the organization Slow Food have jointly developed a voluntary product labelling scheme.

- In Asia, the Non-Timber Forest Products (NTFP) Exchange Programme aims to strengthen the capacity of forest-based communities and their support organizations. The programme has multiple activities which support forest communities to sustainably manage natural resources and develop NTFP enterprises, but specific examples include support for a certification scheme for rattan production in Indonesia and marketing sustainable handwoven eco-textiles in the Philippines and Indonesia.

Enabling conditions: (e.g. partnerships) and remaining barriers

There are a number of initiatives that have been launched to support IPLC producers, but one of the main examples is the Forest and Farm Facility initiative, co-managed by FAO, IIED, IUCN and Agricord, which aims to strengthen the organisations of forest and farm producers to deliver climate-resilient landscapes and improved livelihoods. The crucial question becomes how the models championed by the Forest and Farm Facility can be successfully scaled up. Recent research has sought to identify the values and indicators for prosperity within locally controlled forest businesses that would allow such scaling up. These include in any effort to scale up: ensuring interventions allow for cultural differences, and support collective economic and political empowerment, as well as long-term sustainability.  

Although many of these local enterprises are grouping together at the national level, and reaching out to overseas markets, more needs to be done

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40 Macqueen, “Vietnamese Forest and Farm Producers Work towards More Resilient Livelihoods and Landscapes.”
41 FAO, “FAO’s Work with Indigenous Peoples in Forestry.”
42 Non-Timber Forest Products Exchange Programme, “Exchange News.”
to enable these advances. A further challenge is that - despite some notable exceptions - women continue to be under-represented within leadership structures of mixed-gender group businesses.44

With regard to harmful incentives, it is clear that new opportunities for international partnerships are opening up, such as with those private investors - notably insurers and pension funds - who have committed to rebalance their portfolios to ensure their investments are carbon neutral by 2050. 45

Quote “Vested interests may oppose the removal of subsidies or the introduction of other policies. Yet policy reforms to deal with such causes of environmental harm offer the potential to both conserve nature and provide economic benefits, including when policies are based on more and better understanding of the multiple values of nature’s contributions.” 46

Opportunities and recommended actions for post-2020

“Future targets in a new post-2020 Strategic Plan on Biodiversity may be more effective if they ... take greater account of socioeconomic and cultural contexts and values ... indigenous and local knowledge”. 47 IPBES Global Assessment Report

• For Governments, and other financial actors: The failure to tackle perverse incentives needs tackling, so there should be divestment from 50% of public and private investments and incentives, including subsidies, harmful to biodiversity by 2025 and 100% by 2030. The funds redirected from perverse investments and incentives shall be used to support positive incentives, under conditions as outlined below

• For Governments and other actors: Ensure that any positive incentive systems focussed on climate change or the environment are created with the full, effective participation of IPLCs, and have the flexibility to build the capacity of sustainable locally controlled forest enterprises. Project indicators must include social and biodiversity co-benefits, not just carbon capture, and any safeguard information systems must monitor and report on compliance with environmental and social safeguards as agreed in the Cancun decisions.

• For Governments: Work directly with IPLC community-based businesses to find culturally appropriate ways to support the locally controlled forest sector in ways that benefit them and local biodiversity, while recognising that secure land rights and a rights-based approach are the foundations for sustainable locally controlled forest enterprises, and respecting gender equality and inter-generational equity.

• For IPLCs, their supporters and other actors: Explore opportunities to work in partnership with new financial actors, particularly investors, both to ensure harmful subsidies - such as those for fossil fuels - are phased out and to support the scaling up of locally controlled forest producers. Such work should supplement, and not replace, the need for legislative action to eliminate or reform harmful incentives.

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44 Macqueen et al.
45 Green, “Pension Funds and Insurers Pledge Climate Action at U.N. Summit”; McKibben, “At Last, Divestment Is Hitting the Fossil Fuel Industry Where It Hurts.”
47 Díaz et al.
Governments and other actors: Support the input of IPLC knowledge and experience involving this target with key related processes, including SDG 2 and 15 (particularly targets 1.4, 2.b, 10.5, 12.2, 12.c, 15.5), the United Nations Framework Convention on Climate Change and trade negotiations where relevant incentives are considered.

Key resources


References


Target 4: Sustainable production and consumption

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Key message

Unsustainable global production and consumption continue to be a predominant driver of biodiversity loss. IPLCs’ local production systems also continue to be displaced by large-scale agribusinesses and extractive industries to the detriment both of biodiversity and of local wellbeing. Urgently needed are legislation, policies and programmes that secure IPLCs’ land and resource rights, scale up support for localised sustainable production systems, and fully recognize and support community-led natural resource governance systems.

Context

There has been at best limited progress towards this target, and the IPBES Global Assessment report notes “while actual reductions [in consumption] have been limited, actions already being taken at different levels can be improved, coordinated and scaled up.” The 2019 United Nations Environment Assembly sought to address this, having recognised the scale of the problem. However, so far more attention has been taken to implement plans for sustainable production and consumption, and - importantly from the point of view of IPLCs - less on keeping the impacts of use of natural resources well within safe ecological limits. The consumption per person of materials has risen 15% since 1980, and over three decades, global extraction of biomass, fossil fuels, minerals, and metals have risen approximately 80%. Many key components of biodiversity for food and agriculture at genetic, species and ecosystem levels are in decline.

Yet IPLCs have much to offer in terms of providing solutions. Their indicators of consumption and impact, known as environmental footprints, are notably less than society as a whole. The indigenous concept of buen vivir (“good living”) is being credited with both inspiring and developing ecologically-balanced and culturally-sensitive ways of living that reduce consumption. IPLCs have contributed much to this target through their diverse economies, their protection of agricultural biodiversity, as well as their community land use plans and territorial management plans. But these are often overlooked by many stakeholders. And yet those very same unsustainable consumption and

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50 Balvanera and Pfaff, “IPBES Global Assessment on Biodiversity and Ecosystem Services: Chapter 2. Status and Trends; Indirect and Direct Drivers of Change.”
52 Balch, “Buen Vivir: The Social Philosophy Inspiring Movements in South America.”
production patterns are directly impacting on IPLCs, and the biodiversity they are protecting, as extractive activities and commercial agriculture expand into, or impact on, IPLC lands.

Contributions and experiences of IPLCs towards the target:

"The situation the Earth is in today has been created by unmindful production and unmindful consumption. We consume to forget our worries and our anxieties. Tranquilising ourselves with over-consumption is not the way." - Thich Nhat Hanh, spiritual leader, Viet Nam

Contribution to international standards
The key characteristics of the prevailing consumer economy include an extractive and wasteful linear mode of production, as well as growing inequality and a culture of wasteful consumption. These traits have seen the wholesale expansion of commercial agriculture and the extraction of fuel and minerals into the lands of IPLCs, leading to massive loss of forest cover and pollution of waterways, land grabs, displacement of people and other human rights violations. There are voracious appetites at play putting enormous pressure on the remaining tropical forests of our planet. In 2018 alone, the tropics lost 12 million hectares of tree cover, including a staggering 3.6 million hectares of primary rainforest.54

IPLCs have been working with other civil society partners to limit the damage done to their home environments through advocacy to producer and consumer governments, as well as input into consumer certification schemes for commodity supply chains. Such certification schemes now cover commodities including palm oil, timber, paper, sugar, soybeans, coffee, cocoa and aluminum. Although some have clear environmental standards, many suffer from weak social and human rights protections. Also, no scheme requires an independent public consultation and validation process in their audit process, and there are serious compliance issues. For instance, the Round Table for Sustainable Palm Oil (RSPO) has useful safeguards for indigenous peoples and requires company members to undertake an evaluation of High Conservation Value forests and assess community tenure risks before proceeding to conversion in their concessions. However, certification under the RSPO has consistently failed to apply agreed standards to safeguard forests and uphold community rights, and there is a major loophole where companies who break the rules can simply withdraw from the scheme, as illustrated in the case study of the Shipibo people in Peru [see case study].

IPLCs have also been engaging to strengthen voluntary supply chain initiatives, such as the 2014 New York Declaration on Forests. The Declaration elaborates the private sector goal of eliminating deforestation from the production of agricultural commodities such as palm oil, beef and paper by 2020. It’s aims are to strengthen forest governance and empower communities, but its recent five-year assessment admitted its failure by stating the Declaration “has not lived up to the high level of ambition enshrined in its ten goals.” 55 It is clear that voluntary initiatives on their own will not be

54 Weisse and Dow Goldman, “The World Lost a Belgium-Sized Area of Primary Rainforests Last Year .”
55 New York Declaration on Forest Progress Assessment, “Protecting and Restoring Forests: A Story of Large Commitment yet Limited Progress.”
enough, and the push must be towards mandatory standards if the standards are to succeed in the long term and make sustainable production systems a reality.

“What do we mean by the term sustainability? The palm oil industry has not dealt with many of the past and present violations of community rights by agribusiness developments. It is not enough to create voluntary certification schemes, while we continue to suffer land grabs and the on-going violation of human rights.” - Franky Samperante, Pusaka, Indonesia
Case study: Shipibo-Conibo people protect their territories from palm oil in the Peruvian Amazon, Peru

“We would go to our lands, to eat paiche and all kinds of fish from the lake. My father would hunt there, my grandparents would hunt there. We walked freely there...” Luisa Mori González, President of the Mothers Club and community leader

The traditional lands of the Shipibo-Conibo indigenous community of Santa Clara de Uchunya in the Peruvian Amazon extend to more than 85,000 hectares. These lands have historically provided food, in the form of abundant game and fish, medicine, construction materials and clean water. However, only 218 hectares have been formally titled and since 2012 the palm oil company Plantaciones de Pucallpa S.A.C (now Ocho Sur P SAC), has illegally acquired and deforested approximately 7,000 hectares of these untitled lands to convert them to palm oil plantations.

This has brought a massive environmental impact, with loss of lands and animals, as well as contamination from the spraying of agricultural chemicals. It has also brought violence, with armed groups of land traffickers clearing forests and those who protest facing death threats and intimidation. At the same time, this ongoing dispossession is fundamentally corroding the community’s way of life and ability to survive on their lands.

Despite these threats, the community has made multiple efforts to hold the company to account. Plantaciones de Pucallpa was a member of the Round Table for Sustainable Palm Oil (RSPO), and a formal complaint was made in 2015, which led to a stop work order. The community have also appealed to the company’s European financiers, the London Stock Exchange’s Alternative Investments Market, and various United Nations and regional human rights mechanisms, as well as launching a criminal case in Peru, which has resulted in a high-level investigation led by the Special Prosecutor for Organised Crime.

Despite the RSPO stop work order, suspension orders from the Ministry of Agriculture and Peruvian courts, and widespread condemnation from Peruvian forest and agricultural ministries, Ocho Sur P’s operations continue. There is a general failure of enforcement, and the company has avoided suspending work, and large fines, through selling of its assets to other new companies it has created and withdrawing from the RSPO and London Stock Exchange.

The community has also filed a ground-breaking constitutional lawsuit against the Peruvian Government for failing to process their land titling claim, which facilitated the company’s land grab. The case was heard by the Constitutional Tribunal in September 2019, with judgement pending at the time of writing.

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56 Forest Peoples Programme, “The Struggle of the Shipibo Community of Santa Clara de Uchunya against the Expansion of Oil Palm.”
Diverse local patterns of production

Achieving the global goal of sustainable consumption and production is a long-term process and requires concerted effort from all stakeholders. The challenge in addressing this target is often arriving at the same perspective of what sustainable consumption and production really is. Different peoples and societies have diverse cultural and spiritual views of sustainability, including conceptualizations of poverty, well-being and sustainable development, which require culturally relevant indicators. Although IPLCs have much to teach the world in terms of both sustainable production and consumption, even that contribution may not be enough if the dominant model of consumerism overtakes principles of “do no harm” or ignores or undermines subsistence systems of consumption and production.

Quote: “Indigenous and local knowledge (ILK) can inform resource management. ILK has inspired forest succession management, rotational use, and creation of patchiness. It has informed science on how to live sustainably in and manage “marginal” ecosystems such as the Arctic, drylands and mountain areas.” - Dr. Fikret Berkes, University of Manitoba

Positive examples of local sustainable production

Results from an IUCN analysis of smallholder production show that the economic output of agroecology is often underestimated. They calculate the gross product of smallholder crop, fuelwood and charcoal, timber, and non-wood forest products production is between US$ 881 billion and US$ 1.5 trillion per year. When the value of multiplier effects is accounted for, the total economic value created by smallholder production may be as large as US$ 8.7 to US$ 25.9 trillion per year, which is approximately 12% to 35% of global economic output.57

As a result, the sector is often ignored. Yet IPLC agroecology leads the way in terms of localised systems of production and consumption that can bring multiple benefits, including social and economic benefits, and preserve traditional knowledge and biodiversity.

National levels of examples of this include:

- The Maori in Aotearoa/New Zealand engage in regional Iwi Environmental Management Plans, to identify how the interlinked issues of spiritual and natural resource concerns can be articulated and taken into account in wider governance. The plans outline the inherited responsibilities that the Maori feel as guardians of the environment and is linked to kaitaikitanga which is the concept of guardianship for the sky, the sea, the land and sacred places.

On a smaller scale, local examples include:

- In the Sierra Norte de Puebla in Mexico, traditional coffee farms are reservoirs of biodiversity which practice agroforestry and produce many important materials for handicrafts, including amate paper. They have seen a revival in indigenous handicrafts and local cuisine, which is being popularised through small, inter-village food fairs organised by the youths in conjunction with schools.

First Nations in British Colombia Canada have developed a system called Comprehensive Community Planning (CCP). This aims to create inclusive, holistic, community-driven plans, which articulate long-term visions and goals. The plans combine economic and social needs with cultural, religious and historical respect for land, local environment and the protection of culturally-significant areas. Over half of the First Nations in British Columbia have undertaken a CCP process, which is more than 100 in total. 58

In Nimba County, Liberia, the producer organisation the Botanical Products Association of Liberia (BOTPAL) ensures better livelihoods for its members - including 112 men and 113 women - through their non-timber forest products, while also ensuring they engage in policy debates on sustainable forest management. 59

**Case study: Organic and traditional agriculture in the highlands of Borneo**

The indigenous peoples of the Krayan Highlands on Borneo, which straddles the border between Indonesia and Malaysia, have traditionally been food secure thanks to a highly diverse agricultural system of wet rice agriculture, unique in the interior of Borneo and based on local knowledge and local seeds. There are also several salt springs, which produce ‘mountain salt’ commonly used for cooking and trade. In 2004, in response to the promotion of agricultural chemicals, as well as the threat of the expansion of oil palm plantations, local communities formed the Alliance of the Indigenous Peoples of the Highlands, Indonesia and Malaysia (FORMADAT). The aim of FORMADAT is to act as custodians of local agrobiodiversity through the collective preservation of traditional knowledge and practices. For instance, the communities intensified the production of black adan rice, a local savoury and nutritious variety of rice that had almost disappeared some years ago. In 2016, the communities self-declared the Krayan Highlands an area for organic and traditional agriculture (their ‘territory of life’) and started advocating for formal government recognition. 60

**Enabling conditions**

With regard to supply chain initiatives, it is clear that IPLCs have been working at the international level with civil society allies, both in terms of human rights and environmental standards. Such joined up advocacy must continue, particularly uniting around key UN sustainable development and climate change processes.

This type of collaboration has been happening at the local level too, but the question then becomes how you are able to scale-up localised agro-ecology initiatives, so they break into, or even dominate, the mainstream modes of production and consumption. Pimbert et al argue that there are six so-called 'domains of transformation' between agroecology and the dominant system. These are access to natural ecosystems; knowledge and culture; systems of exchange; networks; discourse; and gender and equity. They review the enabling, and disabling factors, of all of these domains, and conclude that

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59 Grouwels, “Forest and Farm Facility Country Achievements: Liberia.”
60 Stevens et al., “Recognising and Respecting ICCAs Overlapped by Protected Areas A Report for the ICCA Consortium.”
“governance - and particularly power imbalances and deficits in democracy - is the key determining factor for transformation across these domains.” This conclusion effectively advocates for government policies that support bottom-up approaches, which foster inclusive community-led governance processes at their core. 

Opportunities and recommended actions for post-2020

Quote: “No nation or region can appropriate a larger share of the global commons without both transparently reporting this to all other nations and agreeing on mechanisms to ensure that the aggregate use of planetary space remains within safe boundaries” - Johan Rockström, Director of the Stockholm Environment Institute.

Quote: “Indigenous peoples and local communities view the Earth as a living being to be nurtured with care and respect. Planning must be based on the worldview and “good living” of Indigenous Peoples. Their pursuing of an intrinsic and balanced relationship between Mother Nature, human-beings and the Universe should be considered as an example of a holistic approach to guide the post-2020 framework.”

Governments and other actors enable and support active IPLC engagement with key supply-chain mechanisms, particularly with regard to complaints processes in order to test the robustness and efficacy of such grievances processes.

Governments and other actors ensure support to IPLCs for the development and implementation of community-based sustainable management plans, agro-ecology and customary based resource management, based on secure collective land rights. In order to scale up this form of sustainable production to a transformative level, policies must recognise and enable inclusive community-led, gender-sensitive governance processes, focusing on collective action, social movements and solidarity networks as a means of building and amplifying political power and community agency.

Governments and other actors to support the input of IPLC knowledge and experience involving this target with key related processes, including achieving the vision 2050 of “living in harmony with nature”, SDG 12 (particularly targets 12.1, 12.2 and 12.c), the Johannesburg Plan of Implementation, the Marrakech process, the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, the outcomes of the World Conference on Indigenous Peoples and the proposed innovative solutions for environmental challenges and sustainable consumption and production articulated in the Ministerial declaration of the 4th United Nations Environment Assembly.

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61 Anderson, Colin et al., “From Transition to Domains of Transformation: Getting to Sustainable and Just Food Systems through Agroecology | FAO.”
62 Anderson, Colin et al.
64 UNEP, “Ministerial Declaration of the United Nations Environment Assembly at Its Fourth Session Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production.”
**Key resources**


Target 5: Habitat loss halved or reduced

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Key message

Natural habitats, including forests are declining at an alarming rate, but they are declining less rapidly in the lands and territories of indigenous peoples than elsewhere. Nonetheless IPLC lands, habitats and biodiversity are still under widespread threat from industrial-scale incursions, and IPLCs in many countries are struggling to counter this threat. However, they are paying a high price for doing so in terms of conflict and violence against human and environmental defenders. IPLCs’ rights and contributions must be fully recognised, respected and supported if we are to stem habitat loss. This needs to include measures to secure land and water tenure, to uphold resource rights, and to develop and upscale innovative multi-stakeholder collaborations.

Context: What does this target mean for IPLCs?

Land use change, with subsequent loss of natural habitats, is the most important cause of biodiversity loss globally. However, progress on this target has been poor. Although there has been a slowing in the rate of net global deforestation, the loss and degradation of habitats remains high. As the recent IPBES global assessment notes the great majority of indicators of ecosystems and biodiversity are showing rapid decline thanks to multiple human drivers. Of particular concern is that nearly “half of agricultural expansion was into tropical forests”. Commercial agriculture is estimated to be the proximate driver for 80% of deforestation worldwide. The report goes on to note that “72 per cent [of IPLC indicators] show negative trends in nature that underpin local livelihoods and well-being. The areas managed ... by indigenous peoples and local communities are facing growing resource extraction, commodity production, mining and transport and energy infrastructure, with various consequences for local livelihoods and health.” For example, the main direct cause of forest destruction is commercial farming, which accounts for 80% of forest clearance in tropical countries. IPLCs are therefore the effective protectors of large swaths of natural habitats but are also suffering disproportionately when those areas are destroyed or degraded.

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65 Díaz et al., “IPBES Global Assessment on Biodiversity and Ecosystem Services: Summary for Policy-Makers.”
68 Hosonuma et al., “An Assessment of Deforestation and Forest Degradation Drivers in Developing Countries.”
69 Díaz et al., “IPBES Global Assessment on Biodiversity and Ecosystem Services: Summary for Policy-Makers.”
Contributions and experiences of IPLCs towards the target: IPLC centred habitat solutions

It is well known that IPLCs have long protected – and currently conserve – many ecosystems with high biodiversity. It is estimated that nearly a quarter of the Earth’s surface, as well as vast ocean areas, are managed by IPLCs; these areas hold up to 80% of the planet’s biodiversity. Indeed a number of studies have stressed the contribution of IPLCs in limiting diversity loss, particularly through stopping deforestation and forest degradation. For example the Kayapo people in Amazonian Brazil have conserved 105,000km² of forests in a frontier characterized by heavy deforestation due to agricultural expansion, logging and illegal gold miners. Indeed, comparative studies have shown that halting forest loss through territorial management and conservation has been at least as effective as through state enforced protected areas.

IPLCs have led the way in concrete actions for ensuring vital principles and programs for the sustainable use of biological diversity are enshrined in national policies. Examples of this include practically implementing the Plan of Action on Customary Sustainable Use, or through initiatives like the Global Coalition of Indigenous Peoples pledge to protect 400 million hectares of forests, or the practical policy recommendations in the Palangka Raya Declaration on Deforestation and Rights of Forest Peoples. This has included support in formulating these calls to action, as well as advocating for their implementation and monitoring and verifying on progress. When they are empowered IPLCs

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70 Patricia Balvanera et al, “IPBES Global Assessment on Biodiversity and Ecosystem Services: Chapter 2.1. Status and Trends - Indirect and Direct Drivers of Change.”
71 Diaz et al., “IPBES Global Assessment on Biodiversity and Ecosystem Services: Summary for Policy-Makers.”
72 DW, “Unconquered Kayapó Warriors Fighting for Their Amazon Land”; Native Lands and Wilderness Council, Protecting Wild Nature on Native Lands Case Studies by Native Peoples from around the World.
73 Sobrevila, The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners; Schleicher et al., “Conservation Performance of Different Conservation Governance Regimes in the Peruvian Amazon.”
74 UNEP and CBD, “Plan of Action on Customary Sustainable Use of Biological Diversity. UNEP/CBD/DEC/XII/12, B, Annex.”
75 Lima Paris Action Agenda, “PRESS RELEASE: Partnerships, Progress to Protect & Restore Forest - Global Leaders from Governments, Private Sector, Civil Society and Indigenous Peoples Join to Address Pressing Issues.”
76 Various NGOs and Civil Society Groups, “The Palangka Raya Declaration on Deforestation and the Rights of Forest Peoples.”
have shown that they can protect also against biodiversity loss on the ground. Examples include the
Wampis in Peru who have formed their own collective self-governing body which takes peaceful direct
action to remove illegal miners and land grabbers from their lands, or the community of the Resguardo
of Canamono Lompretia in Colombia whose indigenous guard patrol the territory with a focus on
removing illegal miners. These actions not only protect their lands and livelihoods, but protect the
natural environment, and as a result local biological diversity.

“Indigenous and Local Knowledge can help in the conservation of protected areas. Many
protected areas around the world are established at the site of former sacred natural areas.
However, ILK concepts of conservation differ from science, and enforcement is through social
means, such as taboo species and areas.” (Fikret Birkes, p 2)

IPLCs as environmental human rights defenders.
Because so much habitat loss and degradation is happening on their lands and territories, IPLCs are
suffering twice; first through the impacts of the loss of natural environment and wildlife on their
livelihoods and second from the conflict that is generated through such incursions. These conflicts
undermine governance and are in turn further accelerating threats to ecosystems in a damaging
feedback loop.

Those IPLC members who are resisting are finding themselves targeted by state armed forces as well
as those of non-state actors. It is a growing problem, with Frontline Defenders estimating that 247
environmental rights defenders (ERDs) - i.e. those working on indigenous peoples’ rights, land and
environmental rights – were killed in 2018. This may well be an underestimate. Global Witness
estimated that most of the killings of ERDs are related to the extractive industries (43%), followed by
agribusiness and water and dams, with the most dangerous countries in 2018 being the Philippines,
Colombia, India, Brazil, Guatemala and Mexico. But it is not just killings, ERDs suffer a range of attacks,
ranging from physical attacks (27% of the cases), to arrest (27%), threats, intimidation and smear
campaigns (22%), legal action (12%) and disappearance (12%), often escalating from smear campaigns
to criminalisation or murder. 77

It is clear that more needs to be done to support communities under threat, both in terms of
resources, legal support, advocacy and protection measures, in order to safeguard the communities
and the biodiversity they are defending.

Innovative approaches in palm oil
The case of palm oil illustrates interesting opportunities for working with IPLCs to protect habitats.
Palm oil is identified as one of the major drivers of the loss of habitat rich tropical forests. 78 Increasingly
a global movement of palm oil impacted communities, and their supporters, have been advocating a
different model of palm oil development from the large estate model which dominates the current

77 Trócaire, “Making a Killing: Holding Corporations to Account for Land and Human Rights Violations,”
78 Austin et al., “Trends in Size of Tropical Deforestation Events Signal Increasing Dominance of Industrial-Scale
Drivers.”
landscape, with its disputed land grabs, huge swathes of monoculture and reliance on cheap labourers. This new vision imagines a mosaic land-use approach, which includes zones where community landowners can grow palm oil, but also zones with multiple uses, including small-scale agriculture and zones compatible with conserving biodiversity. This is an evolving area, as many of the larger palm oil companies are wedded to the large estate model. It will likely require incentives to shift them from this model, or proper accounting which does not externalise the costs of land grabbing & environmental destruction. The Roundtable on Sustainable Palm Oil (RSPO) provides serious opportunities to switch to this model, given the standard contains provisions such as respect for land rights, the requirement of free, prior and informed consent, and setting aside areas for livelihoods and conservation. However, there are problems in ensuring the enforcement of these provisions, and therefore the transitional shift has not happened yet, but the best hope to scale-up these ideas is via the jurisdictional approach. The jurisdictional approach is a pathway to rapid change “at scale”, and if this cannot yet be done at the country level that it may be possible to combine legislative measures, enforcement and positive incentives within an agreed legal, administrative and geographic ‘jurisdiction’. The RSPO and governments are piloting this in three regional areas, in Sabah on Malaysian Borneo, in the Seruyan district of Kalimantan, Indonesia and in the Amazonian region of Ecuador. All three initiatives are developing what can be done to bring all producers within the jurisdiction up to the RSPO standard. It has created interesting space to explore how to shift the model of palm oil production, with a different emphasis in each region, e.g. progress in Indonesia on free, prior, informed consent and in Malaysia on conservation mapping. However, there is still more to be done to realise the systemic potential to both halt biodiversity loss and promote the inclusion of IPLCs. If successful though, such solutions will also have knock on effects, including supporting Aichi target 4 on sustainable production and consumption.

"Communities have proven ability to manage the forests for many generations. They have innovative knowledge to protect the forest and develop food and economic livelihoods as well as spiritual life within the forest." – Edy Subahani, POKKER SHK, Indonesia

Enabling conditions:
The potential for the jurisdictional approaches explored above promises the possibility that partnerships between government, business and civil society could seriously tackle biodiversity loss. An increasing number of governments, companies and civil society have pledged to work together to achieve “zero deforestation” or “zero net deforestation” by 2020, or to halt or reduce forest loss significantly by 2030. For instance, Indigenous peoples and philanthropists have teamed up on zero deforestation, with pledges of US$459 million to assist forest dwellers, including by helping them secure titles to their land.

79 RSPO, “Supply Chain Certification Systems.”
80 RSPO, “RSPO Benchmark Study – Consolidated Report Different Pilots to Inform the Development of the RSPO.”
81 Colchester et al., Closing the Gap: Rights Based Solutions for Tscking Deforestation.
82 Voice of America, “Philanthropies Pledge $450 Million to Save Forests, Climate.”
The European Union (EU) has been engaging with stakeholders in its options in developing an action plan to tackle imported or ‘embodied’ deforestation through an EU Action Plan on Deforestation and Forest Degradation (EUAPDD). The latest communication from the European Commission opens the door for regulation of EU commodity supply chains and for establishing partnerships between producer and consumer countries. However, there is still some way to go for the proper recognition of the role that IPLC community tenure plays in halting biodiversity loss, and until that comes about the necessary tipping point is unlikely to be reached.  

Opportunities and recommended actions for post-2020

- Governments, donors, business and other actors: One of the key pre-conditions to prevent land degradation and biodiversity loss and restore degraded lands is to ensure secure land tenure, property and land-use rights, vested in communities and/or individuals as appropriate. Actions to facilitate this include: enabling public legislation from producer and importer countries; a dedicated forest tenure fund directly accessible by communities and their organisations; engaging with innovative solutions, such as jurisdictional approaches with agricultural commodities, and reporting to indicators to measure progress on the amount of IPLC's lands, territories and resources that are legally secured.

- Governments, NGOs and other actors: Harmonisation of international conventions and national laws in order to respect, protect and fulfil the rights of ERDs; ensure increased support to prevention and protection measures, with dedicated national protection programmes; strengthen the independence of investigative and judicial bodies; and for businesses to enact a ‘zero tolerance’ policy within their supply-chains for violations against ERDs.

- Governments and other actors support the input of IPLC knowledge and experience involving this target with key related processes, including SDG15 (particularly targets 15.1, 15.2, 15.5, 15.6, 15a, and 14.5), the Plan of Action on Customary Sustainable Use, UNEP’s innovation on biodiversity and land degradation, and officially recognise initiatives such as the Palangka Raya Declaration on Deforestation and Rights of Forest Peoples.

Key resources


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Amazon. “Scientific Reports 7, no. 1 (December 1, 2017). https://doi.org/10.1038/s41598-017-10736-w.


Target 6: Sustainable management of aquatic living resources

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Key message
Globally, small-scale marine and inland fisheries employ over 90 per cent of fishers and fishworkers and contribute nearly 50 percent of the total fish catch. Small-scale fisheries entail less bycatch, less destructive gear, and less fuel consumption than industrial fisheries. However, despite this, and evidence that community resource governance can reduce or reverse degradation, the roles of IPLCs continue to be undervalued and they continue to be marginalised. A radical transformation in governance, which secures the rights and customary practices of IPLCs and promotes co-management of resources by small-scale fishers, is required to protect and restore fish, invertebrate stocks and aquatic plants.

