

# K4D International Nature Learning Journey Summary

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## Introduction

The International Nature Learning Journey was developed to support FCDO and other government departments' understanding, capacity and influence related to nature, particularly in the run-up to COP-26. A series of on-line seminars took place between May and August 2021 which involved an expert speaker on each topic, followed by a case study to provide practical illustrations, and a facilitated Q&A with participants. Each session was chaired by an expert facilitator. Participants included advisors from across several government departments, including FCDO, Defra, BEIS and Treasury, with approximately 150 participants joining each session.

The objectives of the learning journey were:

- 1) Participants to be sufficiently knowledgeable about international nature policy areas to be able to lobby for the UK's international nature engagement objectives in-country to enable the UK to deliver its cross-HMG International Nature Strategy and land key deliverables ahead of COP26.
- 2) Understanding the role of NbS and how to communicate the co-benefits for people, climate and nature and demonstrate their contribution to other objectives, for example, the green recovery to COVID-19; synergies with other policy outcomes, background provided by IPBES and IPCC;
- 3) Overcoming the barriers to scaling up NbS: the evidence base and tackling issues around design, implementation and the enabling environment; and identifying relevant opportunities to promote NbS in line with UK objectives.

## Session 1 – Our relationship with Nature

Chair: Chris Buss, Director of Forest Conservation Programme, International Union for Conservation of Nature (IUCN). 26<sup>th</sup> May 2021

The launch session introduced the interrelationship/integration between biodiversity, ecosystems, ecosystem services, human activity, and climate change. It highlighted how human activity is driving ecosystem degradation and biodiversity loss in combination with climate change, as well as the relationship between biodiversity and climate change and how the dynamics of each are mutually reinforcing.

### Lord Goldsmith, Minister for Pacific and the Environment, FCDO

- The UK is doing important work to provide leadership across the world in the fight to preserve our natural world. The overall statistics are bleak, and we are rapidly depleting life in our oceans and around a million animals face extinction.
- The world is waking up to the importance of tackling climate change. The UK is hosting the G7 this year and we are trying to make real advances with alignment to the Paris Agreement. But the same cannot be said for nature. Poverty and climate change have taken precedence in global matters over the concern for nature, but these issues are intertwined. There is no pathway to net zero without nature, but it is currently taking second place to climate change. The UK has put nature at the heart of our approach to climate change and poverty.
- The UK is providing leadership domestically. We've put in place a 25-year environment plan to put nature on course to recovery. We're the first country to legislate for net zero. We're phasing out fossil fuel subsidies; legislating for biodiversity net gain in all new developments; and legislating to clean up our supply chain.

- We are also providing leadership internationally. The UK has doubled its climate finance to £11.6 billion with nearly a third committed to nature. Nature restoration will help create jobs and protect and restore landscapes and the marine environment. We're building coalitions of countries committed to transforming land use subsidies. We are running an alliance protecting 30% of the world's ocean and land by 2030.

Professor Nathalie Seddon, Professor of Biodiversity, University of Oxford and Founding Director of the Nature-based Solutions Initiative

- The state of nature is showing that biodiversity is in free fall. 40% of primary productivity has been modified. We have seen an 82% decline in mammals and an 80% decline in wild fish since the rise of human civilisation. Biodiversity and the health of our systems are in free fall and the world's emissions are still on the rise. The world is 1% warmer on average than in pre-industrial times and this is set to increase even further.
- Poverty and inequality around the world are increasing. The risks to the global economy, climate action failure, the water crisis and the loss of biodiversity are serious issues that need to be addressed urgently. Biodiversity loss and climate change share some similar drivers and solutions.
- Nature-based Solutions (NbS) can reduce emissions arising from our use of lands and oceans. Estimating the global potential for NbS for mitigation is very challenging. We can only restore forest ecosystems in areas ecologically appropriate for forests. There are three pathways by which NbS can support human adaptation to climate change: by reducing exposure, reducing sensitivity and building adaptive capacity. NbS for coastal defence projects are 2-5 times more cost effective compared to engineered structures.
- A focus on afforestation as climate solution can be problematic because it distracts from the need to keep fossil fuels in the ground. There has been a focus on planting rather than stewardship. NbS includes restoring soil health, bringing nature into our towns and cities, getting local people involved.

