The ninth Trondheim Conference on Biodiversity
Trondheim, Norway, 2-5 July 2019

Making biodiversity matter
Knowledge and know-how for the post-2020 global biodiversity framework

Report of the Co-Chairs

The primary purpose of the Trondheim Conference is the conversations amongst participants, supported by the many inputs made. The intention was that the exchanges at this conference would provide participants, and in particular negotiators, with increased understanding of a range of issues relevant to the upcoming negotiations on the post-2020 global biodiversity framework. These exchanges were about exploring and testing ideas, not about coming to final solutions. This co-chairs' report has been prepared as a means of conveying the key messages from a diverse range of presentations and discussions, and from the very active panel discussions and round tables that allowed every participant the opportunity to make input. The report can in no way capture all of the conversations, and the many inputs made, and it is not intended to do so. However, all presentations and records of discussion made on paper or through electronic means are available from the conference website www.trondheimconference.org, as well as being summarised in this report. Throughout the conference participants were encouraged to make comments and ask questions, and a number of quotes have been shared throughout the text of this report. Such quotes are, of course, personal opinions.

UNDERSTANDING WHERE WE ARE HEADING AND WHAT THIS IMPLIES

There are very real concerns over the impacts of loss of biodiversity, and such concerns are increasing. Meanwhile both biodiversity loss and climate change are accelerating due to human expansion, with strong impacts on each other. Despite limited time to respond, there is a strong determination to succeed in halting biodiversity loss, as well as halting global warming and achieving sustainable development. There is a good knowledge base on which to build, both from science and the wealth of experiences – both good and bad – in addressing Aichi Biodiversity Targets over the previous decade.

- **Scientists warn that we are heading for fundamental change in Earth systems as a result of changes in the biosphere**. The nature and speed of biodiversity loss, and the fact that loss is continuing despite current efforts, means that we need to focus now on implementing more transformative solutions.

- **Concern over biodiversity loss is becoming more and more central and important to the global debate**, including through links to other key agendas such as the Sustainable Development Goals (SDGs)[1] and the drive to address climate change and its impacts. Biodiversity on land and in the ocean, and the benefits it provides to people, is seen as fundamental for achieving the SDGs, as is the need to address the goals synergistically through transformative change.

- **The cost of inaction makes biodiversity loss an issue of importance to all sectors and stakeholders**. As a result, there are increasing efforts to understand the importance of biodiversity

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[1] See the background document on biodiversity and the SDGs at https://trondheimconference.org/background-documents

and of ecosystem services, and to respond accordingly. However, this needs scaling up into a more ambitious 'action agenda' addressing the main drivers of biodiversity loss.

- **Action requires better understanding of the direct and indirect drivers of change, and of how to respond to them**, so as to 'bend the curve' of biodiversity loss in a manner that simultaneously addresses the full suite of SDGs, and especially climate change, food security, nutrition and health, recognising and responding to interconnections.

> "Change has become the new popular phrase, but what does that mean in practice?"

- **There is an increasing recognition of the importance of "nature-based solutions"[2] that address needs across sectors**, especially with regard to achieving the objective of the Paris Agreement on climate change. Linked to this is an increased focus on the need for an 'enabling environment' which identifies the necessary understanding, commitment and resources for developing and scaling up solutions, and for tracking and reporting on success or otherwise.

- **Effective action requires full and effective engagement with stakeholders at all levels and in all relevant sectors**, so as to ensure appropriate response at all levels from global to sub-national, and by actors ranging from the private sector to indigenous peoples and local communities.

Using and building on the available knowledge base, including local and indigenous knowledge, is essential for guiding policy and practice, and assessment processes and reports are particularly valuable in compiling and synthesising available knowledge.[3] The wide sharing of assessment findings and discussion on them increases understanding of the findings and their implications for policy development and implementation, including for development of the post-2020 global biodiversity framework. Importantly, the assessments cover not only status and trends, but also response options.

- **It is widely accepted that biodiversity underpins and sustains human quality of life, providing basic materials that support human livelihoods, cultures and economies**. However, while trends in agricultural production, fish harvest, bioenergy production and harvest of materials have increased, global trends in other categories of nature's contributions to people are continuing to show decline, and as a consequence the fabric of life is becoming increasingly stretched.

- **The effects of drivers of change have accelerated during the past 50 years to levels unprecedented in human history**. The main direct drivers are land use change, direct exploitation, climate change, pollution, and invasive alien species. However, these are impacted by indirect drivers of change, which include population growth and the massive increases in the global economy and trade, including those related to the food system.

> "Can there really be zero loss, or more of a balance between use and restoration efforts?"

- **Most internationally agreed policy goals and targets for biodiversity will be missed by most countries under business as usual scenarios**. For example, while there has been some progress in addressing the Aichi Biodiversity Targets, this has been insufficient, nor does it effectively address the root causes of biodiversity loss.

- **Plausible scenarios, which include transformative change, are compatible with achievement of both the SDGs and the 2050 Vision for Biodiversity**. There will be challenges associated with

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[2] IUCN defines **nature-based solutions** as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits".

[3] See the "annotated list of key assessments" at https://trondheimconference.org/background-documents for a list of the assessments addressed during the conference, and links to the assessment reports

delivery, as biodiversity loss, climate change and achieving a good quality of life are interconnected, and need to be addressed in a coherent integrated manner.

- **There is a range of options already available for implementing sustainable pathways to achieving the 2050 Vision**. These options variously involve addressing the root causes of nature deterioration and fostering transformative change. There are many societal responses and successful examples of rapid transformative change is already happening in many sectors.

> "The private sector has a critical role in nature-based solutions"

- **While all assessments show benefits from biodiversity and ecosystem services, and impacts on them, benefits and impacts are not distributed evenly**, varying from country to country, and from region to region. Meanwhile all assessments emphasise the interconnected nature of the various drivers of change, as well as the need to consider multiple agendas when considering responses.

> **Nature's contributions to people:** One of the key new concepts introduced by IPBES, 'nature's contributions to people', is defined as the contributions, both positive and negative, of living nature to the quality of life of people. This concept is intended to broaden the scope of the widely-used ecosystem services framework by more extensively considering views held by other knowledge systems on human-nature interactions. IPBES identifies 18 categories of nature's contributions to people, many of which closely map onto classifications of ecosystem services.
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> *See, for example, Appendix 2 of the Summary for Policymakers of the regional assessment report on Biodiversity and Ecosystem Services for Africa (*www.ipbes.net/sites/default/files/downloads/ipbes-7-3-en_spm_numbered.pdf*)*

There is clear evidence of the relationship between biodiversity and other key areas of concern for human wellbeing. This reinforces and builds on the increasingly repeated message that there needs to be greater coordination in addressing the different international agendas. It is important both to recognise the roles that biodiversity and ecosystem services play in issues such as climate change and underpinning food security, and the potential impacts on biodiversity and ecosystem services resulting from actions in those sectors.

- **There are close links between the biodiversity and climate agendas, and it is well understood that a temperature rise of 1.5˚C will have impacts on biodiversity and ecosystem function and services**, increasing with a rise of 2˚C or more. Limiting global warming to 1.5˚C is possible, but this will require unprecedented transitions in all aspects of society which could also impact on biodiversity without careful planning. At the same time addressing biodiversity goals could also support achievement of this target.

- **Efforts to reduce global warming can go hand-in-hand with achieving other goals, but there can also be unintended impacts if not done carefully**, and an integrated approach with safeguards is needed. Adaptation interacts with mitigation, as biodiversity, food production and the provision of other ecosystem goods and services may be impacted by approaches being proposed for CO_2 removal. Meanwhile there is huge potential for addressing biodiversity goals to also support climate goals, including through ecological restoration, and taking into account the potential of the oceans.

- **Biodiversity is essential for agriculture and food production, yet biodiversity for food and agriculture is on the decline**, affected by multiple interacting drivers which are much the same as those already identified. Different production systems are affected in different ways, and there are regional differences.

- **However, use of management practices and approaches favourable to the sustainable use and conservation of biodiversity for food and agriculture is increasing** (including for forestry and

fisheries), although these need further research and upscaling, and a strengthening of enabling frameworks and activities (including capacity-building and technology transfer).

- **We use the ocean and its biodiversity in many more ways than most people are aware of, and every single use has been increasing over the past two or more decades.** Our ability to manage ocean uses sustainably requires both adequate knowledge and effective management (including effective governance structures), but this also requires investment at all levels to maintain the flow of knowledge and to empower management.

- **Understanding of interlinkages is critical to being able to respond in meaningful and sustainable ways to environmental change**, and this includes not only understanding of the interactions among the different drivers of change and their impacts, but also the interactions among the different sectors and stakeholders and their needs and aspirations. To be both successful and cost-effective it is necessary to respond in coherent ways and address multiple needs.

FURTHER DEVELOPING THE VISION OF WHERE WE NEED TO BE

Our vision for biodiversity, adopted in 2010, is of a world *"living in harmony in nature"*, where *"by 2050 biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people"*. We need a better understanding of what this means in concrete terms, and what is necessary to get there.

- **While our vision is one of *"living in harmony with nature"*, globally we are certainly not living in harmony with nature at present.** Damage to nature is affecting human wellbeing, including health, nutrition and food security, despite efforts to address the Aichi Biodiversity Targets in recent years.

- **Meanwhile land and water use changes, are very significant drivers of change, exacerbated by the effects of climate change**. This includes the effects of management for food and agriculture, and the level of fishing in the ocean. This emphasises a need to 'connect for change' everywhere. If we are talking about biodiversity, we also need to be talking about climate, food, health, etc.

> *"How to build in a mechanism for science to regularly inform the implementation of post-2020?"*

- **We need to move to a situation where we can 'bend the curve'[4] of biodiversity loss while simultaneously addressing development issues and inequalities**, focusing on these multiple challenges of addressing biodiversity loss, climate change and food security in a world where there are inequalities in both impacts and benefits.

- **Scenario and model analysis tells us that we can bend the curve of biodiversity loss with ambitious efforts in conservation and sustainable use**, but to do it sufficiently and by 2030 will require a more integrated portfolio of actions that also address both the demand and supply side of resource use.

- **For example, by 2030 we could aim for zero loss of natural habitats, zero extinction of species, and to halve the ecological footprint of production and consumption**. The case could be made that such an approach would provide the basis for delivering food and water for 9 billion people, a stable climate, diversity of life and inclusive communities.

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[4] '**Bending the curve**' of biodiversity loss refers to the need to move from a situation of continued loss over time, to one where that loss is stabilising or recovering as a result of actions taken. This concept has been developed by Mace *et al* in a paper on 'Aiming higher to bend the curve of biodiversity loss', published in Nature Sustainability last year (www.nature.com/articles/s41893-018-0130-0).

- **However, to achieve such changes, and get the necessary actions underway, people must be at the centre of, and part of the decision making**, and not simply the object. Similarly we will need to engage with all peoples and communities, and especially indigenous peoples and local communities who are often major custodians of biodiversity. This requires effective communication, and the use of language that is understandable and meaningful in terms of the changes that we want to achieve.

- **Meanwhile, in order to prevent environmental risk and damage, actors, both state and non-state, need to be accountable for their actions in a transparent way**. It is also necessary to be able to assess whether those actions are together sufficient for bending the curve of biodiversity loss by 2030, which also implies a need for common scales, 'add-up-ability'.

There are multiple possible pathways to achieving the 2050 Vision for Biodiversity, involving different approaches to production systems, land use planning, regulation and consumer choices. These possible pathways can be investigated through scenario analysis and consideration of 'nature futures', and through relating them to the different perspectives of 'nature for nature', 'nature for culture', and 'nature for society'. This was addressed through the first of three interactive sessions.

The possible pathways can also be considered as part of a 'theory of change' for delivering the 2050 vision for biodiversity, which identifies more clearly the proposed actions, outputs and intended outcomes. The more detailed aspects of this will be addressed below, but in the first interactive exercise conference participants were asked to back-cast from the 2050 vision of "living in harmony with nature" and brainstorm *which potential pathways would be required to get there*. The broad range of possible pathways participants identified are presented in Annex 1 and visualised in the Wordle[5] below (which draws on the language used by participants). These possible pathways, which are clustered under the headings listed in the box below, show how multifaceted and interlinked the approach to 2050 could be, and provide a valuable resource for those developing the post-2020 global biodiversity framework..

> "How to better include marine and coastal nature into a future common narrative under the post 2020 framework?"

- Educate, communicate
- Change human behaviour, perceptions, commitment
- Change food systems
- Increased participation and ownership
- Increased knowledge
- Rights, including human rights
- Transition into green economy and technological development
- Valuation, risk-assessment, accounting
- Local level/IPLCs
- Change production and consumption
- Mainstreaming
- Human well-being
- Fair and equitable sharing
- Transformative change
- Sustainable use and nature management
- Governance, policy and legal frameworks and financial resources
- Monitoring, reporting, compliance
- Lessons learned and solutions

Participants were then asked to *write a short story to describe one potential pathway for achieving the 2050 vision* selected by them. The resulting 28 'stories' are set out in Annex 2 in nine clusters covering the following topic, and again these provide a very valuable resource.

- Financial systems and value integration
- Communications, awareness raising, mind set change
- Community-driven nature for development
- Evidence-based policy-making
- Mainstreaming and cross-sectoral collaboration
- Sustainable production and consumption
- Integrated governance systems – policy for action
- Managing nature, putting it at the centre
- Innovation and diversification

MOVING AWAY FROM BUSINESS AS USUAL

There have been frequent calls for transformative change to address previous lack of progress in addressing biodiversity-related targets. Participants were asked to consider the conference as a 'transformative space', helping them to conceptualise change and the potential disruption that was an inevitable part of transformative change. Reference was made to the "rationally articulated despair" of earlier sessions, while calling for creative ideas to help set us on a pathway to the level of change necessary for achieving the 2050 vision for biodiversity.

