UK PACT

Nature-positive actions
Lessons from forests

November 2021

Introduction

Nature-positive actions can enable carbon sequestration while promoting sustainable livelihoods

Climate mitigation through nature-positive actions can be an effective strategy to promote biodiversity and reach carbon reduction targets. At the same time, connecting communities with nature can enhance alternative and integrated sustainable livelihoods to prevent deforestation, and foster best land-use practices.

Forest and land-use actions can make a significant contribution to climate mitigation goals, as shown in the IPCC's 2050 scenarios. This is unique in terms of its volume, since its mitigation potential is derived from both an enhancement of greenhouse gases (GHG) sequestration, as well as reduction of emissions through management of land and livestock (IPCC, 2018).

This thematic brief promotes the work of UK Partnering for Accelerated Climate Transitions (UK PACT) sharing knowledge and best practices, with a particular focus on forests.

The promotion of nature, with a focus on forests, is key to supporting UK PACT partner countries to accelerate their clean growth transitions. Work on forests, agroforestry, sustainable livelihoods, and nature-based solutions have been included in various UK PACT project portfolios to date.

There are currently 17 nature-positive projects in UK PACT's portfolio. This is divided between the Country Programmes portfolio which is supporting five livelihoods projects in Colombia, Malaysia, and Mexico; and the Green Recovery Challenge Fund (GRCF) portfolio which is supporting seven projects in Brazil, Kenya, Nigeria, and Peru.

This brief focuses on six selected case studies from Colombia, Kenya, Malaysia, and Mexico. It showcases key aspects of nature-positive projects, with a focus on forests.

It is expected that this thematic brief can inspire further action and commitment from existing and future UK PACT countries and partners. It will encourage readers to consider and incorporate climate mitigation strategies through nature-positive actions ahead of, and beyond, the UN Climate Change Conference COP26.

Image:
© Awake

Emerging issues and challenges

Overcoming barriers for the connection of nature and people

Within the nature theme, it is possible to highlight some emerging issues and challenges found across the implementation of nature-positive actions. These are associated with the urgency to protect planetary boundaries (Stockholm Resilience Centre, 2009) and mitigate harmful impacts of GHGs, while at the same time enabling the social development and well-being of populations globally.

Nature-positive actions and frameworks, such as nature-based solutions, are key to supporting human wellbeing and addressing the dual crises of climate change and biodiversity loss (IPBES, 2021). However, there are still barriers to implementation, including lack of financing mechanisms, governance structures, and limited existing technical capacity. The UK PACT programme has a key role to play in supporting partner countries to overcome these obstacles.

Two types of initiatives across the UK PACT portfolio have especially demonstrated potential to balance environmental and social needs and pressures: agroforestry, and sustainable ecotourism. These can enable the achievement of net-zero targets, prevent

deforestation, and promote best land-use practices, while enhancing sustainable alternative livelihoods.

Among these types of initiatives, it is important to acknowledge and promote agroforestry practices that have a good understanding of local ecosystems, balancing environmental, economic, and social needs by introducing species that are better for biodiversity in the long term.

For tourism, it is key to support local communities in a diversity of industries and initiatives that sustainably utilise the environment, while also protecting it and, where appropriate, promoting regeneration. These opportunities are further presented and discussed through six case studies.

> **An estimated 23% of total anthropogenic greenhouse gas emissions (2007–2016) derive from Agriculture, Forestry and Other Land Use (AFOLU)".**
>
> *- IPCC (2016) Climate Change and Land,*
> *p. 6*

Image:
© Awake

Strategies and recommendations

Opportunities, solutions, and lessons learned from the UK PACT portfolio on forests

This section proposes strategies and recommendations regarding how nature-positive actions can enable integrated sustainable livelihoods and carbon sequestration based on the experiences of existing UK PACT projects.

Based on learning from these projects, we can highlight opportunities and solutions to address emerging issues and challenges connected with commitment and governance, implementation and financing of nature-positive actions, and target setting and monitoring.

