Document 1: Announcement of Opportunity

The Funding Organisations in Biodiversa+ Partnership have joined efforts to organise and fund an International call for transnational research proposals on

"Nature-Based Solutions for biodiversity, human well-being and transformative change (BiodivNBS)"

(1) INTRODUCTION

This joint call for research projects is launched by the European Biodiversity Partnership, Biodiversa+, co-funded by the European Commission. The call addresses topics identified under the Biodiversa+ Flagship programme Better knowledge to develop, deploy and assess nature-based solutions. Specifically, it focuses on biodiversity and nature-based solutions (NBS) for biodiversity, human well-being and transformative change to achieve sustainability.

The Biodiversa+ Partnership is one of the actions included in the EU Biodiversity Strategy for 2030 to 'make the bridge between science, policy and practice, and make nature-based solutions a reality on the ground' (https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en). The Partnership's activities notably include co-funded joint calls for research and innovation projects, biodiversity monitoring, and science-based policy advising activities. 34 countries are contributing to the funding of this joint call (see the updated list of countries and participating Funding Organisations on our website: https://www.biodiversa.eu/research-funding/open-call/participating-funding-organisations/).

(2) CONTEXT

Box 1 – Definitions

Biodiversity

Biodiversity is the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variation in genetic, phenotypic, phylogenetic, and functional attributes, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems. *Definition from diaz et al. (2015)*

Nature-based solutions (NBS)

NBS are here defined as actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits. Definition from Fifth session of the United Nations Environment Assembly UNEA-5.2; UNEA/EA.5/res.5

Transformative Change

This call builds on the notion of Transformative Change as defined in the IPBES Global Assessment: "Fundamental, system-wide reorganisation across technological, economic and social factors, including paradigms, goals and values needed for the conservation and sustainable use of biodiversity, good quality of life and sustainable development." *Definition from IPBES (2019)*

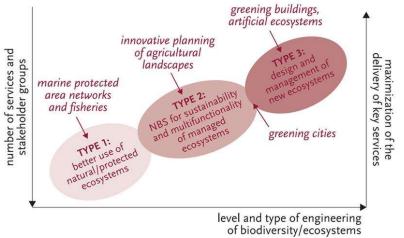


Fig. 1: Schematic representation of the range of NBS approaches as defined by Eggermont et al. (2015). Three main and complementary types of NBS are identified, differing in the level of engineering or management applied to biodiversity and ecosystems (x-axis), and in the number of services to be delivered, the number of stakeholder groups targeted, and the likely level of maximization of the delivery of targeted services (y-axis). Some examples of NBS are provided in this schematic representation.

Box 2 – Examples on use of the term Nature-based solutions

From Eggermont et al. (2015):

"It is important to specify which solutions should and should not be considered as NBS. We illustrate this with the development of green roofs and walls in cities.

Having in mind the sole objective of developing green surfaces in urban areas to mitigate the effects of global warming, green roofs or walls could be created using, e. g., clones from one or very few plant species, regardless oftheir biogeographical distribution. Such new structures would hardly contribute to increase biodiversity and the delivery of other ES [ecosystem services]. This may also lead to a poor resistance and resilience to future extreme events, increased management costs, and risk of biological invasions. Furthermore, without a coordinated approach at the city scale, firms would likely design green buildings in a case-by-case approach with a very uncertain effectiveness at city scale. Such an approach, which largely misses out on the objectives of sustainability, increased biodiversity, and effectiveness at relevant scale (here the city), would not fit the NBS framing. Similarly, rain gardens designed to manage storm water runoff that pay little reference to what plants are used and to other ES, fall short of NBS.

In contrast, within an urban planning approach at the city scale, a range of species could be selected for green roofs or walls based on their biogeography and key functional traits (Lundholm et al. 2015), which would address multiple goals such as cooling during summer, storm water capture, pollution abatement, increased human well-being. biodiversity enhancement, and better resilience to future hazards, while adopting adequate governance to properly tackle the issue at city scale [---] NBS thus broadens the ES framework, promoting and better relying on biological diversity to increase the resistance and resilience of socialecological systems to global changes and extreme or unexpected events and the delivery of a range of ES".

This call aims at supporting research on biodiversity to gain a better understanding of the tipping points and trade-offs and underlying mechanisms affecting Nature-Based solutions (referred hereafter as NBS and defined in Box 1, also see Box 2 for examples on use of the term NBS), and their successful implementation with respect to the benefits for nature, human well-being and societal transformation.

The multiple crises of climate change, biodiversity loss, pollution and social inequality are interlinked, and rapid transformative approaches are required to address them effectively (IPBES 2019; Dasgupta 2021). This calls for innovative solutions realising that people and nature are part of the same complex interconnected system. NBS () are gaining traction in science (e.g., Welden et al. 2021; Seddon et al. 2021) and in policy, including in the Sharm el-Sheikh implementation plan of the UN Framework Convention on Climate Change and the Kunming-Montreal Global Biodiversity Framework of the Convention on Biological Diversity.