Context: What does this target mean for IPLCs?
Current unsustainable fisheries - especially industrial fisheries\textsuperscript{85} - threaten marine and coastal biodiversity severely, and therefore threaten the food security and ways of life of IPLCs, including most of the 800 million people worldwide who depend on fishing or small-scale fisheries for their food and livelihood.\textsuperscript{86} Overall, it has been estimated that small-scale fishers rely on the harvesting of some 15,000 freshwater\textsuperscript{87} and 20,000 marine species.\textsuperscript{88} However the proportion of the world’s fish stocks that is exploited unsustainably continues to grow, and approximately one third of marine stocks are now overfished.\textsuperscript{89} This is in spite of the fact that an increasing percentage of marine fisheries, accounting for about ten per cent of wild-caught seafood, is certified under a standard that recognises progress towards sustainable management. Less attention has been paid to freshwater fisheries but it

is important to note that they are also important sources of food and account for about 40 percent of all fish destined for human consumption.

Small scale fisheries provide sustainable livelihoods to millions of coastal and riverine dwellers, but their role in achieving Target 6, as well as the SDGs, has so far been under-acknowledged. There is insufficient support for their contributions and widespread lack of secure tenure for small scale fishers. IPLCs remain marginalised in the face of large-scale fisheries and coastal and upstream industries, reclamation projects, ports, and dams, all of which are contributing to biodiversity loss in aquatic ecosystems.

Recent UN data confirm that the role of IPLCs needs to be fully recognised and supported in order to achieve Target 6. A 2018 report by FAO states that globally, small-scale fisheries employ over 90 percent of fishers and fishworkers, and contribute nearly 50 percent of the total global fish catch, nearly all of which is for direct human consumption.\(^9\) IPBES (2019) confirms that small-scale fisheries practices entail less bycatch, less destructive gear, and less fuel consumption than industrial fisheries.\(^9\) However despite this, and the evidence that community governance of resources can reduce or reverse degradation, the roles of IPLCs in the sustainability of their fisheries continue to be undervalued and marginalised.\(^9\)

Gender dimensions also need to be addressed in this target. Women play a major role as they represent 14% of fishers and hold 60-90% of fish processing jobs, making a critical contribution (more than 20 per cent of the average per capita animal protein intake) to the nutrition of more than 3 billion people, more than 50 per cent of them in some “less developed countries”.\(^9\) (making fish a more important protein source than beef). However, “Women are often excluded from representing their concerns in the dominant fisheries governance processes, they are more vulnerable to tenure insecurity, marginalization and poverty”\(^9\). Alternative small-scale fishers definitions are emerging. FAO’s Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF-Guidelines) defines SSFs with all activities along the relevant value chains – e.g., “pre-harvest, harvest and post-harvest” by men or by women.\(^9\)

In order to make progress towards achieving Target 6 and the SDGs, it is imperative to fully recognise the central role that small-scale fishers and other IPLCs, including women, play in the sustainable management of aquatic resources. Securing tenure rights to aquatic ecosystems customarily owned and used by IPLCs is an increasingly important and urgent step to enable them to upscale their efforts to achieve Target 6. This would be in line, for example with SDG 14b to “Provide access for small-scale artisanal fishers to marine resources and markets”.

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92 Patricia Balvanera et al.


94 Food and Agriculture Organisation of the United Nations.

95 Harper et al., “Women and Fisheries: Contribution to Food Security and Local Economies.”

96 Patricia Balvanera et al, “IPBES Global Assessment on Biodiversity and Ecosystem Services: Chapter 2.1. Status and Trends - Indirect and Direct Drivers of Change.”
Contributions and experiences of IPLCs towards the target

IPLCs are increasing their contributions to achieve this target both in marine and coastal areas and also in inland waters. They do so through strengthening or revitalising customary sustainable practices and through collaboration and shared governance (including co-management) schemes with scientific and government institutions. They also address the decline in fisheries and aquatic biodiversity using a human rights and ecosystem-based integrated approach and a whole-of-context approach. This is particularly well exemplified by their efforts in addressing salmon decline in the Pacific north-west of the United States (see box 6.1).
Case study: Tribes address salmon declines in the Pacific Northwest of the United States
Preston Hardison, Tulalip Natural Resources Treaty Rights Office

The Pacific salmon is a cultural keystone species for many indigenous peoples of the West Coast of Canada and the United States. Salmon are our relatives, central to our histories, identities, stories, expressions, culture and economies. We honour them every year with the first salmon ceremony through which we communicate with the salmon people in order to renew our relations.

The tribes of Washington State possess inherent rights to salmon stocks, and these rights were reaffirmed by the United States Supreme Court in 1989. Prior to this, from the 1960s the State of Washington began forcing tribal fishers from fishing sites that had been reserved for their use in treaties with the United States. The tribes sued, and in a landmark court case in 1974 (United States v. Washington, 384 F. Supp. 312), Judge George Boldt affirmed our sovereign fishing rights, allocating half of the harvestable catch to us. On appeal the Supreme Court declined to review the Boldt Decision in a certiorari process in 1989, upholding his decision. The Northwest Indian Fisheries Commission (NWIFC) was established for tribes to manage salmon harvesting, allocation, conservation and restoration. Tribal representatives sit on the bi-national US-Canada Pacific Salmon Commission (PSC) and other salmon technical advisory and management boards.

The tribes have advanced technical capacity and active and equal participation in state, multi-state and bi-national salmon management organizations. Nearly US$1 billion has been spent in the last 20 years for salmon recovery. However despite this, most salmon stocks have been listed under the Endangered Species Act as threatened or endangered and salmon are in decline in three quarters of the State. The loss of salmon is having many ripple effects, from the loss of marine nutrient delivery to upper watersheds to the endangerment of killer whales that rely on them.

Our fishing rights are a critical precondition for sustainable salmon fisheries, and the recognition of these rights in Washington has contributed to salmon co-management in which we have legally mandated equal standing with federal and state agencies. But this is not sufficient if underlying causes of decline, some of them far from us, are not addressed.

Salmon are declining for many reasons. Salmon life-histories are complex, affected by impacts from the tops of the mountains into the Pacific Ocean. Some sources of impacts are local - hydropower dams, agrochemical pollution from farms and dairies, the failure to maintain culverts and fish passage, flooding that destroys spawning grounds, the discharge of pollutants, nutrients, pharmaceuticals and stormwater into coastal waters by cities. Other sources of impacts are distant. Streams are warming, partly due to climate change. Atmospheric deposition of carbon causes acidification. Ocean warming and marine heat waves affect salmon and their prey. Climate change is shifting precipitation patterns to heavy rainfall and flooding in the winter and spring and extreme low flows at around 40% of historical baselines in the late summer as mountains lose their snowpack. Some impacts are tele connected due to atmospheric changes long distances away, cross many jurisdictions and cannot be mitigated by actions taken at particular sites.

We are addressing this in multiple ways. The Tulalip Tribes led in establishing the Sustainable Lands Strategy (SLS), a coalition of tribes and farmers that works to develop win-win solutions that benefit farmers and salmon. In 2014, tribes led the way for dismantling the Glines Canyon Dam on the Elwha River, the largest dam removal in US history, and are working to remove others. The Tulalip
Tribes are also developing a version of the Ecosystem Management Decision Support System (EMDS) for integrating numerous models (salmon life-history and habitat needs, hydrology, geomorphology, ocean conditions). EMDS provides scenario building and decision support for restoration and regulations from coarse-grained to fine-grained analyses. The models assess current and future salmon needs, including needs under climate change.

The recognition of our rights to salmon and deep investments in restoration actions have provided enabling mechanisms for salmon recovery, but they are not sufficient. Recovery is based on the ratio of level of restoration actions to the rate and severity of impacts. Recovery lags behind accelerating impacts. Recovery work is based on local symptomatic treatment of the impacts, rather than addressing larger-scale root or underlying causes. These will not be resolved without transformative change that matches the scale of the impacts that endanger our brother salmon.

Because of the nature of the life cycle of the salmon, that runs from mountains to the North Pacific Ocean, salmon problems cannot be solved without involving multiple jurisdictions. While we take all the necessary actions at the local level, there is a need to take a "whole-of-context" approach to problem-solving in order to achieve fisheries sustainability.

Successful projects by IPLCs on salmon rewilding and sustainable use have also been reported elsewhere, including in Arctic Finland, where Saami people are rewilding salmon in the Näätämö river (see Target 19 for further details); and in Kamchatka peninsula in the Russian Federation (see Target 1 for further details).

Another approach that is very promising is that of Locally Managed Marine Areas (LMMAs). A very active LMMA network has emerged in the Asia-Pacific region and experiences have started to be shared in other parts of the world.

**Locally Managed Marine Area (LMMA):**

“An area of nearshore waters and its associated coastal and marine resources that is largely or wholly managed at a local level by the coastal communities, land-owning groups, partner organizations, and/or collaborative government representatives who reside or are based in the immediate area... LMMAs are characterized by local ownership, use and/or control, and in some areas follow the traditional tenure and management practices of the region... Communities typically set aside at least part of an LMMA as a no-take reserve (oftentimes referred to as a community marine protected area) or impose certain gear, species, or seasonal restrictions to allow habitat and resources to recover from fishing pressure, or to sustain or increase fish catch”.


“A locally-managed marine area (LMMA) is an area of nearshore waters that is actively being managed in a ‘local’ practitioner context by residing or neighbouring communities.

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98 Ellis, “What a Saami-Led Project in Arctic Finland Can Teach Us about Indigenous Science.”
99 LMMA Country Networks, “Where We Work.”
100 LMMA Networks, “LMMA Networks.”
Similarly, in Costa Rica, a decree in 2009 has opened up the possibility of recognizing Marine Responsible Fishing Areas, a shared governance model, which involve a partnership arrangement among government and local fishing communities.

**Marine Responsible Fishing Area, Costa Rica:**

“An area with significant biological, fisheries or sociocultural characteristics that is delimited by geographical coordinates and other mechanisms, where fishing activity is regulated in a way that secures the long-term sustainability of fisheries, and where, INCOPEGSA can rely on the support of coastal communities and/or other institutions for fisheries conservation, use and management”. Decree no. 35502-MAG (2009), Art. 1a\(^{101}\).

This has guaranteed that small scale fishers’ communities (SSF) have been able to develop and implement a “shared governance model” for the management of their territories of life: together, governmental and SSF organizations agree on the rules and decisions related to responsible fishing and propose a fisheries management plan for the area. The first MRFA recognized by the government in 2009, and today the country has eleven formal MRFAs and two more have been requested. All the MRFAs are linked through a National Network, which aims to implement the FAO’s Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF guidelines)\(^{102}\). The Network also facilitates sharing of experiences and lessons learned; monitors and promotes the generation of knowledge that incorporates both traditional and scientific knowledge; and implements a human rights-based approach to marine conservation.

Similarly, fishing communities in Zanzibar, Tanzania have instituted temporary fishing closures and bans on dynamite fishing to protect their lucrative octopus fisheries and ensure sustainable use, supported by the Mwambao Coastal Community Network (a local NGO).\(^{103}\) Mwambao supports a growing number of coastal communities through peer-to-peer exchange and co-working on shared interests, such as fisheries policy and legal reform. It has played a key role in introducing and facilitating the implementation of the SSF Guidelines in Tanzania\(^{104}\).
In many cases, community-based fisheries management is also related to innovative approaches to marine protected areas based on recognition of the rights and interests of small-scale fishers (see also Target 11). For example:

- In Zanzibar Kukuu village on Pemba Island established a permanent “no-take zone” within a wider temporary fishing closure zone, which is in turn part of the 1,000-sq km Pemba Channel Conservation Area. Mwambao is working here in collaboration with the government to improve fishery management and secure the future for local people and for the rich biodiversity of the area, including mangroves, seagrass beds and coral reef.

- In Madagascar, Fanamby (a local community organisation) has been monitoring the marine protected area of Loky Manambato, which has 15 000 hectares of coral reefs and 8 archipelagos, since 2015. Ten rangers from the local communities patrol the sea throughout the year to make sure that closing seasons and core marine protected areas are respected. In 2018, 400 fishermen from four village pilot sites started to monitor their catches of fish and octopus. These fishermen are gathered within five associations that are involved in the elaboration of the Dina (local communities’ laws, which are recognized at the national level).

IPLCs also contribute to sustainable management of fish and other aquatic resources in inland waters such as rivers, lakes and streams. For example, in Cambodia there are over 500 Community Fisheries Institutions covering over 850,000 hectares and consisting of some 188,000 members, including over 61,000 women. Registration of a community fisheries institution requires the development of internal rules and regulations based on a calculation of sustainable yields. In 2012 an evaluation of 450 CFIs then in existence documented teeming fish stocks and real benefits to local people in terms of raised standards of living.\(^\text{105}\)

Another sustainable system for inland fisheries that has received government recognition in recent years is the customary tagal system in Sabah, Malaysia (see box 6.2).

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\(^{105}\) Kurien, “From Individual Rights to Community Commons.”
Case study: The Community-based Tagal system in Sabah, Malaysia

Alice Mathew and Jawatankuasa BioBudaya Melangkap

Traditionally, Tagal refers to demarcation by a villager of a part of the river for his family, thereby prohibiting others from accessing the lubuk or deep pool. This traditional concept was adopted by the Sabah Fisheries Department in 2002 to assist the State Government in promoting sustainable fish resource management and in conserving aquatic species, as well as water quality. Through trial and error, communities and the Fisheries Department began to “tame” their growing fish. There are now about 400 river co-management systems that have implemented the Tagal concept.

One indigenous community that has revitalised the Tagal practice is Melangkap, in the district of Kota Belud at the foothills of Mount Kinabalu (adjacent to Kinabalu National Park). The area is rich in biodiversity and the community, which is inhabited by the indigenous Dusun Tindal residing in several villages, retains traditional knowledge of the use of plants, herbs, biodiversity and the natural terrain of this mountainous area. They respect and accord a high level of importance towards the rivers flowing in their area. This is clearly reflected in the village adat (customary rules). There are rules to protect the rivers and catchment areas, including written by-laws concerning the management of rivers (Tagal).

The Tagal system was formally documented in Melangkap Tiong in 1986 and since then, the community has seen an increase in fish numbers and in the number of endemic species. Bombon committees were set up for the purpose of managing tagal areas (Bombon is a Dusun word referring to an area where strict rules are applied) and committee members are villagers chosen by their respective village communities.

In general, every rule emphasises the protection and security of the tagal areas. Some of the common elements are:

- Prohibition of any activity that can destroy the ecosystem, such as fish poisoning, blast fishing and the use of polluting or damaging fishing equipment.
- Prohibition of entry by outsiders without prior permission by the village communities.
- Issuance of penalties to those who disobey the rules set by the Bombon (committee).

In the past they used to have an open season after a 3 year no-take ban; however, the current Bombon Committee have decided to Tagal that particular river with no harvest at all due to the increase in ecotourism, which has benefitted the community as a whole.

In response to concerns about rapid loss of traditional knowledge and customary sustainable use of biological resources the Melangkap community started to develop a community protocol in 2012. Through the protocol, the community have practised their right to self-determination and are fully engaged in governing and managing protected areas (including the Kinabalu National Park and areas under the jurisdiction of the Sabah Forest Department) according to their rights, knowledge, capacities and institutions. The Tagal system is now also linked to the Melangkap community protocol, in that the Tagal System applies effective area-based conservation measures, allowing the safeguarding of the area beyond the boundaries of State protected areas. This complements the actions of the State government and Sabah Parks by enhancing their protected areas system whilst ensuring that there is no infringement of the rights of indigenous communities. The Melangkap community have gone a step further than the State by establishing strict adat rules and
defining the FPIC process that should be adopted by any external actor intending to conduct any activities that may have an impact on the lives of the community, on the biodiversity and on the quality of water in their rivers. Thus, the Melangkap communities have one of the most comprehensive access and benefit-sharing models, and this is currently in the process of being adopted by the State government under the Sabah Biodiversity Enactment and complemented by the Federal ABS Act. The Melangkap experience is therefore directly relevant to Aichi Target 11 and 16.

The Melangkap Protocol has also been successfully utilised by the community to negotiate:

- the planning of road infrastructure and avoided the destruction of a sacred site;
- in the Native Courts and the Land Use Panel to limit encroachment of communal land by a tourism developer;
- the establishment of a benefit sharing system for the ecotourism project of the Tagal Tiong Site from which the whole community benefits.

Enabling conditions and remaining barriers

Enabling conditions to support IPLCs to contribute towards achievement of the target include:

- Increase respect and recognition of customary tenure and rights to aquatic resources for IPLCs.
- Upscaling of support to IPLCs for the implementation of the FAO SSF Guidelines.
- Reduce/eradicate harmful subsidies that contribute to large-scale overfishing and overcapacity.
- Invest in supporting sustainable small-scale fisheries.
- Increase financial and other support to upscale community-based customary sustainable practices and marine and inland water community managed and conserved areas (LMMAs etc).
- Policy and legal reforms, with full and effective participation of IPLCs, to recognise and support their role, including women’s and youth’s roles, in sustainable fisheries and management of aquatic resources.
- Fully implement the ecosystem approach, addressing linkages between terrestrial and marine ecosystems and synergies between sustainable aquatic resources and SDGs.
Opportunities and recommended action for the post-2020 (TBD)

- Governments and relevant actors should adopt a human rights base approach to fisheries management and conservation of biodiversity, including through upscaling of the implementation of the FAO SSF Guidelines.

- Governments to urgently increase respect and recognition of customary tenure and rights to aquatic resources for IPLCs fishers.

- Governments and relevant actors should reduce harmful subsidies that contribute to overfishing and overcapacity and redirect investments to support small-scale fisheries and to upscale community-based marine and inland water managed and conserved areas.

- Governments and relevant actors should grant preferential access of small-scale fisheries to fish in waters under national jurisdiction, in line with SSF Guidelines and with the FAO Code of Conduct for Responsible Fisheries and SDG 14b

Key resources


(should be whole GA)


Target 7: Sustainable agriculture, aquaculture and forestry

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Key message:

The past decade has seen growing concerns over food and agricultural policy, giving impetus to several UN initiatives underlining the role of small-scale farmers and producers in feeding the world’s people and in engendering farm and forest enterprises. Bringing agriculture, aquaculture and forestry under sustainable management requires mainstreaming and empowerment of IPLCs as central actors in rural development. It also requires the reversal of long-standing laws, policies and programmes that have encouraged the expansion of large-scale commodity production, which in turn has caused a widespread decline of biodiversity and the erosion of local management systems and customary sustainable use.

Context

IPLC production systems based on agro-forestry, fishing, hunting and pastoralism constitute a large part of rural economies, which are hugely important for both their subsistence and market values. However, customary land use and resource management systems have been under pressure from export-led strategies focused on large-scale commodity production linked to global supply chains, to the neglect of small-scale producers. The impacts of dominant economic development strategies on IPLCs has been dispossession of their territories, lands, forests and other natural resources; impoverishment, non-respect for their knowledge and marginalisation in decision-making over their futures.

“As widely recognized, the current food and agricultural system is largely responsible for deforestation, water scarcities, biodiversity loss, soil depletion along with high levels of greenhouse gas emissions, which have significantly contributed to climate change.

Today’s food production and consumption have been shifted from their culturally and socially embedded systems towards a system disconnected from local ecological and social systems. In order to meet the needs of present and future generations, it is essential to accelerate a transition towards more sustainable food and agriculture systems that can simultaneously provide economic and social opportunities, while protecting the ecosystems upon which agriculture depends and respecting the cultural and social diversity of territories.

Territorial development needs to be reconnected with the people (and
The past decade has seen growing concerns over food and agricultural policy, giving impetus to a number of multi-stakeholder UN initiatives supportive of SDG Goals 1 and 2, underlining the role of small-scale farmers, including indigenous peoples. These include the UN Decade of Nutrition 2016-2025, UN Decade of Water 2018-2028, UN Decade on Family Farming UNDFF 2019-2028, UN Decade of Ecosystem Restoration 2021-2030, as well as instruments including Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, the UN Declaration of the Rights of Peasants and Other People Working in Rural Areas. Clarification of the actors covered by these processes and the broad adoption of a shared language across multiple policy arenas, will also help towards effective communication and coordination amongst different constituencies and will foster synergies amongst multiple processes and instruments.

The Global Plan of Action adopted by the UN Decade on Family Farming covers “all types of family-based production models in agriculture, fishery, forestry, pastoral and aquaculture and includes peasants, indigenous peoples, traditional communities, fisher folks, mountain farmers, forest users and pastoralists”, acknowledging family farming as the predominant form of food and agricultural production in both developed and developing countries, producing over 80 percent of the world’s food in value terms. “Beyond food production, they simultaneously fulfil environmental, social and cultural functions, preserving landscapes and biodiversity and maintaining community and cultural heritage.”

**Contributions of Indigenous Peoples**

John Mohawk, respected indigenous teacher from north America explains: *Indigenous people are here to maintain survival as a plausible goal. Subsistence is a moral relationship with nature. In many ways, it is the indigenous cultures’ relationship to the earth that represents the only real hope for the long-term survival of people on any scale in the world. Subsistence means that there’s a forest here today, and we find a way to make a living here. Then tomorrow, there’s still a forest here. That’s subsistence.*

Farmers networks such as La Via Campesina (the Peasant Way) are reclaiming the term *peasant*, and building a shared peasant identity across national borders and cultures. Their main concerns are promoting food sovereignty; agrarian reform; people's control over land, water, territories; popular peasant feminism; participation of youth in agriculture; human rights, rights including of migrant workers; promoting agroecology and peasant seeds systems; resisting free-trade and the power of transnational corporations.

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106 John Mohawk, in Paradigm Wars, International Forum on Globalization
107 La Via Campesina
A Peasant Food Web\textsuperscript{108} has been defined as linking small-scale producers, usually family- or women-led, that include farmers, livestock-keepers, pastoralists, hunters, gatherers, fishers and urban and peri-urban producers:

“Our definition includes not only those who control their own production resources, but also those who work for others to produce and supply food, and who have often been dispossessed of their land. Depending on season and opportunity, peasant farmers may also be fishers, as well as hunters and gatherers, and urban peasants may have fish ponds and small livestock as well as outside employment. Peasants may move back and forth between food production and urban jobs for environmental and socio-economic reasons…. Peasants are by no means always self-sufficient and sometimes purchase food from the (industrial food) Chain, and that the reverse is also true. They may or may not grow all of their own food, trade with neighbours and sell the surplus in local markets. While growing all they can under difficult conditions, peasants are often malnourished, but could still have food to trade. “Peasant” sometimes implies “indigenous,” but we recognize that Indigenous Peoples have their own identity and define their own livelihoods and food systems.”\textsuperscript{109}

\textsuperscript{108} ETC Group – Who feeds the world?
\textsuperscript{109} ETC Group – Who feeds the world?
Rural peoples who look to “famine foods” in the seasons of scarcity prior to harvests will survive thanks to the Web’s protection of agricultural biological diversity.

Bringing agriculture, aquaculture and forestry under sustainable management requires mainstreaming and empowering IPLCs to be central actors in rural development, and reversing long-standing laws, policies and programmes which have resulted in the decline of biodiversity and the erosion of indigenous and local knowledge in rural landscapes.
Case study: Loko iʻa: Indigenous Aquaculture and Mariculture in Hawaiʻi

Loko iʻa are an advanced, extensive form of aquaculture found nowhere else in the world. While techniques of herding or trapping adult fish in shallow tidal areas, in estuaries and along their inland migration can be found around the globe, Hawaiians developed fishponds that are technologically unique, advancing the cultivation practice of mahi iʻa (fish farmer). Loko iʻa revitalization goes hand-in-hand with the revitalization of Hawaiian language, arts, architecture and diet.

Loko iʻa take advantage of natural coastal ecology and tidal cycles, enhancing nearshore areas to efficiently provide algae to feed and fatten herbivorous fish. Additionally, where high surf, storms and other weather phenomena can influence and interrupt fishing practices or when ocean fishing may not yield sufficient supply, fishponds provide a regular supply of fish.

The Hawaiian innovation reflected in the variety of loko iʻa designs and construction methods demonstrates an unparalleled understanding of engineering, hydrology, ecology, biology and agriculture. Loko iʻa practice is the result of over a thousand years of generational knowledge, experimentation and adaptation and reflects a deep indigenous understanding of the environmental, ecological and social processes specific to our islands.

Loko iʻa were essential components of traditional food systems in Hawaiʻi and their production provided food security and community resilience.

Historic decline in management and production

Following the overthrow of the Hawaiian monarchy, loko iʻa production dropped. An inventory in 1901 identified only 99 ponds actively used in commercial trade compared to more than twice as many ponds in use only thirty years prior. By 1970, loko iʻa only produced 20,000 pounds of fish-less than 1 percent of what they produced at their peak.

Today, the majority of loko iʻa sites are in highly degraded conditions, some completely covered and unrecognizable as fishponds. Barriers to restoration include: altered watersheds and diversion of water (necessary to create the productive brackish water for coastal loko iʻa), invasive species such as non-native mangrove, permitting processes that are not well-designed to accommodate loko iʻa restoration, and loss and scattering of generational knowledge for management and care of loko iʻa. Yet loko iʻa remain important components of the ahupuaʻa and maintain the potential to contribute to a healthy and robust food system.

Collaboration and Collective Movement of Hui Mālama Loko Iʻa

Over past decades, Hawaiian communities and kiaʻi loko (fishpond guardians/caretakers) worked to restore loko iʻa around the islands and reclaim the knowledge and practice of loko iʻa culture. Hui Mālama Loko Iʻa, a network of loko iʻa and kiaʻi loko from six Hawaiian Islands was formed in 2004, meeting annually and opportunistically to strengthen working relationships and share experience and expertise.

Our network of committed and skilled site-based caretakers most recently leveraged its collective influence to streamline the permitting processes in collaboration with the State of Hawaiʻi.
has generally improved co-management relationships with government and private entities. Sharing and social cohesion is a key component of loko iʻa culture because of the scale of physical labor needed for construction and maintenance. The surrounding community comes to help and in return shares in the abundance produced from the pond.\(^{117}\) Today loko iʻa serve as kipuka for the renewal of traditional practices and values in contemporary ways. Loko iʻa are thus celebrated for their past and future potential to contribute to the needs of their ahupuaʻa and our broader community in Hawaiʻi.

The restoration of loko iʻa provides opportunities for Native Hawaiians and the larger community to renew ʻāina momona, an abundant, productive ecological system that supports community well-being.

Making Economic What is Green

IPLCs have been fostering innovations in local production systems to meet the changing needs of their communities, including new forms of livelihoods and income-generating activities. Investing in community-based social enterprises (see also Aichi Biodiversity Target 3) is another pathway towards advance progress in the implementation of this target.

\(^{110}\) \(^{111}\) Kirch, Feathered Gods and Fishhooks.

\(^{112}\) Reflection from practitioners of local non-profit Paepae o Heʻeia, formed in 2001 to restore and mālama Heʻeia fishpond on Oʻahu.

\(^{113}\) DHM Planners Inc. et al., Hawaiian Fishpond Study: Islands of Hawaiʻi, Maui, Lanaʻi and Kauaʻi (Honolulu: DHM Incorporated 1990).

\(^{114}\) John N. Cobb, Commercial Fisheries of the Hawaiian Islands (U.S. Fish Commission, 1901), 428-433.


Case study: Pgaz K’Nyau Community Social Enterprise as Alternative Livelihoods for Young Generations
**Nutdanai Trakansuphakon, Pgaz K’Nyau Association for Sustainable Development (PASD)**

The Pgaz K’Nyau (Karen) practice rotational farming as a self-reliant economy for our own food consumption, but today, we also need cash incomes for our expenses in everyday life - children go to school, to hospital, and have other needs.” Nutdanai Trakansuphakon is a new generation activist and social worker, working to add value to local non-timber forest products (NTFPs) of Hin Lad Nai and other communities as alternative social enterprise.

PASD works with *Pgaz K’Nyau* communities on community social enterprise, because today, their young people migrate to work in urban areas. Then the communities have lost their young people, leaving a gap between elders and youth. Elders don’t have space to transmit their knowledge to the new generations. The concept of social enterprise is a great tool to sustain and improve the livelihoods of our indigenous people while still preserving cultural identity.

In *Hin Lad Nai* village, we started to design community social enterprise by young people in community and they are the owner of this brand. We started to think about how to use NTFPs - for example wild honey, tea, bamboo shoots etc. However, we have added *Pgaz K’Nyau* knowledge and wisdom to run this brand.

We believe that our wisdom and traditional knowledge will ensure our brand to be sustainable based on knowledge and practice being friendly between humans and nature. For example, *Hin Lad Nai* branding and marketing of honey products, don’t talk about their products as better than other brands, but they use their products to communicate the community story through the tasting of honey combined with how they have taken care of their forest based on their traditional knowledge in everyday life. The honey created has diverse tastes: each bottle of honey does not have the same taste because these products are based on diverse flowers from the biological diversity in *Hin Lad Nai* ecosystem. *Hin Lad Nai* people communicate their story through their honey brand, and it is spreading wide and creating a big impact on wider Thai society. People in the city find that not only are these good honey products but also people take good care of their forest and very well coexist between humans and nature.

Another dimension, *Hin Lad Nai* while creating more and more added value to the diverse products is motivating young people to come back to their community, to play an important role in innovative products, and becoming new types of occupation for them. They have created opportunities for younger generations willing to return home with hope and security in their futures in their home community.

From the sale of products, they give part of their income to collective fund of the community: 20 baht for one bottle of honey, 20 cents from 1 kilo of tea leaves, etc. At the same time, from the sale of brand products, they keep 30% of profits for the community cooperation collective fund. This fund is kept for any urgent and collective activities, particularly for caring and conserving of their environment e.g. fire break and fire control in summer time, replanting or increasing local trees and plants for biodiversity in their ecosystem, and including any urgent need for villagers such as serious cases to go to hospital, education for young people, follow up government policies and others.
They try to upscale the *Hin Lad Nai* honey brand model by sharing to other *Pgaz K’Nyau* communities. The honey and coffee network have started to establish a new brand name “*Pgaz K’Nyau*” by linking 5 *Pgaz K’Nyau* communities from 4 provinces. They have designed and collaborated their common plan and activities together to promote their new brand, established their common governance board composed of young leaders from 5 communities, they are strongly creating their network for their future sustainability goals of their self-reliant economy.