- **It is already recognised that transformative change is needed, so it important to understand what this means, and what the implications are**. In describing the potential disruption, the following diagram was used to demonstrate that over time things change, leading to patterns of destabilization, emerging initiatives, and building blocks for a sustainable future. In order to embrace this we need to change, considering the future we want to see, and recognising that change is already happening in many areas of life.[6] In this context it is important to understand that different stakeholders experience costs and benefits in different ways.
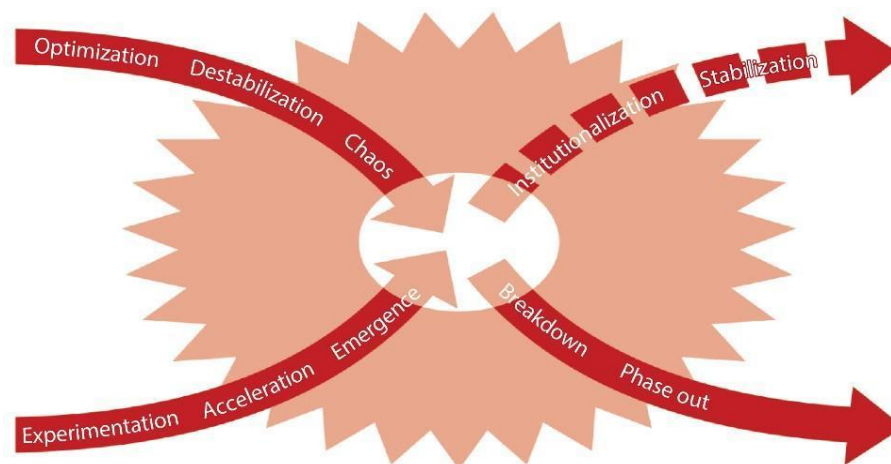
Loorbach D, et al. 2017.
Annu. Rev. Environ. Resour. 42:599–626

Recognising the need for change, there are already examples of actions that are being taken to try to move away from 'business as usual'. It is important to review, learn from and build on these very real efforts to drive change. This includes efforts by governments, scientific organizations, the private sector and indigenous peoples and local communities.

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[6] This approach to understanding transformative change is explained further in a background document which also includes a number of references. See https://trondheimconference.org/background-documents

- **One of the main strategies for delivering change already embraced by Parties to the Convention on Biological Diversity is that of mainstreaming**,[7] which includes many potential tools and actions for creating a change in approach through policies, strategies, practices, legislation, institutional structures, budgets, stakeholder engagement and indicators. As part of this approach, it is important to build the case for biodiversity among sectors, and to open new and reciprocal communication and cooperation channels.

> "How can we ensure that decisions are based on evidence and facts and not on "feel good" ideas?"

- **In order to achieve change through mainstreaming, key activities to strengthen are inter-sectorial coordination, capacity building and communication**. Key lessons learnt based on the experience of Mexico relate to the importance of political will and international cooperation, the fact that there was no unique blueprint, the opportunity of addressing climate change as a prime common leverage agenda, and understanding the different values for the different sectors.

- **Halting land degradation and restoring degraded land is a solution common to multiple agendas, including biodiversity loss**. There are known solutions, but we need to significantly increase efforts to address the pervasive and extensive land degradation that affects all terrestrial and inland water ecosystems worldwide. Degradation materially reduces the wellbeing of 3.2 billion people, and it is necessary to address this if we are to solve other problems.

- **Using the UN Decade on Ecosystem Restoration 2021-2030 as a driver of change provides impetus for massively scaling up restoration of damaged ecosystems** as a measure to fight the climate crisis, and with appropriate safeguards to also enhance food security, water supply and biodiversity. Ecosystem restoration provides multiple benefits, but also incurs potential costs. It is therefore important to identify areas where benefits can be optimised and costs minimised.

> "Perverse incentives are being mentioned constantly, but Parties have not advanced at all on Aichi Target 3."

- **Information tools can be used to identify those areas where restoration effort can yield maximum return on investment across multiple agendas**. Brazil has developed a strategic approach to restoration planning, involving scenario development, understanding of benefits, development of tools/outputs, and validation and dissemination, through a process involving full stakeholder engagement. Global models have since been developed, allowing visualisation of priority areas for restoration under different scenarios.

- **Information tools can also be used as a basis for setting land use policy that takes account of the needs of multiple agendas while maintaining the essential ecological functions**. China has established an approach known as 'ecological civilization', which includes the mapping of major function oriented zoning, key eco-function regions, and ecological protection 'red lining'. Areas with important ecological functions (water supply, disaster risk reduction, etc.) or important for conservation and sustainable use of biodiversity are being conserved with strict measures as a basis for safeguarding and maintaining national ecological security.

- **The "[Business for Nature Coalition](#)" aims to facilitate a united voice from business to help reverse the loss of biodiversity and to restore the planet's vital systems**. The intention is to encourage the private sector to bring forward and scale up solutions, to demonstrate ambition,

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[7] The GEF defines biodiversity **mainstreaming** as "the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally." See also https://trondheimconference.org/background-documents

and to convene a united business voice, as well as to demonstrate that nature protection makes economic sense (particularly in the context of the World Economic Forum Global Risk Report).[8]

- **The private sector has the potential to significantly increase its profile with respect to protection for the environment, including biodiversity and ecosystem services**. This would be delivered through four approaches: working through their own operations and value chains to avoid impacts and identify dependencies; leading multi-stakeholder landscape and seascape level collaboration; implementing systemic change to organization, business models and decision making; and recommending and promoting policy changes to governments.

> "How can we make sure that targets will be achievable given the different country contexts?"

- **In a range of countries, approaches are being developed for increasing the engagement of indigenous and local peoples in effective management of biodiversity and ecosystem services**, including through participatory processes, involvement in governance and decision making, joint planning, and employment in key positions. This includes recognition of the key role that indigenous peoples play as custodians of a large proportion of the Earth's land surface and coastal marine areas, much of it under some form of conservation measures. There has also been increasing recognition of the importance of engaging indigenous peoples and local communities in international fora addressing issues such as biodiversity and climate change.

- **There are also lessons that can be learnt from other sectors about moving away from business as usual**. For example, with climate change and the Paris Agreement there has been a move towards establishing the conditions for a perpetual negotiation, with the pressure on countries to achieve carbon neutrality. With the ozone hole and Montreal Protocol, there was a well understood causality, and few actors to reach out to. With land degradation, innovative public-private partnerships have been developed for mobilizing resources for the Land Degradation Neutrality Fund. Meanwhile, exploration of synergies among the three chemical conventions are an inspiring example of organization within a crowded landscape.

BIODIVERSITY AS PART OF THE SOLUTION

It is clear that it is important to get multiple actors involved, and to consider how best to develop a coherent and integrated approach to the conservation and sustainable use of biodiversity in the context of full understanding of the multiple values of biodiversity, and how it is relevant to multiple agendas. This was addressed in a panel discussion engaging those with experience of other sectors.

- **Nature-based solutions are an important approach for addressing multiple agendas**. This includes restoration as a major tool in addressing, for example, the climate agenda. The question was therefore posed as to why there is not greater investment, including from the climate fund, in this area.

> "How to achieve mainstreaming – is CBD the right treaty for that or is there a need for a simpler way

- **Sustainability rests on environmental, social and economic pillars, and is not simply an ecological issue** that needs to be addressed in rebuilding fisheries. There are good examples of recovery of fisheries, key factors being: science advice welcomed by management; holistic management; inclusive stakeholder engagement; and effective management/governance.

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[8] See https://www.weforum.org/reports/the-global-risks-report-2019

- **It is important to think about biodiversity as a solution, rather than to focus on biodiversity loss**. Food is an entry point for discussion as anybody can engage, and this can open up conversations on sustainability, water and land use, biodiversity and climate. Understanding and developing interconnections are therefore essential, defining common objectives and ways to work together.

- **Population growth combined with urbanization is a major challenge for biodiversity and ecosystem services**, but there are also opportunities though working with local and subnational governments. There are examples of cities that have taken significant steps to 'green' themselves through a range of different approaches, providing experience that can be built on.

> "How could these different sectors all ensure that indigenous peoples are part of the solution and not seen as a "problem" for "new" development?"

- **Water security is essential to agriculture, energy and human wellbeing, and wetland management is key strategy**. Wetlands are essential filters for freshwater, play an important role in disaster risk reduction, carbon sequestration and storage, support livelihoods, and provide space for biodiversity. Integrated approaches and cooperation are essential.

- **Biodiversity is similarly important for health**, whether through access to medicinal products, access to a healthy environment (air, water, etc.), or access to food and nutrition. Many of the interlinkages between food, health and environment are more obvious at the local level. The link between health and biodiversity is understood, but not sufficiently acted on, although the emergence and spread of diseases contributes to raising awareness.

- **All of these issues, and all of these interlinkages, will become more challenging in the years to come** as the population continues to grow and also to consume more and differently due to increasing incomes, and as we continue to move towards ensuring the necessary food, water and energy for securing human wellbeing in a fair and equitable manner.

- **It is important to find the levers for change, both for taking positive action and for reducing negative action** (such as redirecting perverse incentives to ones that are positive for biodiversity and ecosystem function and services). In this regard there are opportunities to make more effective use of culture (e.g. traditional food cultures) in order to make changes.

- **There is a need for workable solutions that meet multiple aims, recognising and involving key players and building partnerships for addressing shared solutions**. There are already many solutions, many good examples, but we need to find ways to scale up more effectively. This includes engagement with sectors and ministries other than environment, including businesses.

- **Critical to change is the need to develop reciprocal communication, understanding, and move for change**, making space for developing joint approaches and implementation. And part of this has to include taking fully into account equity issues, including human rights and gender.

BUILDING ON GOOD PRACTICE

Drawing on experience can be a valuable way to learn about what works and what does not work, so the second interactive session focused on lessons learned, and in particular lessons learned with respect to actions, tactics and approaches that would set us on the pathway to achieve the 2050 vision. This was a very participatory exercise, with participants themselves deciding on what needed to be addressed, and what lessons there were to be learnt.

This session was run as an 'open space agenda', and *participants were encouraged to fill the empty agenda with the issues that they wanted to share* and contribute to the joint learning process.

Annex 3 attempts to list the many conversations that took place in the two open space rounds. From all the thematic issues discussed, ***participants provided the key 'lessons learnt'*** which are set out in Annex 4 organized under the following headings. These are also visualised in the Wordle below. Annex 4 in particular will provide very valuable input to those developing the post-2020 global biodiversity framework.

• Monitoring and compliance	• Global exchange, sharing, empowerment and learning
• Participatory process, increase empowerment and ownership	• Implementation, coordination and collaboration
• Beyond country level	• Trust and communication
• Shared and actionable vision, goals and targets	• Costs, values, financing and trade

Participants essentially 'followed their feet' to join the conversations that they felt they could contribute to best. Each conversation host filled out a template to share the basic content and results of the discussion, and individual templates can be found on the conference website at https://trondheimconference.org/outputs-from-interactive-sessions-and-elements.

BUILDING ON THE EXPERIENCE FROM THE CONVENTION ON BIOLOGICAL DIVERSITY

There is already significant experience in implementing the Convention on Biological Diversity, and it is important to draw on this experience in developing the post-2020 global biodiversity framework. Much of this experience will be drawn on directly through the process established by the Convention to develop the framework, but it will be important to ensure that all relevant input is taken into account, including that from other processes.

• **Information on the process for development of the post-2020 global biodiversity framework is provided on the CBD website** at www.cbd.in/post2020. It is important to ensure that Parties and other stakeholder have opportunity to make input throughout the process, and there have already been a series of consultations. These have provided significant opportunity for sharing views. Parties and others have also submitted views in response to an initial information document. A synthesis of views has recently been made available in document CBD/POST2020/PREP1/INF/2. The future agenda will include meetings of the open-ended working group and the two subsidiary bodies of the Convention, and a number of additional thematic consultations. A plan for the process will be made available in July,[9] and information on all meetings will be made available on

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[9] See https://www.cbd.int/doc/c/b115/6ba0/3eeed527603a736729a48d53/wg2020-01-04-en.pdf

the CBD website. There are also ongoing discussions relating to resource mobilization, capacity-building and communication, all of which will also be on the agendas at the UN Biodiversity Conference in Kunming, China, in late 2020.

- **In developing the post-2020 global biodiversity framework, it is important to be aware of the experience of Parties in interpreting the Aichi Biodiversity Targets for use at the national level**. Malawi used the Aichi Biodiversity Targets as a basis for developing their NBSAP in 2015, but in retrospect recognise that they did not really assess at the time either their readiness to implement the targets, or the level of ambition that was achievable for the country. A number of lessons were identified, many specific to development and implementation of NBSAPs, but particularly relevant to development of a post-2020 global biodiversity framework are: clarity of targets is important; invest effort in approaches that result in maximum biodiversity gains; engage other sectors from the onset of the process; build institutional arrangements to ensure implementation. In addition, the importance of the following was recognised: the importance of resource mobilization and review and accountability mechanisms; the need to build capacity to capture, manage and use data and information, including in indicators and scenario analysis; and the need to invest more in communication and implementation.

> "How can the science community help Parties define SMART and scalable targets so that we do not result in last minute negotiations leading to unmeasurable targets?"

- **It is also important to take into account lessons learnt through the assessment processes addressed earlier, and to consider recommendations from the scientific community**. As part of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment completed earlier this year, implications were identified for development of the post-2020 global biodiversity framework, particularly with respect to targets.[10] Drawing on such lessons, a number of recommendations have been made on the need to develop science-based targets in order to make the post-2020 global biodiversity framework more actionable. The aim would be to quantify targets such that they can be disaggregated to allow all actors the opportunity to identify and contribute necessary actions.

- **The ability to track implementation of the post-2020 global biodiversity framework is essential**, and a project is underway to examine options to enhance the measurability of the post-2020 global biodiversity framework. As part of this a workshop was held in February 2019 at OECD Headquarters.[11] Lessons learnt from attempts to use indicators to track the Aichi Biodiversity Targets noted in particular a difficulty in tracking progress in a consistent and comparable way, and reinforced the point that targets and indicators need to be developed at the same time. The workshop in particular called for SMARTer targets with associated indicators, and suggested identifying a set of quantified headline indicators relevant and comparable across countries, supported by a larger set of accompanying indicators that are not necessarily relevant everywhere (both covering state, pressure and response). There would then be further indicators for enabling conditions, and potentially other process and response indicators.