Dr Ina Porras, Economics, Climate and Environment Adviser, FCDO – Costa Rica case study

- Costa Rica is one of the drivers of forest restoration. The 1940s saw a growth in development as people fled from the war in Europe. In the 1980s Costa Rica faced several issues such as the Central American War, Economic War, the petrol and sugar crises and massive hyperinflation. The abolition of the army freed up more money for health and education systems.
- The Rio Convention brought huge hopes for the country, although not all hopes were met, and some farmers began to abandon land as its upkeep became too expensive. Payments for Environmental Services (PES) in Costa Rica gave cash incentives to landowners in exchange for positive environmental maintenance.
- Nature laws and policies have led to much positive change in Costa Rica in the last few decades. However, its implementation can't be taken for granted as with each new election these policies and laws need to be fought for to ensure their continuation.

Wider discussion focused on how to take NbS to scale, including top-down approaches to scaling up in Costa Rica and China and scaling out approaches replicating small and successful initiatives. To be successful, we need to invest in collective arrangements with both traditional and informal institutions, and be careful how these are implemented, to not exacerbate poverty and power imbalances further.

## **Session 2 – The dynamics of deforestation: drivers, nature, interventions and challenges**

Chair: Chris Buss, Director of Forest Conservation Programme, International Union for Conservation of Nature (IUCN). 9<sup>th</sup> June 2021.

This deep dive considered deforestation through three interconnected lenses: the role of forests/deforestation in climate change; global production; and local needs, poverty and development.

Penny Davies, Adviser to the Climate and Land Use Alliance (CLUA)

- Why forests are important? What is driving deforestation and what policies will work in combating deforestation? One third of the world's land is covered by forests which hold 80% of terrestrial diversity. 1 billion people in low and middle income countries depend on forests for their livelihoods. Forests are vital to our global climate, and they help generate rainfall. Deforestation in the tropics can change rainfall in food producing areas thousands of miles away. Forests remove carbon from the atmosphere and are a net carbon sink unlike the sea. Many countries, like Indonesia, are now actively trying to reduce deforestation, but others such as Brazil, are seeing the rate of deforestation increase.
- People's health and wellbeing are also impacted by deforestation and the carbon emissions created from it. Indigenous people have also been the victims of threats, forced evictions and even murder while trying to defend their land against deforestation. It is vital that consuming countries share the responsibility for emissions from deforestation.
- Deforestation has taken place in Ghana and Indonesia to make way for palm oil plantations, to produce the hugely in demand commodity palm oil.
- Despite its growing popularity the term 'Nbs' isn't always a favoured term to be used when thinking of policies to reduce deforestation. It is considered quite a vague term by some and causes some confusion in political circles.
- The best conserved forests are normally in areas where local communities have secure rights to and management over their land. This contributes to the maintenance of their livelihood resources. Where this is the case, the rate of deforestation is 20 times less than in areas that they don't have control over.
- Financial incentives and payments are not enough to stop deforestation and more stringent policies are needed.
- Increasingly, UK consumers want to be assured that the produce they buy has been sourced legally and more companies are expected to prove where their goods come from.
- UK Aid Direct has helped to bring diverse partners from different industries to the table to assist with the urgent task of tackling climate change. For a long time, young people and indigenous people have had their voices silenced. They are now having more of a say in deforestation laws and policies.

Katie McCoy, Team Leader Partnerships for Forests: *Partnerships for Forests case study*

- Partnerships for Forests work with private sector partners to ensure that the private sector can be part of the solution in combating deforestation. Partnerships for Forests also works with financial investors in the private sector. It is important to bring together the private sector with consumers and residents of deforested/potentially deforested areas. Financial support, grants and technological innovations assist with this.
- The Cocoa and Forests Initiative has brought together the governments of Ghana and Côte d'Ivoire to help fight deforestation. There are more than 500 stakeholders that have been brought together with 37 cocoa and chocolate companies. 90% of cocoa in Ghana and Côte d'Ivoire is produced by smallholder farmers.
- Traditional smallholder systems are challenged by unprofessional farming, ageing farms, and limited access to finance and extension services. Between 2013 and 2014, over 2.3 million children were working as child labourers in Ghana and Côte d'Ivoire. Voluntary sustainability standards have been seen to be ineffective. Partnerships for Forests' portfolio has created 22 commodities and has supported 50,350 people in 12 countries.

Discussion included the role of forests in energy markets, how to reduce deforestation at scale, key success factors, and the role of charcoal production and wood pellets in deforestation.

## **Session 3 – Agriculture, ecosystems, and sustainable land use**

Chair: Rachael McDonnell, Deputy Director General – Research for Development at the International Water Management Institute (IWMI). 23<sup>rd</sup> June 2021.