**Enabling conditions and recommendations**

Securing customary tenure of IPLCs to their lands, territories and resources is critical for progress to be made in sustainable agriculture, aquaculture and forestry, thus also addressing the goals of poverty eradication, conserving biodiversity and climate change mitigation and adaptation. Implementation of CBD Plan of Action on Customary Sustainable Use, and the following actions will further advance progress in the implementation of this target:

1. Improving data collection on contributions of small-scale producers in local, national and global statistics towards their recognition in policy and actions
2. Greater support and investments in IPLCs’ local economies, traditional occupations and community social enterprises, and smallholder production
3. Strengthen IPLC organisations and networks engaged in ecological restoration and community livelihoods
4. Support farm and forest producer organisations
5. Ensure the full and effective participation of women, youth, persons with disabilities and other marginalised members of the community
6. Governments to develop joined up national strategies and action plans, under the various UN Decades: Family Farming, Food and Nutrition, Water, UN Decade of Ecosystem Restoration 2021-2030 etc.
7. Encourage greater efforts to secure, invest in, and add value to small scale production;
8. Protect IPLC territories, smallholder landscapes from incursions by agro-industrial models
9. Development funders and donors, in particular the development banks and major foundations, to change their funding approach by stopping overwhelming support to the green revolution and industrial agriculture model, and reallocating funding towards the agroecological transformation of the food system, including revitalization of indigenous food systems.
10. Realizing Farmers’ Rights and enabling farmers to continue to maintain, develop and manage crop genetic resources, and recognizing and rewarding them for their indispensable contributions to the global pool of genetic resources.

To monitor progress in these actions, a proposed structural indicator could be:

Number of countries adopting laws, policies and measures to secure customary land tenure, with improved access of IPLCs and small producers, including family farmers to a set of services, finance,
knowledge, technologies, rural infrastructure, markets promoting diversified employment
opportunities and strengthening the cultural identity of family farmers, and urban rural linkages.

Key resources

1. FAO/Farm and Forest Facility
2. Who will feed the World? ETC Group
3. World Committee on Food Security HLPE on Food Security and Nutrition: Agroecological
   and other Innovative approaches for sustainable agriculture and food systems that enhance
   food security and nutrition
4. International Partnership on the Satoyama Initiative IPSI
5. UN Decade on Family Farming Global Action Plan, FAO and IFAD
6. The world’s largest private sector? Recognising the cumulative economic value of small-scale
   forest and farm producers, Michael Verdone
**Target 8: Pollution reduced**

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

**Key message:**

Poor progress has been made in reducing pollution over the past ten years. IPLCs continue to play a key role in dealing with this growing problem, both through community monitoring of pollution levels and through the maintenance or adoption of production practices that use few or no chemicals. IPLCs have also been empowered to combat pollution, both locally and nationally, through links with international campaigns and through external support for complaints and legal challenges. The full potential contribution of IPLCs to this goal, however, remains largely unrealized, requiring governmental support alongside strengthened laws and regulations.

**Context: What does this target mean for IPLCs?**

Despite some positive initiatives, overall the progress on this target has been poor. As the IPBES Global Assessment notes “many types of pollution ... are increasing, with negative impacts for nature.”

While quantitative assessment of pollution is limited in terms of the quality of data in many countries, current data show pollution rising at least as fast as the growth in the human population. IPBES note that “plastic pollution [has] increased ten-fold, and also highlights the issue of nitrogen pollution. Over 80% of global wastewater is discharged into the environment without treatment, while 300–400 million tons of heavy metals, solvents, toxic sludge, and other wastes are dumped into the world’s waters each year. Fertilizers enter coastal ecosystems, producing more than 400 hypoxic zones and affecting a total area of more than 245,000km².” Given the high occurrence of water contamination, biodiversity in inland aquatic, coastal and marine ecosystems is particularly at high risk.

Given their close links to the local environment and natural water sources, IPLCs are particularly vulnerable to the impacts of pollution. Pollution is the largest environmental cause of disease and death in the world today, responsible for an estimated 9 million premature deaths, and IPLCs suffer disproportionately.

The loss and/or contamination of traditional lands and territories have major impacts on the social, political and cultural fabric of indigenous communities, particularly on the quality of life of indigenous women and children. There is a growing body of evidence that women’s reproductive health is

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118 Jackson, Storrs, and Morrison, “Recognition of Aboriginal Rights, Interests and Values in River Research and Management: Perspectives from Northern Australia.”


120 Patricia Balvanera et al, “IPBES Global Assessment on Biodiversity and Ecosystem Services: Chapter 2.1. Status and Trends - Indirect and Direct Drivers of Change.”

uniquely impacted from exposure to environmental toxins. Results from the Navajo Birth Cohort Study show that women exposed to uranium contamination can pass on the exposure to their foetus, resulting in children being born with elevated levels of uranium in their bodies.\textsuperscript{122} Indigenous women in the Arctic, in this case Alaska, measured comparatively higher levels of persistent organic pollutants in their breast milk at levels that were considered unsafe.\textsuperscript{123}

**Contributions and experiences of IPLCs towards the target:**

**Local actions**

IPLCs are making significant contributions to reducing environmental pollution through a number of initiatives. Community-based monitoring of the local environment is a key emerging field. For example, the Wapichan in Guyana have undertaken a monitoring project to limit the damage done by miners (see box), but this practice is also being rolled out in other territories such as the Achuar communities in the Peruvian Amazon, who are monitoring the damage done by the oil industry,\textsuperscript{124} and Dayak communities on Kalimantan, Indonesia, who are using drone mapping to protect their forest from encroachment.\textsuperscript{125}

**Case study - River pollution monitoring and improvement of water quality, Russia**

The indigenous reindeer herders and fishermen in the Arctic region of North Yakutiya, Russia, rely on the water from the local rivers for their lives and livelihoods. As such, they have been monitoring the pollution levels in them, particularly for biological and industrial contaminants, including coal dust. The monitoring started in 2016, and in October 2018 high levels of pollution were observed in the river Viluy, which led to the locals opening their own laboratory to analyse the results. This has empowered the indigenous communities in their dialogues with the administration of the Zhigansky district, and the mining companies whose activities can affect the ecology of the territory.

Such monitoring is normally the first step in attempts to rectify the situation, often providing the necessary evidence page to pressure government to enact laws to clamp down on polluters. In some cases, communities take the initiative to deal with the situation directly, such as in Antigua and Barbuda, where the Adopt a Coastline project has seen local community mobilisation to clean damaged beaches (see box). In the Kakadu area of Australia, the local Mirrar people forced the mining company Rio Tinto to shelve plans for the Jabiluka uranium mine, primarily because of pollution concerns.\textsuperscript{126} In nearby Koongarra, the sole surviving member of the aboriginal Djok clan, rejected generous offers from the miner Areva and instead pledged the land he inherited to the Australian Government to become part of the World Heritage-listed Kakadu National Park.\textsuperscript{127}

Concerns about pollution associated with outsider mining for gold on their land, led the indigenous peoples of the Resguardo of Canamomo Lomaprieta, Colombia, to fight a court battle. The subsequent legal victory mandated that their lands must be delimited and titled within one year, during which

\textsuperscript{122} Agency for Toxic Substances and Disease Registry, “Navajo Birth Cohort Study.”
\textsuperscript{124} Collyns, “After Years of Toxic Oil Spills, Indigenous Peruvians Use Tech to Fight Back.”
\textsuperscript{125} Greenwood, “How Drones Can Help Indigenous People Protect Their Land.”
\textsuperscript{126} Australian Conservation Foundation, “We Stood with the Mirarr People to Stop the Jabiluka Uranium Mine.”
\textsuperscript{127} Beyond Nuclear International, “Jeffrey Lee Saved Koongarra from Uranium Mining.”
time all further permits or formalisation of mining activities must be suspended. In Ecuador the Waorani people won a landmark legal case against the Ecuadoran Government to suspend any possibility of selling the community’s land for oil exploration without a free, prior and informed consultation process. In Papua New Guinea, concerns about the potential environmental damage caused by a proposed deep sea mining project led by a Canadian mining company, Nautilus Minerals, has united coastal communities into an organisation called the Alliance of Solwara Warriors. Together they have mobilised local opposition, with educational activities on the potential impacts and participated in court cases which have left the company so far unable to proceed.

Case study – Wapichan Monitoring Programme, Guyana
The Wapichan people of South Rupununi District Council (SRDC) in Guyana established a Monitoring Programme in 2013 in response to the growing impact of lawless mining in the Marudi region. The Marudi mountain range is a sacred area to the Wapichans, and it is also a major watershed. Many creeks were suffering from mercury pollution and siltation, with a direct impact on the associated fragile ecosystems and those communities who relied on it for fishing and hunting. Sampling by the Wapichan, with support from WWF, showed that women from local villages recorded levels for mercury above the recommended WHO safety limits.

The Monitoring Programme was established with the purpose of safeguarding and protecting Wapichan lands, territories, and resources, including through collaborative arrangements with the Government. The programme was developed over several years, following numerous village and District-level meetings. The monitoring volunteers visit sites undertaking visual inspections and making digital records of any incidents. The monitors use instruments like GPS handheld sets, smart phones and drones to inform the village councils, SRDC and other government authorities. The data are the property of the SRDC and they decide how to go about sharing such information and with whom, with a full monitoring report being published in 2018.

The Monitoring Programme has forced the Guyanese Government to act, with the enforcement of mining regulations in Marudi, so there is less illegal mining in the area. As a result of this evidence-based work and persistence, the Cabinet made a decision that there will be no mining above the 4th parallel. Various engagement with Government ministries led to the creation of the Wapichan Land Talks Team which meets with Government representatives to collectively agree on certain issues, especially as they relate to information gathered by the monitors.

The model is now being introduced in other regions where there are environmental problems. The model of a District Council is also taking hold in all five of the ten regions with predominantly indigenous populations.

Case study - Addressing plastics pollution in Antigua/Barbuda
Jennifer Moranto of Adopt a Coastline is changing the attitude and behavior of local children through fostering and mentoring Youth Stewards to conserve and protect the marine and coastal assets in

128 Forest Peoples Programme, “Groundbreaking Win for Indigenous People in Colombia.”
129 Brown, “Indigenous Waorani Win Landmark Legal Case against Ecuador Gov’t.”
130 Deep Sea Mining Campaign, “Joint Letter Calling for the PNG Government to Cancel All Nautilus Minerals Deep Sea Mining Licences.”
Antigua and Barbuda. The Youth Stewardship program is dedicated to restoring and preserving Antigua’s coastlines through a grassroots campaign that includes group beach clean ups, education, raising public awareness, and community action via social media and citizen science. It has become a nationally significance movement, which has widened the understanding of the fragility of the island’s marine and coastal habitats, particularly as it is impacted by pollution, notably from plastics. Adopt a Coastline has organized several group beach clean ups in areas where birds, fish and turtles nest and feed to introduce people to these pristine places where wildlife is struggling to survive.

The impact has been great, with 100 new members recruited since the program started, averaging 30 new members monthly. The known turtle nesting sites around the island beaches are now kept clean and articles collected from the waste are made into usable items, such as artifacts and crafts for sale. Old tires dumped on Falmouth Beach have also been made into bins and advertising signage has been constructed from recycled wood to ensure the beach is kept clean.

The multiple benefits achieved include:
- increased commitment to the protection of natural resources;
- engaged and educated communities, especially young people; and
- long term sustainability with local community ownership and buy in at all levels.

Private individuals and businesses are now donating money, time and resources to the beach cleaning and maintenance programs undertaken. A link has been made to the Antigua Barbuda Marine Association, so that a Zero Waste Cup initiative was introduced in Antigua and Barbuda Sailing Week, leading to 38,375 plastic cups being diverted from landfill.

The future vision of the project is focused on reaching more communities and sites to clean and facilitating ways for the youth stewards to create a viable means of support for their activities through further product development, social media output, and soliciting further sponsorship from businesses and property owners.

International advocacy & legal cases

Many local and national activities that are focused on stopping pollution also relate to, are interlinked with, or later develop into international advocacy.

Examples of this includes the contributions of IPLCs at international meetings and processes, such as the UN Convention on Biological Diversity, the Stockholm Convention on Persistent Organic Pollutants and the Minimata Convention on Mercury.\(^{132}\)

In terms of legal action, a number of pollution-related cases have been moved to the home jurisdiction of the companies responsible for the pollution, or become cases submitted to international complaints mechanisms. Examples include legal battles against Chevron (formerly Texaco) for the environmental impacts of its operations in the Oriente region of Ecuador, which have included variously a class action lawsuit in US federal court, international arbitration, and even proceedings in Canada.\(^{133}\)

\(^{132}\) International Indian Treaty Council, “UN Minamata Convention on Mercury Intergovernmental Negotiating Committee Session 7 (INC7), Dead Sea, Jordan, March 10-15, 2016 Intervention on Agenda Item 12.”

\(^{133}\) Business & Human Rights Resource C., “Texaco/Chevron Lawsuits (Re Ecuador).”
Various complaints to the OECD Guidelines for Multinational Enterprises focus on pollution. These include the case of communities in Cameroon alleging that UK company Victoria Oil and Gas polluted their waterways\textsuperscript{134}, or the case taken out in Switzerland on behalf of indigenous communities affected by the North Dakota Access Pipeline (DAPL) pipeline in the US against Credit Suisse for breaching the principle to carry out risk-based and human rights due diligence, given the risk to the drinking water of local indigenous peoples.\textsuperscript{135}

**Enabling conditions:**

There are opportunities for greater direct representation of affected communities on standard setting bodies which can act to minimise pollution. These include the Initiative for Responsible Mining Association (IRMA), which has indigenous peoples and local communities representation on its steering committee,\textsuperscript{136} and the Aluminum Stewardship Initiative (ASI), which has an Indigenous Peoples Advisory Forum.\textsuperscript{137}

There have been a number of recent incidents where mine waste (tailings) dams have ruptured, causing massive impacts to the environment and IPLCs – including to indigenous peoples living near the Mount Polley mine in British Columbia, Canada in 2014 and to the communities along the river Doce in Brazil after the Samarco in 2015. As a result, investors launched the Investor Mining and Tailings Safety Initiative calling for an independent and publicly accessible international standard for tailings dams.\textsuperscript{138} Although the initiative’s steering committee has sought input from those directly affected, it has yet to ensure they are fully represented on the committee.

Other enabling conditions include IPLCs being able to litigate against companies or put pressure on financiers. For example, the OECD North Dakota Access Pipeline complaint also points to where IPLCs, with their supporting partners, can put pressure on financiers to limit or mitigate pollution.

**Opportunities and recommended actions for post-2020**

Governments and other actors:

Community-based monitoring systems have been increasingly emerging as a valid and cost-effective approach to monitor incidents of pollution. Support should be provided to IPLCs to:

- upscale such systems, developing and using indicators relevant to biological and cultural diversity; and
- to ensure they interact effectively with national and global monitoring and reporting efforts.
- Support the input of IPLC knowledge and experience involving this target with key related processes, including SDG 6 & 12 (particularly targets 6.3, 6b, 8.4, 12.4, and 15.1), the Minimata Convention on Mercury, the Stockholm Convention on Persistent Organic Pollutants, Strategic Approach to International Chemicals Management (SAICM)

\textsuperscript{134} OECD Watch, “Cameroon Communities vs. Victoria Oil and Gas.”
\textsuperscript{135} OECD Watch, “Society for Threatened Peoples vs. Credit Suisse — OECD Watch Case Database.”
\textsuperscript{136} Initiative for Responsible Mining Assurance, “Governance.”
\textsuperscript{137} Aluminium Stewardship Initiative, “Aluminium Stewardship Initiative: Indigenous Peoples Advisory Forum - .”
\textsuperscript{138} The Church of England, “Investor Mining and Tailings Safety Initiative.”
Strengthen national institutions to ensure that polluting industries are held accountable advancing pollution control and enable a global value change that promotes minimal waste, and accelerates the development of clean energy sources and clean technologies that will ultimately prevent pollution at source.

Key resources


References


https://responsiblemining.net/about/governance/.


OECD Watch. “Cameroon Communities vs. Victoria Oil and Gas,” 2018.
https://complaints.oecdwatch.org/cases/Case_498.

https://complaints.oecdwatch.org/cases/Case_475.


Target 9: Invasive alien species prevented and controlled

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Key message

Invasive Alien Species (IAS) continue to pose serious threats to IPLCs’ cultural, environmental and food systems, and many IPLCs are contributing to, and in some cases initiating, programmes to address this growing problem. Stronger partnerships are needed, building on traditional knowledge and actions of IPLCs, to strengthen holistic, ecosystem-based approaches to the identification, assessment, monitoring, and control or eradication of IAS.

(Chapter under development)
**Target 10: Ecosystems vulnerable to climate change**

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

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**Key message**

IPLCs, particularly those in small islands, coastal and high-altitude areas, drylands and the Arctic are increasingly experiencing the impacts of climate change. Natural resource management systems of IPLCs and ICCAs provide valuable solutions as they generate low anthropogenic pressures on coral reefs and other vulnerable ecosystems. As scientific evidence calls for urgent systemic transformations within the next decade, concerted action on this target is needed to bolster IPLCs’ abilities and resilience to maintain ecosystem integrity and to cope with climate change impacts, including reform of climate mitigation and adaptation policies that stand to increase IPLCs’ vulnerability.

(Chapter under development)
Target 11: Protected and conserved areas

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Key message

The proportion of land and oceans designated as protected and conserved areas is likely to reach the 2020 target, but progress on effectiveness and equity lags far behind. This has resulted in continued conflict and alienation of IPLCs. Given that at least 50% of the global land area is held under customary or community-based regimes, and in the light of mounting evidence that these areas conserve biodiversity effectively, a major opportunity to boost global conservation is being missed under current conservation regimes. A radical transformation in conservation policy and practice is needed, from conservation that excludes and alienates IPLCs to rights-based and collaborative approaches that build on their traditional knowledge, practices and strong identity with their traditional lands and territories, and that support the many instances of IPLC-led conservation, including ICCAs.

What does this target mean for IPLCs?

This target is extremely important for IPLCs because, depending on how protected and conserved areas are conceptualised and implemented, they can either recognise and support the efforts of IPLCs to conserve and sustainably manage their lands, territories and natural resources, or they can undermine these efforts and also bring about an increase in poverty, too often with concomitant major human rights violations. This latter outcome is clearly opposite to what the SDGs and the CBD aim to achieve. Thus, from the perspective of IPLCs the target has potential both as major opportunity also as a serious threat.

Contributions and experiences of IPLCs towards the target

The potential contribution of IPLCs to increasing the global area that is protected and conserved is huge. At least a quarter of the global land area is traditionally owned, managed, used or occupied by indigenous peoples (approximately 38 million km2), and scientific evidence generated in recent years demonstrates that a large proportion of the world’s remaining biodiversity is on IPLCs’ lands and territories. These areas include approximately 35 per cent of the area that is formally protected, and
approximately 35 per cent of all remaining terrestrial areas with very low human intervention\textsuperscript{139} (and therefore with high biodiversity and carbon storage).\textsuperscript{140}

![Diagram showing global overlap between formally designated protected areas, lands traditionally owned, managed, used or occupied by indigenous peoples and remaining terrestrial areas with very low human intervention.](image)

*Figure 11.1: Global overlap between formally designated protected areas, lands traditionally owned, managed, used or occupied by indigenous peoples and remaining terrestrial areas with very low human intervention (those scoring less than 4 on the Human Footprint Index). Source: IPBES 2019 Global Assessment Summary for Policy Makers, Figure 5, p 21.\textsuperscript{141}*

Where other forms of communal management by local communities are included, estimates of lands under the communal management of IPLCs range up to 50%, covering a wide range of biomes including forests, rangelands, deserts and coastal areas.\textsuperscript{142} These figures include areas where IPLCs’ rights are legally recognized, as well as areas where they lack legal recognition but claim, use, and manage land and resources in practice, usually on a longstanding customary basis.

In addition to their important role in conserving biodiversity, IPLC lands and forests are also a major repository of global carbon. At least 17% of carbon in forests (almost 300,000 million metric tons) is on lands that are collectively used and managed by IPLCs. However, these lands are subject to increasing resource extraction, commodity production, mining and transport and energy infrastructure, all of which are drivers of deforestation and environmental degradation. There is thus significant potential for future strategies and investments related to conservation of biodiversity, climate change mitigation, and measures to prevent or mitigate land degradation on these lands.\textsuperscript{143}

\textsuperscript{139} IPBES Global Assessment Summary for Policy Makers, page 6 para B6

\textsuperscript{140} Child and Cooney, “Local Commons for Global Benefits: Indigenous and Community-Based Management of Wild Species, Forests and Drylands.”

\textsuperscript{141} IPBES Global Assessment Summary for Policy Makers, Figure 5, page 21

\textsuperscript{142} Child and Cooney, “Local Commons for Global Benefits: Indigenous and Community-Based Management of Wild Species, Forests and Drylands.”

\textsuperscript{143} Child and Cooney.
Many studies have confirmed the value of IPLC lands for biodiversity and carbon stocks at the national, regional and local levels. For example:

- Recent research has shown that in Canada, Brazil and Australia, native vertebrate species richness is higher in indigenous-managed areas than in all other areas, including protected areas. Thus indigenous-managed lands represent an important repository of vertebrate species richness in three of the six largest countries on earth. “These comparisons confirm that positive steps to maintain or enhance already existing values on Indigenous-managed lands have the potential to substantially advance global biodiversity conservation.”

- Multiple studies have shown that deforestation rates are lower in areas where IPLCs’ land rights are secure than in government-managed areas; and local participation in conservation management can improve biodiversity outcomes.

- A 2018 study stated that “understanding the scale, location and nature conservation values of the lands over which indigenous peoples exercise traditional rights is central to implementation of several global conservation and climate agreements.”

In addition to documenting coverage of IPLC lands in relation to biodiversity, an important question is whether biodiversity on IPLC lands will be conserved into the future. Where IPLCs’ rights are not secure this may not be within their control, but there are many examples where IPLCs who have secure rights over their lands, territories and natural resources do actively conserve biodiversity and there is evidence that globally, while biodiversity is decreasing on all lands, it is declining less rapidly overall on indigenous peoples’ lands than elsewhere.

Global conservation policy recognises the role of IPLCs in biodiversity conservation and the need to respect IPLC rights, especially through measures agreed at the IUCN World Parks Congress in 2003 and the CBD Programme of Work on Protected Areas in 2004. Similarly, the 2019 IPBES report emphasises the vital role of IPLCs. However, conservation policy, programmes and projects at the national and local levels in many countries remain based on outdated colonial approaches and laws. This not only fails to support IPLCs to continue to play a role in conservation, but in too many cases still generates conflict with IPLCs and severe negative socio-economic impacts on them, too often involving blatant human rights abuses. Thus, while good progress has been achieved in reaching the quantitative target of 17% coverage of terrestrial and inland waters, severe gaps remain concerning the qualitative aspects of the target, especially in relation to equity, which has implications not only in relation to rights and social impacts but also for conservation effectiveness.

IPLCs are massively contributing to achieving this target in a myriad of ways in very different national and local circumstances. In the section below they are here grouped under three headings:

147 Diaz et al., “IPBES Global Assessment on Biodiversity and Ecosystem Services: Summary for Policy-Makers.”
149 Geldmann et al., “A Global-Level Assessment of the Effectiveness of Protected Areas at Resisting Anthropogenic Pressures.”
Challenging human rights violations and promoting equity and justice in conservation.

Innovative collaborative management of protected areas (e.g. see box 11.4);

IPLC-led conservation, including through ICCAs and indigenous protected areas

However, a massive opportunity is being missed to upscale approaches such as these. In order to do so a transformation of conservation is required in the next decade that is positively rights-affirming and goes beyond outreach and collaboration to include support for the many genuine instances of IPLC-led conservation\(^\text{150}\).

**Collaborative management of protected areas**

In theory, collaborative management of protected areas has been a part of mainstream conservation policy for several decades, but in practice, the degree to which IPLCs have been enabled to participate fully and equitably has been very variable. Box 11.4 describes an innovative example of collaborative management in the Bikin National Park in the Russian Federation, where indigenous peoples are involved at all levels of management: from strategy and goal setting through to operations and monitoring.

\(^{150}\) Whitehead et al., “Transforming Conservation - a Rights-Based Approach.”
Case study: The Bikin National Park: innovative co-management in the Russian Federation

By Polina Shulbaeva, Center for Support of Indigenous Peoples of the North (CSIPN)

The Bikin National Park, an area of 1,160,469 hectares in the Far East of the Russian Federation, is the largest protected virgin forest in Eurasia’s pre-temperate zone. The park was created in 2015 with objectives not only for the preservation and restoration the habitats of wild animals and rare species (such as the Amur tiger), but also for the protection of the forest culture of the indigenous peoples of this territory - the Udege and the Nanai. During the long-term process leading up to the creation of the National Park, a lot of work was done by indigenous peoples, federal, regional and local authorities, and representatives of environmental and scientific organizations and most of the proposals that were developed to guarantee the rights and interests of the territory’s indigenous peoples were included in the title documents of the National Park.

The uniqueness of the Park lies in its co-management by the indigenous peoples living inside the Park together with research staff, based on a combination of traditional knowledge, practices and rituals and new technologies such as unmanned aerial vehicles and camera traps. To this end a permanent Indigenous Council has been established, which guarantees the participation of indigenous peoples in decisions on the protection of nature and wild species, and coordinates programs and projects that may have an impact on the traditional way of life. The Council also develops guidance on norms and behavior for local communities living in the area and monitors the preservation and use of traditional knowledge. The Council’s chairman is the deputy director of the Park.

The Park Regulations define the following zones within the Park:

- 260,000 hectares are reserved as a strictly protected zone.
- 109,000 hectares are categorised as a special protection zone, where excursions are only allowed along certain routes.
- Approximately the same area is assigned to a recreation zone, where amateur hunting and fishing, organized tourism, and subsistence gathering are permitted.
- 674,000 hectares - or about 70% of the total area - is zoned for the traditional management of nature for indigenous people living inside the Park. No reduction of this area is possible. All local residents retain the right to visit the Park freely, wherever they live, and indigenous hunters can carry out traditional economic activities free of charge in their historical hunting grounds and dispose of the products at their own discretion.

114 people work in the park, of whom 70 are indigenous. Indigenous representatives who are Park employees implement tasks related to protection and control of the territory, and also to community-based monitoring (CBMIS), which makes use of traditional knowledge, practices and rituals together with new technologies and information systems. Researchers and representatives of environmental organizations such as WWF are helping to educate indigenous people about modern environmental protection technologies (such as photo traps, modern navigation devices, and unmanned aerial vehicles or drones). The development of eco-tourism and education is also encouraging co-management of the park.

On July 2, 2018, the World Heritage Committee declared the Park a part of the Central Sikhote-Alin UNESCO World Natural Heritage Site, which once again confirms the uniqueness of this region. Thus, the Bikin National Park is the first protected area in Russia where one of the goals is to protect the
ICL-lead conservation

Indigenous-led conservation initiatives are widespread, as is documented throughout this report, yet they still receive only limited recognition or support from most governments and conservation organisations. Within international policy, ICCAs offer a powerful policy mechanism for international recognition of community initiatives on the ground (see examples below) and this has brought or is bringing about legislative and/or policy reform in national protected areas systems in several countries, including Madagascar (see Box 11.2), Australia (Indigenous Protected Areas (IPAs); see Box 11.3) and Canada (Indigenous protected and conserved areas (IPCAs): see Box 11.4).
Case study: Sakatia Island (ICCA), Madagascar
By Bakoliarisima Tsiorisoa Mihanta, TAFO MIHAIVO, Madagascar

Among the 14 emblematic ICCAs in Madagascar, Sakatia’s Fokonolona (local community) territory of life covers 1230 ha and consists of Ambohibe forest reserve (12.4ha), Andranomatavy mangroves (10.5 ha), sandy beach (7.2 ha) and a traditional fishing zone of 110 ha where protected species of sea turtles live (Chelonia mydas and Eretmochelys imbricata).

The first inhabitants arrived on the island in 1883 and it is now home to 1452 people, including eight different ethnic groups (Sakalava Antakarana, Sakalava Boina, Antandroy, Mahafaly, Antanosy, Antemoro, Betsileo, Merina), as well as a small group of Europeans. Currently the main sources of livelihoods include tourism, handicrafts, farming and fishing.

This marine and coastal ecosystem is sustainably managed, conserved and governed by means of traditional rules called “Dina” which have been developed over time and are overseen by customary institutions. The latter involve a traditional leader, a customary leader and a king of the Island, and these are recognized and supported by the municipal and national governments. A community-based organization was set up in 1995, and in 1998 it was given legal responsibility for natural resource management. The management transfer contract, which was signed by the communal municipality, the CBO, the Ministry of Environment and Sustainable Development and the Ministry of Fisheries Resources and Fishing, is based on “Dina” rules.

Local culture plays a major role in strict forest conservation at Ambohibe, which is a sacred forest, “Ala fady”. Likewise, the mangroves in Andranomatavy are protected from unsustainable exploitation. Customary rights to collection of medicinal plants in the forests and mangroves are granted by traditional community and legal institutions. Marker buoys put in place in July 2018 by RASIS delimit turtle zones in order to prevent the decline of the two sea turtle species. The community is also working to control invasive bamboos, and to address the threat posed by a proposed new hostel, which is planned in a turtle spawning area that is part of a sacred site.

Sakatia Island is part of TAFO MIHAIVO network, a national network of local communities managing natural resources. The network is expanding and seeking to collaborate in the establishment of national enabling policies, legal instruments and mechanisms. During 2019, TAFO MIHAIVO and MIHARI (Madagascar Locally Managed Marine Area Network) teamed up to secure indigenous and community areas nationally, through the full recognition of community rights to land and community-managed marine areas. There is currently a government initiative to develop a legislative framework on special status areas, including on areas subject to community land rights, and this offers an important opportunity.