This is presented within three key strategies:

1. **Vertical and horizontal integration to enable nature-based solutions.**

2. **Preventing deforestation and promoting best practices through enhancing sustainable alternative livelihoods.**

3. **Scientifically driven decision-making for nature-positive actions and frameworks**

These three key strategies are presented next, connected with key recommendations informed by lessons learned from UK PACT case studies and background research.

1. Vertical and horizontal integration to enable nature-based solutions

Integrated governance fosters a favourable enabling environment for the implementation of nature-based solutions. This consists of multi-level (vertical) integrated approaches between national, regional, and local governance, that are at the same time aligned with international agendas (such as the United Nations Framework Convention on Climate Change, and the Convention on Biological Diversity).

Moreover, it also includes the engagement between distinct sectors (horizontal integration) such as between public sector, private investors, academia, civil society organisations, and indigenous peoples and traditional communities.

Vertical and horizontal integration qualifies the scope of action and facilitates investment to be channelled towards local action. At the same time, it supports implementation that delivers global environmental benefits, integrating biodiversity and climate challenges towards net-zero and nature-positive futures.

Image:
© Alisos

Hutanomics: Developing frameworks to enable private sector investments into nature-based climate solutions

This project is implemented by Rimba, a Malaysian non-profit research group focused on conducting conservation science, in Terengganu (Malaysia). The primary beneficiary is the Terengganu State Government (including the State Economic Planning Unit, State Forestry Department, State Parks Management Council).

In the Malaysian context, state governments have full authority over land use, but there is often a disconnect between state policies and national policies. While Nationally Determined Contributions (NDCs) are developed at the national level, this sometimes does not translate into implementation at the local level.

This project aims to empower the state government to include managing forests for climate benefits as a revenue source, rather than simply for natural resource extraction. The project also aims to support the development of frameworks that meet the current requirements of investors to commit to carbon offset projects in Terengganu. In the long term, project outputs will also support and lay the foundation for Terengganu's participation in the international carbon market via compliance or non-compliance mechanisms.

This case illustrates the importance of multi-level governance articulation, and multi-stakeholder engagement to achieve climate mitigation targets; while also fostering co-benefits from the standing forest such as protection of livelihoods through job creation, and conservation of wildlife.

Image:
© Rimba

Forest in Terengganu

Box 1. **Nature-based solutions**

According to IUCN, Nature-based solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems. These address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

These solutions are underpinned by benefits that flow from healthy ecosystems and target major challenges such as climate change, disaster risk reduction, food and water security and health, and are critical to economic development.

© IUCN

2. Preventing deforestation and promoting best practices through enhancing sustainable alternative livelihoods

The (re)connection between nature and people can prevent deforestation and promote best land-use practices. The case studies analysed have shown the potential that biodiversity has to enhance sustainable alternative livelihoods in communities considering two areas of action - tourism and agroforestry.

Regarding tourism, regaining skills and knowledge of the forest, and promoting environmental awareness and education can be important entry-points for ecotourism initiatives. Strengthening local capacity building can contribute to creating a

market for local and international tourists, and an identity for an area.

Agroforestry initiatives can enable communities to perceive the value of the standing forest and support associated supply-chains to make a sustainable living. Moreover, agroecological practices, such as eating locally and sustainably, can bring benefits for health as well as carbon reduction.

Supporting livelihoods through ecotourism routes for forest and peace

Grupo E3 – Ecología, Economía y Ética (E3), a Colombian advisory firm that supports private and public entities in promoting the principles of ecology, economics and ethics, is leading the implementation of this project in the Quinchas-Boyacá and Perijá-Zapatosa regions in Colombia.

The Serrania de la Quinchas and Perija areas have abundant biodiversity, with high rates of endemism. However, there is a need to reduce deforestation and promote change in extractive land use. In these regions, communities that have lived through conflict and developed a level of resilience are now promoting sustainable alternative livelihoods.