- Agriculture is important for tackling hunger and nutrition and is an essential pillar of development. But we know that the current food production system in many countries can have a devastating toll on the environment, land ecosystems, water systems, and air quality.
- Advances in agronomy ensure that we can have greater production and a greater chance of tackling hunger, but we know that this has come at a cost. There is a strong movement to embrace more NbS within farming systems. This has been a part of the EU's framing for some time and is now coming into the development sphere. We need a systems-based approach in which nature alongside poverty prevention and nutritional needs are balanced.

Ed Davey, International Engagement Director of the Food and Land Use Coalition: *How to feed the world and save the planet*

Three key messages:

- The agriculture sector needs to go negative by 2050 if we're to reach the 1.5 degrees Paris Agreement goal – not just net zero.
- There is a major economic prize in the transition from today's system to an arguably better system for climate, people, livelihoods, biodiversity, and nutrition. The global food system has an economic value of 10 trillion dollars per year, and creates externalities in the region of 12 trillion dollars per year. There's a delta between the value of the system and its global negative impact.
- Any such transition must be just and fair, so that it works for the people who produce the food we consume.

Susan Chomba, Director of Vital Landscapes, WRI Africa: *Transforming Agriculture from a net GHG emitter to a net sink - an example from Africa*

- Agriculture, forestry and land use contribute to 24% of greenhouse gas emissions globally. Across different continents the figures are: Asia 44%, Latin America and the Caribbean 17%, Africa 15%, Europe 11%, North America 9% and Oceania 4%. The level from Africa is alarming because despite absolute emissions from the continent being relatively small, the agriculture system is highly inefficient, with many people suffering from hunger and food insecurity.
- We need to ask – NbS for what? What are we trying to solve? The climate crisis, biodiversity crisis, food insecurity crisis – or all of them?
- In Niger there is a triple crisis of low income, vulnerability to climate risks, and insecurity from armed militias in the Sahel. However, it is a beacon of successful, sustainable and locally driven landscape restoration. Over five million hectares have been successfully restored in the Maradi and Zinder regions.
- When working with smallholder farmers, we need to focus on livelihoods and income generating activities as well as land health, otherwise deforestation will continue to happen.
- NbS must be context specific. NbS for landscape restoration can have multiple outcomes for biodiversity, climate change and livelihoods. NbS will be scaled up in landscapes that are constantly shaped by millions of smallholder farmers. Farmers are key stakeholders, but each community is not one homogeneous group.

Discussion focused on the constraints of achieving the triple win of climate, nature and income, and how best to overcome these. The role of urban farming in NbS, challenges of scale, and the role of agricultural innovation in carbon capture were also explored.

## **Session 4 – Oceans and Marine ecosystems: challenges, drivers and solutions**

Chair: Jim Woodhill, K4D Director and IDS Honorary Associate, 7<sup>th</sup> July 2021.

Healthy oceans, marine and coastal ecosystems provide a number of ecosystem services including climate change mitigation, and play a key role in livelihoods and economic activities. Biodiversity loss, degradation and climate change are key threats for these ecosystems. Sustainable use of marine and coastal ecosystems is a key priority for the Convention on Biological Diversity's post 2020 Biodiversity Framework. Conservation, protection and restoration interventions can deliver benefits for people, nature and climate change mitigation and adaptation.

Dr Essam Yassin Mohammed, Global Lead for Climate and Sustainability, WorldFish Centre

- WorldFish's mission is for an inclusive world of healthy and well-nourished people and a sustainable blue planet, now and in the future. Over 3 billion people in the world rely on fish as a major source of animal protein. Aquatic food also creates millions of employment opportunities, particularly for small scale food producers, half of whom are women.
- There are multiple impacts of climate change on aquatic food systems due to temperature and sea level rises. By 2100 all countries will face 'higher' or 'very high' hazard scores for marine and freshwater fisheries and freshwater aquaculture. This will significantly affect lower income countries.
- Sardines are highly affordable, small and nutritious fish which in the past have been accessible to many, but they are disappearing from the waters around many countries, like Senegal, due to migration to cooler waters. The fishmeal industry is also booming in Senegal, which hoovers up the fish and processes it to powder to be shipped to aquaculture farms in other countries. This is then used to produce more fish which may not necessarily be consumed by low-income groups. This alarming trend illustrates ill-informed short-term gains and poor decision making around how we sustainably use and manage our resources.
- There's growing momentum on marine protected areas and the 30by30 movement will be hugely useful to protect biodiversity. Water bodies across the world are highly inter-connected, and we need to use this to inform decision making.
- NbS involves aligning incentives and investments for sustainable production of aquatic food. The concept is very simple – how do we reward good practice? For example, a fiscal incentive mechanism where producers are incentivised to change their behaviour and discouraged from unsustainable practices. Legal policy must do more to help end illegal fishing. Some legal policy instruments fuel illegal fishing practices within and beyond national jurisdictions, threatening food and nutritional security and biodiversity conservation.
- We need to eliminate food loss and waste. 35% of fish and seafood is lost during the post catch, processing, distribution, and consumption stages.
- Key message: realising a shared blue prosperity for all through aquatic food systems is possible. To do so, we have to focus on systemic constraints; deploy at scale best fit-for-context technical and social innovations; align incentives and investments to nudge good behaviour; tackle inefficiencies by eliminating food loss and waste; and mainstream aquatic food systems in national and global policy instruments.