A clear message coming out of the collaboration in Madagascar is the need to recognize all forms of community-based natural resource management, including the underpinning structures, rules, and customary practices, which have enabled local communities to manage the resources on their lands sustainably for generations. This recognition must consider at least two inseparable aspects: first, the need for recognition of ICCAs as well-defined physical territories, over which legal status
must be secure, and second, maintenance and recognition of customary natural resource governance systems.  

Case study: World Heritage as a Tool to Heal Gunditjmara Country; Budj Bim Indigenous Protected Area, Australia.

By Damein Bell, CEO, Gunditj Mirring Traditional Owners Aboriginal Corporation

As with all First Peoples around the world, the importance of our traditional homelands is inherent to our belief, culture, practice and life. The Gunditjmara community in southwest Victoria, Australia knows that our ancestors engineered water channels, making barriers with the lava flow and stones to farm kooyang (eels) and fish. This practice continued for thousands of years to build our societies and our stone village sites. The invasion, colonisation and dispossession of our traditional homelands since the early 1800s by Europeans impacted greatly on our lives and culture, but the stone aquaculture systems stayed mostly in place.

From the 1980s, the Gunditjmara regained control over parts of the aquaculture system through recognition of our right to protect our cultural heritage, which included securement of a freehold title. This restored the Gunditjmara community’s sense of self-determination and pride. The Gunditjmara worked with government and archaeologists as partners, to document the engineered stone works along the Budj Bim Cultural Landscape, and to analyse and interpret how our cultural systems worked - how our ancestors had managed the hydrology of the Budj Bim systems and how the systems adapt during floods and droughts.

Over the past 40 years, our Gunditjmara community has continued to partner with universities and research organisations to produce technical scientific reports that are rich with contextual information on our ancestors and their practices. Weaving this new generation of science and reporting with our principles of self-determination and informed consent, the Gunditjmara community has increased its capacity to partner with the broader community and with government, and in this way to increase the area of country being returned to us.

We value the opportunity to manage and grow our country through the Indigenous Protected Area programme. This means that we are managing our country in line with IUCN standards. Additionally, in 2019 Budj Bim was accepted by the UNESCO World Heritage Committee for inscription.

Just as importantly, we have managed to keep working on country with our Elders, young ones and families, continuing our connection to Gunditjmara country. An immense body of our ancestral knowledge was lost through invasion, colonisation and dispossession of our Gunditjmara country, but we now have a platform to work with our traditional homelands and waters and to see how traditional Gunditjmara knowledge will transform and heal the country that we are culturally obliged to look after.

For more details on LMMAs see Target 6.

Rasolojaona, “Synergy of Fokonolona Strengthened for the Recognition of Their Community Heritage.”
Case study: Indigenous Peoples’ Protected and Conserved Areas: The Pathway to Canada Target 1
By IISAAK OLAM Foundation, Canada

In Canada, through the Pathways Initiative, indigenous peoples and governments are taking leadership together to establish Indigenous Protected and Conserved Areas (IPCAs). The Pathways Initiative is an initiative that recognises the integral role of Indigenous Peoples as leaders in conservation, and respects the rights, responsibilities and priorities of First Nations, Inuit and Metis Peoples. Canada’s Target 1, which was designed to relate to domestic application of Aichi Target 11, was a catalyst for the Initiative, which seeks to support collective and collaborative efforts to conserve nature for the benefit of all Canadians, in the spirit and practice of reconciliation.

The Initiative has led to the establishment of the following of key supporting mechanisms:

- **The Indigenous Circle of Experts (ICE).** ICE has been involved in an intense engagement process with Indigenous knowledge holders from across Canada. Guided by traditional ways of knowing and principles of mutual respect, reciprocity and models of Ethical Space, it has introduced and developed the concept of Indigenous Protected and Conserved Areas (IPCAs) in Canada. ICE’s 2018 report, *We Rise Together*, defines IPCAs as “Lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance and knowledge systems.” The report provides 28 recommendations for ways that international organizations, governments, civil society, and other actors can support implementation of IPCAs in Canada.

- **The IPCA Working Group.** This was convened by the National Steering Committee for the Pathway to Canada Target 1 to enable further IPCA development across Canada following the release of the ICE report. The Working Group includes representation from federal, provincial, and territorial governments as well as the Assembly of First Nations.

In the 2018 budget, the federal government committed $1.3 billion over the next five years to create new protected areas. 27 IPCA projects across Canada are expected to receive funding through this program, and there is potential for a second round of proposals. The federal government has also committed an additional $25 million over 5 years to support Indigenous Guardian programs, modelled on Australia’s Working on Country program, and as of 2019 there are more than 40 Indigenous Guardian programs across Canada.

Examples of Indigenous led-conservation in Canada include:

- An Indigenous-led UNESCO World Heritage Site, Pimachiowin Aki, was declared in the boreal forests of Manitoba and Ontario in 2018. Pimachiowin Aki is the first mixed UNESCO World Heritage Site in Canada, recognized for both its cultural and natural values. It covers 29,040 square kilometers.
- In December 2018, the Cree Nation of northern Québec announced its intention to seek protected status for 30% of its territory, a total area of 80,000 square kilometers.
- In 2019, Edéhzhíe and Thaidene Néné IPCAs were jointly declared by Indigenous, federal, and territorial governments in the Northwest Territories, adding a combined total of 40,806 square kilometers of protected lands.
• **Tallurutiup Imanga**, declared in August 2019, is Canada’s newest National Marine Conservation Area, covering 108,000 square kilometres. An Inuit Impact and Benefit Agreement established a cooperative management board and an Inuit Stewardship program for the area. Together with the 319,411 square kilometer Tuuqajitug marine protected area, Tallurutiup Imanga brings Canada’s total marine protected areas to 14%, exceeding the 2020 commitment of 10% of all marine waters.

• Work continues on the proposal to create the proposed 85,000 square kilometer Pikialasorsuaq transboundary marine protected area, led by the Inuit of Canada’s Nunavut Territory and Greenland.

• In August 2019, the Peel Watershed Regional Land Use Plan was signed by the Yukon Territory government; the Yukon First Nations of Na-Cho Nyäk Dun, Tr’ondek Hwëch’in and Vuntut Gwitchin; and the Gwich’in Tribal Council of the Northwest Territories. The Plan protects 85% of the watershed, which covers 67,431 square kilometres of mountain and boreal forest habitats.

• 2019 marks the 35th anniversary of the declaration of Wah'nah'juss Hîlhth'hoo'iss Tribal Park by Tla-o-qui-aht hereditary chiefs in 1984, to stop clearcutting of old-growth rainforests on Meares Island in Clayoquot Sound. Since then, the Tla-o-qui-aht First Nation has established three more Tribal Parks: Ha`uukmin (Kennedy Lake Watershed), Tranquil Tribal Park and Esowista Tribal Park. Non-indigenous governments have never officially recognized Tla-o-qui-aht Tribal Parks, but the monumental cedars of Meares Island are still standing, an inspiration to other First Nations to uphold Natural Law and protect their ecosystems, cultures, and identities.

• The hereditary clan and house leaders of the Wet’suwet’en Nation have been using nonviolent direct action (NVDA) to protect their Yin’tah (traditional house territories) against pipeline development. The Wet’suwet’en Nation continue to assert Anuk Nu’at’en (Wet’suwet’en Law) by constructing healing camps and dwellings on the Yin’tah.

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1 A key opportunity to achieve international commitments, including the Strategic Plan for Biodiversity 2011-2020 and post-2020 global biodiversity framework, thus lies in appropriately recognising and supporting the territories and areas collectively governed, managed and conserved by indigenous peoples and local communities, also known as ICCAs or territories of life.\(^\text{154}\)

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**Key characteristics of ICCAs (territories of life)**

Every territory of life (or ICCA) is inherently diverse and context-specific. Collectively they are a global phenomenon with three common defining characteristics:

- A community has a close and deep relationship with its territory, including through histories, worldviews, identities, cultures and ways of life;
- The community makes and enforces its own decisions and rules on their territory through a self-determined (*de facto* and possibly also *de jure*) governance system, whether or not it is formally recognised by the government; and
- Regardless of intentions or motivations, the community’s decisions and efforts contribute to conserving nature in the territory, as well as to its own livelihoods and wellbeing.

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153 The Indigenous Circle of Experts and participants of the Northern Regional Gathering on Indigenous Protected and and Conserved Areas, *We Rise Together: Achieving Pathway to Canada Target 1 through the Creation of Indigenous Protected and Conserved Areas in the Spirit and Practice of Reconciliation*.

154 For more information, see: [www.iccaconsortium.org](http://www.iccaconsortium.org).
In some countries, organisations and networks of Indigenous peoples and local communities have successfully engaged with governments to adopt recognition of ICCAs in national and sub-national laws and policies, including those on biodiversity, protected areas and forests.

Efforts to highlight the crucial role of ICCAs in key international arenas have brought several issues to the fore since 2003. For the International Union for Conservation of Nature (IUCN), ICCAs are one of four governance types for protected areas, and partly as a result, the role of indigenous peoples in IUCN’s policy and practice is expanding. Meanwhile in the CBD fora, ICCAs have moved from a peripheral position to a more central one, with recognition across multiple thematic and programme areas. These include protected and conserved areas, resource mobilisation, traditional knowledge and customary sustainable use, sustainable development, climate change, ecosystem restoration and agricultural biodiversity. This broad recognition of ICCAs has encouraged indigenous peoples and local communities to pursue sustainable self-determination even more powerfully and to defend their territories and areas against the forces that threaten their survival and wellbeing.

These issues, however, are far from resolved. Indigenous peoples’ and local communities’ contributions to conservation remain largely ‘out of sight’ of national conservation in many countries and in many cases are still under direct threat from dominant political and economic forces. A significant gap remains between what has been agreed internationally and implementation at national and sub-national levels.

OECMs, based on the guidelines adopted in 2016 at CBD COP14, offer an additional potential policy mechanism for recognition of IPLC-led conservation areas if their governance and management is firmly based on IPLCs’ rights.

### Enabling conditions and remaining barriers

Some of the key enabling conditions are evidenced by the above case studies, including the following:

- appropriate legal and policy recognition;
- legal and financial support for IPLC-led conservation (ICCAs, territories of life, other types);
- more broadly, securing rights-based conservation, including addressing past and current injustices done in the name of conservation;

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155 Corntassel, “Rethinking the Contemporary Indigenous-Rights Discourse.”
156 Convention on Biological Diversity, “Decision Adopted by the Conference of Parties to Th Convention on Biological Diversity14/8. Protected Areas and Other Effective Area-Based Conservation Measures.”
• regulation of external threats;
• provision of incentives,
• innovative co-management arrangements; and
• recognition of IPLCs as key actors and agents of change (whereby others, e.g. conservation agencies should become supporters and enablers).

However, the main issue that IPLCs have been highlighting as a key condition is the appropriate and legal recognition (and protection against external threats) of their collective rights to lands, waters, territories and natural resources, in accordance with their self-determined governance systems, customary laws and free, prior and informed consent. Communal tenure can enable IPLCs to sustain and be sustained by their lands, thereby ending the legacy of conflict over protected areas, and bringing in a truly transformative conservation framework.

In spite of widespread policy commitments to the contrary, there are still too many cases where conservation is carried out in a coercive manner, causing negative impacts on IPLCs and serious human rights violations. In 2016, a report by the Special Rapporteur on the Rights of Indigenous Peoples highlighted that about 50% of the planet’s protected areas have been established on indigenous peoples’ lands and that in many cases this has been associated with violations of their human rights. The report also highlighted that conservation organisations were not doing enough to address continuing human rights violations. Further instances of human rights abuses have continued to come to light in the time since then. For example:

• The UN Office of the Human Rights Commissioner has reported that in February 2019 a decision by the Supreme Court of India put up to nine million people at the risk of being evicted from their forest homes, in a case brought by wildlife organisations to prevent “encroachment” on protected areas. 158
• A water management project related to a protected area led to evictions of the Sengwer people of Kenya from their traditional territories and to the death of a Sengwer man in early 2018. Following protests and expressions of concern, which included a joint letter from the United Nations Special Rapporteurs on human rights, on human rights defenders and on the rights of indigenous peoples, the European Union suspended its support for the water project and the evictions ceased. 159
• In 2019, evidence has also emerged of human rights violations by conservation organisations operating in different parts of the world. 160

Conservation agencies have been making policy commitments to uphold human rights repeatedly since the 1990s 161 and it is high time that they take definitive action to ensure that their operations fully uphold these commitments. In order to achieve the SDGs in synergy with the post-2020 global

158 OHCHR, “India Must Prevent the Eviction of Millions of Forest Dwellers, Say UN Experts.”
160 Newing and Perram, “What Do You Know about Conservation and Human Rights?”
161 Newing and Perram.
biodiversity framework by 2030, it is imperative that effective mechanisms are established with immediate effect to ensure that no more human rights violations happen in the name of conservation.

At this critical juncture in the evolution and implementation of the Convention, the key issue for IPLCs with respect to this target is not the percent coverage of lands and waters but the quality of protected and conserved areas, both in terms of effectiveness and in terms of equity. IPLCs therefore call for the recognition of their rights to land, territories and resources, together with the development and implementation of effective mechanisms for ensuring measurable improvements in effectiveness and equity. This is in line with a call by the United Nations Permanent Forum on Indigenous Issues on States to:

"consider establishing independent mechanisms and procedures for the monitoring and evaluation of conservation activities and projects and its effects on the human rights of indigenous peoples and other affected local communities. Such mechanisms and procedures should be established with the full and effective participation of indigenous peoples, and with respect to their right to free, prior and informed consent."\(^\text{162}\)

Similarly, the UNPFII has made the following recommendation for action by the CBD Secretariat:

"that the Secretariat of the Convention on Biological Diversity and the International Union for Conservation of Nature actively engage with indigenous organizations, relevant United Nations entities, non-governmental organizations and other actors to develop a set of actions and commitments in relation to conservation and human rights in the context of the post-2020 biodiversity framework and the next World Conservation Congress."\(^\text{163}\)

Opportunities and recommended actions for the post-2020

Recognise indigenous peoples and communities as the key actors in securing biodiversity and support them in doing so. Champion a community-led conservation model by recognising and securing various types of IPLC-led conservation in national laws, policies and programmes.

- Appropriately and legally recognise and protect against external threats 100 per cent of collective lands, waters and territories of life of Indigenous peoples and local communities by 2030, in accordance with their self-determined governance systems, customary laws and community protocols, and free, prior and informed consent.
- Channel conservation funding to IPLCs’ activities and collective action
- Ensure protection of human rights is integral to conservation governance, management, strategy and programmes (internal human rights monitoring or partnering with human rights organisations), including effective avenues for redress for past and future actions that negatively impact IPLCs.
- Avoid and disinvest from conservation programmes that pose a risk of human rights abuses, including by ceasing to partner with governments that systematically fail to respect and protect human rights, and make sure conservation programmes have clear due diligence.

\(^\text{162}\) UN Economic and Social Council, “E/C.19/2019/7 International Expert Group Meeting on the Theme ‘Conservation and the Rights of Indigenous Peoples.’”

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processes in place to ensure they do not finance, participate in, support or promote such projects.

- Include an element of equity as a fundamental aspect of protected and conserved areas. For example, include “equitably governed and effectively managed and conserved” instead of “effectively and equitably managed”, with emphasis on achieving this by 2030 through implementation of existing guidance on governance and equity issues (including the COP14 decision on protected areas and OECMs).

Key resources

- ICCA Consortium: https://www.iccaconsortium.org
Target 12: Reducing the risk of extinction

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Key message

Many IPLCs view species relationally through kinship, as having spirit, due care obligations, and moral standing equal to humans. Relational values, not instrumental ones, often motivate them to protect and restore threatened species. IPLC measures for species recovery include cultural indicators, community-based monitoring and information systems, traditional knowledge, and community management and self-determination. Partnerships must ensure mutual respect, reciprocity, benefits-sharing, accountability and cultural safety and may involve co-production of knowledge and co-management. Given that root causes of endangerment change over time, it is also important to recognise that IPLCs have long experience of adapting to change and will best navigate the turbulence if their territorial and species management systems are respected.

Contextualisation

Threatened species may be integral to IPLC livelihoods, values, identities and human rights. Traditional knowledge, expressed through stories, songs, prayers, and languages, is relevant to species recovery. Humans exist in sacred kinship relationships with more-than-human beings that bear

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1 custodianship obligations. IPLCs create biocultural habitats and manage the environment in ways that can support recovery. Restoring threatened species involves healing relationships with the environment as well as among human communities, based on consent, mutuality, respect, trust, accountability, and reciprocity.


IPLCs may have different beliefs about endangerment and extinction than scientists or society and these should be respected\textsuperscript{169}. Disregard of their rights, worldviews, motivations, traditional knowledge and concerns related to cultural safety, intellectual property rights and exploitation have contributed to distrust\textsuperscript{170}.

"Our story is in the land. It is written in those sacred places. My children will look after those places, that’s the law."

Big Bill Neidjie, Gagudju, Bunitj Clan Estate\textsuperscript{171}

\section*{Scope: What do we cover in this target?}

This target examines the need to expand site-based and species-specific actions for recovery to address long-range or remote sources of impacts and future impacts, and root causes of endangerment. It also addresses the need to consider species-specific recovery issues of IPLCs.

Actions to support threatened species recovery often occur on a site- and species-specific level within IPLC lands and territories, but many threats are extraterritorial and cross multiple jurisdictions (e.g. tele-coupled systems, climate change, population growth, urbanization, habitat fragmentation, dispersal barriers and pollution transport\textsuperscript{172}). Species range shifts, local extirpation, feral animals, and disease also complicate recovery \textsuperscript{173}. Recovery may be fragile if the underlying causes of


\textsuperscript{172} Liu, Jianguo; Hull, Vanessa; Batistella, Mateus; DeFries, Ruth; Dietz, Thomas; Fu, Feng; Hertel, Thomas W.; Izaurralde, R. Cesar; Lambin, Eric F.; Li, Shuxin; Martinelli, Luiz A.; McConnell, William J.; Moran, Emilio F.; Naylor, Rosamond; Ouyang, Zhiyu; Polenske, Karen R.; Reenberg, Anette; de Miranda Rocha, Gilberto; Simmons, Cynthia S.; Verburg, Peter H.; Vitousek, Peter M.; Zhang, Fusuo and Zhu, Chunquan (2013). Framing sustainability in a telecoupled world.

endangerment, including social and biophysical drivers, are not mitigated and plans are not flexible enough to adapt to change. A broad interdisciplinary approach, often at multiple scales, is required for long-term success.

Target 12 should accommodate the full range of IPLC governance regimes, values, evidence and motivations. IPLCs exist in many different political, legal, cultural, and historical contexts. Inappropriate governance regimes imposed on IPLCs that do not take their contexts, institutions and constraints into account can result in non-cooperation and failure.

Contributions and experiences of IPLCs towards the target
There are many ways in which IPLCs are contributing to threatened species recovery. They are extremely knowledgeable about the behavior, habits, habitats, associations, relationships, distribution, abundance and many other aspects of threatened species. They can use this knowledge to manage the species on their lands and aid scientists and planners. They often manipulate their environments to create “biocultural habitats” that provides support to threatened species, such as


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through traditional burning and soil fertility management. Through sustainable use and innovations, they can prevent local impacts and avoid endangerment. Respect for and protection of their territorial rights, institutions and management systems can prevent the incursion of other actors whose unsustainable actions threaten species survival. Below is a small sample of approaches IPLCs have taken, which range from political measures to self-monitoring and management to partnerships.

- In Australia, three-quarters of listed threatened vertebrate species overlap indigenous lands\textsuperscript{178}. Traditional Landowners are establishing Indigenous Protected Areas (IPAs) and at the same time identifying biocultural hotspots and providing expert knowledge on threatened species\textsuperscript{179}. For example, the Threatened Species Recovery Hub (TSRH) works with Aboriginal rangers and communities to monitor and recover the threatened greater bilby (\textit{Macrotis lagotis})\textsuperscript{180} – a small nocturnal mammal. More broadly, it supports the development of community protocols and indigenous-led processes\textsuperscript{181}. Similarly, the Country Needs People campaign supports Aboriginal and Torres Strait Islander Indigenous Protected Areas and species protection activities\textsuperscript{182}.

- In Guatemala, Indigenous communities monitor community forests for forest health and for endangered birds, mammals and plants\textsuperscript{183}. They maintain a community-based monitoring and information system (CBMIS) that tracks status, trends, cultural values and practices associated with threatened species and provides information for them to manage their forests.


\textsuperscript{179} Ens; Emilie J.; Finlayson, Max; Preuss, Karissa; Jackson, Sue; Holcombe, Sarah (2012). Australian approaches for managing ‘country’ using Indigenous and non-Indigenous knowledge. Ecological Management and Restoration 13(1): 100-107; Ens, Emilie J.; Pert, Petina; Clarke, Philip A.; Budden, Marita; Clubb, Lilian; Doran, Bruce; Douras, Cheryl; Gaikwad, Jitendra; Gott, Beth; Leonard, Sonia; Locke, John; Packer, Joanne; Turpin, Gerry; Wason, Steve (2015). Indigenous biocultural knowledge in ecosystem science and management: Review and insight from Australia. Biological Conservation 181: 133-149.


\textsuperscript{181} TSR Hub (n.d.). Submission to the Senate Inquiry on Australia’s faunal extinction crisis: The importance of Indigenous Peoples to the conservation of Australia’s threatened species, National Environmental Science Program Threatened Species Recovery (TSR) Hub, St Lucia. 9pp.; TSR Hub (n.d.).


\textsuperscript{183} Asociación Sotz’il (n.d.). Monitorio Biológico Cultural: Fortaleciendo la Gestión Colectiva Indígena para la Conservación y Manejo Sostenible de Bosques Comunales en la Cadena Volcánica Occidental y Los Cuchumatanes\textsuperscript{9} Fase II. poster. Poster presentation. Asociación Sotz’il, Colonia San Rafael, Chimaltenango.
behavioural ecology, food sources and terrestrial habits and provides the basis for short-term conservation recommendations\textsuperscript{184}.

- In the United States, Joint Secretarial Order 3206,\textsuperscript{185} related to the Endangered Species Act and tribes, recognizes that tribes often bear conservation burdens for harms they have not caused. It employs a mitigation hierarchy to take actions to prevent endangerment, preferentially imposes burdens on those who have caused the harms, and when harms are unavoidable, minimizes tribal burdens in consultation with tribal authorities.

\textsuperscript{184} Serra, Gianluca; Sherley, Greg; Failagi, S. Afele; Foliga, S. Talie; Uili, Moeumu; Enoka, Fialelei and Suaesi, Tepa (2018). Traditional ecological knowledge of the critically endangered tooth-billed pigeon Didunculus strigirostris, endemic to Samoa. Bird Conservation International 28(4): 620-642.

Case study: The Gwich’in Porcupine Caribou Herd, North America

The Porcupine Caribou Herd (PCH) (*Rangifer tarandus granti*) is an iconic group of animals in North America with a range that stretches from Alaska in the United States to the Northwest Territories in Canada. The PCH travels over 2,400 kilometers each year across the traditional territory of the Gwich’in nation (Canadian Parks and Wilderness Society Yukon Chapter, n.d.) in the world’s longest mammal migration. The PCH and the Gwich’in now face complex persistent threats that include ineffective interjurisdictional management, impacts from industrial activity, and climate change.

The Gwich’in are a caribou people whose nation spans 15 communities across the migratory route of the PCH in the high Arctic. They have relied heavily on the strength and vitality of the PCH for thousands of years for their food security. They share an intimate connection with the lands and waters that make up the very substance of their spiritual and cultural identity and livelihoods. The health and productivity of the Porcupine Caribou Herd and the physical and cultural survival of the Gwich’in are one and the same (see also Target 14).

Canada has combined the Porcupine Caribou Herd as a subpopulation of the Barren Ground Caribou (*Rangifer tarandus groenlandicus*) in its Species At Risk classification (Committee on the Status of Endangered Wildlife in Canada 2016). This artificially inflates population numbers for the declining Barren Ground Caribou herds and creates the perception that the PCH occurs more widely, which has resulted in the approval of major industrial projects without an accurate or adequate impact assessment.

One example is the De Beers Gahcho Kue diamond mine, which is in Barren Ground caribou calving grounds in the Northwest Territories (Target 5/12/14). The calving grounds are located in “lizhik Gwats’ an Gwandaii Goodlit” (The Sacred Place Where Life Begins), in the 1002 Area of Alaska’s Arctic National Wildlife Refuge (ANWAR). ANWAR, one of the largest intact ecosystems in the world, was established in 1960 and expanded in 1980 to include a moratorium on oil and gas development with the intention of preserving the “fish and wildlife populations and habitats in their natural diversity” (Gelb 2001). Pressure from the United States oil and gas industry has successfully opened the 1002 Area to accelerated oil and gas exploration through the Tax Cuts and Jobs Act of 2017 that allows lease sales, seismic testing, and drilling to take place. The Act requires that lease sales be completed by the end of 2019, limiting the scope and rigor of the environmental impact assessment typically associated with major projects. Bipartisan legislation, the *Arctic Cultural Coastal Plain Protection Act*, has been passed in the United Stated House of Representatives by those who believe that the purpose of the wildlife refuge is antithetical to oil and gas development. This has been passed on to the Senate (Sedlak 2019). (see Targets 2/3/4/8)

This development puts strains on achieving the objectives of Treaty E100687: *Agreement Between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd*, a bilateral international treaty in force since July 17, 1987. The treaty is administered by the International Porcupine Caribou Board (IPCB), whose core responsibility is management of the herd. The Board was established in 1985 following the negotiation of the Porcupine Caribou Management Agreement and includes representation from both government and Indigenous nations/organizations (Porcupine Caribou Management Board 2019). It has the authority to make recommendations to the federal and territorial ministers based on information.
gathered in any manner, including information based on traditional knowledge, innovations and practices, to inform recommendations on an equal footing to science (see also Target 18). However, the Board’s last report was released in 1998 (Government of Canada 2019) and it has not convened a meeting since November 2016.

Recognizing the significant historical, spiritual, and cultural impacts that any industrial activity will have on the PCH and the Gwich’in people, the 634 First Nations Chiefs of the Assembly of First Nations have demonstrated overwhelming and continuous support to the Gwich’in through passing of resolutions and calling on the governments of Canada and the United States to ensure that the critical habitat located in the Arctic National Wildlife Refuge be permanently protected through designation as a protected area (see also Targets 11 and 17).

Indigenous eels in Canada

By Alexandra McGregor and Wanli Ou, AFN Fisheries

Pimizi (Anishinaabemowin) has had a long co-existence with the Indigenous peoples of the Canadian eastern seaboard on Big Turtle Island. Otherwise known as Anguilla rostrata or “American Eel”, this serpentine creature has been vital to the health and wealth of Indigenous peoples for thousands of years. Eels have not only been a significant source of food and medicine but are key to Indigenous cultures, traditions, and knowledge systems that demonstrate respect, co-existence, and responsible governance.

Given its reputation as a magical being with healing powers, it seemed fitting that the American eel played a restorative role in the long struggle for Aboriginal rights to fish in Canada. In August 1993, Donald Marshall Jr., a member of the Mi’kmaq Nation, was accused and charged with three offences set out in the federal fishery regulations: the selling of eels without a license, fishing without a license and fishing during the closed season with illegal nets. In September 1999, Mr. Marshall was acquitted on all charges and the Supreme Court of Canada upheld the Treaty rights of the Mi’kmaq to fish for a "moderate livelihood". This landmark ruling in Canada involving eels affirmed the Nation-to-Nation relationship between the Canadian state and Indigenous Nations on the Atlantic coast.

American eels spawn in the Sargasso Sea and the elvers spawn up the Eastern seaboard populating the rivers and streams in the United States and Canada. Since the 1950s, populations of this catadromous species have declined dramatically over vast areas of Canada due to multiple factors including continuing habitat degradation, dams, pollution, and commercial fisheries.

To the Anishinaabeg, eels are an excellent indicator of habitat integrity and can signal the vulnerability of other species in the ecosystem. Therefore, the decline of eels is seen in some First Nations communities as a sign of interference with the natural sacred order, a symbol of a looming
potential broader environmental collapse and a symbol of society’s willingness to endorse policies that have led to their decline.

In 2012, the Committee on the Status of Endangered Wildlife in Canada categorised this iconic species as threatened. The recommendation by this independent body of scientific experts triggered a legal process to have the species listed for protection under Canada’s Species at Risk Act, a federal law developed as part of Canada’s commitments to the international Convention on Biological Diversity. Given the responsibility Indigenous peoples have to their territory and all its inhabitants, as well as their legal stake in resource conservation and management decisions, many First Nations believe that efforts to recover the species should be driven by their knowledge systems. For First Nations, these recommendations mean that minimum levels for food sustainability would be maintained, gear restrictions would mirror traditional practices, and adaptive management and monitoring programs should be based on food sustainability requirements.

As the late Algonquin Elder William Commanda said:

“the plight of the eel must awaken us to the crucial need to transform our relationship with Mother Earth and All Our Relations, and to awaken us to the pivotal role of Indigenous Peoples in this process”.

Enabling conditions

- Processes involving species utilized by IPLCs should be led, self-managed or co-managed by IPLCs, and take fully into account their governance, institutions, values, languages, concepts, sustainable uses, methodologies, traditional knowledge and evidence bases186;
- Species recovery efforts should be based on commitments to long-term relationships that promote trust, ensure respect, accommodate IPLC concerns, provide mutuality, reciprocity and benefit sharing, and are based on free, prior and informed consent;
- It should be recognized that although IPLCs may not have caused endangerment, they are often asked to carry conservation burdens. Measures should establish mitigation hierarchies that avoid or minimize their burdens, in consultation with them. However, a mitigation hierarchy implies the existence of trade-offs, some of which may not be appropriate when considering human and indigenous rights, including rights to self-determination. Mitigation hierarchies must only be applied with full respect for rights;
- Species recovery involves more than extracting the knowledge and labour of IPLCs for targeted recovery efforts; it also involves commitment to supporting their ways of life, thinking, well-being and human rights.