This project has been developed together with communities and explores how to preserve and restore ecosystems, lower associated emissions, strengthen social cohesion, and protect the forest. The aim is to demonstrate the potential of community-based ecotourism in biodiversity hotspots as a means to sustain rural livelihoods, reduce deforestation, and avoid GHG emissions. At the same time this aims to strengthen peacebuilding, recognising the history of conflict in these regions, due to extractive industries (coal and emerald mining, illegal logging) and guerrillas.

One of the project's actions is the implementation of the ecotourism plans co-developed in Phase One, using enhanced capacities and knowledge of the forest, and marketing tools, to pilot the ecotourism routes for forest and peace. Routes are already being tested by tourists, allowing for increased understanding of the value of standing forests, ensuring new markets develop in an equitable manner (e.g. development of lodging facilities and homestays that respect local traditions), and fostering local production (e.g. food to tourists and resident communities, sustainably using local biodiversity).

Box 2. **Integration and promotion of ecosystem services**

Ecosystem Services are **the benefits people derive from ecosystems** and are classified within four categories (Millennium Ecosystem Assessment, 2005):

Regulating services help to control our climate, contribute to crop pest resilience and pollination.

Provisioning services deliver potable water, food, raw materials, and medicine.

Cultural services provide wellbeing and recreation opportunities, and influence traditions and beliefs.

Supporting or Biodiversity services underpin life on earth. They include the cycling of nutrients, photosynthesis, and the formation of fertile soil.

Another key action includes the ongoing strengthening of social cohesion and trust by supporting communities to distribute the costs and benefits of new green tourism economies, and to promote the conservation of these critical forests for the long-term benefit of the communities.

Among the successes achieved by the project thus far, it is important to highlight the progress in strengthening the governance structure within the communities (e.g. collaborative plan delivery); understanding and promoting the value of biodiversity for gastronomy and for creating a market around tourism (e.g. marketing tools); and community capacity building (e.g. training, and field trips with communities).

Key lessons learned include the importance of a foundation of strong social cohesion to create an enabling environment for project implementation; and understanding the value of biodiversity and ecosystem services for aspects beyond sustenance, such as healthy eating and livelihoods.

Implementing a deforestation-free and climate smart cocoa value chain for the Colombian Amazon piedmont

This project is implemented in the Amazon Piedmont Region of Colombia by Alisos, a non-profit organisation focused on the construction of partnerships for sustainability.

The target region for the project is strategic due to high deforestation rates, and suitability for sustainable agroforestry productive systems. The project aims to leverage forest and landscape restoration and sustainable livelihoods through the promotion of a deforestation-free and climate-smart cocoa value chain in the Amazon Piedmont.

This project shows an alternative to extractive economic development within this context, promoting a sustainable cocoa value chain, which remains competitive in international markets. Moreover, this project also connects with strategy number one (vertical and horizontal integration) to enable nature-based solutions, demonstrating that bringing actors together by leveraging partnerships and resources is key to both the process and long-term results.

Among key impacts and results so far is important to highlight the support with awareness and appropriation strategies and governance capabilities. These are key to fostering an enabling environment, bringing stakeholders together towards sustainable livelihoods approaches.

3. Scientifically driven decision-making for nature-positive actions and frameworks

ECOSUR's land use map for Campeche (2019) on Ecometrica's EO Lab, with query analysis of forestry subsidies by municipality
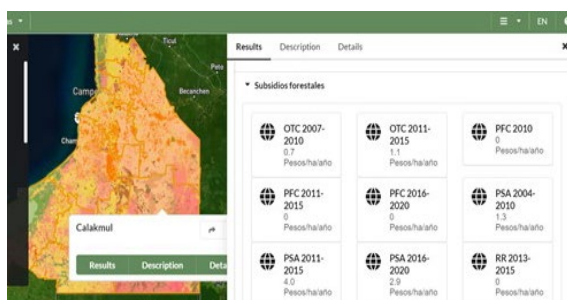
The implementation of nature-positive frameworks is supported by creating an enabling environment where monitoring, reporting and verification (MRV) becomes a common practice within organisations.