Steph Bale, Programme Manager & Policy Advisor, International Forests & Landscapes, Defra: *Blue Forests Initiative: community-led mangrove management & restoration*

- Mangroves are coastal intertidal trees that have adapted to live in harsh conditions that most trees couldn't survive in. Given their unique characteristics and location, they are very valuable as productive ecosystems for the triple win for people, nature and climate. Their estimated worth is up to \$800 billion US dollars. They can capture and store huge amounts of CO<sub>2</sub>, between 3 to 5 times more than tropical forests can. Mangroves support around 120 million people worldwide, providing natural coastal protection.
- The Blue Forests Initiative focuses on Madagascar and Indonesia, in communities which rely on mangroves to survive. Mangrove deforestation and degradation in both countries is driven primarily by a lack of land and tenure rights and management techniques. The Blue Forests Initiative addresses these drivers by working with local coastal communities, private sector and national governments to protect and restore mangrove ecosystems, create new sustainable livelihoods, support community health, support women's empowerment and increase climate resilience.
- Mangroves face a number of anthropogenic and natural threats. As much as 50% of mangrove forests have been lost in the last 50 years, and a further 26% are degraded. This comes from the pressures of unregulated harvesting, intensified fishing, demand for building materials and fuel wood, logging, climate change and pollution.
- But by changing the way we interact with nature we can also become a force for good. Restoration and effective local management of mangroves can reduce the rate of deforestation, improve local livelihoods, prevent carbon emissions and aid recovery.



- There are five components to the programme: forestry management, blue carbon, small scale fisheries' management and its improvement, livelihood diversification, and community health and women's empowerment. The programme exemplifies the need for a holistic, integrated approach to mangrove protection and restoration.

Discussion centred around how to achieve scale, incentive structures, scope for climate finance, monitoring and evaluation processes, and future potential for novel foods (such as seaweed) to fill the gap.

## **Session 5 – Increasing financial flows and the role of finance in sustaining nature**

Chair: Peter Taylor, Director of Research, Institute of Development Studies. 21<sup>st</sup> July 2021.

The global financial system enables a number of activities and trends that undermine Nature. However, it can also be put to work to protect, conserve and restore nature. This session considered some of the financial instruments that can increase finance for Nature interventions and NbS. It explored the changes that are needed to redirect capital away from approaches or activities that degrade nature and towards approaches, activities and solutions that sustain nature.

Neha Dutt, Greening Finance Policy lead, Defra: Case study on the Task Force for Nature-related Financial Disclosure (TNFD)

- The TNFD is part of the greening finance strategy. It aims to mainstream nature related risks into the risk architecture of economy actors and financial institutions, so that it can pivot a broader theory of change towards a more nature positive economy.
- The financial repercussions of climate change are clear, because of the impact on enterprise value creation; ability for businesses to remain open; and the overall impact on the stability of the financial system. Climate change is one important part of the puzzle to enable us to hit our climate related targets.
- Nature related risk is currently invisible in financial risk analysis, reporting and company valuations.
- Physical risks posed by nature are similar to those posed by climate change and impact the physical ability of an institution to operate. Nature-related risks aren't just limited to agriculture and pollination. The pandemic has been perpetuated by systematic destruction of ecosystems.
- The goal of the TNFD is to provide a framework for organizations to report and act on evolving nature-related risks, in order to support a shift in global financial flows away from nature-negative outcomes and towards nature-positive outcomes. The TNFD is supported by governments but not driven by them. It aims to generate reporting and disclosure framework to help investors make more informed and aligned capital allocation decisions.
- The TNFD is working very closely with the TCFD (Task Force on Climate-related Financial Disclosures) framework to ensure continued alignment, and will build on the four-pillar approach adopted by the TCFD.

Wider discussion focused on potential revenue streams, politically enabling conditions, how to move beyond disclosure to change, and how take a sector-wide approach.

### **Background reading:**

K4D Helpdesk Report 1006: Nature-based Solutions (NbS) – What are They and What are the Barriers and Enablers to Their Use? Roz Price, 5 May 2021

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