186 Tengö, Maria; Hill, Rosemary; Malmer, Pernilla; Raymond, Christopher M.; Spierenburg, Marja; Danielsen, Finn; Elmqvist, Thomas, and Folke, Carl (2017) Weaving knowledge systems in IPBES, CBD and beyond: lessons learned for sustainability. Current Opinion in Environmental Sustainability, 26-27. pp. 17-25.
“Two-way healing”/“two-way knowing”/“both-way learning”\textsuperscript{187} can promote transformative change in IPLCs and society for Living in Harmony with Nature\textsuperscript{188}. Partnerships may mask power imbalances and indigenous concepts, and evidence may be ignored if they are not “legible.”\textsuperscript{189} Partnerships enable IPLC empowerment when designed to provide equal standing and recognition of a diverse range of values and indicators\textsuperscript{190}.

Opportunities and recommended action for the post-2020 framework

- **Monitoring and reporting of IPLC species recovery actions**: There is still a lack of systematic monitoring and reporting on projects and effectiveness of recovery at the national and international level\textsuperscript{191}.
- **Continued support for community-based monitoring and information systems (CBMIS)**: IPLCs are in the best position to monitor and develop indicators for species that are relevant to themselves and that are compatible with their specific circumstances, and to manage knowledge and data that are or are not shared. Funding and support for these kinds of activities need to be upscaled and made accessible to them.
- **Reducing the threats to species recovery and scenario planning**: Successful recovery of threatened species over the long run requires mitigating the underlying causes of endangerment as well as cumulative and combined impacts. Coordination and cooperation


\textsuperscript{188} Colloff, Matthew J.; Lavorel, Sandra; van Kerkhoff, Lorrae E.; Wyborn, Carina A.; Fazey, Ioan; Gorddard, Russell; Mace, Georgina M.; Foden, Wendy B.; Dunlop, Michael; Prentice, I. Colin; Crowley, John; Leadley, Paul and Degeorges, Patrick (2017). Transforming conservation science and practice for a postnormal world. Conservation Biology 31(5): 1008-1017.


across scales and jurisdictions and involving IPLCs in planning processes are necessary to protect their rights and interests.

- **Recognizing biocultural habitats in mainstreaming Target 12 into production landscapes:** Species recovery is relevant not only in wild landscapes and protected areas but also in coupled human-natural systems and biocultural habitats.\(^{192}\)

- **Recognizing the range of IPLC institutions, values, concepts, contexts, interests and rights:** Global society has benefited immensely from the conservation actions of IPLCs: through their land and resource tenure systems and their ways of being, knowing and doing.\(^{193}\) The focus should be on supporting IPLCs in the maintenance of their lifeways that prevent endangerment, and avoidance of imposing conservation burdens that can degrade their custodianship and relationships to nature.\(^{194}\)

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**References**


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\(^{192}\) Bird, Rebecca Bliege; Tayor, Nyalangka; Coddıng, Brian F.; Bird, Douglas W. (2013). Niche construction and Dreaming logic: aboriginal patch mosaic burning and varanid lizards (Varanus gouldii) in Australia. Proceedings of the Royal Society B: Biological Sciences 280(1772): 20132297


Target 13: Safeguarding genetic diversity

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Key message
IPLCs have nurtured agricultural biodiversity for food, medicines and for its cultural values for millennia. However globalised industrial food systems, which are linked to land dispossession and land use conversions, continue to displace and transform local food production systems, in many cases undermining local food security and contributing to genetic erosion. IPLCs are acting to renew and revitalize indigenous food systems as part of broader social movements for food sovereignty and agroecology, and this will safeguard existing genetic diversity at the same time as contributing to local livelihoods, improved health and nutrition, and self-determined development.

Context
Diverse local economies underpinned by subsistence values have prevailed over much of human history, much longer than more recent industrialised food regimes. Indigenous peoples and local communities have evolved dynamic relationships with lands and waters in which they have lived, using traditional knowledge and customary sustainable use practices for food production and community livelihoods. Indigenous food systems embodying cultural values and governed by customary institutions promoted community well-being and solidarity, collective action and ritual celebrations and spiritual values of care and reciprocal relations with the natural world.

A poem (Hta) of Karen Elders

The elders still order us
The elders still tell us,
Order us to conserve the taro seeds;
Tell us to preserve the yam seeds;
To save at least 30 kinds of seeds;
Even in a famine, we will not die.

Heirloom Recipes from the Cordillera highlights that “The ingredients in this book are diverse. They come from the land and the waters of the indigenous territories in the Cordillera. They include grains, roots, stems, shoots and fruits of plants; fish, crabs and snails from the waters; domestic animals and those that grow wild in the forests; and insects. They are fresh, natural, packaging-free, and simply delicious. The great variety of the ingredients point to the people’s deep familiarity with their land and territory, their skill in foraging, hunting and gathering, and their physical strength and perseverance in working the land. From careful observation and experience, the people learned when is the best time to plant the seeds and when to harvest. They know when and how to catch the fish; gather the snails, crabs, frogs and tadpoles from the waters; and collect the edible mushrooms. Children get involved in

gathering the next meal. After school they would go to the river or to the rice paddies and catch and
gather ingredients for their mothers to cook. This way, the knowledge is passed on and kept for another
generation.”

Likewise, the Kyrgyz nomad diet is described as based on livestock activities, simple in preparation and
cooking, rich in protein and calcium, good for transportation and storage, and meals are usually taken
together with the family. African pastoralism relies heavily on livestock as source of economic and
social wellbeing, contributing to at least 50 per cent of subsistence and marketed production by an
average pastoralist household. Pastoralists are custodians of key national resources found in arid and
semi-arid areas covering 40 per cent of Africa’s land mass, using various types of strategic mobility to
access water, pastures and other grazing resources. Pastoralist culture is part of the cultural heritage
of Africa. Animal and plant resources in pastoral areas are among of the most important genetic
resources on the continent.

Indigenous food systems rooted in traditional small-scale agriculture, represent well established
agricultural systems generating great diversity of domesticated crop and animal species, maintained
through customary resource management and sustainable use practices and sustained by indigenous
institutions and knowledge systems. Localized food systems have provided the foundations of
people’s nutrition, incomes, economies through culturally specific ways in highly diverse
contexts around the world.

Seed maintenance and local exchanges have been important for plant domestication, exchanges of
improved crops and maintenance of crop biodiversity. Seed flows (through the market or through
other forms of seed exchange) are networks through which planting material flows and genetic
diversity disseminated and conserved. Today, many IPLCs continue to maintain home gardens with
high landrace and species diversity contributing to in-situ conservation.

CASE STUDY – ZENU WOMEN, COLOMBIA

The Zenú women of Colombia use their critical knowledge of natural resources and cultural practices
in the meaningful space of the front yard, or patio, which survives despite the fragmentation of their
ancestral territories over the past three centuries. The Zenú de San Andrés de Sotavento reserve is
located in the Caribbean region of Colombia, and although the Zenú people possessed a land title for
83,000 hectares of land dating from the Colonial era, their territory underwent a series of
fragmentations, first at the hands of the Spanish State and then later by the newly established and
strengthened Colombian State in the republican era.

Zenú women interact in three fundamental ways with the biodiversity to contribute to the survival
and well-being of their people: first, the Zenú front yard is used for raising small animals, fruits, and
vegetables for food and to involve children in learning activities; second, dozens of wild and cultivated
medicinal plants are used to support the indigenous health system; and third, conservation and
sustainable use of wild palms for the production of cultural materials such as construction goods, dyes,
ornamentation, firewood, and artisanal creations incorporating centuries-old patterns. Such practices

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196 Indigenous Peoples Major Group (IPMG) Global Report on LTRs, 2017
are vital contributions to sustainable agriculture with organic composting, seed selection for greater biodiversity, auto-consumption rather than market dependency, and support for bee populations, among many benefits. They also help maintain, reproduce, and transmit Zenú identity and culture to future generations.

On a global scale, a study by ETC Group, highlights the contributions of peasants to global genetic diversity: “Peasants have bred and donated (to national and international gene banks) 2.1 million varieties of 7,000 domesticated plant species. 80-90% of peasants’ seeds are saved, shared or locally traded. Importantly for adapting to climate change, peasants protect and sometimes interbreed 50,000–60,000 wild relatives of cultivated species at no cost, with a potential economic value of $196 billion. While many of these species are minor crops, they may be important to countries or ecosystems where they could be essential “famine foods.” Hundreds of millions of rural people regularly turn to local food systems in times of scarcity.

Ironically, many of the world’s farmers and small food producers are also among the world’s poorest in cash incomes and in adequate food. The UN estimates that 815 million people throughout the world still suffer from hunger and that the prevalence of other forms of malnutrition is still considerable in some regions of the world.

Colonialism and modern industrialism have transformed diverse local economies and production systems to serve global markets. Rapid transitions from subsistence economies to market-oriented production systems are changing local livelihoods, food systems, traditional diets and nutrition, health and well-being of indigenous peoples. Land use changes associated with global investments in large-scale mono-crop production of agricultural commodities, linked to industrial systems of production and consumption are displacing multi-mosaic landscapes rich in genetic diversity.

Today, indigenous food systems persist, but are threatened and marginalised by the global food regime shaped by the neoliberal tenets of deregulation, international trade liberalization, reduction of public expenditure, and privatization. The IPBES Global Assessment on Biodiversity and Ecosystem Services found that: Globally, local varieties and breeds of domesticated plants and animals are disappearing. This loss of diversity, including genetic diversity, poses a serious risk to global food security by undermining the resilience of many agricultural systems to threats such as pests, pathogens and climate change. Fewer and fewer varieties and breeds of plants and animals are being cultivated, raised, traded and maintained around the world, despite many local efforts, which include those by indigenous peoples and local communities.

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197 ETC – Who feeds the world?
198 IPBES GA SPM.
Who Will Feed the World?

Given the incorporation of diverse indigenous food systems into the global food regime, strategies to maintain genetic diversity need to be seen through the lens of the power dynamics governing the current food regime and through an understanding of the multiple factors impinging on the problems of food security and food sovereignty. Policies and strategies to promote genetic diversity and associated diversity in food systems and ecosystems are structurally embedded in multi-level economic, social, cultural and political governance systems impacting local, national, regional and global scales. The inter-actions between local food initiatives and the dominant regime on food and agriculture will shape the futures of genetic diversity.

La Vía Campesina (the peasants’ way) was founded in 1993 as an international movement of peasant organizations encompassing small and middle-scale producers, agricultural workers, rural women, and indigenous communities from Asia, Africa, America, and Europe. It was the group that advocated for “food sovereignty”, campaigning for farmer's seeds, the rights of peasants, agrarian reform, and the central role of women farmers and youth participation in agriculture.

Case study: Declaration of the International Forum for Food Sovereignty

Nyeleni, Mali, made on 27 February 2015

We, more than 500 representatives from more than 80 countries, of organizations of peasants/family farmers, artisanal fisherfolk, indigenous peoples, landless peoples, rural workers, migrants, pastoralists, forest communities, women, youth, consumers, environmental and urban movements, have gathered together in the village of Nyéléni in Sélingué, Mali to strengthen a global movement for food sovereignty.

Most of us are food producers and are ready, able and willing to feed all the world’s peoples. Our heritage as food producers is critical to the future of humanity. This is specially so in the case of women and indigenous peoples who are historical creators of knowledge about food and agriculture and are devalued.

But this heritage and our capacities to produce healthy, good and abundant food are being threatened and undermined by neo-liberalism and global capitalism.

Food sovereignty gives us the hope and power to preserve, recover and build on our food producing knowledge and capacity.

The relevance of food sovereignty for indigenous peoples in northern Canada was highlighted in a report on Aboriginal Food Security in Northern Canada: An Assessment of the State of Knowledge which concluded that "While food security focuses on the pillars of food access, availability, acceptability, adequacy, and use to ensure that all people at all times have physical, social and economic access to food, food sovereignty is based on the principle that decisions about food systems,"

199 IPES/ IDS publication
200 Aboriginal Food Security in Northern Canada: An Assessment of the State of Knowledge
including markets, production modes, food cultures, and environments, should be made by those who depend on them. Support for autonomous community food systems, community-based research, and community-based solutions that respond to locally identified needs emerged as essential steps towards meeting the goal of sustainable and local food self-sufficiency. It became clear to us that sustainable solutions to improve food security must be holistic, be enabled by traditional knowledge, respond to locally identified needs, and be paired with economic development strategies. To achieve food sovereignty, support for local food systems is essential.

Echoing these sentiments is the Declaration on Food Sovereignty and Traditional Knowledge for Climate Change Resiliency made in the Dine Nation:

“Our struggle is to live and is one of resistance...
In our wisdom, we know we have the roots, songs and courage to survive...
Our strength and our power is in our indigenous identity, history, culture and politics...
In healing our inter-generational, historic and unresolved trauma, we also heal the Earth...
We accept our life responsibility to remain warriors uncompromising, to defend the sacred.”

Renewal and revitalization of indigenous food systems, as part of a broad social movement for food sovereignty and agro-ecological transitions will safeguard existing in-situ pools of genetic diversity and contribute to local livelihoods, improved health and nutrition, food sovereignty and self-determined development.

Enabling conditions and recommendations

The Global Plan of Action of the UN Decade on Family Farming (UNDFF) proposes that:

1. Interventions should focus on family farming’s innovativeness, enabling their use and dynamic management of genetic resources and incentivizing the development of production systems which can optimize the diversity and complementarity of species and increase biological synergies between crops, livestock and trees, leading to greater resource use efficiency and resilience, increased productivity and enhanced ecosystem service.

2. Based on these features, family farmers’ production systems can, at the same time, guarantee the reproduction of resources and increase the availability of diverse, nutritious, sustainably produced and culturally appropriate food in a steady and sturdy way, enabling healthy diets.

The Global Hub in Indigenous Food Systems has underlined

1. Learning more about Indigenous food systems through participatory research & documentation and evidence-based dialogues among indigenous peoples, governments and research centres

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201 Declaration on Food Sovereignty and Traditional Knowledge for Climate Change Resiliency
2. **Sustaining Indigenous food systems** through capacity building, including on the Free Prior and Informed Consent; advocacy activities at international levels and at country level towards policy and decision-makers; intergenerational dialogues on traditional knowledge at local & national levels

3. **Promoting Indigenous Food Systems** through intercultural education methods & capacity building among the youth; capacity building in social entrepreneurship for indigenous peoples to develop opportunities of sustainable commercialization; build indigenous participatory networks on food systems at local and regional levels

**In addition, there needs to be:**

- Support for Farmers rights including participatory plant breeding programmes, community seed and gene banks, and seed fairs.

**Resources**

2. IPES-Food (2016) *From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Diversified Agroecological Systems*, Louvain-la–Neuve: International Panel of Experts on Sustainable Food Systems
3. Heritage Recipes from the Cordillera; Other Cookbooks (Arctic)
4. ETC – Who feeds the world?
5. From Transition to Domains of Transformation: Getting to Sustainable and Just Food Systems through Agroecology Colin Ray Anderson, Janneke Bruil, Michael Jahi Chappell, Csilla Kiss and Michel Patrick Pimbert
Target 14: Ecosystem services

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Key message

Lands, territories and resources traditionally owned, used and occupied by indigenous peoples cover a large part of formal protected areas and the remaining ecosystems and habitats critical for nature conservation, restoration, and the well-being of IPLCs, women and the poor. Safeguarding these ecosystems from the threats of land use conversion and large-scale commercial exploitation, in favour of customary sustainable use and restoration is a top priority. Land tenure security is a fundamental imperative for sustaining nature’s contribution to people, such as clean water, diverse foods, local livelihoods, cultural and spiritual values and community solidarity and resilience.

What does this target mean for IPLCs?

The progress towards achieving this target is quite poor as there is an imbalance between use of nature versus its restoration or conservation. IPBES Global Assessment explains that despite the fact that 60% of the indicators of nature’s contribution to people (NCP) have increased, 86% of the indicators of the state of nature are in decline.

It is posited that “most parts of the planet managed and/or owned by indigenous peoples have low-intensity land uses: less than 3.8 million km² (10.2%) of the world’s urban areas, villages and non-remote croplands are on indigenous peoples’ lands, whereas, in contrast, they encompass 24.9 million km² (65.7%) of the remotest and least inhabited anthropic territories.” Other studies also said that “[countless indigenous management institutions have already proven to be remarkably persistent and resilient, suggesting that such governance forms can shape sustainable human-landscape relationships in many places, [even in areas where] indigenous peoples are still in the process of regaining their land rights.” Currently, it is estimated that communities hold around 65% of the world’s land area through customary and community-based tenure systems.

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203 Anthromes or anthropogenic biomes characterize the human-altered form and dynamics of terrestrial ecosystems. They denote long-term patterns in human populations and their land use, taking into account population density, agricultural village development, percentage cover by crops, pasture and rice, irrigated land area and areas potentially covered by tree. (Garnett 2018:373)


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Draft 1 prepared for Peer Review, November 2019

1 reports that indigenous peoples manage or have tenure rights over at least 38 million km², which 2 amounts to over a quarter of the world’s land surface, and intersects about 40% of all terrestrial 3 protected areas and ecologically intact landscapes. This is only a fraction of the combined 4 community land estate estimated to be more than 6 billion hectares that provide for community 5 landholders that include an estimated 2.5 to 3 billion rural dwellers. Therefore, safeguarding 6 indigenous lands is essential in order to safeguarding global ecosystem services. Protected areas can 7 also be a helpful mechanism for safeguarding ecosystems that provide essential services, especially if 8 IPLCs are fully involved in the process. “Positive conservation and socioeconomic outcomes are more 9 likely to occur when protected areas are co-managed, empower local people, reduce economic 10 inequalities, and maintain livelihood benefits.” These outcomes can be ensured depending on the 11 levels of security of land tenure of IPLCs, and the quality of their participation in resource 12 management.

Lack of progress towards this target has serious implications for IPLCs, particularly because of their 14 reliance on shared communal natural resources for livelihood, food, medicines and other non-material 15 NCP such as culture, identity, community cohesion and spirituality. Despite the fact that the role of 16 nature to IPLCs’ quality of life is widely known, this is rarely reflected in public policies at national or 17 international scales, particularly in addressing their well-being. One of the various reasons for this 18 neglect can be traced from conventional economic approaches to development and dominant view 19 of utilitarian economic valuation of nature and its contribution. The 2019 IPBES Global Assessment 20 argues that “[i]gno"ng different types of values associated with material, non-material, and regulating 21 contributions of nature and thus not incorporating them in economic decisions is considered among 22 the most significant factors underlying the loss of nature and its contributions to people.”

Land or resource tenure insecurity for IPLCs impacts their values and knowledge (See e.g. 25 Target 1, 18), which also has implications in nature’s decline, and have greater negative

The value that’s placed on [natural] resources by state and companies is a dollar value. For us, that’s not the same. Mother Nature is more than a dollar value. She’s a part of who we are.

— Cristina Coc, indigenous Q’eqchi, co-spokesperson of Maya Leaders Alliance

[see full story in https://equatorinitiative.exposure.co/land-guardians]

207 Nature Sustainability, “Nat. Sustain.”
211 Sangha, Kamaljit, Russell-Smith, and Costanza.
212 IPBES, “Chapter 1. Assessing a Planet in Transformation: Rationale and Approach of the IPBES Global Assessment on Biodiversity and Ecosystem Services | IPBES.”
213 IPBES.
impacts on women and girls. Although protecting customary tenure systems is among the key action
for this target, it is important to recognise that women and girls in some customary systems of IPLCs
have imbalanced decision-making power compared to men. Thus, their particular needs and
context of discrimination to access and ownership should be understood and addressed accordingly.
Furthermore, men and women may hold different values and knowledge relating to nature, which is
linked to their varying access to resources and different dimensions of wellbeing derived from NCP.

Contributions and experiences of IPLCs towards the target

IPLCs have been increasing their efforts to secure their land tenure and continue to strike a balance
of benefitting from NCP as well as safeguarding its restoration and conservation for future
generations. These are significant contributions to achieve this target, including several goals in the
SDGs. Here below are some stories about their efforts towards this target.

On security of land tenure

- In Cambodia, Bunong indigenous communities in Mondulkiri province have successfully filed
a lawsuit against a rubber plantation, Socfin-KCD, under French law on the basis that the
plantation is funded by the French firm, Bolloré and community representatives have
attended the Tribunal of Nanterre in France for questioning. The communities claim that since
the rubber plantation started operating in 2008, their lands, traditions and customs have been
under threat.

- Forest Rights Act in India [placeholder: text to be provided ASAP]

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214 IPBES, “Summary for Policymakers of the Regional Assessment Report on Biodiversity and Ecosystem
Services for Europe and Central Asia of the Intergovernmental Science-Policy Platform on Biodiversity and
Ecosystem Services.”


216 Fortnam et al., “Gendered Nature of Ecosystem Services.”

Case study: Maya land court case in Belize

By: Maya Leaders Alliance (MLA)

The main challenge to the livelihood of the Maya people is land tenure security. The Maya first sought legal protection for their ancestral lands in the mid-1990s in an attempt to combat numerous logging and oil extraction incursions.

On 22 January 2001, the government of Belize entered into a Production Sharing Agreement granting an exclusive concession to US Capital Energy-Belize to conduct oil exploration within Maya territory in southern Belize. There was no consultation with the affected Maya communities. The concession, otherwise called ‘Block 19’, covers an area of 313,906 hectares including all the traditional Maya lands in the Toledo District, and land within the Sarstoon-Temash National Park, a protected area that encompasses land belonging to the Maya communities of Crique Sarco, Midway, Sunday Wood, Conejo, and the Garifuna indigenous community of Barranco. In 2014, US Capital Energy-Belize installed a drill pad and rig within the national park to conduct exploratory drilling.

Furthermore, despite a court injunction, additional logging permits were issued by the Belize government to third parties on Maya lands in 2011 without consultation or the consent of Maya people. In 2011, seven times more Rosewood timber was logged in Toledo than permitted by the Forestry Department. Maya village leaders monitored vast quantities of timber illegally removed from their land for exportation to China. The government initially did not take action to curb this illegal logging, permitting timber exports without explicit consent for extraction from the Maya.

In addition to the above incidents, there have been two recent court cases filed by MLA and aggrieved leaders for incursions onto Maya lands without consultation or consent. One such case arose from the government’s seizure of a large portion of farm lands in Jalacte Village to construct a major highway, several government structures, and a checkpoint to monitor passage on the road. The highway runs directly through the village and disrupts community members from accessing their farmland. The other case involved an individual taking residence near a protected sacred site, an area understood among the community as off-limits for building, bulldozing a road and damaging an ancient Maya temple. The individual did not follow customary practices to seek and receive permission from the government or local community.

They have fought these cases in Belize Supreme court, Caribbean Court of Justice and Inter-American Court of Human Rights. The legal battle reached a pinnacle in 2015 with the decision of the Caribbean Court of Justice—the highest court of the Belize judicial system and the Caribbean. In its ruling, the Caribbean Court of Justice awarded “legal and constitutional effect to the umbilical relationship between the Maya people of southern Belize and the land and its resources that have long provided physical and spiritual sustenance to them and their forebears.” The decision of the Caribbean Court of Justice gave rise to collective and individual property rights within the scope of Sections 3(d) and 17 of the Belize Constitution.

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On sustainable use and restoration and conservation of nature

Case study: El Balché: Sacred tree of the Mayan people, Mexico
By: Federación Indígena Empresarial y Comunidades, Locales de México, A.C. y Sociedad Cooperativa Lool Xaam SC de RL de CV.

Beekeeping is an important source of foreign exchange in our country, and is a source of income for much of the Mayan community of Felipe Carrillo Puerto, Quintana Roo. However, this activity has been reduced by the low price paid to honey producers. In addition, populations of pollen and nectar-producing trees have decreased in the area as a result of forest resource exploitation, and as result, the quantity and quality of honey has decreased. Therefore, it is necessary to monitor the hives constantly, and also to monitor and reforest the flora around beekeeping farms, to ensure a supply of pollen and nectar for the bees. There has been minimal support from government agencies for this and therefore the U Lool Xaam Cooperative Society and its members have organized themselves to carry out part of these tasks.

In Tihosuco and in the Quintana Roo region, one of the most affected species is the Balché (Lonchocarpus longistylus). This tree has become scarce over the past ten years or so. The Balché is a tree of great importance for the Mayan people. It is used in rites and ceremonies: a drink is made from its bark which is presented as an offering during the “cha’ chaakc”, ceremony in which Chaak, the god of rain, is asked to show favour to the crops. This drink has medicinal properties: an infusion of its leaves is used to treat coughs and to disinfect wounds. Its flowers are a source of nectar for the bees, and this is ideal for the conservation of the hives, avoiding excessive swarms and keeping them in good condition for the honey harvest, a situation that strengthens this economic activity and therefore the social development of families dedicated to this activity. The Balché also has a broader environmental importance, helping to combat the effects of pollution by purifying the air, and on land, prevents soil erosion.

Talks between men and women of the community have identified, revalued and given cultural and environmental importance, which has motivated not only their care but also the implementation of continuous reforestation:

“The balché has many benefits for us, we use it in ceremonial rites and for the elaboration of our medicine, the bees feed on their flowers in times of scarcity, so the bees can continue producing the honey and we can harvest it. That is why we have organized to plant the balché in places where there is no vegetation now ...”

Angeles Pat, a member of Lool Xaam

The CIELO partners of the Lool Xaam venture have reforested areas in the immediate vicinity of their beehives with native plants of the region, such as balché and other species that are sources of nectar. The places chosen for reforestation are those that have been used for agricultural activity, so it is intended to regenerate the vegetation with poly-nectariferous trees originating in the area.

The reforestation and conservation of areas that were planted in the community of Tihosuco, in the state of Quintana Roo, will contribute to the reproduction of native plant species, which in turn will increase bee production and strengthen its presence within the agrifood sector. This has great benefits within the sustainable productive activity, beekeeping, as well as promoting the maintenance of floral diversity in the region.

The actions carried out by the Lool Xaam Cooperative Society have contributed to the Sustainable Development Objectives, mainly objective 13, Climate Action, and objective 15, Life of terrestrial ecosystems, since measures have been taken to preserve and conserve the Balché and other native species.
IPLCs, in some cases, while having to recover from severe external impacts, are able to adapt and develop strategies that contribute to sustainable use and NCPs (see e.g. Box 14.3).

Case study: Agro-pastoralism as Strategy for Sustainable Conservation and Livelihood in Wadi Allaqi Biosphere Reserve, South Eastern Desert, Egypt

By: Hoda Yacoub of the Nature Conservation Sector of Environment Ministry, Egypt and women from Bedouins in Wadi Allaqi Nafeisa Saleh and Radina Nasser

The agro-pastoralism project targets the Bedouins who, through the Government decision no. 23 in 2002, were resettled in governmental houses at the Wadi Allaqi Biosphere Reserve. This is 16 kilometers away from their resources that is the Lake Nasser shores. The location of the village is too far from Bedouins’ essential livelihood resources, which created a great challenge to their sustainability in the village. Food insecurity, poverty, irregular water supplies and lack of fodders are the main challenges. Furthermore, those communities experience harsh seasonal shortage of food due to drought conditions that extends more than fifteen years. The problems of poverty are further exacerbated among Bedouins of Allaqi due to inadequate basic social services, particularly on health and education.

Conservation of habitat and natural resources is the main objective of the Wadi Allaqi Biosphere Reserve, a protected area under the Nature Conservation Sector of Egypt’s Environment Ministry. But usually the work strategies are not efficient enough to face the natural challenges and to sustain conservation of habitat and threatened species. Agro-pastoralism is one of programs implemented in Wadi Allaqi by the Re-habitation and Development Research Group (RDRG) of the Environment Ministry to overcome challenges of drought, overgrazing and overuse of resources and to provide alternative livelihood to local communities who had to adapt to the harsh circumstances. The Bedouins utilised their knowledge of agropastoralism, which allowed the households to obtain more than 50% of its gross income from livestock and communal grazing land and more than 25% from cropping activities.

The outstanding feature of Bedouin farms is that trees of target species are be cultivated with annual fodder crops to maintain a stable agricultural production without placing a load on natural vegetation. The implementation mechanism of agro-pastoralism was based on scientific research applied in the area combined with wealth of indigenous knowledge, Bedouins practical experience and their applicable information related to agro-pastoralism technique, for example, identify: a) climate variability and risks; b) the best areas for application the agro-pastoralism; c) the best methods for agro-pastoralism; d) selection of appropriate crops and trees for cultivation; e) ways of seeds reservation, collection and storage and f) their indigenous knowledge related to conservation ways of habitat and wild plants and the uses of plants as food, fodder and medicine.
Enabling Conditions and Remaining Barriers

Respect and promotion of IPLCs’ rights to own and manage their lands, territories and natural resources, including the particular roles and contribution of women in knowledge regarding resource management would go a long way in enabling IPLCs to fully contribute to this target.

Programmes and projects that recognise IPLCs as partners in resource management for access to NCP as well as restoration and conservation of ecosystem would also enable IPLC’s contributions.

The dominant perspective of utilitarian economic valuation of nature and its contribution is an impediment to incorporate multiple values to nature, particularly the non-material NCP that plays significant value to IPLCs.

Opportunities and Recommended Actions for Post-2020

The Parties should:

▪ Establish national level mechanisms to adjudicate the rights of IPLCs pertaining to lands, territories and resources, and respecting their customary tenure rights.

▪ Recognise and support IPLCs’ collective actions that contribute to maintain and restore NCPs.

▪ Implement guidelines and standards adopted under the Convention such as the Plan of Action on Customary Sustainable Use and the Akwé: Kon Voluntary Guidelines.

Donor agencies should:

▪ Continue to provide and increase direct support to IPLCs in securing land tenure, promoting their collective actions that contribute to maintain and restore NCPs, and capacity building activities and initiatives that involve partnerships with governments and relevant actors.

Intergovernmental bodies (like the UN and EU) should ensure that:

▪ Parties full explore and raise awareness of “collective rights” and the contribution of IPLCs collective actions to the goals and vision of the Convention.

▪ Parties adhere to the international standards in protecting and promoting IPLC rights, including ensuring access to justice especially in cases where national mechanisms are not available or have not been effective.

▪ Parties address the indirect drivers that contributes to the degradation of biodiversity resulting in erosion of NCPs.