- **It is important to consider aspects of equity when developing the post-2020 global biodiversity framework.** In April 2019, an expert meeting was convened in New York to consider gender equality for a transformational post-2020 global biodiversity framework. This expert meeting suggested that the post-2020 global biodiversity framework should be: rights based, inclusive,

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[10] See background document at https://trondheimconference.org/background-documents
[11] The report of the workshop can be found at www.oecd.org/environment/resources/biodiversity/Summary-Record-OECD-workshop-The-Post-2020-Biodiversity-Framework-targets-indicators-and-measurability-implications.pdf

participatory and gender-responsive. Key components of the latter include: enhancing women's agency and promote their effective participation and leadership in biodiversity conservation; promoting and protecting women's rights and access to resources; and enhancing and ensuring equitable benefits and human well-being. There are more details, including examples of actions to be taken, which will be in the meeting report.[12]

RESPONDING TO SOCIETY NEEDS

There have been repeated calls for the post-2020 global biodiversity framework to provide a holistic framing of biodiversity-related goals, targets and/or milestones, responding to broader economic and societal needs. There is therefore a need to consider how diverse stakeholder actions could help build greater ambition and how this could be promoted and facilitated through a post-2020 global biodiversity framework.

- **In June 2019, a consultative workshop was convened with the aim of increasing ownership of the post-2020 global biodiversity framework by engaging with other convention and processes**, including the other biodiversity-related and Rio Conventions, and other intergovernmental conventions and processes.[13] This built on earlier work by some of the conventions to align strategies, and on efforts to increase cooperation in implementation as part of the 'synergies' process. Key messages from the workshop included the following. There was a willingness across all conventions to engage and to be mutually supportive of each other's activities. This included willingness to participate actively in the post-2020 process. However, each convention is different, and has its own independent legal framework, which potentially limits the extent to which everything can be fully aligned. Having said that there are opportunities for coordination of implementation in the context of a post-2020 global biodiversity framework, enhancement of synergies, and for further building coordination at the national level.

> "It is important to link biodiversity and climate change, but there is a risk if we ALWAYS do that. Biodiversity is not just a subcategory of climate!"
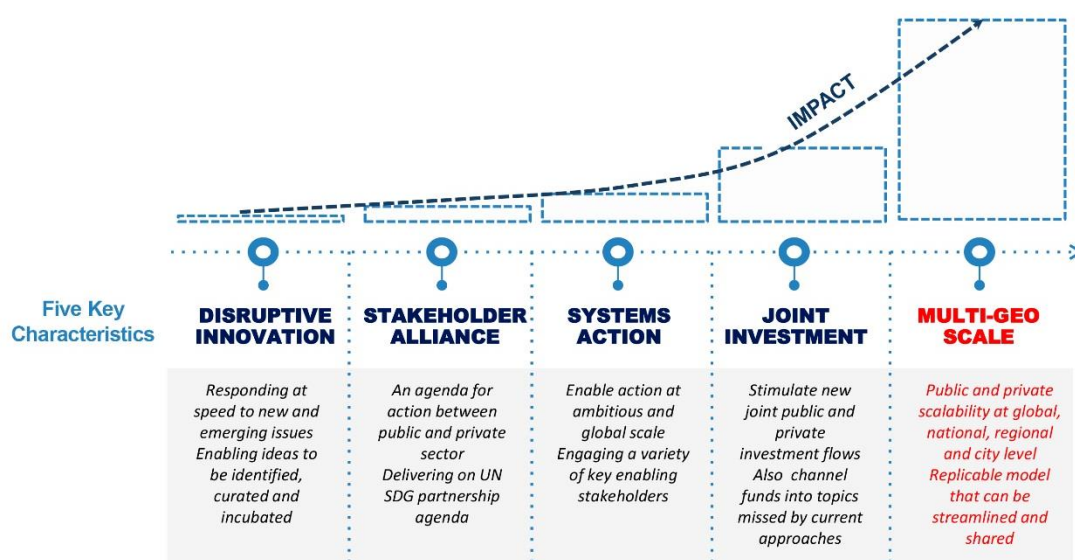
- **At the national level there is a need to find ways to increase coherence in implementation of the Rio Conventions**. More than a quarter of a century after adoption of the three conventions, discussions are still ongoing on how to most effectively address biodiversity loss, climate change and land degradation. Each topic has a convention, each convention has its own governing body and scientific body, many countries are party to all three conventions, and each Party has a national focal point for each convention. Despite all this, the conventions are not yet implemented in a coherent manner. There is a real need to further promote coherent implementation, particularly at the national level, which is what the Egyptian CBD COP Presidency is currently promoting. The initiative aims to guide and support countries to meet, in a synergetic and integrated manner, their objectives and commitments under the three Rio Conventions and the Paris Agreement, as well as the 2030 Agenda for Sustainable Development.

> "How can nature-based solutions become a core element of UNFCCC and CBD agendas?"

- **It is also important to build on and strengthen regional and sub-regional cooperation**. Countries in the same region and sub-region are often similarly situated, and frequently share successes, challenges and opportunities in meeting biodiversity-related targets. Regional and sub-regional

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[12] When completed, the report will be found at www.cbd.int/conferences/post2020/gender
[13] When completed, the report will be found at www.cbd.int/conferences/post2020/brc-ws-2019-01/documents

synergies contribute to the framing of biodiversity-related targets and approaches that are more cognizant of the resources and capacities of countries, and more responsive to their particular needs and development goals. These synergies foster inclusiveness, and allow small and/or developing countries greater engagement.

- **Perceptions on environment-related risks have increased significantly in recent years, affecting the ways that world leaders in governments and the private sector think**. Each year the World Economic Forum publishes a Global Risks Report that is based on perception of global risk amongst decision makers from the public and private sectors, academia and civil society. In 2019 five of the eight top risks in terms of both impact and likelihood include the environmental risks – extreme weather events, failure of climate change mitigation and adaptation, natural disasters, biodiversity loss and ecosystem collapse, and man-made environmental disasters. Additionally, environmental risks are seen to interact substantially with other risks.

- **As business sees it,[14] current approaches are not delivering global sustainability, and something extra is required fast**. They see the traditional approach as being inflexible, incremental and irrelevant, suggesting a move is needed to something that is innovative, scalable and impact-led. The suggestion is that we should move from a 'project mentality' to a 'platform mentality' as illustrated in the graphic below prepared by the World Economic Forum.[15] In this regard lessons can be learnt from partnership platforms such as the Tropical Forest Alliance, Friends of Ocean

Five Key Characteristics	DISRUPTIVE INNOVATION	STAKEHOLDER ALLIANCE	SYSTEMS ACTION	JOINT INVESTMENT	MULTI-GEO SCALE
	Responding at speed to new and emerging issues Enabling ideas to be identified, curated and incubated	An agenda for action between public and private sector Delivering on UN SDG partnership agenda	Enable action at ambitious and global scale Engaging a variety of key enabling stakeholders	Stimulate new joint public and private investment flows Also channel funds into topics missed by current approaches	Public and private scalability at global, national, regional and city level Replicable model that can be streamlined and shared

Action, Platform for Accelerating the Circular Economy, and the evolving Nature Action Agenda.

- **There are strategies and strategy process in other sectors where there are biodiversity-related impacts and dependencies, and interlinkages need to be addressed and experience shared**. The Intergovernmental Panel on Climate Change is currently working on a number of reports of direct relevance to biodiversity and ecosystem services, which will feed into the climate process. The Strategic Approach to International Chemicals Management (SAICM) is also working on their strategy for the post-2020 period, and opportunities could be sought for ensuring alignment with the post-2020 global biodiversity framework. SAICM is a voluntary process, but it does involve all key stakeholders, and is also looking at issues relating to biodiversity and ecosystem services. The

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[14] There is a background note on private sector initiatives at https://trondheimconference.org/background-documents
[15] See presentation at https://trondheimconference.org/assets/04_Akanksha-Khatri_WEF_Presentation_04072019.pdf

Basel-Rotterdam-Stockholm Conventions control a number of serious pollutants, and are therefore directly relevant to control of pollution, one of the key drivers of biodiversity change.

IDENTIFYING WHAT WE NEED TO ACHIEVE THE 2050 VISION FOR BIODIVERSITY

The third and final interactive session considered in more detail what actually needs to be included in the post-2020 global biodiversity framework in order to deliver the 2050 Vision for Biodiversity. This was considered in the context of: addressing thematic issues that may warrant particular attention; the relationship with the SDGs, protocols, and other conventions; how to embed transformative change within the framework; building on the existing framework of NBSAPs and other national commitments; continuing to reflect the diverse perspectives; and strengthening communications.

The various consultations to date as part of the post-2020 process, and the submissions from Parties and other stakeholders, have all suggested possible 'ingredients' for the post-2020 global biodiversity framework. These have included reference to: goals for supporting delivery of the 2050 vision (or elements of it); a mission and/or apex target; milestones/goals/targets (based on biodiversity outcomes, benefits, direct and indirect drivers of biodiversity loss, and enabling conditions); indicators; means of implementation; and accountability, review, and reporting.

Participants were provided the opportunity to consider in more detail two of the following 10 elements, drawing on what they had learnt and discussed earlier in the meeting, and also taking into account the need to embed transformative change, build on the existing framework, and take on board diverse perspectives. The elements were as follows, the targets to address having been chosen by poll. In addition, another group also discussed marine targets. The results from all the discussions will be rdirectly relevant to those developing the post-2020 global biodiversity framework, and these are presented in Annex 5, and visualised in the Wordle below.

- Vision and mission
- Review and accountability
- Implementation/enabling
- Integrating agendas
- Structure
- Target(s) for consumption and production patterns
- Target(s) for mainstreaming
- Target(s) for sustainable use
- Target(s) for food and agriculture
- Target(s) for protected areas

When the post-2020 global biodiversity framework is adopted in 2020, Parties to the Convention will also be considering the means for promoting and facilitating action. Putting in place the necessary enabling activities – resource mobilization, capacity-building, technology transfer, technical and scientific cooperation – will be essential. Also essential will be the engagement with multiple stakeholders ranging from governments to NGOs, from IPLCs to the private sector, and from youth to academia.

- **It is absolutely essential that all parts of society develop a better understanding of the real values of biodiversity and ecosystem functions and services**, and embed this understanding in decision making. In this regard it is a very real concern that Aichi target 3 on incentives and disincentives, and Aichi target 20 on resource mobilization have not been better implemented. On one hand we are investing money to destroy biodiversity and ecosystem services, while on the other we do not fully understand the resources that are available for protecting biodiversity.

- **In all decision making processes it is important to understand both cost and benefit, and this must include full recognition of all environmental costs**. Investing money that essentially destroys biodiversity and ecosystem functions and services is short-sighted, and does not take account of all the facts. It makes economic sense to protect nature, recognising it as an essential resource that must be used sustainably, and countries need to consider ways to do this whatever the level of resources available.

> "Do we need to change the Aichi targets? NO. Do we need to Implement them? YES. The transformation is in the DOING."

- **In order to plan resource use more efficiently at the national level, it is essential to have a full understanding of the resources available**, how they can be accessed, and how they are currently being used. This is important for addressing inefficiencies in how resources are currently invested, and for facilitating increased alignment amongst sectors. It is essential to have open, transparent discussion on resource mobilization.

- **NGOs have an essential role to play in creating a public force for action and facilitating public participation**. In doing this they also play significant roles in championing development of society and communities, and in convening and building collaboration, including through the development of networks and partnerships.

- **Effective communication is critical to achieving an improved understanding of the multiple benefits of biodiversity and ecosystem services**, and a number of NGOs have taken a strong lead in this area, exploring what current understanding of the value of nature is and how it can be improved upon. This has to be addressed in multiple ways, involving both society and businesses.

- **Most effective is the use of storytelling, and linking the message to things that people readily understand, such as the food on their plate**. In the lead up to Kunming in 2020 communication and action is likely to increase, building on examples such as the success of the "Our Planet" documentary series on Netflix and activist group movements such as Extinction Rebellion.

- **Good businesses recognise that there are environmental problems, and want to take action to reduce their impact and increase their contribution**. Actions needed will vary with the type of business, but include: decreasing and offsetting carbon consumption; moving to renewable energy; reinventing packaging; eliminating environmental impacts from supply chains; re-localising processes; encouraging restoration; and reducing waste. Business leaders want to

actively engage in developing the post-2020 global biodiversity framework, calling for a coherent and simplified narrative.

- **In many parts of the world, indigenous peoples and local communities are – or should be – a key player in managing the environment**. Indigenous Peoples and Local Communities (IPLCs) have actively considered the role they play in responding to the Aichi targets, and the findings are relevant to development and implementation of the post-2020 global biodiversity framework: traditional knowledge is cross-cutting and enabling of all targets; supporting IPLC actions can be an effective approach as their lands hold much of the worlds biodiversity; biodiversity and cultural diversity together increase resilience to social and environmental change; and IPLCs are ready to work in partnership to support delivery. However there remain concerns relating to human rights violations, and over land tenure issues, and the rights of indigenous peoples and local communities with respect to access to and use of indigenous knowledge.

- **Youth has an unexpectedly powerful voice, as it is increasingly recognised that unless significant action is taken now our current youth will be living in an impoverished world**. Intergenerational equity is becoming an important issue. They are asking not for a 'Paris moment' (more promises) in Kunming, but for a far greater focus on actual implementation, and for actions that address the inequalities and other social issues impacting on biodiversity.