It is key to utilise verified data to inform baselines on nature as a mitigation strategy for carbon reduction. Ultimately, case studies have shown the importance of resources (technical and financial support) for capacity-building to translate technical knowledge into informed decision-making.

Strengthening the use of earth observation platforms to support the implementation of climate change mitigation goals in the forest and land use sector in three states in Mexico

This project is implemented in the Campeche, Chiapas and Tabasco states (Mexico) by Ecometrica, an end-to-end environmental software-as-a-service (SaaS) provider who focus on sustainability. Ecometrica implements this project with Ecosistemas Consultoria, El Colegio de la Frontera Sur, and Pronatura Sur.

The project aims to provide effective tools for policy decision-makers related to forest and land-use. The project evaluates and strengthens the use of earth observation platforms, maps and tools, to monitor and steer progress towards the achievement of Mexico's NDCs in the land use sector.
This initiative exemplifies the importance of MRV systems in providing scientific data to inform decision-making. Moreover, finding and promoting multipurpose uses from deliverables such as these maps (e.g. information can be used by stakeholders beyond key beneficiaries) supports the likelihood that this process will become embedded within organisations, thus promoting Its long-term sustainability.

Expected benefits from the project include insights into land-use change dynamics in areas where government agricultural and forestry programmes are being implemented in the three states. These will help the national and state-level governments to more efficiently direct resources on the ground to benefit rural communities, while contributing to the pathway to net zero deforestation by 2030. It is also important to highlight the support for training in the use of these tools, building human capacities within local teams.

Sustainable tourism enhancement project: boosting conservation and emissions reduction through tourism and technology

This project is implemented in the Amazon, Orinoquia, and Pacific regions of Colombia. The implementing partner is Awake, a travel agency and impact company, concerned and engaged with initiatives on the protection of natural resources. It started in 2019 and is now in its second phase. It targets an extensive list of primary beneficiaries including tourism host organisations, other organisations dedicated to nature tourism and conservation, the public sector, NGOs, foundations, and donors.

This project seeks to protect the forests in the three regions and reduce deforestation through the strengthening of ecotourism organisations and individual 'hosts', promoting it as a sustainable lifestyle for rural communities.

This project's goal is to develop the mechanisms and motivations for the conservation of forest coverage, through stronger tourism organisations, and rural communities who receive benefits such as income, and a more sustainable livelihood, through tourism.

This case shows the importance of innovative solutions with an interesting component of community-based acoustic monitoring (e.g. sounds of biodiversity such as mammals and birds) as a tool to engage the community to understand what is in the forest and its effects on the ecosystem. The information collected through this monitoring process will inform a marketing strategy to give visibility to ongoing conservation initiatives.

Promoting nature-based solutions for land restoration while strengthening national monitoring technical working group in Kenya

This project is implemented by the World Agroforestry (ICRAF) in Kenya. The project addresses land degradation, climate change, biodiversity loss and poverty through nature-based solutions, including planting the right trees in the right place for the right purpose, farmer-managed natural regeneration (FMNR), soil and water conservation, agroecology and other restoration practices.

In addition, the project is working with key actors to establish a national restoration monitoring technical working group which will help co-ordinate monitoring and credible reporting on all restoration efforts in the country - critical for tracking, reporting, and scaling up restoration efforts in Kenya. Drawing from ICRAF's experiences on restoration in Makueni County, the project will provide context-appropriate and gender-responsive restoration options to help generate lessons for wider scaling and impact.

Box 3. **Scientific-based targets for nature-positive actions**

Science-based targets provide a clearly defined pathway to reduce greenhouse gas (GHG) emissions, minimising the harmful impacts of climate change.

These targets can set a baseline to inform nature-positive actions, which consist of an approach that enriches biodiversity and therefore brings benefits such as carbon storage and water purification, among others. In short, a nature positive approach is a powerful mitigation strategy and enhances the resilience of our planet and our societies.