Key resources


Target 15: Ecosystem restoration and resilience

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Key Message
At least 293,061 million metric tons of carbon are stored in the collective forestlands of IPLCs and despite recent evidence of unprecedented climate change impacts around the world, these systems still play a vital role in maintaining carbon stocks and in climate change mitigation and adaptation. Yet IPLCs still lack wide-scale support and recognition in many countries. The increasing impacts of climate change in the coming years require immediate action and comprehensive support for indigenous sustainable resource management systems and IPLC-led restoration, through a combination of indigenous local knowledge and technical input.

What does this target mean for IPLCs?
IPLCs’ close relationship with their lands makes them more vulnerable to rapid ecosystem changes which are exacerbated by climate change. IPLCs are contributing the least to greenhouse gas emissions and are managing various ecosystems - landscapes, seascapes or ‘icescapes’ - and enhancing resilience by drawing on their diverse knowledge systems, values, practices and technologies. Assessments of IPLCs’ contributions to carbon sequestration published in 2018 report that IPLCs manage at least 17% or 293,061 Mt of the total carbon stored in the forestlands of the assessed countries - a global estimate that is 5 times greater than that shown in a previous analysis of aboveground tropical forest carbon, and equivalent to 33 times the global energy emissions of 2017.

To strengthen the knowledge, technologies, practices and efforts of IPLCs related to climate change, the UNFCCC Conference Of The Parties (COP) 24 established the Local Communities’ and Indigenous Peoples’ Platform (LCIPP), to facilitate an exchange of experiences and sharing of best practices on mitigation and adaptation based on a holistic and integrated approach.

Restoration of degraded ecosystems to improve resilience and mitigate climate change is another integral component of this target, and this is also important among IPLCs because any restored ecosystem is an addition to the natural resource base that supports their well-being, including meeting basic livelihoods needs.

The extent of degradation varies across different landscape and countries, in part due to various causes and pressures. The global area of ice-free land considered as degraded ranges between 2% and 47% while the land being affected by human activities is between 35% and 76%.

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219 Rights and Resources Initiative, “A global baseline of carbon storage in collective lands.”
220 UNFCCC, “COP24 Strengthens Climate Action of Local Communities and Indigenous Peoples.”
221 Navarro et al., “Restoring Degraded Land: Contributing to Aichi Targets 14, 15, and Beyond.”
limit to agreed standard indicators and definition of land degradation, and there are inconsistencies in methodologies to measure degradation, the challenge is clear: to respond to a wide range of pressures on ecosystems and the resulting degradation plans for restoration initiatives must incorporate multiple goals.\textsuperscript{222}

**IPLCs’ contributions**

IPLCs have contributed immensely in addressing the current crises of biodiversity and climate change mitigation and adaptation through their diverse, innovative and sustainable systems of resource governance and management, as well as a deep awareness in many IPLC cultures that all of life – mountains, rivers, skies, animals, plants, insects, rocks, people – are inseparably interconnected. The need for enabling support and conditions to sustain IPLCs contribution to respond and adapt to climate change is reflected in the commitments forwarded by IPLCs during the Climate Action Summit in New York (see box)\textsuperscript{223}.

<table>
<thead>
<tr>
<th>Commitments made by IPLCs at the Climate Action Summit in New York, September 2019:</th>
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<tr>
<td>1. Lead the implementation of holistic plans to protect biocultural diversity, ensuring the inclusion of our most marginalized;</td>
</tr>
<tr>
<td>2. Develop actions to secure indigenous peoples’ rights to lands, territories and resources, self-determination and free, prior and informed consent (FPIC);</td>
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<tr>
<td>3. Access the development of renewable energies in accordance with self-determination and FPIC.</td>
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**Impacts of these Commitments**

1. Increase the amount of protected Indigenous lands, resources, and territories, contributing to the restoration of biocultural diversity and the sequestration of carbon to reduce carbon emissions.

2. Generate sustainable, localized, and nature-based economies to protect Indigenous Peoples traditional lifeways, food sovereignty, water sovereignty, and cultural transmission that will benefit our communities and humanity.

3. Strengthen Indigenous Peoples’ climate resilience and adaptation by increasing the effectiveness of climate solutions on the ground.

4. Effective climate solutions including disaster prevention and response with the use of Indigenous Peoples’ knowledge systems in combination with scientific knowledge.

These commitments\textsuperscript{224} are made specially to secure the future of the next generations.

\textsuperscript{222} Restoration goals include provisioning, regulating and cultural services.

\textsuperscript{223} The Climate Action Summit was held in September

\textsuperscript{224} World Indigenous Peoples Initiative to the United Nations Secretary General, “World Indigenous Peoples Initiative to the United Nations Secretary General Climate Action Summit.”
“I want to be a good ancestor. Indigenous Peoples’ commitments to climate action ensure that we are thinking of the seven generations to come.” Chief Howard Thompson, Haudenosaunee.

RRI reports that “up to 2.5 billion people make their living in rural economies through the stewardship of community forests and other community lands that play an essential role in maintaining ecosystem services at the landscape level”. It is noted in the report that communities with secure tenure tend to experience lower rates of deforestation and forest carbon emissions and maintain higher levels of biodiversity resulting in more resilient landscapes. In addition, the absence of recognition of land rights often leads to criminalization and violation of the rights of IPLCs, including violation of the right to FPIC:

“According to the latest assessment of 58 countries encompassing nearly 92 percent of the global forest estate, progress toward the legal recognition of community forest tenure rights is wholly inadequate, amounting to just over 14 percent of forest area as of 2017. As a result, communities face increasing threats of criminalization and violence from the continued expanse of externally driven land-use schemes that fail to recognize the tenure rights of communities or effectively and openly seek their free, prior, and informed consent.”

“The Ts’msyen Nation in Northern British Columbia is currently experiencing the effects of climate change and industrial development within our region. Rain patterns are shifting, drought is occurring, ocean temperatures are rising, and industry threatens our way of life and the coastal ecosystem every single day. Support is required from all sectors and government to safeguard our way of life and to help Indigenous peoples and communities mobilize to advance the clean energy, net zero carbon, sustainable future that is desperately needed to keep global temperatures below 1.5 degrees C.” Braden Etzerza, Metlakatla First Nation

Findings from the IPBES Global Assessment Report affirm that IPLCs have contributed to conservation of carbon stocks and strengthened ecosystem resilience through their natural resource management systems and ILK-based management practices. Land management by IPLCs has lower deforestation rates comparing it to other areas and thus results in climate change mitigation and preservation of nature’s contribution to people. IPLCs’ lands in the Amazon basin, Mesoamerica, the DRC and Indonesia contain over 20% of the above-ground carbon in all the world’s tropical forests. Noted

227 Masson-Delmotte et al.
contributions of IPLCs include soil carbon enrich practice, fire management and the role in restoring degraded landscapes.

“Our territory is part of our body and our spirit, we see it and live it as a space that we must all keep and protect and that we all know is a non-negotiable space. I come from a community in the Amazon rainforest. The forest has been preserved by indigenous peoples throughout our traditional knowledge and this space has the capacity to preserve and give continuity to the life of our peoples and of humanity in general. The survival of the Amazon forest is our survival and it is in the hands of the indigenous youths, because we are defenders of the environment, of the climate, defenders of life. States must understand that we are the guardians of these territories, of our mother Earth, just as the Amazon forest and other ecosystems in which we live are the hope of the planet. We indigenous women and youths are on the front line defending the rights of indigenous peoples, and now we are facing climate change in our territories and we can provide solutions to this global concern and bring it to all the spaces for political advocacy.”

Rayanna Maximo Franca, Indigenous youth of the Baré people / Indigenous Youth Network of Brazil

IPLCs as key actors in addressing climate change and issues related to it are also consolidating efforts to participate and engage in other climate initiatives and climate funds such as the Green Climate Fund. The GCF opens another opportunity to capture the potential and capacity of IPLCs in contributing to climate change mitigation and adaptation under the UNFCCC, by integrating indigenous local knowledge and other innovations. Climate change is a complex issue and its impact is heavier on IPLCs than on many others, and adaptation and mitigation frequently require high levels of technology and finances.

In view of the huge number of initiatives, plans and projects that would benefit from funding by GCF, IPLCs have called for IP policy, participation and engagement, strong safeguards, FPIC, grievance mechanism, and access to GFC resources. The GCF Secretariat will not directly implement activities; rather it will work with countries to identify needs and the best way to meet these needs. Thus, IPLCs need to engage with this process and to monitor actions to ensure that any initiatives will not harm communities, so as not to multiply their vulnerability, but on the contrary will do good and have positive impacts on them. The protection and recognition of IPLCs rights are contingent in the observance of due diligence by stakeholders introducing development or actions halting the impact of climate change at the country level.

229 Green, “Pension Funds and Insurers Pledge Climate Action at U.N. Summit.”
Case study: Addressing Drought through Revival of Historical Reservoir in Antigua and Barbuda

Sustainable development in Antigua and Barbuda are particularly vulnerable to extreme impacts of climate change unless appropriate adaptation measures are put in place, especially in the coastal zone\(^{230}\), and local community initiatives are an important part of the necessary measures. In 2015 a community group involving the children and youth mobilised and initiated actions to restore a community reservoir to address a four-year drought in partnership with businesses and government ministries. The drought and the need for water brought the people in Barnes Hill village together to deal with the multiple issues affecting them, which led to the formation of Barnes Hill Community Development Organization. This ‘small’ step by the community resulted in positive changes of behaviour (not only within the community – especially among the youth - but also in other communities and people) and greater appreciation of the value of a once degraded ecosystem. This is a living proof of the value of collective effort to revive a historical heritage that can also provide food, livelihood and protection from further impacts of climate change. The unearthing of cultural knowledge, creation of sustainable livelihoods, appropriate use of the community’s natural assets and incorporation of traditional knowledge and practices of the villages all contributed to the inspiring story of Barnes Hill.

affected the natural balance, and this means that today new policies and thinking are needed that focus on un-learning harmful practices and on environmental and agro-ecological thinking. It is still possible to recover, protect and conserve our environment, but for this to happen we must to strengthen the sense of the care for our natural heritage in the inhabitants and develop an environmental management plan, which in turn will allow us to maintain healthy surroundings.

The indigenous community of Cañamomo has concentrated the efforts and will of our entire organization, our authorities and the community members on environmental recovery of the territory. In order to advance in this purpose, a strategic plan is being developed that contemplates seven areas: water, solid waste management, risk management, environmental education, biodiversity, climate change and mining.

Our activities to date have included the following:

- Creation of an Environmental Council and an Environmental Recovery Association (CREAR);
- Drafting of an environmental education policy and development of a natural heritage programme;
- Organisational strengthening, including through meetings of environmental committees, community aqueduct boards, and an environmental assembly;
- Environmental workdays;
- An "I don't take garbage to my house" campaign focusing on proper management of solid waste, management of wastewater discharges, recovery of forest strips, isolation of strips for environmental protection, maintenance of tree plantations;
- Analysis of the current state of decontamination of domestic wastewater;
- A "Plant a Tree for the Resguardo" campaign, which has involved community tree nurseries and the planting of 61,000 trees;
- Establishment of living fences and maintenance of an inert fence
- Management of wild species of flora and fauna and creation of a nursery to protect local species.

We plan to consolidate and expand these activities and to:

- Work towards compensation for villagers’ properties that will be left in order to expand areas for conservation and restoration;
- Re-establish the biological corridors and walking paths;
- Embed a responsible commitment to nature as an objective of the curriculum
- Generate a plan for the restoration, care and use of the wetlands and lagoons, and restore the purity of the waters;
- Establish a plan for the adequate management of solid waste

These actions have been carried out without external financing. We are strengthening the social fabric of our community and generating unity, both intergenerationally and women and men. We are carrying out these actions in the context of conflict, hate speeches and threats against our
Indigenous leaders, in order better to defend our territory. Our actions are a hope, a light amid a chaotic and turbulent world of armed conflict.
Case study: Loko iʻa: Indigenous Aquaculture and Mariculture in Hawaiʻi

Loko iʻa were essential components of traditional food systems in Hawaiʻi, which boosted food security and community resilience. Loko iʻa takes advantage of natural coastal ecology and tidal cycles, enhancing nearshore areas to provide algae efficiently to feed and fatten herbivorous fish. Additionally, where high surf, storms and other weather phenomena can influence and interrupt fishing practices or when ocean fishing may not yield sufficient supply, fishponds provide a regular supply of fish. Sharing and social cohesion is a key component of loko iʻa culture because of the scale of physical labor needed for construction and maintenance. In times past, as we see in the revival of loko iʻa today, the surrounding community comes to help and in return shares in the abundance produced from the pond.

Statewide surveys published in 1990 have identified 488 fishponds on six islands, including several locations containing groups or concentrations of ponds. They once served an essential role in protein production, producing an estimated 300 pounds of fish per acre per year.

The innovation reflected in the variety of loko iʻa designs and construction methods demonstrates an unparalleled understanding of engineering, hydrology, ecology, biology and agriculture. Loko iʻa practice is the result of over a thousand years of generational knowledge, experimentation and adaptation and reflects a deep indigenous understanding of the environmental, ecological and social processes specific to our islands.

In the wake of the social and political upheaval following the overthrow of the Hawaiian monarchy, loko iʻa production dropped. An inventory in 1901 identified only 99 ponds actively used in commercial trade, with an estimated annual production of over 680,000 pounds, including 485,000 pounds of ‘ama’ama (striped mullet, *Mugil cephalus*) and 194,000 pounds of ‘awa (milkfish, *Chanos chanos*). The report containing the inventory also speculated that there had been more than twice as many ponds in use only thirty years earlier. It also acknowledged the subsistence use of ponds for individual households and friends, which was not reflected in the inventory.

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231 Kirch, Feathered Gods and Fishhooks.


233 DHM Planners Inc. et al., Hawaiian Fishpond Study: Islands of Hawai’i, Maui, Lana’i and Kaua’i (Honolulu: DHM Incorporated 1990).

By 1970, loko i’a only produced 20,000 pounds of fish—less than 1 percent of what they had produced at their peak.\textsuperscript{237} Today, the majority of loko i’a sites are in highly degraded conditions, some completely covered and unrecognizable as fishponds. Barriers to restoration include altered watersheds and diversion of water (necessary to create the productive brackish water for coastal loko i’a); invasive species such as non-native mangroves; permitting processes that are not well-designed to accommodate loko i’a restoration, and loss and scattering of generational knowledge for management and care of loko i’a. Yet loko i’a remain important components of the ahupua’a and maintain the potential to contribute to a healthy and robust food system.

Over past decades, Hawaiian communities and kia’i loko (fishpond guardians/caretakers) have worked to restore loko i’a around the islands and reclaim the knowledge and practice of loko i’a culture. Recognizing the current challenges and in an effort to increase collaboration and accelerate restoration and food production, kia’i loko formed the Hui Mālama Loko I’ a, a network of loko i’a and kia’i loko from six Hawaiian Islands. Since 2004, the Hui Mālama Loko I’a has met annually and opportunistically to strengthen working relationships and share experience and expertise from their unique places and work.

\textsuperscript{235} Reflection from practitioners of local non-profit Paepae o He‘eia, formed in 2001 to restore and mālama He‘eia fishpond on O‘ahu.

\textsuperscript{236} John N. Cobb, Commercial Fisheries of the Hawaiian Islands (U.S. Fish Commission, 1901), 428-433.

As an ever-growing network of committed and skilled site-based caretakers, the Hui Mālama Loko ʻa has improved and accelerated the loko ʻa stewardship movement. Most recently, the network leveraged its collective influence to streamline the permitting processes in collaboration with the State of Hawaiʻi, and has improved general co-management relationships with government and private entities.

Today loko ʻa serve as kīpuka for the renewal of traditional practices and values in contemporary ways. Loko ʻa are thus celebrated for their past and future potential to contribute to the needs of their ahupuaʻa and our broader community in Hawaiʻi.

The restoration of loko ʻa provides opportunities for Native Hawaiians and the larger community to renew ʻāina momona: an abundant, productive ecological system that supports community well-being.

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Case study: The Froxán Common, Galicia, Spain

The Froxán Common is an area of 100 hectares (1 km2) of communal land and is under the direct care of families living in the municipality of Lousame in Galicia, Spain. It was recognized as 'monte veciñal en man común' ("neighbourhood commons") in 1977, after the entire Froxán community signed a petition to the Civil Governor demanding the devolution of common lands. 'Monte veciñal en man común' is a legal land ownership category that is based on a customary form of communal land governance and covers 22% of the land area in Galicia.

Before the land was awarded to the community, the land was under a feudal tenure system based on manorial charters that had been issued in 1409, 1527 and 1709, but its manorial status was extinguished in 1928 when the community bought the land and they were given a "manorial redemption" agreement. However, the state disrespected the agreement and instead incorporated the community land into the Public Woodlands Catalogue in the 1930’s and 1940’s and such control given to the state restricted traditional right and use over the land. The land was then handed over to mining companies resulting to severe environmental degradation, land disputes (continuing today), damages to habitats like peat wetland but most importantly, it restricted people from the community to use their land for livestock grazing and other use. The people caught using the land were fined. After suffering from the impact of mining, the land was also used for plantations by the State Forestry Service.

Faced with degraded biodiversity from mining and plantation, the community commenced restoration efforts in the 1990s up to the present day. Initially, the restoration efforts included filling in abandoned mine pits and shafts. More recently, efforts have been initiated to eradicate exotic invasive species (particularly Acacia melanoxylon, Acacia dealbata, Robinia pseudoacacia and Eucalyptus sp.) that are aggressively expansive and tolerant of fire. Eucalyptus plantations are also being removed, as the last productive cycle gives way to restoration with high-ecological-value native species. Work has also commenced to restore a wetland that was degraded by State forest services through drainage and forced forestation. A management plan for the wetland was selected in 2018 as one of four pilot case studies of climate change adaptation of natural management initiatives. The community collectively self-manages its own water supply system, and wetland restoration in the face of a new pattern of prolonged droughts perceived as critical to hydrological regulation. This is particularly important because natural springs from which water is collected are immediately downhill from the area being restored (see Campo de Lamas Wetland Management Plan (under Resources) for further details).

Part of the community’s restoration initiative is the revival of their traditional livelihood systems and practices. Firewood collection has become a source of livelihood, water source like spring water is used for household use, and an irrigation was built for community use and management. The community also gather animal manure for fields and gardens, chestnuts are gathered and roasted when in season and preserved for future consumption. The common land has been designated as a wild mycological production area where people can gather wild mushrooms and aromatic and medicinal plants.

In recent years, the Community has been active in engaging the wider society in its conservation and restoration efforts, particularly working with children, schools, families and environmental organizations. These groups have assisted in reclaiming degraded areas affected by mining activity and invasive species, through participatory reforestation with native species. Through these
activities, the community is developing an ongoing programme for education and sustainability ("Montescola"), showcasing the potential of community land-management in addressing pressing environmental and social issues. These issues include climate change, wildfires, invasive species, land and water contamination and degradation, alternatives to rural depopulation, and cultural continuity among traditional rural communities in Galicia. These efforts were recognized in 2017 with the inclusion of Froxán in the ICCA Registry, being among the first two Community Areas in Spain to participate in the ICCA Registry. Froxán was simultaneously included in the World Database on Protected Areas (WDPA) after going through a national peer-review process.

The Froxán Commons has also promoted a participatory biodiversity inventory (see related links) and the whole area has been included as a Special Scenic Interest Site (LEIP) in the Galician Landscape Catalogue. In addition to natural heritage, the common lands hold significant cultural heritage that evidences a long history of communal management. This includes a large stone enclosure that has been dated to the Early Middle Ages, which would hold the community’s herds in the higher part of the mountain. Another feature is a traditional water mill that was documented in a 1563 notarial deed. Oral memory testifies to the existence of a megalithic burial mound called 'Casa Vella' ('Old House') that was likely destroyed by mining in the mid-20th century, and similar megalithic sites are present in the area. An ancient pathway ('Caminho da Missa'), which has been identified as a possible secondary route of the Roman Via XX 'Per loca maritima', also goes through the common Castanea sativa forest, preserved by the modern road that replaced it.

Enabling conditions

IPLCs’ contribution and participation as partners in addressing climate change mitigation and adaptation through their ILK, approaches and strategies can reach their full potential if enabling conditions are provided. These include the following:

- Integration of FPIC into all projects that will affect IPLCs. FPIC processes should include transparent and inclusive consultations, including with women and youth, free of coercion or intimidation;
- Community approaches to restoration and resilience-building informed by ILK, can be more effective when supported with policies recognizing the rights of IPLCs;
- Create and support an iterative space for discussion/dialogues at different levels, so that it permeates democratic participation and collective decision;
- Pursuit of mitigation and adaptation development pathways should be supported with climate and land policies that amplify social resilience, support ecological restoration, and foster engagement and collaboration among multiple stakeholders.

Opportunities and recommended action for the post-2020

- Improve the status of biological and cultural diversity by safeguarding, restoring and strengthening the resilience of ecosystems, species, genetic diversity and associated cultural and knowledge systems through recognition and policy support.
• Scale up recognition of IPLCs’ land and forest rights by implementing existing laws and legislation recognizing rights and their rights to own, use and develop their lands, territories and resources

• Secure and always protect IPLCs rights to FPIC, in an iterative manner and at various levels

• End the criminalization and persecution of IPLCs defending their lands, territories and resources

• Develop partnerships that promote and use indigenous local knowledge to reduce emissions from deforestation, strengthen community-based conservation and restoration efforts and improve sustainable land use

• Enhance mechanisms for climate funds, allowing easy access and shared benefits

Key resources


Target 16: Nagoya Protocol in force and operational

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Key message:

IPLCs and governments have identified challenges in the national implementation of the Nagoya Protocol, including in fostering full and effective participation of IPLCs. Embedding the Nagoya Protocol within a holistic post-2020 global biodiversity framework, implemented in synergy with other global instruments, opens new opportunities for multiple benefit-sharing arrangements with IPLCs. Applying innovative approaches, including the use of biological resources and bio-trade; respect and legal recognition for diverse community protocols and customary law opens up potential for increased partnerships between governments, the private sector and IPLCs.

Challenges faced in the implementation of the Nagoya Protocol

Following the adoption of the Nagoya Protocol, indigenous participants expressed their concerns that the phrase ‘in accordance with domestic law’ could be problematic if national policies fell below internationally accepted rights of Indigenous Peoples. Whereas Indigenous Peoples are often owners of biological resources and holders of associated traditional knowledge, State recognition of IPLCs and their rights to lands, territories and resources and requirements for their free, prior informed consent (FPIC) for the access and use of their resources and knowledge is still absent or weak in many countries. Concerns that the Nagoya Protocol is overly narrow and legalistic in its treatment of traditional knowledge could result in potentially limited benefits for IPLCs. 239

The Nagoya Protocol goes further than the CBD in spelling out the rights of indigenous peoples and local communities to fair and equitable benefit-sharing, based on mutually agreed terms, arising from the utilization of genetic resources held by indigenous and local communities; to prior informed consent, when traditional knowledge associated with genetic resources, is accessed; to have their customary laws, community protocols and procedures be taken into account by Parties when implementing their obligations under the Protocol, and to non-restriction of their customary use and exchange of genetic resources and associated traditional knowledge. The distinct role and contributions of women in access and benefit-sharing processes is also recognized. However, implementation of all these provisions leave much to the discretion of governments regarding national legal, policy and administrative arrangements and how to implement the Nagoya Protocol with the full and effective participation of IPLCs.

To date the operationalization and implementation of the NP has been limited, including the provisions directly relating to IPLCs, as evidenced by the report on Nagoya Protocol Implementation

239 Quotes are from IIFB Statements and Press Conferences during COP10 and COP11 available at iifb.indigenousportal.com
The COP/MOP decision adopted by the Parties to the Nagoya Protocol on Access and Benefit-Sharing, identified priorities and challenges with respect to IPLCs, including: determining how the concept of “indigenous peoples and local communities” applies at the national level; clarifying the rights of indigenous peoples and local communities over genetic resources and/or traditional knowledge associated with genetic resources; identifying the different groups of indigenous peoples and local communities; understanding the way they are organized; and linking traditional knowledge with the holder/s of such knowledge. The following possible actions were identified: capacity building of Parties and IPLCs with respect to ABS issues; building on the relevant work of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions on the concept of indigenous peoples and local communities; establishment of national mechanisms for the participation of IPLCs; support for coordination and institution building within and among indigenous peoples and local communities to address ABS issues including through the development of community protocols; capacity-building to support IPLCs in developing minimum requirements for mutually agreed terms and model contractual clauses for benefit-sharing.

Challenges faced by IPLCs have also been identified in community protocols – the case-studies below demonstrate examples of this.

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240 CBD/NP/MOP/DEC/3/1 30 November 2018: Decision Adopted by the Parties to the Nagoya Protocol on Access and Benefit-Sharing

*Nirmanee Development Foundation*

**Note:** This bio-cultural protocol is a comprehensive document covering the inter-generational heritage, traditional medicinal knowledge, their acquaintance with serpents and other animals and extraordinary treatment methods and varieties of medicine of the Native Healers in the Kegalle District, Sabaragamuwa Province of Sri Lanka. It describes the unity of nature and the culture, beliefs, values and lifestyles affecting the protection of biodiversity, as well as challenges currently faced by traditional healers. The following is an excerpt from the protocol.

**The challenges we are confronted with**

- Difficulty in obtaining required medicine
- Impact on the registration as a native healer due to the laws introduced during the time of colonial era
- Destruction of medicinal plants due to the expansion of commercial plantations;
- Restrictions imposed to enter forest area
- The ban imposed on planting essential medicinal plants, example: kansa
- Demeaning the native practitioners due to pressure exerted by western medical authorities
- There is no recognition given to the native medicines within our education system
- Due to the addition of chemicals to the medicinal plants, quality of the medicine has been affected
- Quality of medicinal plants has been affected due to mutilation of genes of those trees.

**Threats from multi-national companies**

- Indigenous medical practice is being suppressed by authoritative market controlled by western medical system
- Programmes are made to undermine the native medical system labelled as primitive
- Government assistance given to Indian Ayurveda system, Chinese acupuncture system, and homeopathy system
- The government’s minimum concern towards the protection of the native medical system the benefits not being passed on to the lowest level.

**The Integration Process of Social Protocols**
We are bound to follow the main principle in the conservation of our biological diversity and medicinal plants. At the same time, the right of the citizen who uses the bio assets is also to be protected. In development of local knowledge, and in giving benefits to locals, we expect to work in collaboration with the Sri Lanka Biodiversity Secretariat, and educational institutes and other relevant associations.

Our requests
In accordance with the Treaty (CBD), we request assistance from the government for the following:

1. To utilize folk treaties on the equitable and fair sharing of the benefits accrued from genetic assets and traditional activities.
2. To not complicate cooperation agreements;
3. To formulate model agreements in order to share benefits;

Our main requirements are:

1. To be educated on finding markets for our products
2. To be educated on finding technology for new productions
3. Implementation of development programmes for bio-assets management.

Implementation of the Nagoya Protocol in the post-2020 Biodiversity Framework

Adoption of the post-2020 global biodiversity framework, including embedding the Nagoya Protocol in its Goals, Targets and Indicators opens the opportunity for a more expansive implementation of the Nagoya Protocol to maximize benefit-sharing arrangements with IPLCs.

For IPLCs, there may be limited benefits from new legal constructs of property rights – such as rights to traditional knowledge associated with genetic resources – which technically and legally dismember rights to lands, territories and resources and undermine holistic approaches and indigenous worldviews. As such, IPLCs need to engage national ABS processes to operationalize the Nagoya Protocol provisions and to potentially address national flexibilities by going beyond its minimal requirements and allowing synergies with other global instruments on benefit-sharing. These include other processes such as Farmers Rights under the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); UNCTAD Bio-trade; and the Sustainable Development Goals (SDGs).

The Nagoya Protocol on Access and Benefit-Sharing allows using national flexibilities to go beyond its minimal requirements by promulgating national laws, policies, regulations and guidelines consistent with Target 18, recognizing customary law as a framework for implementing the Nagoya Protocol,

including respect for community protocols and customary institutions and maximizing benefit-sharing opportunities with IPLCs in the post-2020 global biodiversity framework.

An approach of maximizing benefit-sharing arrangements with IPLCs in implementing the Nagoya Protocol opens up the potential of delivering on multiple benefits, including monetary and non-monetary benefits, which are prioritised by IPLCs in their diverse biocultural community protocols. Community protocols are usually holistic, going beyond the use of traditional knowledge associated with genetic resources. By recognizing these community protocols, governments can respond holistically to the priorities and concerns of IPLCs based on their needs in specific localities and contexts.
Case Study: The making of the Endorois Peoples’ Bio-cultural Protocol

By Cicilia Githaiga and Eric K. Kimalit

The Endorois community live around the shores of Lake Bogoria and different parts of Baringo County, as well as in Nakuru and Laikipia Counties within the Rift Valley of Kenya. They regard Mochongoi Forest and Lake Bogoria as sacred grounds which are used for key cultural and religious ceremonies. They have been evicted several times from their ancestral home, but their 1973 eviction culminated in the gazettement of Lake Bogoria as a National Reserve. The community filed a claim with the African Commission on Human and Peoples’ Rights and succeeded against the Government of Kenya when orders for restitution and compensation were made in 2010.

The community boasts of many natural resources ranging from medicinal trees, aloe vera and an alkaline lake, L. Bogoria which hosts hot springs, flamingos and algae which are extremely valuable for local, domestic and commercial use. The Lake is also a source of tourism revenue, resulting in the development of a Lake Bogoria Management Plan (LBMP), that allows joint community and Baringo County Government management of this important resource.

Having lost valuable resources in the past, the Endorois have since learnt to organise themselves as a community to be able to determine matters of access and benefit sharing relating to their resources, over and above the mechanisms that have been put in place by the National Government. The community developed their Protocol with a view to articulate community determined values, procedures and priorities under customary, state and international law as the basis for engaging with external actors, such as governments, academia and other parties interested in access to, and utilization of, their resources. The three-year process of development of the protocol, data collection and drafting took a lot of back and forth with the community being in charge of the content and with Natural Justice providing technical advice.