- **The view from youth on transformational change is that it requires a refocusing of our core values and principles** so that they encompass: equity; transparency; responsibility; sustainability; harmony; respect; and inclusiveness. This includes issues of intergenerational equity; free, prior and informed consent; and full adoption of the Rio Principles.[16] The vision of living in harmony with nature requires: integrity of life supporting systems; sustainable living; effective governance, enforcement and implementation; and inclusive participation and intergenerational equity. The representatives of youth also made the following challenges in their presentation.[17]

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[16] The Rio Principles are listed in the Rio Declaration on Environment and Development (1992), which can be found at https://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm
[17] See presentation at https://trondheimconference.org/assets/GYBN_Trondheim.pdf

Two topics that are essential for effective implementation of the post-2020 global biodiversity framework will also be addressed during discussion on post-2020 and as separate agenda items in Kunming, resource mobilization and capacity-building. While these were not the intended focus of discussion at the Trondheim Conference, they were topics of great concern to participants, coming up again and again throughout the conference. Therefore the key messages arising will be communicated to those working on these topics. Also considered were the implications of conference discussions for future research needs.

Resource mobilization

Drawing on discussions during the conference, the following 'summary notes' relating to resource mobilization were presented on the final day.

- Increased effort will need to be put into identifying and mobilizing resources from domestic and ODA sources, as well as 'non-traditional' sources of funding including philanthropy and the private sector. This may well include new approaches including domestic budget reallocation, and carbon/environmental taxes (as indicated earlier). However, this needs to be supported by a better understanding of the real values of biodiversity and ecosystem functions and services, and of risk.

  "Whose responsibility is it to put resource mobilization at the front and centre of our agenda and why is it not happening?"

- The Global Environment Facility (GEF), as the financial mechanism for the Rio Conventions, has a key role to play in expediting implementation of the framework, building on a long track record of investment. GEF-7 is already looking more systematically at underlying drivers of biodiversity loss, seeking to leverage change – and further resources - through GEF support. The GEF is also working with countries to articulated transformation pathways, addressing underlying drivers.

- However, far more resources are needed because of the pace of environmental degradation. The private sector – from big business to individual farmers – is responsible for 80% of all economic activity, and is increasingly dependent on scarce natural resources. It also has the capacity to rapidly innovate and deploy sustainable solutions, and through public-private partnerships can address non-market barriers and reduce risk to foster sustainability.

Capacity-building

Based on discussions during the conference, the following areas were identified where capacity was needed, at least in part also implying the need for resources to address these capacity needs.

- Capacity to address the major issues that directly impact on biodiversity and ecosystem functions and services, including illegal activities, and impacts caused by the interests of particular groups and individuals.

- Capacity to address the underlying drivers of change, for example through aligning national expenditures, removing harmful subsidies and implementing green infrastructure projects, and transforming supply chains.

- Capacity to identify and replicate good practice, building on experience, and expanding and scaling up what is known to work.

- Capacity to use technology to empower the powerless, increase transparency, mobilize action and to hold actors accountable.
- Capacity to communicate effectively and to tell a good story, so that the true values of biodiversity and ecosystem functions and services are understood and embraced.
- Capacity to effectively use data, information and knowledge in order to address biodiversity, water and food security, carbon sequestration and disaster risk in a coherent manner.
- Capacity to locate the necessary resources, including through unleashing private-sector capital.
- Capacity to buffer the most vulnerable, through protecting essential ecosystems for the vulnerable, fast tracking ecosystem restoration, and managing natural resources.

In illustrating this final point, the presenter used the graphic below as a basis for identifying essential societal and environmental needs. This is taken from work on "doughnut economics" in describing and attempting to define "a safe and just space for humanity".[18]
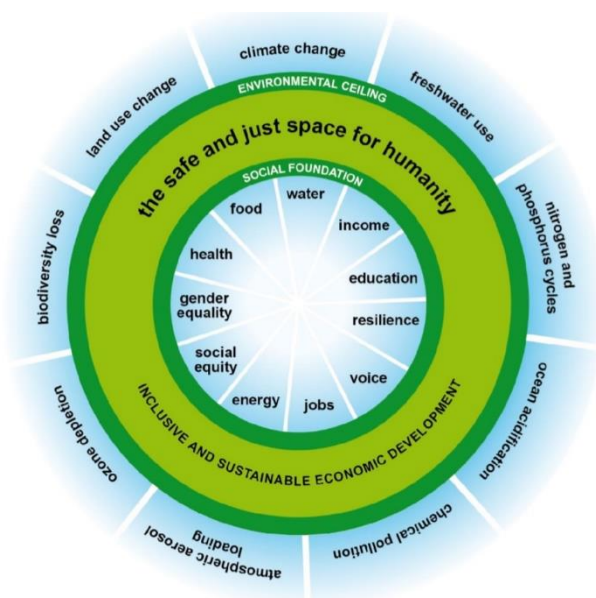
Finally, a key focus of the Conference was on the knowledge base for informing development of the post-2020 global biodiversity framework. As a result, the discussions were also very relevant to identifying what further knowledge needs there might be in the future.

Research needs

Based on the discussions during the conference, the following needs and challenges were identified, recognising that these built on what had already been identified during the IPBES and other assessments.

- Research on the interdependency between biodiversity and development issues, so as to be able to better understand, communicate and respond to the links to sustainable development, trade, prosperity and human wellbeing, including addressing inequalities.

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[18] See the Oxfam Discussion Paper on "A Safe and Just Space for Humanity", which can be found at https://www-cdn.oxfam.org/s3fs-public/file_attachments/dp-a-safe-and-just-space-for-humanity-130212-en_5.pdf

- Research on development and implementation of more effective conservation outside of protected areas and 'other effective area-based conservation measures, leading to sustainable use of biodiversity over the whole planet, including more effective greening of cities.

- Move towards more effective multidisciplinary, transdisciplinary and interdisciplinary research, including social science and the engagement of different sectors and different knowledge systems, so as to increase understanding of how to respond effectively and in a mutually cooperative manner.

- Research to enable transformative actions, including on both the enabling conditions (such as awareness raising, data, knowledge and information, and funding solutions) and on the feasible and viable actions (so that these are based on the best available knowledge base).

MAKING BIODIVERSITY MATTER

During four days of presentations and both formal and informal discussion, a broad range of views were expressed relating to the form and content of the post-2020 global biodiversity framework, and on the measures for enabling implementation of that framework. The overarching message was that action is urgent for a whole range of different reasons, and that action to date has been insufficient. As a result there is a clear understanding that the post-2020 global biodiversity framework must promote and facilitate a step change in action on the ground to address biodiversity loss and the associated disruption to ecosystem functions and services. This is essential for realising our vision of living in harmony with nature.

"Transformational change is more about WHO should change, not WHAT should change. If WE change, what we do will change. Transformational change begins with ME."

"Good Conference. Zero politics. We focused on biodiversity not interests. If we carry this spirit to our COPs we will speak for biodiversity not interests."

ANNEX 1 – BRAINSTORMING ON POTENTIAL PATHWAYS FOR ACHIEVING THE 2050 VISION

Educate, communicate

- Get the wide population on-board! Communicate!
- Change of education syllabus from all primary schools
- Education and awareness to raise ambition and strengthen actions
- Need the GBF and its targets to be translatable, to have value and resonance with the key sectors and public and youth
- Communicate the trade-offs and synergies and inform the public and policy makers on alternative futures.
- GBF needs a strong communication plan with translated terms to engage the public and key sectors
- Clear and concise
- Develop our communication skills to enable us to reach people's hearts and create enthusiasm and sense of urgency
- Integrating into formal curriculum, work more with education sector, how to talk to the youth and how youth talk to the parents and incorporate technology into education sector (youth influencing parents)
- Innovate ways to communicate and market knowledge (including scientific knowledge) on nature. How to get a simple target to catch people's attention? Tangible, visual ways to create linkages
- Focus targets and communications around Nature for People - benefits of conservation to engage the public and decision-makers
- Communication and accountability: Bridge the gap between scientific knowledge and policy making
- Making biodiversity (basis of cake) a top priority, commonly understood
- Different ideas and languages are part of the solution
- Conservation messaging
- New communication approach
- Stepwise vision
- Need for increased awareness of the values of biodiversity, biodiversity mainstreamed in educational sectors
- Building capacity for leadership
- Human network

Change human behaviour, perceptions and commitment

- Get the young into nature
- Changing demographics change the balance of perceptions of nature
- Influencing policy-makers, pointing out those who are acting differently.
- Accountability not just for governments but for all actors
- Show possibilities/options for individual persons
- Changing human behaviour
- Population growth slowed
- Intergenerational
- Everyone on Earth should do more
- Sacrifice
- Commit to a set of principles/values that lead us towards harmony with nature
- Keep high levels of ambition throughout

Change food systems

- Good local diverse and shared food!
- Sustainable agriculture
- Change in food systems
- Biodiversity vs. food
- Sustainable food systems
- Sustainable diets
- Farmers
- Feeding the people without hurting the environment
- Food a good vector for mainstreaming nature charm

Increased participation and ownership

- Get the young into nature and involve cities, local and regional governments, indigenous & local communities, women and girls, private sector and even individual citizens at all levels
- Many pathways are needed and the pathways need to be dynamic
- Greater transparency, Inclusiveness and participation
- Ensure GBF is not only framed globally but flexible enough to allow relevant actions at regional and national levels
- Importance of post-2020 framework being open, accessible, and welcoming to EVERYONE
- Build partnerships
- Intergenerational equity and socio-environmental justice pathway

- Rights-based pathway: Empowerment of people, bottom up, enhanced engagement of stakeholders in decision-making, decentralization

- Empower people that they can and must contribute to creating change for biodiversity

Increased knowledge
- ASEAN Biodiversity Outlook report is a good template for the framing of the GBF
- Increased knowledge of nature
- Need common understanding of the various components of the vision

- Information on thresholds, research on thresholds to be able to talk to competing areas, how much development needed to implement policies.

Rights, including human rights
- Rights-based approach
- Land rights
- Human rights
- Secure land tenure

- Address the situation of biodiversity defenders and contributions of women to biodiversity conservation and sustainable use

Transition into green economy and technological development
- Decouple economic growth from natural resource use
- Ensure just transition
- Green cities
- Phase out harmful subsidies
- Circular economy
- Halt loss - stop bad things from happening
- Nature...culture...society (including economy)
- Work together to limit climate change to 1.5°C
- Pathway to sustainable development and investment/finance
- Nature-based livelihoods
- Economic case

- Address driving factors
- Appropriate affordable technology and innovations
- Parallel to low carbon economy - a high nature economy
- Control on corporate power
- Address embodied impacts - sustainable trade!
- Enhance incentive mechanisms (e.g. for biodiversity restoration) and shift subsidies to sustainable practices and reduced ecological footprint

Valuation, risk-assessment, accounting
- Move from valuing short term economic gains to long-term resilience of socio-ecological systems
- Should we be regulating against standard 'built in obsolescence' in numerous products currently dominating the market?
- Address social costs and Internalise environmental costs
- Risk assessment
- Corporate accounting and transparency
- Recognition and reward for costs of/benefits of using nature
- Need Metrics for common understanding of the various components of Vision 2050

- Measure the cost of not doing something as opposed to the cost of doing something
- Strengthen biodiversity safeguards and biodiversity co-benefits in financial decisions
- Finding ways to account for effects of actions and policies on biodiversity loss: accountability of policy makers
- Create systems for managing natural capital (basis of SDGs 'wedding cake')
- Natural capital assessments
- Due diligence on understanding the real costs on the environment
- Internalization of externalities
- Integrated convention reporting/ valuation and planning for land and sea

Local level/Indigenous peoples and local communities
- Empower IPLC and support them for ownership and rights
- Capitalize on local initiatives
- Community-based conservation

- Integrate local communities and traditional knowledge/ practices – everyone depends on biodiversity
- Greater recognition of community-based PAs

Change production and consumption

- Pathways to sustainable consumption/ production to accommodate nature in a 9-billion-person world (thus focus on developing regions and their lessons learned where most people live and where most biodiversity is)
- What will be the future of trade?
- Secure new consumption and production patterns - fewer non-renewable resources, sustainable use of renewable resources

- Importance of production and consumption, business, human well-being
- Radical decarbonisation of developed countries through reduced and more efficient energy options
- Consumer awareness
- Decelerate consumption
- Changing consumption and production patterns

Mainstreaming

- Make nature-based solutions a priority, standard measure in all relevant actions
- Food a good vector for mainstreaming nature's charm
- Inter and intra sectoral involvement
- Assess trade-offs
- Consider biodiversity in health, education policy, so that developing countries include consideration of biodiversity in flood, cyclones
- Synergies between economic and environmental decisions, align all scales of governance
- Change the structure of development including the way we consume Nature

- Guatemala – having government invest in tackling drivers of livestock industry, for example. Make the linkages to rescue traditional knowledge, culture.
- Mainstream biodiversity into other departments, trade business,
- Make friends with sectors
- Agree on / create common, cross-sectoral biodiversity status knowledge base and understanding, including the fundamental role of diversity
- Responsibility for mainstreaming and integration of biodiversity goals across different sectors

Human well-being

- Address inequity and poverty, create equality (end poverty)
- Nature based livelihood and alternative job creation for land users
- People are the problem... but people are the solution
- biodiversity to advance human progress - frame it this way to facilitate mainstreaming
- Social interlinkages vision

- Set 2030 milestones against the 2050 vision but be mindful that societal conditions underlying actions are still relevant - need to be adaptive
- Human health depends on biodiversity
- Define what living in harmony means
- Ensure well-being of people
- Align social policies with biodiversity conservation

Fair and equitable sharing

- Equitable benefits for all - women and men
- Ensure intergenerational equity
- Equitable use of resources

- Access and benefit sharing: inequalities at the core of biodiversity loss
- Equity

Transformative change

- Think beyond 2050 to materialize the vision 2050
- Set 2030 targets as pathway milestones in the context of the 2050 vision
- Make it a development/economic issue (sustainable development)
- Vision

- Transformative change - the political side
- Sustainability issues and human related issues solved simultaneously
- Change of systems
- Step wise
- Support good governance

Sustainable use and nature management

- Genetic resources
- Restore - make good things happen

- Need to take into account all impacts on the environment and not only climate change

- Places where Nature's interests have priority over people
- Strengthened Protected Areas (Marine and Terrestrial)
- Stabilize or improve both ecosystem services and what we get from nature

- Integrated approach in management of natural resources
- Sustainable use (of wildlife)
- Make better use of biodiversity
- Land-use planning
- Halting the loss