NBS aim at benefitting human well-being by enhancing biodiversity and recognizing their interconnectedness. To fulfil the requirements of the definition (Box 1), actions have to be beneficial for biodiversity and must be designed and implemented with the full engagement and consent of indigenous people and local communities where appropriate. NBS can be a powerful tool to address global challenges. For example, in the context of climate change, NBS have the potential to deliver up to a third of the emission reductions that we need by 2030 (Griscom et al. 2017; Girardin et al. 2021; see also the examples in Box 2).

However, there can also be conflicting goals and trade-offs. As NBS enter into policy and are implemented by projects on the ground, there is a pressing need to clarify the specific objectives of each intervention and what is required to ensure effective implementation. Without this, poorly designed NBS could result in inconsistent and ungrounded implementation. Worse still, weak or mis-labelled NBS projects can water down the case for NBS – de-

incentivising their use, eroding confidence for funding, and misdirecting efforts (ILO et al. 2022). However, it has to be noted that there is ongoing work to create and implement these much-needed standards (IUCN 2020; NetworkNature 2022). Application of criteria such as the IUCN Global Standard for NBS (Fig. 2; IUCN 2020) provides an opportunity to create a global user community that helps guide the design, planning and implementation of NBS on the ground at different scales, accelerate development, policy conservation science on NBS. ensure ecosystem integrity and keep biodiversity benefits at its heart.

Interdisciplinary research is needed to overcome barriers and to upscale implementation of NBS across sectors and policies. The issue of scalability poses a significant challenge when it comes

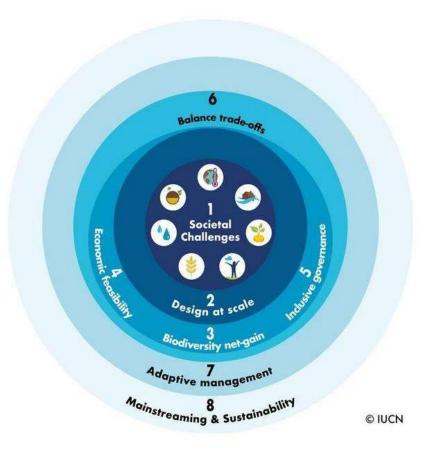


Fig. 2: Eight criteria of IUCN's Global Standard for NBS (IUCN

to the implementation and widespread adoption of NBS. While NBS has shown great potential in addressing various environmental and societal issues, the ability to scale up these solutions to a larger, more impactful level remains a complex task. Two key questions are: what makes NBS work from different perspectives (ecological, social, political, economic, legal, etc.), and how do we address trade-offs between different dimensions of transformation? In this context, it should be recognised that there are multiple pathways to achieving transformative change (Bulkeley et al. 2020).

Despite the steeply increasing number of research projects on the NBS topic, a recent mapping of the EU research, innovation and implementation landscape (El Harrak and Lemaitre 2023) reveals considerable bias. EU-level support focuses predominantly on NBS based on developing sustainable management protocols and procedures for the management of restored ecosystems (NBS type 2; ca. 50% of all projects) and on NBS that involve creating new ecosystems (NBS type 3; ca. 40% of all projects). In contrast, NBS involving existing natural or protected ecosystems (NBS type 1) remain largely understudied (for definitions see Fig. 1 in Box 1). Similarly, NBS in ecological environments other than forests, agricultural lands or urban areas received far less attention. Several key knowledge gaps and potential pitfalls remain related to effectiveness and enabling factors. There is also a lack of evidence-based narratives about tipping points and critical trade-offs as well as about synergies among societal challenges together with protection of critical biodiversity (Seddon et al. 2021).

(3) EXPECTED IMPACTS AND TRANSNATIONAL ADDED VALUE

Global scope

The call is not restricted in terms of specific environments nor geographic areas, encompassing all realms (terrestrial, marine, coastal and freshwater) and ecosystems experiencing various levels and sources of disturbances, including transition zones and interfaces (coastal, wetlands, urban-rural, forest-agriculture, etc.) and in integrated land/seascapes. The call covers research on NBS in all parts of the world. Research projects can thus include study sites also beyond Europe and its Outermost Regions and Overseas Countries and the other countries participating in the call as long as the research demonstrates clear transnational added value (see document 6 "Assessment Criteria" for more information on what transnational added value means).

The physical, biological and social processes associated with development and deployment of NBS take place at a range of spatial scales, from the local to regional and global. Therefore, a sufficient understanding of these processes relies on studies performed at multiple sites and scales, also taking their connections into account. These in turn need to explicitly consider the ways in which processes at one scale might drive or constrain processes at other scales, and how local results include commonalities that apply across regions and nations. In order to support effective actions for biodiversity protection, restoration, sustainable use and management across land and sea, the diversity and unique characteristics of each place and region must be thoroughly analysed in view of the local context, including biodiversity, ecosystems and socio-cultural conditions. Yet in addition, the interconnectedness and independence of regions often require considering the global context, both in terms of species distribution and ecosystem function and for example consideration of teleconnections of value chains and finances.