Among achievements, it is important to highlight the formation of the Land Restoration Technical Working Group which is a key step towards ensuring effective coordination of restoration initiatives, and helping the country to meet its environmental, economic and development goals. The focus now is on building solid structures to ensure the Technical Working Group serves its intended purpose by working with key stakeholders, including state and non-state actors.

Key lessons include the importance of the project having a unified framework on monitoring restoration efforts. In this context, will contribute to tracking Kenya's Nationally Determined Contribution, Land Degradation Neutrality targets, and commitment to restore 5.1 million hectares of degraded and deforested landscapes by 2030 and the 10% tree cover by 2022. It is expected that this can then be adapted to other countries in the

region. Moreover, this case demonstrates that evidence-based restoration efforts need to take into consideration social, economic, ecological and gender contexts.

This project promotes nature-based solutions, such as species site-matching when growing trees, soil and water conservation, and farmer-managed natural regeneration (FMNR) that contribute to climate resilience, land restoration, reducing biodiversity loss and improving livelihoods. It also demonstrates how nature-based solutions can create green jobs for women and youth, while promoting food and nutrition security. UK PACT is currently consulting with key stakeholders and partners in Kenya to identify further priorities for supporting nature-based solutions.

Key recommendations

Towards net zero and nature-positive realities

This thematic brief has presented key challenges and opportunities for the nature theme based on the experiences across the UK PACT programme portfolio.

The case studies presented have demonstrated the key role that forests have in promoting low-carbon development and their many associated co-benefits for people and nature.

The strategies presented can enable complementary outcomes for climate and biodiversity targets. The urgency and scale of the challenges ahead call for combined measures to foster positive impacts for current and future scenarios.

The UK PACT programme and its partners continue to support nature-positive actions to promote mitigation and improve sustainable livelihoods worldwide.

Box 4. Improvement of national forest monitoring systems

Countries are working to strengthen their national forest monitoring systems to meet the requirements of results-based payment systems. High-integrity data on emissions and sinks will allow countries to access carbon finance and thereby enable them to progress towards their climate change mitigation and sustainable development objectives.

An example of an initiative on this issue is the IMPRESS (Improving Measurement for Payments to Reduce Emissions and Strengthen Sinks) project. This project will develop an innovative approach to forest monitoring to underpin access to carbon finance, which will help Kenya Forest Service to deliver high-quality estimates of greenhouse gas emissions from forests, as well as real-time data on forest threats. These data will enable Kenya to protect its forests and access new sources of forest finance announced at COP26 in Glasgow, helping to achieve Kenya's 10% tree cover target.

Image:
© ICRA

References

Awake. COP26 Nature Thematic Brief - Awake. Interviewed by Arup, 15 September 2021

Alisos. COP26 Nature Thematic Brief - Alisos. Interviewed by Arup, 16 September 2021

E3. COP26 Nature Thematic Brief - E3. Interviewed by Arup, 7 September 2021

Ecometrica, Ecometrica: Thematic Brief. Interviewed by Arup, 8 September 2021

IUCN, Nature-based solutions, https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-thematic-groups/services (accessed 7 September 2021)

IPBES (2021) Scientific outcome of the IPBES-IPCC co-sponsored workshop on biodiversity and climate change, IPBES secretariat, Report

IPCC (2019) Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, Report

IPCC (2018) Summary for Policy Makers, Summary report

IPCC (2018) Agriculture, Forestry and Other Land Use (AFOLU), Chapter report

Millennium Ecosystem Assessment (2005), Millennium Ecosystem Assessment Report, http://www.millenniumassessment.org/en/index.html (accessed 7 September 2021)

Rimba. Nature Thematic Brief | Rimba | UK PACT & COP26. Interviewed by Arup, 21 September 2021

Stockholm Resilience Centre (2009), Planetary Boundaries, https://www.stockholmresilience.org/research/planetary-boundaries.html (accessed 7 September 2021).

Acknowledgements

UK PACT

www.ukpact.co.uk

For any enquiries, please get in touch via email at communications@ukpact.co.uk