Governance, policy and legal frameworks and financial resources

- Increased financing
- Reviewed legal frameworks and governance systems
- High level Government attention to wildlife
- Legislation by introducing no-net loss for environmental licencing procedures
- Legislation for an enabling environment
- Stronger legal and regulatory framework
- Environment department should have list of priorities where the resources should be invested in
- Accelerate the implementation of known policies and practices
- Develop specific policy options

- Dissolve/bridge institutional obstacles and different systemic approaches
- Legal and regulatory instruments with effective enforcement
- Economic and Financial instruments established
- Social information system - education and communication
- Consider both human needs and nature in planning and commitments
- Improve synergies within the UN system – (current example of marine litter)
- Finding topics for mobilization
- Integrated approach in management of natural resources

Monitoring, reporting, compliance

- How do we help the negotiators choose SMART and clear targets
- 2030 targets against the 250 vision - quantifiable milestones with measurable targets and indicators that we regionally and nationally flexible in implementation
- Improved monitoring, reporting and compliance

- SMART targets and simple framework focused on drivers of loss
- Focus GBF around key words in the Vision - targets around value, conserve, restore, wisely use with indicators to track
- Policy evaluation
- Compliance mechanism

Lessons learned and solutions

- More focus on lessons and solutions from the developing world
- Lessons learned from other MEAs and SDGs - need to develop pathways with early wins/outcomes while still have the long-term vision in mind
- Holistic approach
- Action

- Solutions based on nature
- Bending the curve to 2030 is a similar concept to what we tried in 2011 to 2020 plan - can we draw on some lessons learned to improve the GBF and develop a smart roadmap to 2050
- Adaptation together with mitigation (of biodiversity loss as well as climate change)

ANNEX 2 – STORIES TO DESCRIBE POTENTIAL PATHWAYS

Financial Systems and Value Integration

Natural capital management: Make the natural capital REALLY the basis of the cake Have a system in place where our natural capital is accounted for and managed sustainably by all sectors. Use financial and ecological experts, and sectors, to develop accounting and management systems. Natural capital accounting is key to have impact on production and consumption patterns that drive land use change. Develop standardize methods for valuations. Integrate into financial systems in order to induce behavior change to ensure ecosystem sustainability, resilience and global env. benefits. Net positive impact (>0) on biodiversity (negative indirect become positive direct drivers) by delivering benefits BEFORE costs - needs long-term mitigation banking (species-ecosystems-genetic); targets for sectors and actors; address embodied trade impacts; connectivity; recognize intrinsic values

Net gain: Countries legislate net gain of habitat (extent and quality) requirement into their environmental impact assessment and environmental licensing procedures. This means that businesses would have to restore habitat to more than compensate for any impacts to habitat from their projects.

Fair share: Equitable wellbeing for everyone while maintaining integrity of all ecosystems. This is by done by harnessing the full potential of protected areas and other effective area-based conservation measures by securing rights of indigenous and local communities lowers the pressures on land and the seas by addressing over-consumption and unsustainable production practices via total removal of perverse subsidies and implementation of financial mechanisms and regulations to disincentivize damaging activities. Consumers choices are empowered by environmental impacts of goods and services and reporting them on products.

Integrated land and water use valuation: To achieve multiple objectives across economy, society, environment & Climate. Using integrated valuation tools to implement governance frameworks, land classification based. Such tools will show full cost & benefit of production and conservation.

Biodiversity value integration: To achieve the 2050 vision, mainstream biodiversity value into national, regional and local development plan and policies. Integration can be achieved by revitalizing indigenous knowledge, economic valuation, providing awareness to all stakeholders

Communication, Awareness Raising and Mindset Change

Awareness raising: One of the most important elements for the vision should be "awareness raising": By 2050 most of the society understands the concept of conservation and sustainable management of biodiversity and the benefits to the economy and quality of life. This can be achieved by:
- Increasing production intensity to lower footprint;
- Reducing food waste through the adoption of low tech solutions to reduce spoilage • Increasing the efficiency of the food distribution system to lower its footprint and increase equitable distribution
- Reduce the disparate impacts of trade on biodiversity loss
- Remove perverse incentives (subsidies and trade barriers).
- Create more regional food production and consumption systems to lower. This fundamentally requires public engagement and education (on the impacts of inefficient food production/consumption on biodiversity and on the choices that can drive the above actions).

These actions need to be incentivized through pricing the externalities of food production/consumption waste to drive production/consumption systems that maximize quality and accessibility, minimize impact on biodiversity and minimize cost

Paradigm shift: Outcome to achieve the vision 2050: Having a new definition of wellbeing with a new set of values, merging all the new knowledge and traditional solutions, advocating policy coherence, using nature based solutions and having fair and sustainable energy production

Community-Driven Nature for Development

Community: Indigenous peoples and local communities have sufficient incentives (of all sorts) to manage their land/sea & wildlife sustainably Works by increasing recognition & support for community conserved areas; integrating traditional and scientific knowledge; market mechanisms and other incentives that support local benefits; equitable governance.

Nature for development: To empower IPLC to implement nature-based solutions and integrated approaches to management of natural resources to achieve sustainable development. Nature for development pathway recognises the importance of multiple benefits and high value of biodiversity to enhance & improve a sustainable livelihood 4 all, & achieve SDG.

"Bijomal ru chi chooch" pathway: To achieve 2050 vision, recognize and protect indigenous land tenure systems that has demonstrated lived experience of biodiversity conservation. Indigenous land guardians have an umbilical relationship with nature; empowering to transfer sacred ecological knowledge.

Nature for people: Link development finance with biodiversity conservation and nature - based solutions to climate change. Ensure food security and health of people are integrated with biodiversity.

Locally adapted sustainability solutions: Facilitate bottom-up approaches towards biodiversity conservation, and meeting development priorities /needs of the people. "Locally Adapted": Builds on local expertise, culture and traditional knowledge. Slow process, but high actor commitment.

Evidence-based policy-making

Science based policy making: Making science policy-relevant and well communicated to policymakers. Scientists must move out of their comfort zone and provide clear communication relevant for policy and society. policymakers must be accountable to society, including scientists.

Mainstreaming and Cross-sectoral collaboration

"Move out!" pathway: We're moving out of the environment sector to talk to suppliers and end-users to achieve a more sustainable supply chain. We'll engage with governmental agencies, companies, share information on sustainable practices of raw materials to put more sustainable practices in place.

Mainstreaming: the importance of keeping the integrity of biodiversity / life supporting system is mainstreamed across all sectors through:
- Communication, education and public awareness to enhance awareness and political will among general citizens and government
- Dialogue between different sectors: discuss how each sector impacts and benefits from biodiversity, establish roles and responsibilities for each
- Establishing biodiversity/biosphere integrity as long-term national priority with guidelines for each ministry/sector.

Sustainable Production and Consumption

Sustainable use: Encompassing sustainable production & consumption - cross-sectorial mainstreaming Through: - sustainable use of land, sea and natural resources (species) - customizing sustainable use of IPNCs - true value & true costs: internalize costs (social & environmental costs).

"Let's go for dinner together" pathway: (Sustainable food consumption and production system for biodiversity conservation and sustainable use). Why: food touches the daily life of all people, but also tackles the climate change, biodiversity, energy and quality of life. Food is linked to the cycle of nature. By 2050, food production and consumption systems are based on the principles of limited footprint, limited waste, efficient and equitable distribution. To achieve this, by 2030 we reduce by 25% the ecological footprint of food production and consumption and reduce by 50% by 2050.

No food waste: To reduce pressure on nature by eliminating food waste throughout the food chain, by investing in marketing and storage infrastructure and internalizing environmental and social costs. This will at the same time help address certain elements of climate change mitigation policy. Healthy + nutritious diets from sustainable food systems by changing attitudes + behaviors through marketing + policy innovations and by moving from perverse to nature friendly subsidies which would also reduce waste.

Integrated Governance Systems – Policy for Action

Integrated action: a common approach to make decisions on biodiversity, climate, food security and other SDGs; addressing them in isolation will not work. The common approach creates shared understanding of synergies and trade- offs. Integrated strategies across sectors and at all levels.

Empowering politicians to manage biodiversity in a sustainable way: by enhancing the contribution of biodiversity, to the well-being of society. Empowering local communities, creating green jobs, adding value to biodiversity, managing conflict of interest concerning land-use.

Mainstreaming, governance and ambition: To achieve national empowerment through the creation of human networks, to keep up the levels of ambition to achieve national targets

Integration of biodiversity through national governance systems: Build sets of tailored narratives which will: Raise public awareness to influence government decisions; Enlighten government leadership to create change from within. This will help influence policy frameworks & budgetary allocations. Transform agri-food systems towards nature-positive production via urgent and fundamental subsidy reform; expanding nature-positive incentives, smarter regulation; increased supply chain transparency and by giving people credible information on the environmental impact of their food choices

Managing nature, putting it at the centre

Protecting-what-matters: Create ambitious protected areas as a "bank" for nature and people. Maximize value by considering economic and ecosystem/biodiversity goals simultaneously. Achieve by developing plans informed by: irreversibility risks; high resolution biophysical economic models; data and statistics

Prioritising nature: By giving people positive alternatives to achieve development that is ecologically, socially and economically sustainable, which protects and conserves what's left and allows nature to recover for itself and for the benefit of all.

"Eco-cities": Maximizing areas for nature in and around cities; Minimizing urban ecological footprint; People understand their connection to nature and rural populations; institutionalise nature-based solutions for cities.

No net biodiversity loss: Maintain and restore ecosystem services, habitats and species for the benefit of people and the planet - better monitor impacts on biodiversity - strengthen protected areas - implement land neutrality at all relevant levels, including at the level of large ecosystems

Ecosystem approach: By using the principles of ecosystem approach the management is knowledge based, are in the safe limits of the ecosystem, are inclusive and involves local participation in decision and the adaptive management.

Innovation and diversification

Innovation pathway to 2050: Job creation and economic growth without exploitation of nature - requires competitiveness of "green sector" and level playing field - requires political attention by our leaders - overcoming inequalities in the distribution of wealth resulting from growth.

Diversified land use change pathway: (Burundi): Alternative sources of firewood that generate income and improve health for the local communities through locally accessible technology, intensified sustainable agricultural and agro- forestry practices.

ANNEX 3 – LIST OF CONVERSATIONS THAT TOOK PLACE IN THE TWO 'OPEN SPACE' DISCUSSION ROUNDS

1. Global, national, local governance

2. Sharing experience on ABS and discussing how to move forward

3. Special countries with special circumstances

4. Contribution of biodiversity to people

5. Coordination of ASEAN Member States towards concerted action

6. Spatial targets: What works? What doesn't? What's next?

7. Land tenure systems and biodiversity conservation: impacts, implications, synergies

8. Mainstreaming of biodiversity – cultural heritage to improve stakeholder engagement - what works and what does not work

9. Scale-up: meaningful partnerships with indigenous peoples and women in post 2020 framework

10. NatureMap data for laws to manage land use (e.g. Ecological Redlining)

11. The Bern Convention's Case file system: introducing it and discussing how it could be used

12. How do we shift responsibility to developed countries to safeguard biodiversity in developing countries

13. Species conservation through participatory process focusing on target & non-target species

14. Networking with managers to implement qualitative aspects of Aichi target 11 in Mediterranean and Atlantic

15. Connectivity

16. CBD Voluntary Peer Review, experience in Montenegro and Sri Lanka and review mechanisms more generally

17. Voluntary peer review: review of implementation

18. Local community in saving biodiversity at local level

19. Invasive species: management through utilization

20. Implementation of Aichi target 18: traditional knowledge, customary sustainable, enabling environment

21. Supply chains

22. Climate and biodiversity: the important rule of local communities and indigenous peoples

23. Marine governance outside national jurisdiction

24. Networks and stakeholders to launch Act4Nature

Copies of notes on a number of these conversations can be found at
https://trondheimconference.org/outputs-from-interactive-sessions-and-elements

ANNEX 4 – LESSONS LEARNED IN THE "OPEN SPACE AGENDA" DISCUSSIONS

Monitoring and compliance
- ABS contracts assuring yielding actual benefits
- Mechanism to continuously ensure compliance and implementation – also for the private sector (not just every 4 years) to ensure good conservation outcome through social control
- Scale up and strengthen voluntary peer review to identify which changes need to happen (tbc: combination with the new review tool based on voluntary reporting to be tested at the Subsidiary Body on Implementation (SBI))
- Tools to trace individuals' footprints to influence consumption decisions

Participatory process, increase empowerment and ownership
- Changes the ways of thinking of bureaucratic, policies development through various public consultation, co-management, improve and educate local people, set up guideline to improve the rule of local community, valuing the tangible value of biodiversity and ecosystem services, improve the motivation & spirit of local communities
- Imbalance of power relations at decision-making level? Need actions to empower. Laws on gender balance? Should be natural/automatic
- Communicate to local communities the importance of climate change and the nexus with development
- Improve understanding of local communities to make them part of the solution
- Integrating indigenous peoples' knowledge and holistic view of the environment in national level climate and planning
- Locals around protected areas should benefit in some tangible way from living with the wildlife
- Involve locals in the designation of protected areas to minimise conflicts. Without an effective tenure system, conservation would not work
- Involve locals in the designation of protected areas to minimise conflicts. Without an effective tenure system (formal rights to land), conservation would not work
- Co-management by local people (elite) in decisions, as civil society and local communities have the main responsibilities to preserve
- Guidelines to improve role of local community
- When people "own" the resource, they manage it better - also good for conflict resolution
- Motivation and spirit
- Include private economic sector and academia and make private sector part of the solution
- The debate on the Bern Convention's case file system showed that dialogue about implementation and a compliance mechanism could improve implementation of the CBD. This should include scientifically established and agreed recommendations which should be followed up regularly in a participatory way.
- Establish who is benefiting, and how much they are benefiting
- Further empower existing mechanisms
- Cross-sectoral cooperation among stakeholders with varied interests
- Greater youth engagement in conservation efforts
- Bring actors together to ensure fair and sustainable trade
- Targeted group participation