Methodology

Transnational collaboration in development and the inter-comparison of different models is one of the approaches to advance research on NBS. Learning and information sharing is also key to social adaptation, and project participants will benefit from a collaborative and participatory approach to the problem, bringing together different forms of knowledge and involving stakeholders and researchers. Inter- and transdisciplinary research projects are therefore encouraged to address these challenges. Proposals are furthermore welcome to demonstrate a consideration and understanding of the governance and economic structures that inform the planning/design, implementation and maintenance of NBS, and where relevant liaise with existing structures such as the Connecting Nature Enterprise Platform (https://connectingnature.eu/cnep).

Projects may cover a broad range of methodological approaches (comparative and experimental studies, synthesis research, systems analysis, local and community participatory processes and case studies, inclusion of traditional/indigenous knowledge, living labs, modelling, scenario development, quantitative and qualitative social science methods, etc., or a combination of these). Moreover, the call encourages innovative approaches and promising actions/tools that may not be currently labelled as NBS (e.g., grassroots initiatives or non-conventional nature-based solutions in indigenous practices and local knowledge). This can also include systemic assessments of the interplay between biodiversity conservation, sustainability and environmental justice issues. Researchers are invited to consider the question of 'NBS for whom' and how to weave diverse worldviews, alternative knowledge systems, and multiple values into their proposals.

Interdisciplinarity and transdisciplinarity

Integrated approaches and skills of natural sciences, social sciences and humanities, including economics and finance, are encouraged where needed to address the specific objectives of each research proposal. The call aims for interdisciplinary, transdisciplinary and cross-sectoral research projects demonstrating academic excellence, in particular in biodiversity research, as well as potential for societal and policy impact. Where relevant, projects should be developed in collaboration with diverse stakeholders including the private sector, governmental agents, civil society and under-represented groups such as indigenous or marginalised communities.

Given that increased investments are critical for NBS large-scale deployment and long-term success, development of knowledge to help promote the case for financial and societal investments in NBS can be considered under each of the three call themes mentioned below. Moreover, the involvement of the private sector in the proposals can help to ensure that the whole innovation chain is covered. However, only projects from basic research up to the pre-competitive research level can be funded under this call.

Research projects should provide relevant information for policy makers, authorities, institutions and practitioners in the private and public sector concerned with decision making, planning, designing and managing a broad range of environments and outreach to society. This includes to develop and evaluate co-designed research to bring citizens, research organizations, companies, local and regional authorities together to validate knowledge and technologies and scale on innovations business (see: Biodiversa Guide Stakeholder [https://www.biodiversa.eu/wp-content/uploads/2022/12/stakeholder-engagement-handbook.pdf]; Biodiversa Guide on Policy Relevance [https://www.biodiversa.org/1563/download] - note that this guide currently being updated; and Biodiversa Citizen Science **Toolkit** [https://www.biodiversa.org/1810/download]).

It is expected that applicants will explicitly make clear the novelty of their research and how it adds to the existing knowledge base, including previously funded or ongoing projects. Projects are expected to deliver a significant contribution to scientific knowledge production. Redundancy with respect to on-going international, European and national projects on this theme must be avoided. Complementary research (for example with existing Horizon 2020 and Horizon Europe projects) is possible but must be clearly explained. Applicants are encouraged to use existing resources and infrastructures for their project, including the data and information from Earth Observation Programmes such as Copernicus, and the existing biodiversity research infrastructures (see: Biodiversa Mapping of Biodiversity Research Infrastructures [https://www.biodiversa.eu/wpcontent/uploads/2022/12/mapping-biodiversity-research-infrastructures.pdf] — note that this document is currently being updated). Links with projects funded under the LIFE Programme are also encouraged.

(4) PRIORITIES OF THE CALL

The call aims at supporting research on biodiversity to gain a better understanding of the tipping points and trade-offs and underlying mechanisms affecting NBS, and their successful implementation with respect to the benefits for nature, human well-being and societal transformation.

The call encompasses exploring and assessing of NBS at all levels from local or regional to global, embracing and building on conceptualisations of multiple and plural values of nature as expressed in the recent *IPBES Values Assessment* (IPBES 2022). Main entry points are: i) how NBS

contributes to biodiversity benefits, and ii) the role of biodiversity in making NBS effectively address societal challenges and promote transformative change.