The Protocol goes beyond defining who we are, our culture, ways of life, food, social organisation and relations with our resources. It anticipates processes that the community needs to engage and participate in to ensure not only protection and conservation of their resources but that impact assessment processes, the government policy, planning, decision making, budgeting, resource allocation, monitoring and compliance processes took into account the community’s access and benefit sharing needs. Matters of awareness creation, the modes of resource mobilisation and dispute resolution were also addressed. The Community’s Protocol is also a schedule to the LBMP, giving the Protocol legal force as part of the wider management strategy of the community resources and lake.

The Protocol documents the community agreement to uphold the organisational structure of their governing body, the Endorois Welfare Council, a community based organisation, representing each of the 17 Endorois locations. It outlines the community’s specific challenges, threats and opportunities with specific calls made to both the County and National Governments to act. The community’s expectations and outcomes, some of which were achieved in the process of making the Protocol, include: due recognition of the community, acknowledgment of the community role in protection and conservation of biological resources; the community has been brought together and is now more cohesive; better more inclusive decision making; better appreciation and
Learning from more examples of community protocols developed in Africa\textsuperscript{244}, and drawing lessons from them, the following summary statement was made:

“Finally, the implementation of ABS is made much more meaningful for communities if it takes a broad and strategic view: by giving communities rights over their genetic resources, including obligations for national users in their national ABS frameworks, and linking ABS with biotrade and with options for local and national valorization. From a community perspective, the distinctions of what constitutes utilization in the narrow sense of the Nagoya Protocol, and the separation of traditional knowledge from the use of the resources that it is associated with, can be very artificial. A narrow restriction of community rights to traditional knowledge associated with GR, utilized abroad, can exclude communities from a large share of potential benefits. Countries in Africa have been aware of this challenge and are developing various measures to involve communities in benefit-sharing not only on traditional knowledge, but also, at the minimum, genetic resources provided by them.”

Respect for Customary Law and Community Protocols

Indigenous peoples have called for an holistic approach to traditional knowledge protection grounded on their rights to self-determination over their lands, traditional territories, resources, knowledge, and cultures; and respect and recognition of their own institutions, customs and customary laws and practices.

They have consistently argued that measures for protection of traditional knowledge should be based upon and support enforcement of their customary laws. In some countries it is recognised as a source of law, in others its role is limited to the exercise of internal autonomy by indigenous peoples and local communities, while many countries have yet to give formal recognition to customary law. Where it is recognised it is usually seen as coming at the bottom of the hierarchy of laws, a situation which must be revised in the light of recent developments in international human rights law.

Indigenous peoples and local communities recognise that customary law alone cannot protect their traditional knowledge and traditional knowledge systems or their rights over their knowledge and must be supported by national, regional and international law. A key determinant for securing effective recognition and application of customary law in traditional knowledge protection will be the development of functional interfaces between indigenous peoples’ and local communities’ decision making and enforcement authorities and national and international legislative, administrative and judicial authorities.\textsuperscript{245}

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\textsuperscript{243} Chair of the Board of the Endorois Welfare Council, kimalit2002@gmail.com

\textsuperscript{244} Natural Justice, 2018 Community Protocols in Africa: Lessons learned for ABS Implementation

\textsuperscript{245} Brendan Tobin
State adoption of formal regulatory frameworks with respect to IPLCs on land and resource management systems, customary use of resources and traditional knowledge practices can have differentiated impacts, depending on the substance of such regulations:

- Formal regulations are inappropriate for informal system – but neutral
- Inappropriate but biased against the informal system
- They could restrict the informal system
- They could exploit them
- They are declared illegal

Governments adopting a broad framework for benefit-sharing arrangements with IPLCs can adopt structural, procedural and outcome indicators for monitoring the implementation of the Nagoya Protocol, which includes the full and effective participation of IPLCs in the elaboration and adoption of laws, policies, procedures, programmes and partnerships which promote benefit-sharing with IPLCs. This is including, but not limited to, the signing of contractual agreements with IPLCs for the utilization of IPLC biological resources and associated traditional knowledge. Indicators which assess synergies and consistencies in the application of various global instruments relevant to IPLCs and access and benefit-sharing would help to ensure that provisions on trade and intellectual property rights do not conflict with environmental, social and human rights standards and obligations agreed by governments in other relevant processes.

This includes consistency with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), including Article 31 which states that:

1. **Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.**

2. **In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.**
On matters of traditional knowledge, respect and protection of customary law is a necessary condition to guarantee benefits for IPLCS. Legal recognition of customary law and competent authorities of IPLCs would be the bases for partnerships on access and benefit-sharing.

Opportunities and recommended action for the post-2020

1. Ensure full and effective participation of IPLCs in national processes on access and benefit-sharing, overcoming narrow and limited implementation of Nagoya Protocol with respect to IPLCs to date.

2. Governments to make use of flexibilities in the Nagoya Protocol to adopt broad laws, policies, guidelines and programmes, including respect for customary law and community protocols;

3. Governments to put in place benefit-sharing arrangements in partnership with IPLCs, at all levels, including sustainable development of biological resources and bio-trade; farmers rights; and institutional mechanisms and funds for for benefit-sharing;

4. Promote legal pluralism and interfaces between local-global sources of law – Respect and recognition of community protocols, customary law and customary institutions of IPs consistent with the UN Declaration on the Rights of Indigenous Peoples, (UNDRIP); UN Declaration on the Rights of Peasants and Other People Working in Rural Areas; Farmers Rights under the ITPGRFA and the International Convention on Economic, Social and Cultural Rights.

Key resources

CBD/NP/MOP/DEC/3/1 30 November 2018 - Decision Adopted by the Parties to the Nagoya Protocol on Access and Benefit-Sharing
1 Brendan Tobin, Bridging the Nagoya Compliance Gap: The Fundamental Role Of Customary Law In Protection Of Indigenous Peoples’ Resource And Knowledge Rights, LEAD Journal

3 Natural Justice, 2018 Community Protocols in Africa: Lessons learned for ABS Implementation

5 Manuel Ruiz and Ronnie Vernooy, 2012 The Custodians of Biodiversity, Earthscan
Target 17: Biodiversity strategies and action plans

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Key message

The role and contributions of IPLCs in maintaining biodiversity and healthy ecosystems is still poorly recognized in the majority of NBSAPs and national targets. For Aichi Biodiversity Targets 14 and 18, which are particularly relevant for IPLCs, there is very limited information from which progress on implementation can be assessed. Appropriate institutional mechanisms to foster IPLCs’ full and effective participation in the development, implementation and monitoring of community-based and national biodiversity strategies and action plans is essential to ensure effective post-2020 progress at national, regional and global scales.

Context: What does this target mean for IPLCs?

This target is important for IPLCs because their full and effective participation in the development and implementation of NBSAPs and in national reporting will ensure that they can fully engage in decision-making concerning biodiversity. This will become even more important in the post-2020 period because NBSAPs will need to be aligned with the SDGs and the Paris Agreement on Climate Change.

The GBO5 (draft) summary for policy makers states that, “Since 2010, 97 per cent of Parties have now submitted at least one NBSAP, and 155 have taken the Strategic Plan on Biodiversity (2011-2020) into account. Most national targets included in NBSAPs align with the Aichi Biodiversity Targets, but the level of ambition varies, and the collective ambition of national targets does not add up to the global ambitions of the Strategic Plan”.246

Based on a review of NBSAPs submitted so far, the SCBD concludes that “The Strategic Plan reinforced the importance of NBSAPs for national biodiversity planning, building on guidance adopted earlier, and emphasising that NBSAPs should be adopted as a whole-of-government policy instrument. However, few countries have done so, undermining their effectiveness in addressing other sectors and weakening the level of implementation of NBSAPs”.247

In addition to lack of ambition and lack of adoption of NBSAPs as whole-of-government policy instrument, is the poorly understood recognition of IPLCs’ roles and contributions. The GBO5 summary for policy makers highlights that “Despite the importance of indigenous peoples and local communities as custodians of extensive

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lands, freshwater and marine resources in all regions, their role is poorly recognized in the majority of NBSAPs and national targets, with some notable exceptions.” The SCBD also states that “It should be noted that there is very limited information from which progress on implementation can be assessed for a number of Aichi Biodiversity Targets, such as Target 14, (Ecosystem services) and Target 18 (Traditional knowledge).” Ignoring the contributions IPLCs should be considered as one of greatest missed opportunities by Parties in trying to achieve the goals of the Convention.

An initial analysis of the 91 6th national reports submitted by 30 June 2019 reveal that 9 of them (10 per cent) mention IPLCs’ engagement in NBSAP processes and 14 of them (15 per cent) mention their engagement in NBSAP and other national processes dealing with natural resources or the environment. While there has been some improvement in national reports mentioning IPLCs since LBO1 in 2016, there has not been any progress in IPLCs’ participation in NBSAP processes, so there is still much to do to make NBSAPs truly participatory.

Contributions and experiences of IPLCs towards the target
IPLCs are increasing their contributions to achieve this target by various actions, particularly by:

- Engaging in NBSAPs and national reporting where possible (e.g. see box 17.1)
- Advocating for improved participatory mechanisms in the development and implementation of NBSAPs and in national reporting
- Producing and implementing their own local biodiversity plans

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Case study: Indigenous peoples’ participation in NBSAP processes in Costa Rica

By Donald Rojas Maroto, Brunca Indigenous People and President of the National Indigenous Bureau, Costa Rica

In September 2015 Costa Rica made its National Biodiversity Policy (PNB) 2015-2030 official by means of Executive Decree No. 39118-MINAE, and this established a national path towards improved conservation and sustainable use of biodiversity, as well as fair and equitable sharing of the benefits arising from the utilisation of resources. In 2016, Costa Rica also approved its second National Biodiversity Strategy, which covers the period 2016-2025. This strategy is related to Costa Rica’s Biodiversity Law No.7788 of 1998, which aims to protect biodiversity and sustainable use of resources, and ensure fair benefit-sharing. The Law also includes indigenous participation explicitly, and embraces the three objectives of the Convention on Biological Diversity (CBD), which has been adopted by the country.

Many indigenous participation processes were developed thanks to indigenous advocacy and the openness of the Ministry of Environment and Energy (MINAE), with the help of the National Commission for Biodiversity Management (CONAGEBIO) and the facilitation of the National Indigenous Board of Costa Rica (MNICR). Of great importance is the fact that these processes included the participation of youths, adults and elderly women and men, and leaders from many community organisations, including traditional authorities and integrated indigenous development associations. These processes included cultural, environmental, economic, and agricultural issues as well as issues related to crafts, ecotourism, healthcare, water and education. They have also opened up participation in many other spaces. In addition, territorial, regional and national workshops have been carried out, with contributions and recommendations based on different indigenous “cosmovisions”, in order to develop both the National Biodiversity Policy and the second National Biodiversity Strategy. The results of the participatory processes were returned to indigenous peoples during specific territorial and regional workshops.

In this way, Indigenous peoples have been able to make contributions and recommendations for the main points, objectives and guidelines of the National Biodiversity Policy. The Policy’s vision includes indigenous peoples explicitly. Similarly, indigenous recommendations for guidelines, actions and 57 programme and project proposals were provided for the second National Biodiversity Strategy. In addition, 13 proposals were prioritised and government institutions that could potentially be responsible for their implementation were identified.

The second National Biodiversity Strategy consists of 98 goals. Indigenous proposals contributed to 38 of those goals, which address, among other issues, the use and management of biodiversity, the governance of protected areas, traditional knowledge, indigenous participation, benefit-sharing and strengthening of indigenous economies through the development of tourism, payments for environmental services (PES) and the marketing of agricultural products. Dialogues with public institutions have now started for the implementation of these goals. In particular, work in goal 63 has been progressing, with regard to the productive and economic development of indigenous territories through tourism activities related to biodiversity. Important discussions and proposals related to sui generis community rights and traditional knowledge have also taken place.

By agreement of the Plenary Commission of CONAGEBIO, a working group has been established to make sure that the indigenous knowledge platform in Costa Rica has substance and applicability.
This was announced in a preparatory meeting for the 25th Conference of the Parties (COP) to the United Nations Convention on Climate Change (UNFCCC), which was held in San José Costa Rica in October 2019.

The government in Antigua and Barbuda has also taken positive steps in improving participation of local communities in the NBSAP process. In their 6th national report, Antigua and Barbuda reported that:

“Local groups were trained through workshops organized by international entities, such as the regional Capacity Building Workshop for the Caribbean Region on Traditional Knowledge and Customary Sustainable use under the Convention on Biological Diversity in the year 2015. They also organized their own trainings for various communities with the creation of 15 community groups working on their own project documents with the support of GEF/SGP as well as national projects with local buy-ins to promote sustainable activities. Additionally, revised NBSAPs undergo stakeholder review processes.”

Case study: Challenges remaining: the experience of IPLCs in the NBSAP process in India
Ashish Kothari, Kalpavriksh, India

From 2000 to 2003, one of the world's largest participatory NBSAP exercises in the world took place in India. Kalpavriksh (a civil society organisation) coordinated a nation-wide process to prepare India’s National Biodiversity Strategy and Action Plan. This process, under the aegis of the Union Ministry of Environment and Forests (MoEF), was sponsored by GEF through the United Nations Development Programme. Kalpavriksh in consultation with MoEF set up a 15-member Technical and Policy Core Group, which identified and commissioned over 100 groups and individuals around the country to prepare action plans at local, state, ecoregional, and thematic levels. The process involved extensive consultation, public hearings, cultural events, workshops, exercises in educational institutions, media outreach, and other methods of reaching out to a large cross-section of people. A major focus was on getting the inputs of local communities living in or depending on forests, wetlands, seas, grasslands, and other natural ecosystems and resources, and on farms and pastures. Over 50,000 people were involved in these activities. The outputs of the process included action plans for 30 states, 16 sub-state (local) sites, 10 ecoregions (cutting across states), and 13 themes. Also produced were 33 review papers on various thematic issues.

Towards the end of the process, all these outputs and the learnings from the process were put together into a draft national plan. This draft was shared widely, discussed at a national workshop, and finalized based on inputs received from hundreds of individuals and organizations. Till late 2003, the MoEF was committed to accepting the finalized draft as the national action plan; however, with a change in the senior bureaucracy, it suddenly changed its mind. Finally, the draft was accepted only as a Final Technical Report (FTR) of the NBSAP process and submitted by MoEF to UNDP. After trying to get MoEF to publish this for a year or so, Kalpavriksh went ahead and published it in the form of a summary with a CD containing the full national plan and all other outputs. Despite intense lobbying, MoEF never accepted the FTR-NBSAP as the action plan. Due to this the signal that went out to state and local agencies was that even the plans they had produced, were not recognised. Only in 2008 did MoEF produce a final action plan, which was a brief document that built on a 1999 National Policy and Macro-level Action Strategy on Biodiversity (about 50% being copied from it), but without IPLCs’ participation, and excluding most of the crucial strategies/actions relating to IPLCs that were in the FTR-NBSAP. This was then complemented with an Addendum in 2014, currently available on the CBD website.

Despite this setback, a number of outcomes of the NBSAP process have been positive. This includes the widespread networking that resulted in many new partnerships and exchanges of experience; the incorporation of several points from the FTR-NBSAP into India’s 11th 5 Year Plan; the publication of and consideration of several state action plans for implementation; generation of awareness through various events and media coverage. Some of the local (sub-state) plans have been used by local communities and others, e.g. the one drafted by Dalit women farmers of Deccan Development Society in Telangana. In other cases, groups/communities felt empowered due to participation in the national process, and subsequently implemented some of the actions proposed based on their capacities and determination.
At the same time as participating in development and implementation of NBSAPs, IPLCs also play a major role in producing and implementing their own local biodiversity plans. These have much potential to contribute to implementation of NBSAPs, although they are not fully taken into consideration in national reporting yet.

In conclusion, some positive experiences of IPLCs’ participation in NBSAPs have started to emerge, but overall this is limited to very few countries. There is therefore a need to learn from these positive experiences and to replicate them, adapting to national and local circumstances.

Parties and relevant organisations should also take action to implement the IPBES Global Assessment’s recommendations to improve environmental governance and decision-making, including:

**Promoting inclusive governance approaches** through stakeholder engagement and the inclusion of indigenous peoples and local communities to ensure equity and participation:

- Recognizing and enabling the expression of different value systems and diverse interests while formulating and implementing policies and actions
- Enabling the inclusion and participation of indigenous peoples and local communities, and women and girls in environmental governance, and recognizing and respecting the knowledge, innovations, practices, institutions and values of indigenous peoples and local communities, in accordance with national legislation.
- Improving collaboration and participation among indigenous peoples and local communities, other relevant stakeholders, policymakers and scientists to generate novel ways of conceptualizing and achieving transformative change towards sustainability.

**Promoting adaptive governance and management:**

- Enabling locally tailored choices about conservation, restoration, sustainable use and development connectivity that account for uncertainty in environmental conditions and scenarios of climate change.
- Promoting public access to relevant information as appropriate in decision-making and responsiveness to assessments by improving monitoring, including setting goals and objectives with multiple relevant stakeholders, who often have competing interests.
- Piloting and testing well-designed policy innovations that experiment with scales and models.

**Enabling conditions and remaining barriers**

Some key enabling conditions are:

- Political will and the establishment of effective participatory mechanisms to facilitate and ensure the participation of IPLCs in NBSAPs and national reporting.
- Supporting IPLCs to develop culturally appropriate mechanisms and educational resources to enable their effective contributions to the NBSAP processes and local implementation of the Strategic Plan for Biodiversity.

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Opportunities and recommended action for the post-2020

Governments should:

1. Urgently implement of IPBES Global assessment’s recommendations, particularly on promoting inclusive governance approaches through stakeholder engagement and the inclusion of indigenous peoples and local communities to ensure equity and participation

2. Establish effective mechanisms, including through suitable financial allocation, at the national and local level for full and effective participation of IPLCs in NBSAPs and national reports

3. Promote coherence of NBSAPs with relevant national and local processes such as strategies for implementation of SDGs, climate change commitments and other environmental treaties (CITES, RAMSAR etc)

4. Fully recognise the role and contributions of IPLCs as managers of extensive lands, freshwater and marine resources, and address land tenure security in NBSAPs and national targets

5. Recognise local plans where they exist and support IPLCs to develop local plans related to biodiversity, climate change mitigation and adaptation, and sustainable development

6. Promote and facilitate partnerships and collaboration among all relevant stakeholders, particularly government, IPLCs, women and youth to leverage ownership of NBSAP processes and wide scale action for their implementation

7. Embed the collective actions of IPLCs in NBSAPs so that the resulting local action plans can directly support NBSAP implementation

Key resources

- GBO5 Summary for Policy Makers
- 6th national reports
- SBSTTA-23 and WG8j-11documents
- IPBES Global Assessment on Biodiversity and Ecosystem Services, 2019
Target 18: Traditional knowledge and customary sustainable use

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Key message

While there has been an increase in recognition of the value of traditional knowledge and customary sustainable use, both in global policy fora and in the scientific community, Parties do not explicitly address the core elements and the globally agreed indicators for this target in their national reports, and this makes monitoring of progress challenging and inconsistent. Meanwhile reports from IPLCs show an increase in collective actions on knowledge transmission, language revitalization, customary sustainable use and defence of their lands, territories and resources. Urgently needed to address national and local implementation gaps, are effective national laws, policies and programmes, consistent with human rights obligations to recognize, respect and promote traditional knowledge, innovations and customary sustainable use with the full and effective participation of IPLCs.

What does this target mean for IPLCs

This target is of utmost importance as traditional knowledge and customary sustainable use are cross-cutting issues that apply to all the Aichi Biodiversity Targets.

Traditional knowledge and customary sustainable use are closely linked to a core feature of IPLCs, i.e. their inextricable relationship with their lands, territories and natural resources. Their environment, culture, knowledge, values and survival are interrelated; a gradual erosion in one implies a parallel loss on other aspects of their lives. The value of indigenous and local knowledge (ILK) in preventing and addressing environmental degradation is well established, and yet these knowledge systems continue to be degraded and lost at an alarming rate. In turn, loss and degradation of IPLC lands, territories and resources negatively impacts their knowledge, their culture and their identity. This is also associated with declines in biodiversity.

The main root causes of this trend include globalisation and modernization, growing resource extraction, including mining, and increasing pressure from commodity production (see e.g. Targets 3, 4 and 5) and from the growth of transport and energy infrastructures. These processes also raise issues related to opportunities for IPLC’s participation and decision-making in development.

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253 See IPBES Report Chapter 3, p. 7 (check proper citation)
254 See IPBES Report Chapter 2.1, p. 8 (check proper citation)
255 IPBES (2019) have used telecoupling approach to examine resource demands and decline in biodiversity (see Chapter 1 of IPBES draft report).
Evidence concerning global progress

Very little systematic information is available to assess progress in the implementation of this important target. While some progress has been made in the reporting by Parties in the 6th national reports, the SCBD warns that “It should be noted that there is very limited information from which progress on implementation can be assessed for a number of Aichi Biodiversity Targets, such as Target 14 and Target 18”. Likewise, the IPBES Global Assessment, in its summary of the progress towards the Aichi Targets, categorised as “Unknown” two out of the three elements of Target 18. Unfortunately, this points to a systemic failure and insufficient political will by Parties to implement this Target.

However, based from the Sixth National Reports of the Parties to the CBD, some actions are being taken to address this target; out of the 96 National Reports that were available by 30th June 2019, 82 (85%) discussed issues related to IPLCs – a threefold increase in comparison with the Fifth National Reports (2014).

Some actions reported by several Parties are:

a. Implementation of capacity-building workshops and trainings on traditional knowledge and customary sustainable use under the Convention;

b. Initiatives to establish co-management of protected areas with indigenous peoples and local communities living in and around them;

c. Establishment of Indigenous Community Conservation Areas (ICCA), Indigenous Protected Areas (IPAs) and elaboration of corresponding co-management plans;

d. Actions to involve indigenous peoples and local communities in resources management and conservation;

e. Documentation and development of inventories on traditional knowledge and related resources; (f) Development of traditional medicine and pharmacopeia action plans;

f. Commercialization of edible wild produce;

g. Introduction of general mechanisms for consultations with indigenous peoples;

h. Incorporation of traditional knowledge in consultation processes, including by giving indigenous leaders specific mandates;

i. Development of draft policies on traditional knowledge;

j. Elaboration of national legislative and political frameworks for equitable access to genetic resources and sharing of benefits resulting from its use; and

k. Guidelines for establishing community protocols. Table Xa shows Parties that reported on particular actions. The actions are clustered from 12 to 8 actions.

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256 SBSTTA/23/2 Add.2 p.8
257 IPBES Global Assessment Summary for Policy Makers, Figure 6, p.24.
258 The summary is from document, CBD/WG8J/11/INF/XX acquired from the CBD Secretariat. The summary includes 96 National Reports submitted to the Secretariat until 30 June 2019. The Secretariat noted that due to limited resources, the summary only includes National Reports submitted in English, French and Spanish. Five National Reports (i.e. Belarus, Qatar, Saudi Arabia, Turkmenistan, United Arab Emirates) could not be analyzed as they were written in Russian or Arabic. Thus, the evaluation in Figure XX are based only from the 91 countries.
259 CBD/WG8J/11/2 13 August 2019, paragraph 9
260 See details of actions in full reports of the Parties in https://www.cbd.int/reports/.
Actions reported related to traditional knowledge | Parties that reported on specific actions
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Capacity-building and training on traditional knowledge and customary sustainable use | Albania, Algeria, Antigua & Barbuda, Armenia, Belgium, Bhutan, Burundi, Cameroon, Canada, Ecuador, Malawi, Nigeria, Sweden, United Kingdom of Great Britain and Northern Ireland, Uruguay;

Establishment of ICCAs and co-management of protected areas | Antigua & Barbuda, Argentina, Armenia, Bhutan, Botswana, Canada, Chile, China, Egypt, Finland, Gambia, Ghana, Guinea, Haiti, India, Italy, Kazakhstan, Malawi, Montenegro, Morocco, New Zealand, Philippines, Samoa, Senegal, South Africa, Sudan, Thailand, Togo, United Kingdom of Great Britain and Northern Ireland, Yemen and Zambia

Inventory and documentation of traditional knowledge | Algeria, Bhutan, Botswana, Chad, Finland, Madagascar, Malawi, Republic of Korea, Spain, Switzerland and Thailand

Commercialisation of edible wild produce | Cameroon

Traditional medicine, including pharmacopeia | Burkina Faso, Burundi, Chad, China, Cote d’Ivoire, Montenegro, and Thailand

Introduction of general mechanisms of consultation with IPs | Costa Rica, France, India, and New Zealand

Involvement of indigenous leaders | Cameroon, Nigeria, and Uruguay

Establishment of community protocols: | Botswana, Malawi and Panama

Despite these positive developments in reporting, it is difficult to gain an overview of progress and trends over time from the National Reports because many Parties have not used the globally agreed CBD indicators. The global indicators for Target 18 are (1) trends on land use and land tenure in the traditional territories of IPLCS, (2) trends in linguistic diversity and number of speakers of indigenous languages, (3) trends in the practice of traditional occupations, and (4) trends in which traditional knowledge and practices are respected through their integration, safeguards and full and effective participation of IPLCs in the national implementation of the Strategic Plan. As Figure Xb illustrates, very few parties have reported on the CBD indicators for Target 18. However, evidence relevant to CBD indicators is emerging from global processes.

262 See further discussions on the global indicators of Target 18 in LBO1, pp. 124-131.
Trends in land use change and land tenure: The 2019 IPBES Global Assessment notes that land-use change has had the largest negative impact on nature since 1970, followed by direct exploitation. The most widespread form of land-use change is agricultural expansion, with over one third of the terrestrial land surface being used for cropping or animal husbandry.\(^{262}\) Urbanisation is another major case of land use that affect nature and provision of nature’s contribution in urban and rural areas.\(^{262}\) Its expansion also reduces habitats, particularly in biodiversity hotspots,\(^{264}\) which affects IPLCs’ values (See Target 1 and Target 14) and indirectly impacts indigenous peoples’ language diversity as discussed below.

Discussion on the importance and main trends in land use change and land tenure is contained in Target 14. It should be noted that, despite having the indicator on security of land tenure in Target 18, this is an overarching issue for IPLCs that, when properly addressed, can have multiple positive outcomes for most of the Aichi Targets (See e.g. Targets 4, 5, 7, 11, 12, 13, 14).

Some actions are being considered by the UN Interagency Support Group on Indigenous Peoples Issues together with the UNPFII, regarding operationalising the land tenure indicator.\(^{265}\) More global data on this indicator may become available soon.

Trends in linguistic diversity and number of speakers of indigenous languages: It is estimated that 2,680 languages are endangered worldwide\(^{266}\) and that nine languages are lost every year or one language every 40 days. Indigenous languages are being lost at an even more alarming rate.\(^{267}\) In an effort to bring attention to this alarming trend, the United Nations declared 2019 as the International Year of Indigenous Languages, underlining “the urgent need to preserve, revitalize and promote indigenous languages at the national and international levels.”\(^{268}\)

The huge decline in languages can be traced from the time of settlement colonization,\(^{269}\) especially in the Americas and Australia in the 19\(^{th}\) century. Since the mid-twentieth Century urbanisation has been a principal driver of language loss in many other parts of the world\(^{270}\) (See Figure Xc), and has often been the result of displacement and forced resettlement rather than voluntary migration. Urbanisation is set to continue: it is predicted that the proportion of the population living in cities will increase from 31\% to 58\% in sub-Saharan Africa and from 38\% to 66\% in Asia between 2000 and 2050.\(^{271}\) IPLCs moving to urban centers do not always lose their mother tongue, but often they must adopt the dominant national language in order to participate in economic activities and administrative and political processes.
in the urban economy. In addition, the move away from their lands, territories and natural resources impacts on traditional knowledge and values across the generations.

**Trends in the practice of traditional occupations:** The 2019 IPBES Global Assessment Summary notes that related IPLC practices based on longstanding knowledge of complex local ecological systems are seen to be resilient in IPLCs and among smallholders. But 72 per cent of the local indicators developed and used by IPLCs show negative trends in nature that underpin local livelihoods and well-being. A combination of lifestyle change, adaptation to climate change, seasonal migration, enclosures, privatization, and degradation of resources is strongly affecting both the settlement patterns and the lifestyles of the peoples who directly manage these diverse local ecological systems.

Contributions and experiences of IPLCs towards the target
The stories below illustrate the kinds of initiatives taken by IPLCs that contribute to this target.

**On securing land tenure**
IPLCs across the world are working towards secure land tenure and resource rights. A few examples are as follows (for further examples and discussion please see Target 14):

- Communities across the world are employing participatory mapping as a tool to gather evidence for land tenure claims and counter external threats to their traditional lands, territories and customary use of resources.

  *“We are not happy with the prospect of being evicted from our villages. Our way of life will be affected by this cement factory. But can a Baka man say no to the implementation of a project that has been decided by the government?”*

  — Ewondji Bruno, Chief of Bemba II (14/11/2017)

- For example, the Baka communities of Bemba I and Bemba II in South Cameroon fear that they will lose their livelihoods and culture because of a proposed limestone mine and cement factory. The government planning and zoning process did not involve them or respect their rights to free, prior and informed consent (FPIC).

- In 2017 the communities embarked on a participatory mapping process to document their customary use of resources. The maps they have produced show how government permits for forest management units and licenses for limestone exploration overlap considerably with their traditional hunting zones, sacred sites, and other areas essential to their customary sustainable use.

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272. Although Simons (2019:10) has only referred to indigenous peoples, forced eviction and resettlement are also true for many local communities.

273. Read further on interrelations of indigenous languages and plant diversity in Target 18 of LBO1, pp. 124-131; See also Target 1 in LBO2, pp xx-xx for further discussions on importance of revitalisation of IPLC values’ in wider awareness-raising on biodiversity.