Beyond country level
- Marine governance outside national jurisdiction - what mechanism can deliver outcome? Form should follow function. Way forward: identify joint aspirations and needs for coordination - use that to build trust. If turf-battles are avoided, progress can be made and we can achieve outcomes
- Regional framework for cooperation is important as an intermediate and more manageable level for addressing challenges, from national to the global scale
- Regional framework for cooperation maximises available resources by complementing programs and actions
- Regional mechanisms are important for regional solutions
- We must base this on ecosystem biome rather than country
- It shows the relevant contribution of working at the regional scale with practitioners to fill the gap between international policies and national action

- Some changes are needed to promote transboundary and regional cooperation and networking for the conservation of certain habitats and species (mainly migratory) focusing on ecological connectivity
- Ecological connectivity must be part of any target concerned with protected areas and other effective area-based conservation measures
- Promotion of common language and practices among managers communities at regional (Mediterranean) or larger scales (Atlantic)

Shared and actionable vision, goals and targets
- Integrated planning
- Nature-based solutions
- Pay attention to the relationship between tenurial rights to agriculture and conservation/develop relevant framework to address this lack of effective tenure systems hampers conservation include IPLCs in the designation/expansion of protected areas
- Help identify voluntary commitments interest in mainstreaming in business
- Interest of collective action rather than individual moves, less risky and easier choice of higher ambition
- Government support is a very useful stimulus to adopt a voluntary commitment
- Targets need to focus on policy areas (actionable)
- Policy areas need to be: (a) specific enough so that progress can be measured and (b) broad enough to be meaningful to most countries.
- Transformative change by post 2020
- Contribution of Nagoya Protocol / ABS to the two objectives - conservation and sustainable use should be captured
- Digital sequence information on genetic resources should be included and technology that implications on ABS
- Identification of highest leverage points
- From Ethiopia: invasive species management should be a major topic in the post-2020 agenda
- Further development - model for ecosystem-based management
- We must increase % target
- We must avoid division on sustainable use and protected areas
- We must include tele-coupling effects
- Financial discussions must happen at the same time as policy decision
- Spatial targets must be viewed in larger umbrella of all targets
- Bold targets must be easy to communicate
- We must focus Aichi 11 on the outcome we want to see
- We need mechanisms in place & coastal zone management based on these mechanisms
- Need to pay more attention on the relationship between tenurial rights to agricultural land and as these have been largely undermined
- Invest in improving skills and capacities of protected areas managers from practical exchanges
- Build on ecologically or biologically significant marine areas (EBSA) process
- Identify joint/common aspiration, need for coordination and building trust
- Form follows function
- Vision - not just targets and goals. What elements? Who should determine targets? --> process issue
- Need to signal commitment somehow
- Do we need regular gender sessions/sensitisation
- Needs to be tailored to global & local
- Give room for better use of % and how it will contribute
- Link - climate change - water
- Find ways to illustrate connections to people as a prerequisite for change

Global exchange, sharing, empowerment and learning
- Share global research and build capacity for different sectors
- Improve human resources e.g. through education
- Countries need data and policies for land-use planning across . Ecosystem services, agriculture, etc.
- Study should be launched to learn about best practices (success stories and challenges)

- Convention for the conservation of Antarctic marine living resources (CCAMLR) approach has been useful/ successful implementation
- Decisions must be based on updated knowledge
- Value of exchanging with peers and improving methodologies together
- The productive discussion helped in learning similar experiences in distant places (like Africa & Cook Islands) as well as sharing of experiences and challenges faces in similar initiatives
- Act 4 nature is open source can be adapted to all countries with a group of stakeholders: business, NGO, government and science

Implementation, coordination and collaboration
- Way of thinking of bureaucracy is changing
- Cross-sectoral cooperation among stakeholders with various interest
- Legislation and benefits to the economy from
- National adoption and implementation
- Modern technology (remote sensing, spatial planning)
- Commitment to implement ABS (resource commitments)
- Work with financial institutions, and with regulators domestically + in countries where investments take place
- Technologies need to be innovated, communicated
- Mainstreaming work with sectors
- Ensure national debates have priority
- Ensure sustainable local finance
- Institutionalise IPs/mainstreaming = little action e.g. SDGs. Gap between article 8j + practical implementation. Maybe need something in post-2020 to close this gap

Trust and communication
- Replace 'mainstreaming' by 'sustainability', focus on food, energy systems (change to happen there)
- Business language translation of Aichi targets - make them more concrete
- Challenges ahead require that we create linkages between existing processes and mechanisms. Coordination is essential. Creating arenas for dialogue is important, to build the trust needed to be able to resolve the conflicting interests that will occur in an era of change.
- The mechanism shows usefulness of dialogue
- Avoid turf battles and polarisation. Many "trust issues"
- Public knowledge about
- Consumer awareness is key – treat them as shareholders

Costs, values, financing and trade
- Investments are needed that value the
- Value proposition for nature / how to redirect subsidies
- Explore more effectively the economic value of biodiversity and ecosystem services
- Calculate the cost of damage (risk assessment, risk management)
- Lower income vs. Losing (no action value)
- Internalize costs (environmental + social)
- Customer sensitivity is key to success and business involvement
- Challenge: leakage (in case of moratorium)
- Work on consumers/ supply chain
- Trade hub: how to make trade more friendly
- Sustainable conservation through fundraising and government support as well as development intervention and maximisation of resources

VISION AND MISSION: THE BIG 'WHY?'

(Re-)connecting people and nature
- We have to destroy the disconnect between humans and the Earth. We need to be able to speak to the people and take off our academic heads. Nature is what makes our live on Earth possible. We are embedded within the biosphere, we have. Coming together for live, in the end it is all about life
- Bringing back nature in in the city, reconnect people to the web. Humans and nature are not separate, therefor we need to understand indigenous knowledge much more, we need to capture a variety of understanding Nature. We also need to preserve different languages as a construct to understand reality.
- Coming together for life, each living being is interlinked and embedded in a web of life. Each species are creating their own condition for life. Living harmony is appealing because it is working on emotion. Creature of Earth.
- Our life our nature our culture
- Connect with the inner-self, in order to connect with the wider world. Self-observation

Inclusive and holistic approach needed
- Living in harmony with nature, then who should we be? To become a creature of Earth again, Earthbound. We have been taking possession of nature, but now nature is taking possession of us. We need to have a different approach were a reductionist approach (with ecosystem valuation) and a process approach (or a holistic approach) are two sides of the same coin, nature and culture are part of the same concept.

How to address/engage stakeholders
- stakeholders, how are they coming together, in which setting? Is the setting authentic? Different collectives who need to engage the stakes a look for links.

Flexible / adaptable 2050 vision
- A vision for 2050 should not be set in stone, it needs to be adaptable because the future is unpredictable and emerges and unfolds every moment. The future does only exist in relation to present action. So perhaps we need principles of adaptive co-management.

Health & nature
- Healthy life, healthy decommissions

Nature based solution
- Nature based solution, for basic human needs. Making the case for nature-based solution, engaging in a diverse set of partners. Bringing back exclusivity, true democracy

Recognize indigenous culture and knowledge
- invest indigenous culture and knowledge how, we need to preserve it and put it much more in our vision creation. Bending the curve is perhaps not inspiring to get people on board, because it has not helped so far, but of course.

2050 vision remains relevant
- 2050 Living in Harmony with Nature - remains relevant
- Vision 2050: Less focus on bending the curve for the sake of bending the curve.

Proposals for updated mission 2030/2040
- 2030 Mission: Ensure no net-loss of biodiversity and ecosystems services to deliver benefits essential for all people- some degraded ecosystems restored- most genetic resources are equitably shared- essential ecosystems are valued and conserved- species extinction rate reduced
- 2030 Mission: Ensure no net-loss of biodiversity and ecosystems services to deliver benefits essential for all people
- 2040 Mission: By 2040, net-gain in biodiversity and ecosystems services- most BD and ES valued, conserved, wisely used- most benefits equitably shared

Standardized/simplified process to review SMART targets and increase Parties' accountability through national and global reporting

- The post 2020 framework should, as parts of NBSAPs, agree on a streamlined, well-explained and SMART format for targets and indicators to ensure more standardized use and basis for monitoring of progress.
- Accountability involves both what Parties should be accountable for and how this should be reported and reviewed
- Need to move forward more standardised elements - these should be SMART, parties could be held more accountable on both status targets as well as policy and actions
- Parties could be held accountable to their NBSAP commitments (based on national circumstances). Also need to strengthen review of implementation/achievement of results (outputs, outcomes and impacts)
- Common process for addressing direct drivers that all Parties use as a basis for action. Must be flexible enough to recognise the varying weights of different drivers depending on national conditions
- Common template for NBSAP revision, and especially action plans, to ensure better monitoring and reporting
- Current reporting system is not working. 6NR shows lack of effective implementation towards targets
- Recognising joint accountability when working with other sectors. Discussions on biodiversity by or with e.g. Ministry of Agriculture should be co-convened.
- Regular and continual reporting/updating by Parties on actions and status for each global target
- Reporting system should be accessible, simple, easy, with common guidelines.
- Standard key indicators on drivers for national reporting by all Parties
- Establish a well-thought time frame for countries to report effectively on intended actions, then on progress for implementing those actions, then finally on their outputs and impact at a national level. This will enable, for each step, data to aggregating and analysed on the global level.
- Fewer number of key indicators on drivers and changes in them for national reporting
- Data sources are a challenge - but there are data-bases available
- Global monitoring and reporting combined with national monitoring and reporting.
- Implementation has to add up to sum of what is needed

Ratchet mechanism for national commitments

- Implement, in due time before COP16 in 2022, a ratchet mechanism for countries to strengthen their commitments and actions every four years if outputs and impact do not match ambitions.
- More frequent reporting, will enhance accountability linked to ratcheting up ambitions

Voluntary peer-review not enough

- Review: voluntary peer-review is not enough - review of party actions/commitments is needed but needs to be flexible

Sanction or concession mechanisms / make use of regulations

- Implementation of the post-2020 biodiversity framework at the national level means beneficiaries who impact biodiversity need to have moral accountability
- Governments put sanctions or concessions on others to allow for some leeway on condition of implementing certain CBD (or other MEA) decisions
- Greater use of regulations, standards, penalties to push for better accountability (targets and indicators must be suitable)

High level commitment needed

- Declarations from senior government (e.g. prime minister's office) requires action and accountability. Need to raise the issue up the political agenda.

Financial mechanisms

- How will we Implement the post 2020 Global Biodiversity Framework? The experience in the pre-2020 period showed that there were problems with implementation. A certain Level of Commitment is needed for the implementation of each target. Part of each target should not be only accompanied by indicators but also a list of information required and resource demands on the party to implement

the target. The issue of implementation is making clear at the outset what resources have to be available to the country for success in implementation.

- Have a framework for sustainable financing including innovative finance
- Innovative financial mechanisms including offsets, PES, green bonds, blue bonds, environmental levies
- Promote / scale-up NBS under climate finance mechanisms
- Integrate biodiversity and ecosystem services/natural capital into investment decision-making.
- There must be flexibility in allowing each country to figure out what are the entry points that will work in each country leading to the accelerated achievement of the target. There should be a Target to increase international and domestic funding from a baseline. It is important to identify the potential barriers that will impede implementation and take steps to address them. Important to add value. Important to determine where potential areas of financial support are (Biofin). Important to use language that can be easily communicated and understood.
- There should be a resource mobilization target for both national and intentional (ODA) increased resources (for example, double resources for nature conservation), including use of innovative financial mechanisms to reach targets
- Implementation mechanisms should include provision of financial resources, using innovative financial mechanisms, capacity building and development of new technologies, technology transfer.

Specific milestones
- The Strategy should have a goal/target linked to enablers - money, capacity building, monitoring (assists parties to know if they are achieving the target), organisation of work.
- Appropriate governance is needed to progress towards implementation. Governance should be inclusive – IPLCs, business, civil society (include all cultures and businesses).
- Difficult for SIDS and other small countries to absorb all of the capacity-building options available. We have to determine what kind of capacity building can actually be absorbed by SIDS and small countries.
- Perhaps have a strategic approach to capacity building.

Harmful subsidies / positive incentives
- Redirect harmful subsidies towards biodiversity-friendly practices and positive incentives

Engage sectors (indirect drivers) to develop targets
- Find a way to enable other sectors to give their commitment to biodiversity. The indirect drivers must be considered. The sectors responsible for biodiversity loss must be given a fair share in the planning and implementation process. We have to figure out how the industries can be a part of this process. Financial reporting has to be more explicit - the funding flows have to be made transparent. There must be a Mechanism to have users contribute to the implementation of the target. Have the users of Natural Resources (Agriculture, Industry) assist in developing the target, so that they have a part in achieving the target. Some sectors are actually showing that they would like to surpass existing targets.
- The Users of the Natural Resources (Agriculture, Tourism etc) have to be involved and they have to be motivated to participate in the process. The work programmes and budgets of these sectors have to be shared. This may be part of the Sustainable financing which is important in maintaining the implementation process.
- Ensure timely and holistic stakeholder engagement throughout the process and at all levels

Technology transfer
- Transfer appropriate technology and provide support with a view towards the long-term
- Science and Technology must be included in the implementation process.

Support IPLC conservation approaches / make use of ILK
- Investment in the Communities (IPLCs) is important to assist conservation of biodiversity. IPLCs are already living in harmony with nature and they don't have the resources to maintain themselves. Hence the need for direct investment into the Communities.
- Mobilize all available knowledge and data including indigenous knowledge to support, enable, inform policy and implementation and track progress
- Legislative framework needed to support the IPLCs in their ability to maintain biodiversity. Many industries are beginning to take responsibility in achieving the goals of Biodiversity.
- Parties should commit to increasing support to respect and preserve and maintain traditional knowledge.
- Provide sustainable capacity development and support (driven by demand)

Legal frameworks / enabling environment
- Enforceable legal frameworks towards effective implementation and enabling environment

Implementation through NBSAPs and NVCs
- Strengthen implementation through national strategies, action plans, regular monitoring and review and national voluntary commitments (NVC)

Environmental safeguards / cost-and-benefit analysis for finance and investments
- Putting in place environmental safeguards / cost-and-benefit analysis as a condition for finance and investments

Reflect urgency of the environmental emergency
- Behaviour needs to Change: The priorities have to be made, the governments have to understand that the house is on fire therefore, transformational change has to take place.