Key transversal knowledge needs and challenges include but are not limited to:

- Understanding and evaluating the ecological, social and economic benefits of NBS, and their synergies and trade-offs between multiple sustainability goals and multiple monetary and nonmonetary values.
- Recognition of and allowing for biodiversity dynamics of behavioural, ecological and evolutionary processes over time and space.
- Assessing effectiveness and cost-benefit analysis of NBS in relation to the level of urgency in terms of **key ecosystems and biodiversity hotspots.**
- Addressing technical challenges associated with designing and implementing NBS, including challenges related to data collection and analysis, and the identification of appropriate sites and species.
- Better understanding of how NBS can **leverage transformative change** for the sustainable use of biodiversity as well as for other societal challenges.
- Recognizing the **transformative power** of NBS in various environments and different geographic areas, including in under-studied contexts such as areas in low-income countries characterised by informal urbanisation or rapid land-use change.
- Better understanding of **societal attitudes and diverse value systems** in which NBS are applied, with recognition of a diversity of people-nature relationships, highlighting ecological aspects while also acknowledging the cultural, social, political and economic aspects of NBS.
- Assessing the **political dimension** of NBS to encourage support from decision-makers, with development and assessment of adaptive governance models and demonstrating the effectiveness of NBS to address multiple societal and policy challenges.
- Recognizing and addressing **inequalities of rights and abilities**, as well as inadequate policies, regulations, and institutional frameworks, hindering the effective implementation of NBS.
- Analysing **user and stakeholder conflicts** for NBS implementation at different temporal and spatial scales.
- Developing innovative approaches and incentives to **upscale** NBS beyond local contexts, including through governance, economic and social innovation.
- Demonstrating strong NBS cases to encourage **investments to help build resilience** and sustain long-term projects, with the involvement of diverse stakeholders including local or governmental officers, civil society, non-governmental and private sectors.
- Addressing the need for **investment in co-design, training and capacity building**, and implementation of NBS, the need for understanding of potential cost-effectiveness and potential for driving new revenues, and the need for financing and innovative business models (European Investment Bank, 2023).
- Exploring opportunities related to NBS offered by and for citizen science.
- Analysing the framing and communication of mitigation actions and NBS in view of how
 potential conflicts and trade-offs affect public support in different sectors of society and
 business.

CALL THEMES

- A. Synergies and trade-offs of NBS in the context of human well-being
- B. NBS mitigating anthropogenic drivers of biodiversity loss
- C. The contribution of NBS for just transformative change

Note that these call themes are overlapping and non-exclusive, and each project can address one or several themes. **The role of biodiversity shall underpin the research in all themes** (Fig. 3), adopting 'do no harm' approaches and enhancing biodiversity benefits in accordance with the concept of NBS (as defined by UNEA-5, Box 1). Similarly, the pluralistic valuation approach (IPBES 2022) is central across all themes.

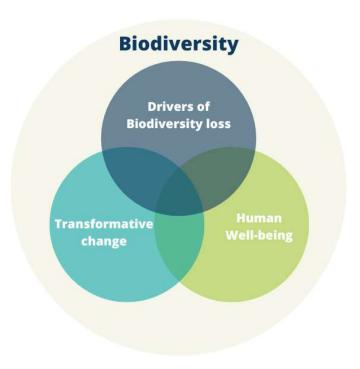


Fig. 3. Schematic scope of the call that is structured in three overlapping and non-mutually exclusive themes embedded in a biodiversity framework.

Theme A. Synergies and trade-offs of NBS in the context of human well-being

This theme focuses on multiple links between the different goals of NBS, with a focus on jointly improving the well-functioning of the ecological system with human well-being, including physical and mental health, food and water security, as well as risk avoidance/prevention. This approach motivates a need for holistic analyses, where systems analysis and interdisciplinary and transdisciplinary research inform the understanding of relative benefits across nexus goals, with social sciences and humanities research being integral to assessing costs and benefits. Evaluation of the role of NBS includes mobilization of indicators and designing monitoring schemes across multiple temporal and spatial scales.

Major knowledge and innovation needs under this theme include but are not limited to:

• Identify environmental, ecological, economic, and social synergies and trade-offs across sectors relevant for the theme, to be considered when developing, planning and implementing NBS.

- Identify, evaluate and promote best practices for improving through NBS ecological functioning of ecosystems for nature and people. This can include development of pilot projects, living labs, demonstration cases, etc.
- Evaluate integrated regional NBS strategies and land/sea spatial planning for biodiversity, water, food and health, with development and testing of management options for approaches to ensure equitable and fair access to benefits for people and nature generated by NBS.
- Analyse the potential for upscaling in space and time of successful NBS, with a focus on issues specific to the context of ecosystem conservation and human well-being.
- Explore benefits and risks of NBS regarding impact on biodiversity and the health of humans and domesticated species (e.g., livestock, crop plants, etc.). This can include comparison of technical and NBS measures of risk avoidance/prevention and demonstration in real cases.
- Analyse how NBS can offer smart and sustainable alternatives to complement or replace technical solutions to tackle major societal challenges.

Theme B. NBS mitigating anthropogenic drivers of biodiversity loss

This theme will address cross-sectoral approaches to direct and indirect drivers which negatively affect biodiversity (by loss or by change) including climate change. habitat destruction fragmentation, invasive species, pollution, etc. Integrated responses that contribute to mitigation of negative drivers may offer a wider range of solutions with a greater likelihood of being successful than unilateral approaches. conserving, restoring and sustainably managing biodiverse ecosystems which increase resilience, NBS can contribute to the regulation and buffering of direct and indirect drivers of biodiversity loss or negative change (see Box 3).