274. IPBES report Chapter 2.4, p9

275. See IPBES Summary for policymakers, p. 6 (check proper citation); see also: https://www.ipbes.net/news/Media-Release-Global-Assessment#2-Indigenous in “Indigenous Peoples, Local Communities and Nature”

276. IPBES report Chapter 2.4, p9

277. See Target 18 in LBO1 for more examples of community-mapping, including a further discussion on the importance of community-mapping in addressing land use change and security of land tenure
• In July 2019, these Baka communities, together with neighbouring communities, used their maps in
dialogue with the local government, presenting the likely impacts of the cement factory on their lives.
These maps had a significant impact on discussions, and the meeting concluded with an agreement
that there needed to be further dialogue, in order to avoid potential negative impacts for forest
communities.
• In Tanzania, in 2011 the first indigenous communities in Tanzania received a Certificate of Customary
Right of Occupancy (CCRO), which is provided for under the Village Land Act of 1999. This was a
landmark achievement. The communities, which belong to the 10,000-year-old hunter-gatherer tribe,
Hadzabe, were able gain leverage to this end through an historic campaign coupled with an innovative
carbon offset scheme through REDD+278, community monitoring and inclusive governance.

On revitalisation of indigenous languages

Many indigenous communities are working to ensure that their languages continue to be passed from one
generation to the next in the context of increasing globalization and urbanization. For example:

▪ In Russia, the world’s first nomadic kindergarten
initiated by reindeer herders is designed to
educate children in their community and natural
surroundings. The children are taught their native
languages and traditional culture (See Target 1).

▪ After years of Ainu cultural revitalization and
advocacy, in February 2019 Japan passed a Bill
that officially recognises Ainu as Japanese
indigenous peoples and confirms support for
efforts to revive the Ainu culture. This process
dates back to the 1997 Act on Ainu Culture
Promotion and Dissemination of Information
Concerning Ainu Traditions Act. Since then there
have been various activities to revive the Ainu
language, which is regarded as crucial to the
expression of the Ainu heritage.279

▪ In Vietnam, the Vietnamese Indigenous Knowledge Network (VITK) aims to revitalise indigenous
languages, traditional dress, songs and dances in various provinces in Vietnam.

On traditional occupations and customary sustainable use

▪ Placeholder: Indigenous Navigator data on traditional occupation

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278 See further discussion on carbon trading and IPLCs in Target 7, pp xx–xx.

“I myself did not speak [the Ainu language] routinely because it was discouraged, but I
was surprised to find I remembered the language unexpectedly … When I was young, I
thought Ainu was inferior in the face of discrimination. But now I feel that it was
advantageous for me to have acquired the language without knowing.”

– Mutsuko Nakamoto, indigenous Ainu
whose Ainu teachings were featured in a
book published in 1999 and 2001
Case study Traditional herders are needed to safeguard biodiversity of species-rich grasslands in Central Europe

By Sáfián, László (shepherd, Hajdúsámson, Hungary) and Molnár, Zsolt (ethnoecologist, MTA, Hungary)

People don’t see that we work also for nature, herders do manage their pastures, we manage weeds, bushes and reed. People think that all this diversity comes from nature only, they believe that these grasslands would survive without grazing. Furthermore, urban people have got used to artificial food. They don’t realise that if herders go, tasty meat will go too.

Now the wild animals have less and less space to live because people keep on entering, trespassing on their habitats. In the past there were more beetles because there were more cowpats with dung beetles for birds to feed from. Now in many areas grazing is abandoned, the area became wild. The grassland is dirty, full of litter, bushes and invasive species. Many nature protected areas suffer from improper or abandoned grazing.

However, things are getting better in our country. Conservation rangers wouldn’t talk to us 20 years ago. They criticised us without asking us anything. Now they stop and we can talk about pasturing and grassland management. We agree on about 90% of things, so we can find good compromising solutions. For example, we try to fit in with both sides, so that it’s good for our livestock and us, and good for the conservation rangers and their protected birds. We do what we heard from our fathers, we revived an old meadow management practice: we graze the meadows in early spring, so we can cut the hay later, when the European Union Regulations allow it for us. And this is also good for the birds breeding on the ground.

We need to recognise each other’s knowledge. This means that we also have to recognise the conservationists’ knowledge. We should teach each other. Many conservationists say that our traditional herding is very much needed in protected areas because there were wild horses, wild cattle and bison many millennia ago, and these habitats need grazing to maintain their biodiversity. Others only see the overgrazed areas managed by less knowledgeable ‘herders’.

Proper grazing needs knowledgeable herders. Otherwise livestock would only eat the good grass like children prefer sweets. Many areas still have their own herder, who knows the area, and knows what can graze where and when. Without herders, these areas wouldn’t be pasture any longer, just rough land. If there were no herders, the areas wouldn’t be grazed properly. Sheep and cattle are inclined to overgraze some parts of the pasture. Where they like it, they stop. If nothing else is left, they would still stop there. Nature would suffer. Nobody would force them into the marsh, to clean the area up from encroaching tall vegetation.

If a grassland is not grazed at all, it will be overgrown with weeds. By abandoning grazing, we execute the death-sentence of the puszta (steppe). Then you can say what was left to us by the ancestors, we let get ruined. Pastures would be ruined and go wild when there is no livestock on them. Thorny bushes and thistles would spread and they must be cut by conservationists at high fuel prices with expensive machines.

Herders can also help restore these abandoned pastures. With restarted grazing pastures become a lot cleaner, they are refreshed. More birds go there. Wildlife has a cycle, which requires livestock. For example, it depends, which kind of a protected flower is there. You have a look at it when it flowers and before or after it you put livestock on its habitat. You would have them graze there, trample down the old vegetation.
The flower would feel better afterwards. You have to find the appropriate type of livestock, graze it in the proper period and with a knowledgeable herder. You’ll get more out of it than using a machine.

People never thought about herders as knowledgeable people. A lot of people don’t consider herders’ knowledge real knowledge. We did not learn from books, we inherited this knowledge, we were born into it. If people respected us a bit more, that would mean a lot. There’s too much certainty in our life regarding pasture tenure and the meat market. All we can plan with is our own expert knowledge. We have to adapt to the changing world.

A lot of people say in Europe that traditions need to be safeguarded. We argue that it’s not traditions that need safeguarding, it’s the livestock. Traditions need to be loved and respected, but what needs to be safeguarded is the livestock. Herding-related traditions will only survive if herders survive, if herding survives. All the cooking programmes on TV have wine suggestions, which means that wine gets properly advertised. But lamb meat and calf meat don’t! Good market for lamb and calf would save us and would save species-rich pastures for conservation too.

Enabling Conditions and Remaining Barriers

A key enabling condition for the promotion and protection of IPLCs traditional knowledge and customary sustainable use is the establishment of laws and policies that recognise their identity and their rights to their lands, territories and natural resources, including security of land tenure and effective participation in resource-management. Some of the above examples illustrate advances in laws and policies in some countries but much more remains to be done.

Another significant enabling condition is institutionalising government programmes that support or provide spaces for IPLCs to forge partnerships and/or collaborations with the government and relevant international and local non-government organisations.

Opportunities and Recommended Actions for Post-2020

The Parties should:

- Establish national level policies, laws and mechanisms to protect traditional knowledge and customary sustainable use.
- Operationalise and use the agreed CBD indicators related to Target 18.
- Recognise and support IPLCs’ collective actions that contribute to protect and encourage traditional knowledge and customary sustainable use.
- Strengthen collaborative partnerships with IPLCs towards protecting and promoting their traditional knowledge and customary sustainable use.
- Implement guidelines and standards adopted under the Convention such as the Plan of Action on Customary Sustainable Use and the Akwé: Kon Voluntary Guidelines

Donor agencies should:

- Continue to provide and increase direct support to IPLCs in securing land tenure and promoting their collective actions that contribute to maintain and revitalising traditional knowledge and customary sustainable use.
Key resources

- IPBES Global Assessment on Biodiversity and Ecosystem Services, 2019
Figure: The countries that reported on land tenure and land use are Finland, Montenegro and Myanmar. Although no National Reports has directly mentioned traditional occupation, Sri Lanka reported an initiative pertaining to the use of traditional knowledge in agro-ecosystems for livelihood. With regards to indigenous languages, two (2) of the three, i.e. Canada and Finland, are explicit in referring to protection and promotion of indigenous languages. But unlike the two, India’s report was focused more on oral traditional knowledge. As for the traditional knowledge and practices are respected, two aspects from the National Reports were noted. First is on laws and policies on TK and CSU. Second is on the participation of IPLCs in the implementation of the Strategic Plan. For the first aspect, the National Reports that provided details on it are: Botswana, Canada, France, Gambia, Ghana, Montenegro, Niger, Nigeria and Yemen. For the second aspect, they are China, Ecuador, India, Kazakhstan, Malawi, Myanmar, Samoa, and South Africa. Two countries have both, i.e. Finland and Sweden.
Figure: shows percentage of doomed or extinct languages by 25-year generation from 1920 to 2018. (Simons 2019:8)
Target 19: Sharing information and knowledge

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Key Message
Increased collaboration between governments, scientists and IPLCs has strengthened our overall knowledge base about biodiversity values, functions, status and trends, and revealed new policy options relating to biodiversity. However, there is a wide gap between increased recognition of the value of traditional knowledge in global policy, and its continuing neglect and erosion on the ground.

Bridging diverse knowledge systems at different scales and applying indicators relevant for IPLCs require a fundamental change in programming, funding and capacity-building.

Context: What does this target mean for IPLCs?
Among the ground-breaking advances in recent years has been the inclusion of indigenous and local knowledge alongside the sciences, as complementary systems of knowledge for achieving fuller and richer understandings of biodiversity values, functioning, status and trends and consequences of its loss at different scales. A policy brief from the Scientific Advisory Board of the former UN Secretary General acclaimed “cultural diversity as a creative source and enabler for sustainable development....
Diverse knowledge systems, encompassing the physical and natural sciences, social sciences and humanities, as well as indigenous and local knowledge systems are all critically important for understanding and addressing complex challenges and opportunities for people and planet. Inasmuch as biological diversity underpins the resilience of ecosystems, likewise, cultural diversity underpins social resilience for sustainable development.”

Rather than implying an abandonment of tradition, modernity should be tested and made sustainable in the light of cultural knowledge and values.”

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280 See CBD – UNESCO Joint Programme on Biological and Cultural Diversity
Case study: Science and ILK have complemented and enriched each other throughout the IPBES Global Assessment process.

Eduardo S. Brondizio¹, on behalf of the co-chairs, technical support units, and authors of the IPBES Global Assessment

¹ Indiana University-Bloomingon; Co-chair, IPBES Global Assessment on Biodiversity and Ecosystem Services (GA)

It was clear that fulfilling the mandate of the IPBES Global Assessment on Biodiversity and Ecosystem Services (GA) would require a comprehensive, multi-faceted approach to incorporate, synthesize and scale-up the contributions of Indigenous and Local Knowledge (ILK), practices, and innovations and issues concerning Indigenous Peoples and Local Communities (IPLCs), from local to global levels. Evidence shows that while ILK systems are locally-based, they are manifested in regional landscapes and ecosystems, and is globally relevant. IPLCs have shaped the ecologies, conservation initiatives, and resource economies of vast regions of the world, from managing forests, soil fertility, grasslands, mountains, watersheds, and coastal areas to the cultivation and nurturing of domesticated and wild species and the management of vast social-ecological production landscapes, for humans and non-humans. They are also at the forefront of pressures created by expanding extractive industries, pollution, infrastructure, and climate change, and, at the same time, playing key roles in supporting the 2050 Vision for Biodiversity, the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, and the Paris Agreement on Climate Change. In the spirit of Aichi Target 19, science and ILK have complemented and enriched each other throughout the IPBES global assessment process.

An operationalization strategy dedicated to ILK and engaging IPLCs was developed at the onset, discussed and reviewed by multiple constituencies within IPBES, particularly the ILK Task Force, and in dialogues with experts and IPLC representatives. This guiding strategy included several components. During the first author meeting, a dedicated ILK-liaison authors group was formed and collaborated throughout the assessment process within and across chapters. This ILK-liaison author group included 28 authors (Coordinating Lead Authors and Lead Authors) and 32 Contributing Authors who analysed evidence and participated in dialogue and consultation workshops.

A question-based approach provided a common guiding reference for authors to review empirical evidence and as a basis for consultations and dialogues activities. Three overarching questions were developed, and then further detailed into 36 chapter-specific questions. These included: i. ‘what have been the contributions of Indigenous and Local Knowledge (ILK), practices, and innovations to the sustainable use, management and conservation of nature and nature’s contributions to people at regional and global scales?’, ii. ‘what are the most important features, pressures and factors related to and/or enabling or constraining these contributions, as well as impacting present and future quality of life of IPLCs?’, and iii. ‘what policy responses, measures, and processes can contribute to strengthen and improve the institutions and governance of nature and its contributions to people with regard to IPLCs?

Addressing these questions through a systematic and inclusive review of evidence from multiple sources included literature searches in indexed journals and review of a wide range of reports, information from other IPBES assessments and earlier IPBES ILK dialogue workshops, various types of geospatial data, and inputs received from online and face-to-face consultations with IPLC
networks and organizations. Dialogues and consultations carried out in international fora and community grounds involving representatives of IPLCs, experts and practitioners, provided essential contributions to the GA. An ‘Online Call-for-Contributions’ (available in 3 languages and equipped with a webpage translation tool), engaged 363 contributors from over 60 countries and over 1200 bibliographic resources. Altogether, authors reviewed over 3000 relevant references, generating, for instance a synthesis of over 500 local indicators of social-ecological changes, and a systematic review of all Aichi Biodiversity Targets and SDGs as related to IPLCs. Literature review and dialogue workshops also allowed authors to assess the available scenarios, the pressures experienced by IPLCs in different parts of the world as well as relevant policy options and instruments concerning, directly or indirectly, IPLCs.

Together, and in consonance with the broader array of scientific evidence, the GA shows the global importance of Indigenous Peoples and Local Communities to the management and conservation of nature, agrobiodiversity, climate change mitigation, their innovations and emerging governance solutions, as well the pressures and struggles IPLCs suffer from, currently and projected. The GA shows that recognizing the knowledge, innovations and practices, institutions and values of IPLCs and their inclusion and participation in environmental governance enhances their rights and quality of life while simultaneously advancing nature conservation, restoration and sustainable use with implications to the broader society.

As we build on the goal of Aichi Target 19, the experience of the GA shows the importance of co-production and co-learning through multiples forms of interaction among and between assessment authors and representatives of IPLCs. While having a dedicated group of authors and a dedicated ILK Technical Support Unit (at UNESCO) were fundamental, the process ultimately depended on the recognition and engagement of the wider community of scientists in the assessment team and knowledge holders and community representatives from around the world who engaged with the process. It is important to note that this process calls for mobilizing funding and supporting staff from the onset. Going forward, it is important to continue to advance the participation of IPLC representatives during an assessment’s scoping and expert nomination phases, including expanding the participation of IPLC experts and representatives with relevant knowledge in the assessment team.

Contributions and experiences of IPLCs towards the target:

Community-based monitoring and Information Systems (CBMIS) have become more widespread in recent years, as its importance for self-governance has become better understood, and as the monitoring of governments and business for their compliance with global obligations and commitments has been stepped up.

CBMIS faces many challenges in terms of bridging local-global scales across many thematic domains. Whilst upholding community-based monitoring for local and governance, and using indicators and approaches relevant for community needs, the data generated can also contribute to national and global reporting and thematic assessments. In the words of the UN Statistics Division: “Data collection and dis-aggregation concerning indigenous peoples pose unique challenges in terms both of developing data for global comparative purposes and of developing data that is useful at a micro-level
Local Biodiversity Outlooks 2
Draft 1 prepared for Peer Review, November 2019

In the context of current processes to adopt indicators for the Sustainable Development Goals, the approach of promoting an “ecosystem of data” including official statistics and the contributions of multiple actors, including citizen science and community-based monitoring seeks to ensure the best possible evidence-base for policy decisions about the future of people and planet.

IPLC organisations and networks work together on a number of global platforms, including on Community-based Mapping, Monitoring and Information Systems (CBMIS), thus linking local initiatives with the global change agenda on sustainable development, biodiversity and climate change. Comprised of IPLC participants working together as a forum, they engage and advice intergovernmental processes to address issues of indigenous knowledge and human rights.

Global platform:

Biological Diversity and Cultural Diversity: International Indigenous Forum on Biodiversity (IIFB) and Local Biodiversity Outlooks

- Using the results of community-based monitoring about traditional knowledge and customary sustainable use, members of the International Indigenous Forum on Biodiversity (IIFB), the Indigenous Women’s Biodiversity Network (IWBN), the Centres of Distinction on Indigenous and Local Knowledge are collaborating on the publication of “Local Biodiversity Outlooks” (LBO) and LBO Online, together with the Forest Peoples Programme and the Secretariat of Convention on Biological Diversity (SCBD).

Inter-governmental Platform on Biodiversity and Ecosystem Services (IPBES): International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES) and the network of Centres of Distinction on Indigenous and Local Knowledge

- A global network of Centres of Distinction on Indigenous and Local Knowledge (ILK), comprised of organizations implementing programmes on indigenous and local knowledge in different global regions. This network is an institutional mechanism for identifying and joining up ILK holders and experts in geographic regions or thematic areas of expertise, creating focal points for collaborative work with each other; and with governments, scientists, researchers and policy specialists.

Sustainable development: Indigenous Peoples Major Group (IPMG) and the Indigenous Navigator project:

- The Indigenous Navigator (IN), is a shared CBMIS framework for monitoring implementation of the UN Declaration on the Right of Indigenous Peoples (UNDRIP), SDGs and WCIP Outcomes being implemented in 11 countries: Nepal, Bangladesh, Philippines, Cambodia, Colombia, Peru, Suriname, Cameroon, Kenya and Tanzania, is funded by the European Commission. http://indigenousnavigator.org

- The IPMG has published regional reports and a global report on the situation of lands, territories and resources of indigenous peoples; thematic reports on biodiversity, on

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indicators, on access to energy and on inclusion, equality and empowerment; and a special report on indigenous women.

UNFCCC: International Indigenous Peoples Forum on Climate Change (IIPFCC)

• Indigenous participants in the UNFCCC are organized under the International indigenous Peoples Forum on Climate Change (IIPFCC). Some IIPFCC proposals adopted as decisions include: environmental and social safeguards in REDD+ and the creation of a Local Communities and Indigenous Peoples Platform (LCIPP) to strengthen the knowledge, technologies, practices, and efforts of local communities and indigenous peoples related to climate change and to facilitate the exchange of experience, best practices and lessons learned on mitigation and adaptation. A Facilitative Working Group has been established to elaborate its work programme and to further operationalise the LCIPP.

• ELATIA\(^{282}\) (the Indigenous Peoples Global Partnership on Climate Change, Forests and Sustainable Development) work in 13 countries across Asia, Africa and Latin America use CBMIS as a tool for participatory action research, publishing results of their work in 2018.

Case study on IPLCs’ contributions: Indigenous Intercultural Universities

In Latin America, a network of Indigenous Intercultural Universities – Universidad Indígena Intercultural (UII) – has been established, where indigenous students undertake post-graduate courses supportive of professional development and technical excellence in the service of indigenous peoples’ development with culture and identity. Integral to the curriculum are modules taught by indigenous women and men respected for their wisdom, expertise, leadership, cultural knowledge or spiritual guidance, speaking directly from their experiences as interlocutors for indigenous peoples self-determination. This mobile faculty – named Itinerant Indigenous Chair (IIC) – forms the backbone of the UII network which currently includes 26 associated academic centres (CAAs), which are universities, study centres or research institutes experienced in providing university-level education programs for and with indigenous peoples. Instead of creating a new institution, the UII network builds on the CAA’s teaching staff, their knowledge and practices, as well as their infrastructure, and in addition develops new curricula and enriches existing ones with new perspectives and contents based on the worldviews and proposals of the indigenous peoples.

http://www.stisolutions4sdgs.globalinnovationexchange.org/innovations/intercultural-indigenous-university-uii

Enabling conditions and remaining barriers

PLACEHOLDER: Indicators Relevant for Indigenous Peoples

Inasmuch as global strategies and commitments pose challenges for governments to adopt national implementation plans, monitoring frameworks and indicators, the same can be said for IPLCs who face

\(^{282}\text{Elatia}^\text{ ia Maasai word meaning “group of neighbours doing a common decision or plan of action was chosen as the name of this network collaborating on Indigenous Peoples Self-determined Development, including CBMIS.}
huge and growing inequalities in access to data and information and in the ability to use it. A wide gap exists between advances being made in the global recognition of traditional knowledge and its continuing neglect and lack of protection in reality. Numerous good examples showing progress in the recognition of indigenous and local knowledge should not overlook the underlying social marginalization faced by indigenous peoples and local communities in most countries, which undermines having legal standing and voice in national decision-making processes affecting them.

Opportunities and recommended action for the post-2020: Actions to enhance progress

- Support strategic partnerships and capacity building activities between governments, research institutions and IPLCS for plural valuation of biodiversity, strategic planning and programming inclusive of IPLCs and traditional knowledge, participatory research and use of indicators relevant for IPLCs.
- Strengthen synergies between indigenous platforms engaging biodiversity, sustainable development and climate change processes towards capacity-development for national and local implementation.
- Increase institutional and financial support for training and implementation of Community-based Monitoring and Information Systems.
- Strengthen interfaces between global, national, and community-based processes of data and knowledge generation and the use of IPLC relevant indicators for monitoring and reporting.
- Apply lessons from successful collaborations between sciences, indigenous and local knowledge and other knowledge systems, such as IPBES, International Partnership on Satoyama Initiative (IPSI) and Multiple Evidence Base partnerships.
- Academies of Science, including Global Young Academy to undertake dialogues and initiatives to enhance collaboration with indigenous and local knowledge holders and experts.
- Mainstream training on the complementarity of sciences, technologies and ILK for biodiversity conservationists and natural resource scientists.

Key resources

1. UN Scientific Advisory Board - Policy brief on ILKs and Sciences for Sustainable Development
2. IPBES Global Assessment on Biodiversity and Ecosystem Services, 2019, V/1 Section III - Approach to recognizing and working with indigenous and local knowledge
4. Rights and Resources Initiative
1 **Target 20: Resource Mobilization**

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

2 **Key message**

Financial resources to support IPLCs’ actions remain largely ad hoc, local in scale, and insecure. New partnerships and mechanisms are needed to upscale these resources significantly, both in terms of IPLCs’ participation in and contributions to national and global processes, and in terms of actions on the ground. Funding also needs to become more accessible for IPLCs, through greater information-sharing, a review of technical requirements, a greater prevalence of small grants schemes and a greater proportion of funding earmarked for IPLCs. More consultative processes are needed in identifying funding needs and shaping new funding programmes. Safeguards and measures for social inclusion need to be integrated into all funding and other resource mobilization processes.

3 **Context: what does this target mean for IPLCs?**

In many countries IPLCs are already managing protected and conserved areas with no external support. Many of them are unknown to the CBD focal points, yet they function as community stewards and watchdogs, all on a voluntary basis, to safeguard biodiversity. Many of them, including many women, have no protection and increasing numbers of human and environmental rights defenders have been killed for their just and dedicated actions.

4 **The Escazu Agreement**

In an important development, a new regional Environmental Agreement, the Escazu Agreement has recently been opened for signature by Latin American and Caribbean countries, where the highest numbers of killings of Human and Environmental Rights Defenders are taking place. The Escazu Agreement (the Regional Agreement on access to information, public participation and justice in environmental matters in Latin America and the Caribbean) is the first environmental human rights treaty in the region. It opened for signature in September 2018 and so far has been ratified so far by 5 LAC countries. Its implementation is currently being piloted.

The Escazu Agreement has the potential to open doors to new partnerships, to bring IPLCs into relevant conversations and to provide them with access to environmental information, consultations and ultimately, greater justice. Ratification of this new environmental agreement has

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the potential to bring many benefits to IPLC’s, including funding, technical resources and capacity building in many areas.

However financial resources for IPLCs’ work and stewardship remain largely ad hoc, local in scale, and insecure, and new partnerships and mechanisms are needed to upscale these resources. IPLCs urgently need donor support for their local actions on conservation and sustainable use of biodiversity to be upscaled and made more accessible. There need to be dedicated funding sources, set aside and earmarked for IPLC local actions that are making very important and significant contributions towards all twenty of the Aichi Targets.

Local actions can only be upscaled if financial resources are made available through mechanisms that are straightforward for IPLCs to access. Many times, access to information about these resources is limited, and limited capacity to understand funding guidance and write complex project documents is at times a major constraint. Access to information mechanisms must become a reality and not just exist on paper. Efforts must be made to increase broad advocacy and outreach to IPLC areas, and provide the necessary information.

Contributions and experiences of IPLCs towards the target

To build on the transformational work by IPLC’s across the world, greater recognition must be given to IPLCs’ local actions. The multiple benefits accruing to our environment globally from IPLCs has been recognized and documented, as detailed elsewhere in this report. Many IPLCs initiatives do benefit from existing biodiversity funding sources but much more is needed. Their contributions to wildlife management, their protection of endangered species, their knowledge of plants and their uses, and many other aspects of their customary systems of resource management constitute a valuable knowledge source which must be treasured and protected.

The Global Environment Fund’s Small Grants Facility is one of the few dedicated funding sources that can reach these groups in country and bring about transformational benefits and changes, but it needs passionate and committed persons on the in-country teams in order to make the necessary connections to be made and build trust. However, even these sources can be difficult for smaller organizations to access. Increased accessibility of existing sources of finance and a significant increase in total financial resources available for IPLC initiatives would be a cost-effective way to increase progress towards the attainment of the Aichi Biodiversity Targets.

Some other sources of funds are as follows:

- The International Partnership for the Satoyama Initiative (IPSI) provides membership to IPLCs and this allows for capacity-building, networking and partnership-building. It also includes a small fund to support IPLC actions on the ground.
- Embassies in many countries have small amounts of funds available for grants for IPLCs, but generally, this is very small scale.
- Swedbio has been supporting IPLCs and has been willing to form partnerships and make resources available for capacity-building initiatives.
- IFAD and other groups have dedicated funding support to IPLC’s.
Some governments, including Canada, the EU, Norway, New Zealand and Australia, have been very supportive of IPLCs and provide funding support for their participation in meetings.

Small grants programmes can be relatively labour-intensive to manage, and this is probably be one reason why they are not a more common. However, they can have an impact out of proportion with the funds provided (for example, see box on Walling Nature Reserve in Antigua-Barbuda), and are invaluable as a means to trial new approaches and initiatives.

**Case study: The potential impact of small grants: GEF-SGP support for Walling Nature Reserve, Antigua-Barbuda**

In Antigua and Barbuda, support from the GEF/SGP for community action has led to the setting up of the Walling Nature Reserve. This first community-managed conservation site in the country is working towards an effective management system though collection of entrance fees and allocation from bathroom fees, being the only rest stop in that part of the island. It is the government who has the overall responsibility to manage the area, but budgetary deficits prevent them from providing the necessary human, technical and financial resources. SGP has been a powerful mechanism to empower local groups and build capacity for effective community conservation and management, as well as to support community efforts related to the protected area.

This small grant is having impacts beyond this one site. The project results are motivating other local groups to develop programs that find solutions to other environmental challenges, and this is evidenced by the large number of requests coming in for program support for other community conservation areas and effective area-based measures that support biodiversity.

Empowerment as a result of SGP support is widespread across the country, covering many areas and sectors, and has enabled the group to develop community rights outreach efforts and to build and develop partnerships with different actors, including the Ministry of Sustainable Tourism, Department of the Environment, the AB Investment Authority and the Community Development Division the private sector and hotels.

In addition, IPLC actions are providing multiple benefits across the Rio Conventions, with cross-cutting issues related to other multilateral environmental agreements, and with mainstreaming of gender considerations. These proactive and integrated actions are contributing to biodiversity conservation, but additional financial and other forms of support to upscale local actions would allow far greater impacts. Such support works in part by giving value and recognition to local groups and putting steps in place to build local connections and synergies. It can lead to a multiplier effect not only on the ground but also in policy processes, with greater involvement of IPLCs on inter-agency committees and national working groups, where they can form an integral part of processes and decision-making through the two-way flow of information.

Information that needs to be available to IPLCs includes information about projects coming on stream. There needs to be greater access to funding information, including on application and project timelines, which are often tight; currently IPLCs miss many opportunities because they are not in the right place at the right time to hear of them. Regular access to emails and other communication channels are also important to allow an adequate information flow. Information on planned country...
visits by donors can also play an important role in connecting local groups and creating opportunities for visitors to see firsthand what local groups are doing, and to begin to build a bond and a connection with them. In this way, technicians can become aware of what is going on and how IPLC actions in their communities are sustaining biodiversity. Many focal points are not aware of the enormous work and activities taking place in protected and conserved areas and of the Interrelatedness between the different activities and processes.

Existing processes to integrate IPLCs into national policy, outreach and implementation need to be reviewed, based on a realistic assessment of their current and potential roles and contributions to nature-based solutions, which are often based on practical knowhow and local experiences.

Close examination of the IPLC case studies that are incorporated into NBSAPs show that very few countries have made these connections sufficiently clearly. There is an urgent need for greater IPLC involvement through participatory, inclusive processes that fully respect FPIC. NBSAPs are a powerful policy instrument to increase effectiveness and can act as road maps for global uptake.

IPLC actions, if studied and documented, can show the interrelationships and synergies across the Rio conventions and SDG’s. However, it will take cooperation, proactive efforts, advocacy, and systematic mobilization of resources to initiate and sustain these processes.

Enabling conditions and remaining barriers

- IPLCs should be invited to serve on national working groups
- Donors visiting countries should be provided with opportunities to visit IPLC project sites
- There needs to be increased documentation of IPLC activities, and the collation of case studies
- Increased opportunities are needed for IPLC participation and sharing at international meetings
- Increased capacity-building to improve skill sets and capabilities for IPLC’s in project proposal writing

Opportunities and recommended actions for the post-2020 period

- Longer-term and more sustainable financing mechanisms need to be developed.
- More consultative processes are needed in identifying funding needs and shaping new funding programmes.
- Safeguards and social inclusion must be integrated in all resource mobilization processes.
- Overall, new partnerships and mechanisms are needed to upscale resources available to support IPLCs’ contributions. This applies both in terms of IPLCs’ participation in and contributions to national and global processes, and also in terms of actions on the ground. Access to funding also needs to be more accessible for IPLCs, which will involve greater information-sharing, more sources of small-scale project funds alongside large funding programmes, and a review of technical requirements.