Overarching strategy for enabling conditions / not a specific target
- Enabling conditions should be expressed in the GBF, but probably not as explicit targets. Enabling conditions include high level political will, societal support, good governance and capacity building.

INTEGRATING AGENDAS

Transdisciplinarity
- Transdisciplinarity approaches are helpful here: the co-generation of solutions across different domains, around an agreed set of desired outcomes.

Integration at all stages and scales – adaptable and interconnected
- Integration is necessary in all stages of the process, not just at the start or post facto: in other words, integration of goals, measurements, actions and outcomes.
- Agendas also need to be integrated across scales: global to regional to national to subnational to local, and back up again. Spatial and economic planning tools are key to achieving this.
- An iterative and adaptive management approach is essential and feasible. Start with integrating the obvious things. This will reveal what works, and what does not. It will also surface further things that need integration.
- Acknowledge that almost all of the pressing issues in the contemporary world are interconnected in non-trivial ways. As a result, none of them can be solved by addressing them purely individually. There needs to be attention to the interconnections and their systemic consequences, including opportunities. This is what we understand by integration.
- The way to solve such a tangled problem is not to have everyone working on all parts, all at the same time. The problem needs to be disaggregated and responsibilities assigned, but in an intelligent way which preserves to key interconnections, or deliberately reconstructs them when the system as a whole is re-assembled.
- The arguments for integration are the capacity to explicitly deal with trade-offs and exploit synergies, but also the efficiencies of dealing with each issue once and correctly, rather than piecemeal and in a flawed way. These benefits overwhelm the disbenefits of a more complex process. This is necessary complexity, because the problems themselves require it.

Visions and goals
- The first step is to align and integrate the vision and goals of the key conventions, starting with the three big ones: CBD, UNFCCC and UNCCD. Then their action plans and measurement systems need to be coordinated, an a case by case basis.
- Developing a shared narrative is the crucial point of departure: a high-level vision which unites and converges, rather than divides and polarises. Humans are uniquely good at this, and the process needs to build on this aptitude.
- Land quality neutrality (a bit broader than the notion of Land degradation neutrality, we also talked of land use neutrality) would be a good integration principle. It is a minimum goal, which does not exclude quality improvements where those are required, and allows for balanced trades, for instance between jurisdictions.

Recognising knowledge
- Recognising the special role of groups who have custodial rights, stewardship responsibilities, and long-accumulated specific knowledge, such as indigenous peoples is an important step.

Suggested structures
- Broad structure with 3 components:1) central component is Vision 2050 and Mission 2030 and global strategic/aspirational goals reflecting desired status of biodiversity clearly expressed, 2030 SMART goals for instance to reflect desired reduction in pressures/desired conservation level, targets to underpin transformative change through addressing direct and indirect drivers. 2) accountability framework (review, monitoring, reporting, assessment utilizing indicators). 3) enabling conditions (resource mobilization, capacity building, knowledge management, technology transfer, communication, legal instrument, etc.).
- The structure of the post 2020 framework will start from 2050 vision and is worked backwards from there with milestones to be achieved by 2040 and 2030. By 2030 stop the net loss of biodiversity and Ecosystem services and by 2050 restore biodiversity and ecosystem services. The post 2020 framework will be based on 4 Pillars. 1. Mission, vision, Targets, 2. Implementation and Drivers, 3. Enabling Tools/elements, 4. Action Agenda, Non-state Actors, mainstreaming. Each Pillar will have Targets which can be organized/prioritized based on country specific conditions. Subset of these targets will be selected for communication as prioritized by country. Example of Targets: 1. Reduce Pesticide Use
- Structure the post2020 framework as the SDGs with just a heading followed by sub-targets and then indicators! The Scope of the framework should include enabling conditions (implementation mechanism, reviews, etc), as these other pillars (than the targets) are often forgotten.

Better communication
- Targets and goals are one aspect, but this is about the whole scope. Structure makes the framework easy to communicate. Illustrate structure as a temple with pillars – one pillar is the target, another might be mechanisms for implementation, a third might be Review mechanism, another synergies with other MEAs etc.
- The framework should be based on the 3 goals of the Conventions and based on sound science. We do not need to have an apex goal. The Communicators will pick whatever they want to communicate about: This is by experience from how the IPBES global report got presented in media, and also how the Paris agreement is presented with the 1.5 goal – even if there are 2 other goals alongside.

Enforcement and regulation
- ACTIVITY: Stronger and more urgent Regulation to introduce a resource efficient and circular economy for commodities and materials
- ACTIVITY: Better enforcement of existing legislation on circular economy measures
- Ensure appropriate regulatory mechanisms related to impacts on biodiversity, to improve quality of production at different levels, to inform consumers of the potential impacts to biodiversity.
- Investments contributing to the decline of nature are re-directed towards sustainable management of nature.

Footprint
- Reducing footprint of materials used in the production (carbon, water, energy footprint)
- ACTIVITY: Conduct ecological footprint analysis on key commodities to inform consumers (and procurers).
- OUTCOME: A fundamental change in human psychology/behavior towards patterns of consumption based on buying [less] and higher quality, low ecological footprint goods and services
- TARGET: By 2030, ecological/nature footprint of goods and services per capita and per GDP reduced by 50% (and by 90% by 2050)
- Encourage sustainable consumption of products to avoid over-consumption of that help to reduce over-exploited materials from nature.
- The supply chains linking producers and consumers of natural resources are equitable and maintain the natural resource base within safe ecological limits.
- Supply chains linking producers and consumers of the components of biodiversity are traceable, sustainable and equitable and can certify/indicate the final products are from sources without detriment to biodiversity
- Reduce chemicals-illegal production

- Reduce chemicals and hazard materials used in the production to reduce pollution.
- Avoid illegal production (counterfeit products that don't take biodiversity concerns) by means of providing certification of products.

Traceability
- Ensure transparency and traceability of materials that goes to consumers, how to make smart/sustainable choices that don't harm biodiversity/nature/environment.
- ACTIVITY: Use Blockchain and similar technologies to improve traceability of commodities and highlight unsustainable trade

Suggsted targets
- TARGET: Built in obsolescence for products entirely phased out by 2025
- By 2030, production and consumption of natural resources to be sustainable and equitable
- By 2030, sustainability, traceability and equity are integrated into supply chains between producers and consumers of products made from the components of biodiversity which are maintained within safe ecological limits
- Human use is in balance with needs of biodiversity so that species and habitats are preserved and in a good conservation status, and humanity's ecological footprint is within the carrying capacity, globally and in every country. Additional targets are needed on trade and other issues.
- TARGET: Additional targets need on. trade (especially international), public procurement, finance, waste and losses, awareness raising. Link to SDG 12. Indicator list need to be revisited. Reference to CBD Vision 2050 (very much aligned).

incentives
- Improving production efficiency to avoid/reduce waste by providing incentives, such as scientific and technological innovations, enabling policies and financial mechanisms to result in reduced impacts on nature.

Awareness
- Responsible authority for biodiversity should ensure that producers of food are informed about the responsible use of biodiversity and identify who will inform them. Raise awareness and ensure that there are mechanisms in place to transfer knowledge to producers taking into consideration the 2030 Agenda.

CONCRETE TARGET "MAINSTREAMING"

Communication, mindset, education, awareness
- Capacity building, communication focus on the consumer, general public-education, information-knowledge, data management, transparency
- CEPA targets
- Simple language and message. There has to be shared language, a shared language between different collectives.
- Make trans-sectoral dialogue a prerequisite to decision making
- How do we speak to the production sector, how can we find common ground? How do we engage with them? How can we put a monetary value to complex systems as ecosystem and ecosystem services?
- The IPBES report was very clear: we need Transformation. Then, do we want to mainstream new ideas into the new system? do we want to co-opt to the existing regime? Or do we want to address vested interests in biodiversity that are in cahoots with government?
- People around the world really need to understand what biodiversity is. Encouraging the sector, all the different levels, a top down approach, getting information bottom in order to mainstream.
- ES and natures contribution to people need to be actively translated in sectors. Use the term "ecosystem services" where it works in policy, if not, then we need to frame the concept. We need to be able see the world from the perspectives of many different people with different worldviews in order to show the importance of ES. Also if it means that we need to frame the concept different, then mainstreaming really works
- Certain knowledge is not translatable. Tailor our message to different contexts
- How to be agnostic about growth?
- In economics we need to have proper valuation process, but we also need to take degrowth messages seriously for mainstreaming

Draft targets
- Net gain of habitat (extent and quality) targets
- By year X all Parties should have identified and start the cooperation, integration with relevant stakeholders responsible for mainstreaming biodiversity in each relevant sector.
- By X+1 year Parties should develop an action plan for each sector as well a joint plan. The plan have to include- explores, manage, and resolve conflict of interests- monitoring and evaluation
- How to ensure mainstreaming of biodiversity? Mainstreaming should be ensured in two broad levels: - International level - National level
Topics/issues, tools and means for mainstreaming:- Policy level decision is needed- Mechanisms/strategies- Coordination- Assessment- Biodiversity valuation - as natural capital   - % Protected area   - % forest area   - $ value of ecotourism   - $ value of fishery   - social/cultural value of biodiversity   - health/recreational value of biodiversity   - $ value of water resources   - $ value of land - $ value of agriculture- capacity building- Stakeholders Engagement   Academia   private sector   government   civil society/people   international organizations
- Voluntary contributions by supply chain
- Mainstreaming Target 1: Biodiversity is mainstreamed by 50 % of the member countries by 2025Target 2: Biodiversity Valuation is carried out in 50 % of the member countries by 2030Target 3: Biodiversity targets mainstreamed by 40 % of private sector companies by 2025
- Has to be a package
- Definition of baselines for mainstreaming
- Internalizing cost, taking into account the targets to the SDGs
- Develop sectoral biodiversity strategy and action plans
- To 2030 national public policies are implemented to guide all sectors.
- To 2030 awareness all sectors about the importance and connection with biodiversity
- to 2030 promote public and effective participation to biodiversity governance
- To 2030 the National Public politics are implemented in the National development plan to guide all the sectors and consumers, in order to reduce the xx% of negative impacts and drivers, on biodiversity, ecosystems services, and climate change.

Incentives
- creation of positive incentives
- tax incentives
- increase efforts to remove harmful subsidies and strengthen positive incentives

Participation, stakeholder engagement
- establish effective and efficient knowledge management and communication system to ensure public participation, policy makers engagement....
- policies to be consulted with all relevant stakeholders
- stress the positive narrative of biodiversity in dialogue with other sectors
- use the financial sector as leverage
- necessity of constant engagement according to sectoral needs
- include productive as well as social sectors in mainstreaming strategy

Governance, policy and legal frameworks
- Strengthening institutional, policy & legal framework through NBSAP
- High-level political commitment
- Demonstrate clear CBD targets in SDG
- CBD Agenda item under WEF & UNGA
- The plan should have 3 strata-ministerial-joint among ministerial-regional plan, for instance, East African joint planning
- We can mainstream new address, institutionalize new ideas

Monitoring, reporting, compliance
- UPR as a mechanism under CBD

Implementation
- securing financial resources (every party country should stablish natural capital account, generate more fund for capacity building)
- has to be considered horizontally & vertically
- assess obstacles to mainstreaming

- provide examples and guidance for relevant sectors on how to integrate biodiversity
- Being able to translate the biodiversity footprint trough different types of technology, not only in words but also by video screens. Also through anthropology and through art. Not only in government policy, but also actually on the ground. We need to have a good balance of mainstreaming, but also what works in which contexts?

CONCRETE TARGET "SUSTAINABLE USE"

Management
- Sustainable use at ecosystem, species and genetic level
- By 2030 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring the ongoing provision of ecosystem services and the conservation of biodiversity

Participation
- Differentiate different types of users
- Inclusion of indigenous and local knowledge, innovation and practices of IPLCs in sustainable use
- Women's participation and contribution to sustainable use

Monitoring, reporting, compliance
- Sustainable use at what level (ecosystem, species and genetic level). Thresholds of sustainable use, limits of acceptable use and change. Indicators to measure the level. Baseline for measuring trends. Monitoring and evaluation Set of indicators that links with sustainable consumption and production, and mainstreaming
- Indicators to measure the level
- Baseline for measuring trends
- Monitoring and evaluation
- Set of indicators that links with sustainable consumption and production, and mainstreaming
- implementation of accountability measures on sustainable use for different types of uses and users
- Track and trace systems are a key tool to implement sustainability across value chains, particularly those that involve disjunctions between consumption, production and waste disposal.
- The ideas of Natural Capital accounting and its integration into General Systems of Accounts ('Green GDP') can be a key tool for measuring progress and guiding decisions around sustainable use.

Draft targets
- Number of species/ecosystems that are being overexploited is reduced by x%
- X-amount of species/ecosystems are managed sustainably
- Benefits from x% of species/ecosystems are being sustainably provided (nature's contributions to people)
- X% of wild species are used sustainably
- X% of ecosystems are used sustainably
- X% of trade in biological resources is based on sustainable use
- Sustainable agriculture, aquaculture and forestry, with sub-targets
- Sustainable wild harvesting target (terrestrial and marine species) with sub targets
- All direct exploitation of wild species is at sustainable levels and without impacts on non-target species
- By 2030 all wild harvested species are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overexploitation is avoided, and the impacts of harvesting is within safe ecological limits.
- By 2030, the components of biological diversity are used in a way and at a rate that does not lead to the long-term decline of biological diversity
- Thresholds of sustainable use, limits of acceptable use and change
- Pragmatically, we can make progress by initially tackling this around key sectors and species where we know that unsustainable use is a problem, and metrics of sustainable use are broadly agreed: fisheries, forests, rangelands, endangered but desirable species (tuna, ivory...) based products are examples.