Major knowledge and innovation needs under this theme include but are not limited to:

- Understand the limitations and gaps, including in terms of available data and models, and potential of NBS to analyse how NBS at the landscape scale can achieve biodiversity net-gains or prevent net-loss and address simultaneously societal challenges in different land-use scenarios by minimizing trade-offs.
- Understand biodiversity dynamics as an integral part when designing NBS for mitigation to ecosystem pressures, with emphasis on genetic, functional and structural diversity under changing conditions. This

Box 3 – NBS to mitigate drivers of biodiversity loss: example and challenges

For example, to contribute to achieving climate neutrality and resilience by 2050, NBS need to be implemented on a large scale to drastically reduce emissions and enhance absorption, to reduce vulnerabilities to climate risks, and to enhance adaptation to the impacts of global change (Nabuurs et al. 2022). However, solutions may in some cases be harmful to biodiversity and thus by definition are not NBS. Understanding the co-benefits and trade-offs associated with mitigation of different drivers is key to support prioritization among the various sectoral policy options, and to simultaneously achieve multiple goals for sustainability and transformative change. NBS hold the potential to provide significant synergies for biodiversity, climate adaptation and mitigation as well as other sustainability objectives, for example through sustainable land management approaches. Different actions can be beneficial on different time scales. For example. benefits conservation of key ecosystems and hotspots are immediate, while habitat restoration takes more time to deliver measurable results (e.g., the conservation of high carbon ecosystems immediately benefits climate change contrary to their restoration, IPCC 2023).

may include understanding the contribution of biodiversity for NBS and mitigation through cross-system analysis of the relationships between biodiversity, ecosystem services and social systems as a basis to understand the potential for effectiveness, efficiency and resilience of NBS.

- Analyse interactions between different nature-based solutions, fostering cross-sectoral mitigation linkages.
- Understand and predict the importance of spatial and temporal dynamics for upscaling of NBS, including the analysis of connectivity and emergent properties of spatial networks, as well as analyses of cross-system domains (e.g., rivers and coasts, rural to urban/peri-urban, forests to agriculture fields, land to water) using modelling scenarios for environmental and sociological conditions.
- Analyse how the potential of protected areas for mitigation with respect to direct and indirect drivers of negative biodiversity change can be integrated into regional NBS strategies as part of integrated landscape and seascape approaches.
- Analyse how financial instruments, governance, and knowledge types (research, innovation, multiple sources of knowledge, education) affect the design and implementation of NBS and how they lead to positive outcomes for biodiversity and society. This includes the role of local institutional arrangements, and participatory co-design and co-governance processes, and assessing cost-effectiveness and economic viability of NBS delivering multiple benefits. This could also include their impacts on scaling-up of NBS.
- Analyse trade-off between functional and compositional stability over time in a biodiversity-NBS context, as long-term functional stability of an NBS may require adapting to changing conditions, which often is not the immediate aim of biodiversity conservation efforts.

Theme C. The contribution of NBS for just transformative change

This theme will address the contribution of NBS as drivers for just transformative change and just livelihoods, with specific regard to identification of barriers to transformation.

The theme includes an assessment of what elements of NBS may catalyse transformative change, including impact on the human-nature relation. It also includes evaluation of NBS investments (including non-monetary assets) and their impacts; the potential of NBS to mitigate, but also to trigger or exacerbate conflicts on land use; the link between NBS and business and finance sectors; and development of new mechanisms for nature-based enterprises and socio-economic indicators. In order to implement the NBS concept as a policy instrument, social acceptance at the local level is required. Other important aspects include the link between NBS and governance and policies, transdisciplinary approaches, and knowledge development to support evidence-based decision-making. The theme also covers the need to standardize evaluation of NBS, and the concepts of valuing ecosystem services/nature benefits to people, natural capital and ecosystem accounting, in support of biodiversity. In addressing these issues, it is important to build upon previous efforts and create synergies with ongoing research within the EU and globally (e.g., Kaleyeva and Gawrońska-Nowak 2021, and European Commission 2022).

Major knowledge and innovation needs under this theme include but are not limited to:

• Multiple benefits and trade-offs of NBS, exploring NBS contribution to achieving transformative change recognising the diverse values of nature. This may include exploration of

- novel designs for transformative NBS using participatory and inclusive practices, regional planning and political decision making, that account for multiple values and knowledge systems.
- Monitor and evaluate the impact and effectiveness of NBS through science-based assessments
 of their economic, social & environmental benefits, and evaluate complexities and uncertainties
 to guide risk assessments.
- Analyse how NBS and nature-based transformations are understood, valued and enacted across
 different worldviews and knowledge systems with respect to the biodiversity-climate-society
 nexus. This includes a special attention to the Global South and vulnerable people worldwide.
- Explore how NBS values can be taken up in long-term investment decision by private business actors and public actors, at a level that promotes societal transformation.
- Explore measures and governance models that can be used to ensure the just distribution of benefits and costs of NBS among stakeholders, and evaluate their effectiveness.
- Analyse how NBS policy and governance is contradicted or sustained by other types of policies, and the socio-economic context of NBS policy making (stakeholders, interest groups, economic class structure, social media, education, etc).
- Explore the effect and potential of NBS on large-scale land transformations, and the role of private sectors, financial investments, and governance structures.

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(5) PROCEDURES, ELIGIBILITY AND SELECTION CRITERIA

List of abbreviations

CSC: Call Steering Committee (All Participating Funding Organisations) EPSS: Electronic Proposal Submission System (EPSS) – submission platform

EVC: Evaluation Committee

FCP: Funding Organisation Contact Point

1- Submission, deadlines and time schedule

Submission

A two-step process will apply, with a mandatory submission of pre-proposals at Step 1 and submission of full proposals at Step 2. Pre-proposals and full proposals (in English) must be submitted electronically with the Electronic Proposal Submission System (EPSS, https://proposals.etag.ee/biodiversa/2023). Instructions for electronic submission will be available on the Biodiversa+ website at www.biodiversa.eu/2023/06/05/2023-2024-joint-call/ in September 2023.

Please note that:

- The online platform will stay open 5 minutes after the official deadline. Any proposals not correctly submitted at this moment will be declared ineligible.
- All completed proposals will be submitted automatically when the platform closes, to avoid a situation where an applicant does not have time to click on the submit button. In this situation, the proposal will be evaluated as it stands.

At Step 1: Applicants have to submit pre-proposals: information (in English) on the project consortia, a 5-page description of the project and the required budget for each Partner must be submitted on the EPSS. **Submission of pre-proposals is mandatory**; it is not possible to enter the procedure at a later stage.

Only eligible pre-proposals can be invited to submit full proposals.

At Step 2: Invited applicants only have to submit full proposals: information (in English) on the project consortia, a 16-page description of the project and the required budget for each Partner must be submitted on the EPSS.

The information submitted at Step 1 and Step 2 will be used to complete an eligibility check, to find appropriate evaluators, and to evaluate the pre- (Step 1) and full (Step 2) proposals.

Deadlines and time schedule

The evaluation procedure will consist in an eligibility check and an evaluation of pre-proposals at a first step and an eligibility check and an evaluation of full proposals at a second step.

The call will go through the following processes and applicants must pay attention to the deadlines outlined below in the time schedule:

5 June 2023:	Pre-announcement of the call	
11 September 2023:	Official launch of the call	
26 September 2023 at 13:00 CEST:	General webinar of the Call	
10 November 2023, 15:00 CET:	Deadline for submitting pre-proposal	
December 2023:	First eligibility check completed by the Call Secretariat	
	and Funding organisation Contact Points (FCPs)	
Mid-February 2024:	Results of the first Evaluation Committee (EvC)	
	meeting	
	Selected applicants are invited to submit full	
	proposals	
9 April 2024, 15:00 CEST:	Deadline for submitting full proposals	
May 2024:	Second eligibility check completed by the Call Secretariat	
	and FCPs	
June or July 2024:	Second EvC meeting	
	Ranked list of proposals established by the EvC	
Late September 2024:	Recommendation for funding projects by the Call	
	Steering Committee (CSC)	
	Results communicated to applicants	
1 December 2024:	Earliest possible start of funded projects	
1 April 2025:	Latest possible start of funded projects	

During the entire procedure, strict confidentiality will be maintained with respect to the identities of applicants and the contents of the proposals.

2- Eligibility of projects and Partners (call criteria):

The call is open to proposals and research consortia that meet the following criteria:

- The international, scientific research projects are performed by eligible Organisations. Funding Organisations eligibility criteria (see <u>Funding Organisations' rules</u>) apply to research entities and for participation by private sector (profit and non-profit) organisations;
- The project coordinator is eligible and employed by an eligible Organisation according to the terms and conditions of the participating Funding Organisation from which he/she applies for support;
- The project coordinator (person in charge) can only participate as coordinator in one proposal of this call. Apart from the position of project coordinator, applicants can participate in several proposals (as long as this is in line with their Funding Organisation's eligibility rules);
- The project must be a transnational project involving **eligible research Partners from at least three different countries participating in the call** and requesting support from at least three different Funding Organisations; including eligible research Partners from at least two different EU Member States or Associated Countries¹ participating in the call.
- An individual researcher affiliated to several organisations cannot request funding from more than one funding organisation in this call. If participating in the call as part of more than one organisation, the individual researcher must declare which research Partner within the consortium he/she represents. He/she will not be considered as two different Partners within the consortium.
- Proposals must be written in English;
- The submission of a pre-proposal is compulsory. Applicants cannot submit a proposal at a later stage otherwise;
- Pre-proposals and full proposals must be received before the deadlines set for the submission;
- Proposals must meet all the formal criteria: submitted electronically on the EPSS (see Call Documents 2 and 3 for indicative pre- and full-proposals application forms respectively), respect page limits and number/type of attachments allowed;
- The information given in the pre-proposals is binding. No change regarding the proposals' content will be allowed by the Call Steering Committee (CSC) between the pre-proposals and full proposals. However, it is still possible to make minor changes to improve your proposal if the objectives remain unchanged (you will have to declare these changes in your full proposal). Regarding the administrative details, a limited number of changes may be allowed by the Funding Organisation Contact Point (FCP) and/or CSC, provided they are in line with the general rules of the call and the rules of the Funding Organisations:
 - Change of budget can be allowed by the relevant Funding Organisation. The FCP can decide according to its own rules whether it needs a justification for it. There is no need to inform the Call Secretariat.
 - Changes in the consortium composition:
 - No change of project coordinator (person in charge) will be allowed, except in case of force majeure. A request of change of project coordinator must be submitted