Implementation
- Measures put in place (incentives, legislations, funding) for sustainable use

- Implementation of sustainable use is generally conceptually well understood. Some research is needed around specific implementation and metrics. The availability of data and knowledge is patchy, and there is a need for capacity building and consistent implementation.
- Internalising externalities into the price of goods is also a key tool to help implement sustainable use.
- Robust and transparent governance and regulation is also a prerequisite for sustainable use, in addition to market-based mechanisms.

CONCRETE TARGET "FOOD AND AGRICULTURE"

Production, consumption and impacts on biodiversity
- Produce food to take pressure from biodiversity. Make sure that ag-diversity to produce enough food so you take the pressure away from the diversity. A lot of this diversity is outside the production system. Philippines: Biodiversity friendly agriculture. Starting with food production in the protected areas. Different systems for agricultural production around the world. Respect and start from the situation in which the land is. In Europe where a high percentage of the land is agriculture, the biodiversity is interlinked to ag. semi-cultivated biodiversity. Impact on the non-ag areas from the agricultural land, like sediments.
- The food system must be reviewed from a biodiversity-perspective. Diversity in the agricultural systems. Pesticides - and spill off into the non-ag areas. Agriculture production based on biodiversity and ecosystem services.
- Reduce the impact from agricultural production.
- Pesticides - and spill off into the non-ag areas. Agriculture production based on biodiversity and ecosystem services.
- Increase production in a sustainable manner. Reduce the impact from ag. production. Focus ag. on ecosystem-based approach. We have new tools. We are not in the situation for returning to traditional farming. We need to use the innovative and new tools. Precision agriculture: measure the needs so you do not use more resources then you need.
- There are red lines in biodiversity - in a situation of degradation you will not be able to produce. The level of where the red line is needs to be built into the assessment/ the indicators. Degradation of or erode soil is one indicator. Mono-culture is a challenge for biodiversity. Larger crop rotation - could be a measure. How can the mono culture be countered? Promoting more diversified systems, including the fruit trees.
- Find a manner where the consumer wants to pay a higher price. Niche products. A need to reduce the food-capitalists and shorten the distances between the producer and consumer. Reduce the spill. Increase the production of locally produced food. How to introduce incentives for farmers who are closer to the biodiversity-friendly production. Looking at production systems that are maintaining the culture landscape. Preserve the landscape and develop it further. Competition for the most flower-rich grassland.

Ecosystem services, ecosystem approach, assessments
- Vision: There are linkages between the 5 themes (Q 6-10). (ag. = agriculture) Change the interactions: Biodiversity is in the core/center of food and agriculture. Food and agriculture is far from at the center-piece now. Soil, fertilizer, pollinators, water, space, and genetic diversity.
- The services from nature must be used as in production. Need for feeding everyone and create income so people to stay in production so we maintain employment so we maintain production. RE-engage in using the scrub-lands (ag. land that has been abandoned from production.) Increase production in a sustainable manner.
- Focus ag. on ecosystem-based approach.
- Change the interactions: Biodiversity is in the core/center of food and agriculture. Food and agriculture is far from at the center-piece now. Soil, fertilizer, pollinators, water, space, and genetic diversity. Produce food to take pressure from biodiversity. Make sure that ag-diversity to produce enough food so you take the pressure away from the diversity. A lot of this diversity is outside the production system.
- The services from nature must be used as in production. Need for feeding everyone and create income so people to stay in production so we maintain employment so we maintain production. Increase the self-subsistence for all countries. RE-engage in using the scrub-lands (ag. land that has been abandoned from production.)

Practices and technologies
- We have new tools. We are not in the situation for returning to traditional farming. We need to use the innovative and new tools.
- Precision agriculture, so you measure the needs so you do not use more resources then you need.
- Philippines: Biodiversity friendly agriculture. Starting with food production in the protected areas. Different systems for agricultural production around the world. Respect and start from the situation in which the land is.

Livestock
- Food animals - local breeds at risk, the old breeds could be better for the semi-agriculture lands.

Livelihoods
- Increase the self-subsistence for all countries.

Draft targets, outcomes, activities
- Can we create a vision for how the plus 2020? Vision: There are linkages between the 5 themes (Q 6-10). (agriculture)
- Food and Agriculture targets should address direct and indirect driver of biodiversity loss in the entire food system. the target needs to address separately biodiversity within the food and Agricultural sector and outside (in the wild). Aichi Targets 3, 7, 13 need to be quantified within the time frame 10, 20 and 30 years.
- OUTCOME: A sustainable [nature-positive] agriculture and food system by 2050
- ACTIVITY: Carry out national agricultural ecosystem assessments to inform better decision making
- Target, by year x 50% of our food comes from a greater number of crops (a diversification target),
- Target: By 2030 x% of land is used for sustainable agriculture
- TARGET: All perverse subsidies driving degradation of natural capital ended and replaced by nature-positive subsidies by 2025
- Target: Redraft Target 13 of existing Aichi Targets to emphasise increase in genetic resources rather than maintaining them
- ACTIVITY: Raise awareness through media of the harm being done to nature by unsustainable subsidies
- OUTCOME: Agriculture and food systems are diversified in terms of varieties grown/raised in biodiverse agricultural ecosystems
- Target: target for restoration of degraded agricultural land to enhance sustainable food production We like Aichi Targets 7 and 8 but would like to make them measurable - sustainably managing agricultural land perhaps even a target like: **foodprint** (not footprint!) of traded food commodities should be reduce by x%
- ACTIVITY: Bring in legislation to improve the security of tenure for smallholder farmers
- ACTIVITY: Assess the negative externalities of agricultural production and their impact on ecosystem services and use this information to drive more sustainable [nature-positive] practices which safeguard, soils, water and biodiversity within and around agricultural ecosystems
- ACTIVITY: Work in collaboration with FAO's biodiversity mainstreaming platform
- Target 13 - International Treaty Plant Genetic Resources for Food and Agriculture FA would like the CBD to adopt and prioritise plants genetic conservation targets in the new framework

Incentives
- Means to redirect subsidizes. Include the external costs. This will increase the food price. This will require a re-distribution of income. Subsidize consumption rather than production. A good nutrition is good for health.

Monitoring, reporting, compliance
- FAO biodiversity is one of 11 elements or indicators. Just one element of the sustainability.
- There are red lines in biodiversity - in a situation of degradation you will not be able to production. The level of where the red line is needs to be built into the assessment/ the indicators. Degradation of or erode soil is one indicator. Monoculture is a challenge for biodiversity. Larger crop rotation - could be a measure. How can the monoculture culture be countered? Promoting more diversified systems. Including the fruit-trees.
- FAO biodiversity is one of 11 elements or indicators. Just one element of the sustainability. A potential to improve in every agricultural system Review the support measures, so they are linked to improving the eco-system services.

CONCRETE TARGET "PROTECTED AREAS"

Promote effective (community-led) management, adequate and sustainable funding and community rights (also to sustainable use)

- Increasing protected areas. Invest in proper/effective management of protected areas
- Protected areas systems demonstrate management effectiveness as measured through management competency indicators
- Protected area management respects rights of local communities (including IPLCs) to ensure buy-in, reduce poaching, increase effectiveness through buffer zones
- Protected area management emphasizes stakeholder engagement of all stakeholders
- Protected areas governance includes the concept of sustainable use.
- Strengthen the communication and connections between the policy/decision makers and the communities and managers.
- Bottom up approach.
- Invest more resources for effective management and governance
- Developing sustainable financing mechanisms in order to provide more incentives and subsidies to local communities to take more initiative in managing protected areas.
- Use traditional knowledge to inform management systems and mechanisms.
- Change the way of thinking (i.e. exercising authority)
- Increasing the values of the protected areas (ecosystem services - providing people's needs)
- Empower local communities and engage them on managing the protected areas.
- Full recognition of locally managed area.
- Allow the communities the rights to access the resources as they need it.
- That gives them more reason to conserve the resources.
- Provide templates and guidelines on establishing protected areas, developing management plans and supporting management mechanisms and capacity building
- Increasing protected areas Invest in proper/effective management of protected areas
- Financing for Protected Areas should be sustainable.
- Benefits from Protected Areas are equitably shared.
- Integrate ILCs in PA Management
- Third objective of CBD is fair and equitable sharing of benefits (ABS) (fishing, bee-keeping, food, tourism) and communities thus will improve their livelihoods. This is essential.
- Effectiveness of PA
- Inclusion & co-management
- Formulate target that can enhance PA management
- Emphasis on participatory management in protected areas, because the areas are a direct participant. So they favour management in the PAs and for sustainability.
- Improve management and ensure there is connectivity.
- PAs should be generating economic benefits (non-forest timber products) to incentivize communities to maintain protection
- Communities must be taken on board before a PA is corrected
- Don't find reporting to be difficult on the percentage coverage, but there are definitely challenges in reporting on quality of management in PAs.
- There are solutions to keeping communities happy for example allowing grazing by using rotational grazing practices so land is not degraded.
- Post-2020 must address lack of funding for implementation of the PAs, and NGO funding is not always consistent. Sometimes the same PA has to be covered by different funding projects when one completes/runs out.
- Because implementation is so important and often seen as missing from Aichi 11, we need to build capacity building and information exchange into post-2020 on management/implementation of PAs.

PA Networks halt over-exploitation, ensuring representativeness, ecosystem functioning and increased ecosystem services

- By 2030, protected areas networks are sufficient to ensure ecosystem functioning and resilience
- Protected area networks are extensive and connected enough to ensure viability of species populations including migratory and transboundary populations

- Protected areas are representative of ecosystem types
- Enhanced collaboration among countries (example: transboundary fisheries) Improving the regional systems of protected areas. Declaring protected areas in different jurisdictions within the regions. Addressing BBNJ issues.
- Stop overexploitation of resources.
- Addressing BBNJ issues.
- Supporting the development of OECMs in different sectors.
- Connectivity of PA
- Representativeness of PA
- Concerns expressed around changing boundaries of PAs without appropriate consultation.

Enable governments to "dare" to protect the right areas and commit to these long-term and be accountable

- Strong political wills to declare protected areas, despite foreseen political circumstances/implications.
- Strengthen the communication and connections between the policy/decision makers and the communities and managers.
- Improving the regional systems of protected areas.
- Protected areas should be top priorities in countries.
- Decisions made regarding which areas are made into Protected Areas are based on science and knowledge, not convenience, and should be representative of all ecosystems
- Governments should hear from the communities.
- Recognizing the importance of sacred protected areas
- Protected Areas legislative frameworks are resilient in the face of instability, so PAs cannot be abolished every time the government changes.
- Protected Areas should include restoration sites.
- Accountability involves both what Parties should be accountable for and how this should be reported and reviewed

Regional approach to PA Networks

- Protected areas must have connectivity across the landscape
- Enhanced collaboration among countries (example: transboundary fisheries)
- Declaring protected areas in different jurisdictions within the regions.
- Promote networks at local, national, regional levels - learn from each other (what works, what doesn't)

Develop guidelines of fisheries and other sectors to become OECMs

- Develop guidelines of fisheries and other sectors to become OECMs.
- Formulate OECM as one of the targets

Show value of PA for SDG achievement

- Protected areas governance is integrated with research and academic agendas, not limited to strict conservation paradigms, as research value is among PAs' most important values.
- Protected areas should be linked to the SDGs.
- Valuing PA

Draft Target (elements)

- By 203Xx, at least 17 XX per cent of terrestrial and inland water areas and 10 XX 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 that are, effectively and equitably managed, ecologically representative and well-connected and integrated into the wider landscape and seascape.-Need to disaggregate ? Need to clarify that target is only met if all elements/qualifiers are met
  - Revision of CBD's management effectiveness tool?
  - Narrative would be helpful
  - IUCN Green List Standard as Indicator?
- 30% terrestrial, 30% marine by 2030 or 2035
- There is support for a great percentage coverage, but it should vary on what is the national capacity (national context).
- Some participants have already achieved 30% and are some calling for 25-30% to be protected by different deadlines at national level.

- 30% of terrestrial and marine area is protected by 2030, being effectively managed, inter-connected and including protection of key biodiversity areas and carbon sinks. Participatory planning and management must be applied. The 30% should include IUCN categories 1-6 and other area based effective conservation measures.
- By 2030, the value of all sites of significance for biodiversity, including key biodiversity areas, is documented, retained, and restored through protected areas and other effective area-based conservation measures [covering at least X% of terrestrial and inland water environments and X% of marine environments] Important to start the new target with the biodiversity outcome we want PAs and OECMs to achieve, NOT another %Effectiveness, equitable management, connectivity, adequate resourcing etc are all implicitly required for PAs but do not need to be specified given the wording. Important that such a target is complemented with ones addressing ecosystem services, habitat loss, and species conservation. Scaling up resourcing for PAs is critical. Need monitoring of the biodiversity features in sites of significance in order to track progress & assess the % of sites in Favourable Conservation Status. If we have a %, then one-third of land/marine area (33%) may be appropriate

CONCRETE TARGET "MARINE"

- Society/ people depend on land and sea for health, food, livelihoods. Marine issues should not be an add on, or marginalised. There should be both
  - a stand-alone marine component in the post 2020 framework to ensure visibility
  - all components/ targets of the post 2020 framework should have a marine dimension to them (e.g. in food/agriculture; protected areas etc)
- The table discussed the benefit of creating an enabling space for addressing complex and fragmented realities ocean governance. A multi-level platform or unified space that would connect/link national, regional (e.g. regional seas) and global levels. It could also help to address the disconnect that exists between the implementation, review/ reporting mechanisms applied by the different processes and frameworks and build synergies (e.g. in the CBD, countries adopt NBSAPS; however NBSAPS are not used within the regional seas structures and yet many countries would like to use Regional Seas as a platform to help with their implementation).
- It was recognised that there will need to be further development of marine related indicators that will be useful for multiple stakeholders. This development work should not start from scratch but make use of what already exists. Several regional seas conventions (e.g. HELCOM and OSPAR) have existing indicators and have recently been through long scientifically based processes to develop marine indicators that could be a useful starting point.
- Also to note that there are many good examples of indicators, tools, experiences from the marine environment that could be useful to take into other targets under the post-2020 framework.