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¹ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

- to the Call Secretariat, at least one week before the deadline for submitting full proposals and it will be discussed on a case-by-case basis by the CSC.
- Changes in the consortium composition are allowed (maximum two changes of Partners), provided approval by the concerned Funding Organisations. Please note that the following actions are considered as changes: addition, removal or replacement of a Partner (incl. self-financed partners). Please note that the maximum number of changes applies to "Partner"; it does not apply to "team member".
 - o In case of a removal of a Partner, consortia have to make sure that their consortium still includes the minimum number of requested Partners. If this is not the case, the project will be declared ineligible and won't be evaluated. All new Partners have to comply with their respective Funding Organisation's rules. If a new Partner is declared ineligible at Step 2, the whole consortium will be declared ineligible and won't be evaluated.

In terms of procedure: The eligibility of new research Partners must be confirmed at least one week before the full proposal submission deadline. Changes must be asked to the FCP, with the Call Secretariat in copy, who needs to check the eligibility of the new Partner and agree with the change, before being implemented into the EPSS.

Please note that the following cases are not considered as one of the maximum two changes but the procedure mentioned above remains the same:

- o If the change is explicitly requested by a Funding Organisation after the eligibility decision at Step 1
- o If a researcher in charge (person) remains the same but changes the institutions (within the same country), provided the institution fulfils eligibility criteria of the same funding organisation.
- Similarly, if the institution remains the same but the researcher in charge (person) changes, provided the researcher in charge fulfils eligibility criteria of the same funding organisation.
- The change(s) should not change the substance of the proposal. Applicants will have to indicate in their full proposal the changes made as compared to the pre-proposals (for information for the EvC and the Call Secretariat).

Please indicate the acronym of your project when you contact the Call Secretariat and/or your Funding Organisation.

• Compliance with Funding Organisation eligibility criteria and rules (e.g. eligible budget items) is mandatory; it is thus strongly recommended that applicants approach their respective Funding Organisation Contact Point to make sure they respect all the eligibility criteria and rules (contact list and main Funding Organisations' rules are available in the call documents published on the Biodiversa+ website).

If one Partner is not eligible, the whole proposal will be considered ineligible and will not be evaluated, unless the eligibility issue(s) can be fixed without changing the substance of the proposal.

3- Project duration

The project duration is 3 years. Projects are expected to act as transnational project and not as a mosaic of national projects; to this end, as far as possible Partners should participate in the project

for its entire duration. However, as needed, position of some team members can be requested for only part of the project's duration, as long as at least one member of each Partner remains involved for the whole project duration.

4- Evaluation and selection

General information:

Potential applicants are advised to take careful note of the aims and scope of the call as described above in the Announcement of Opportunity. Applicants are strongly advised to assess the relevance of their proposed research against the thematic priorities set forth in the scientific text of the call. Any project that does not fit within the thematic priorities identified will not be recommended for funding, regardless of its quality.

Biodiversa+ aims at funding excellent scientific research projects that can demonstrate societal relevance, including policy relevance, and engage with stakeholders. Proposals will thus be judged on both scientific excellence and their expected impact on society and policy, in addition to project implementation. Proposals should therefore focus on clear research questions with tractable and testable hypotheses and clearly explain expected societal and policy impact as well as their stakeholder engagement approach. Research projects should generate new knowledge and solutions based on the production of new primary data and/or by making use of available data.

Proposals from the natural sciences, technical sciences, and social sciences and humanities are welcome.

Evaluation process:

A two-step evaluation process will be organised.

1) First Step:

An eligibility check will be performed by the Call Secretariat and Funding Organisation Contact Points (FCPs) as well as a first Step evaluation of eligible pre-proposals by an independent Evaluation Committee (EvC) against the following criteria:

- (i) Fit to the scope of the call,
- (ii) Novelty of the research
- (iii) Impact

Only successful pre-proposals will be invited to submit full proposals.

2) Second Step:

An eligibility check of full proposals will be performed by the Call Secretariat and Funding Organisation Contact Points (FCPs).

Eligible full proposals will be evaluated by an independent Evaluation Committee (EvC) as well as by external reviewers (as far as possible 3 external reviewers per proposal, 2 scientific and 1 policy/management) against the following criteria:

- (i) Excellence,
- (ii) Quality and efficiency of the implementation,
- (iii) Impact.

The Call Steering Committee (CSC) will establish an EvC, comprising both scientific experts from natural sciences, technical sciences, social sciences and humanities, and policy/management experts

relevant to the Call. The EvC composition should allow to cover, as far as possible, the range of topics within the scope of the call.

Members take part in the EvC as independent experts and do not represent any organisation nor can they send any replacements. This means that their work on this Committee does not represent any organisation or nation.

The EvC will assess the proposals according to the criteria defined (see "Assessment criteria" document in the call documents). At Step 2, the EvC will also moderate the assessments provided by the external reviewers.

The EvC will discuss about the proposals and establish the final ranking of pre- and full proposals based on the set of criteria defined.

After Step 1: The Call Steering Committee (CSC) will decide on which projects to invite to Step 2, following the eligibility check and the evaluation made by the EvC.

After Step 2: The CSC will decide on which projects to recommend for funding, and selection must be made on the basis of the final ranking list established by the EvC.

Upon the final decision by the CSC, a list of funded projects will be published on the Biodiversa+ website.

Please note that **no appeal can be brought at the EvC and CSC levels to challenge the results of the selection procedure**. However, the decisions taken by the CSC do not take precedence over possible mandatory national or organisational requirements for eligibility and appeal processes.

In case of funding failure of a funding organisation, a re-evaluation procedure may be implemented. The exact process will be agreed on by the CSC in an ad hoc manner.

(6) FUNDING

For this call a total amount of over 30 M€ has been provisionally reserved by the participating Funding Organisations (see the list in the table below).

The European Commission (EC) will also provide funding for the funded projects depending on the final total funding amount for research proposals committed by the participating Funding Organisations eligible for EC-funding.

The indicative total budget for this call is thus of over 40 M€, including the EC contribution.

Total indicative budget for each Funding Organisation is given below. Please note that Funding Organisation may have defined maximum requested budget per project. Each participant in a funded project will be preferentially funded by his or her Funding Organisation(s) participating in the call. The additional funding provided by the EC for the funded project will be distributed through the EC-eligible Funding Organisations.

The aim of the call is to fund medium size projects (with a total budget of typically 1.2-1.5M \in on average; but note that this constitutes an indication rather than a formal limit). The requested funding should be justified and relevant with regards to the work planned within the project.

TABLE 1: LIST OF FUNDING ORGANISATIONS AND THEIR FUNDING COMMITMENTS*,**

*The full up-to-date list of participating funding organisations joining this Call and their reserved budget is available on the Biodiversa+ website: https://www.biodiversa.eu/participating-funding-organisations-biodivnbs/

**The Funding Organisations marked by "#" have defined maximum allowed budget per project and/or per research Partner. Please consult the Funding Organisations' rules and contact your Funding Organisation Contact Point for more information.

Country	Funding organisation	Acronym	Reserved budget (low) in euros	Reserved budget (high) in euros
Austria	Fonds zur Förderung der wissenschaftlichen Forschung	FWF	1,000,000	1,000,000
Belgium	Service Public Fédéral de Programmation Politique Scientifique	BELSPO#	500,000	500,000
Belgium (Wallonia- Brussels)	Fonds de la Recherche Scientifique	F.R.SFNRS#	300,000	300,000
Belgium (Flanders)	Fonds Voor Wetenschappelijk Onderzoek-Vlaanderen	FWO#	750,000	750,000
Brazil	Brazilian National Council of State Funding Agencies	CONFAP#	100,000 (tbc)	100,000 (tbc)
Brazil	Brazilian National Council for Scientific and Technological Development	CNPq#	100,000	100,000
Bulgaria	Bulgarian National Science Fund	BNSF#	380,000	380,000
Canada (Québec)	Fonds de Recherche du Québec	FRQNT	600,000	600,000
Czech Republic	Technology Agency of the Czech Republic	TA CR#	680,000	680,000
Denmark	Innovation Fund Denmark	IFD#	1,000,000	1,000,000
Estonia	Sihtasutus Eesti Teadusagentuur	ETAG#	150,000	150,000

Country	Funding organisation	Acronym	Reserved budget (low) in euros	Reserved budget (high) in euros
Faroe Islands	Research Council Faroe Islands	RCFI	100,000	100,000
France	Agence Nationale de la Recherche	ANR#	2,000,000	2,000,000
Georgia	Ministry of Environmental Protecton and Agriculture of Georgia	MEPA	40,000	40,000
Georgia	Shota Rustaveli National Science Foundation of Georgia	SRNSFG	40,000	40,000
Hungary	Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal	NKFIH#	250,000	250,000
Iceland	Icelandic Centre for Research	Rannis#	1,000,000	1,000,000
Ireland	Environmental Protection Agency	EPA	500,000	500,000
Israel	Ministry of Environmental Protection	MoEP#	375,000	375,000
Italy	Ministry of Universities and Research	MUR#	3,500,000	3,500,000
Italy	Autonomous Province of Bolzano/Bozen	BOZEN#	400,000	400,000
Latvia	Latvian Council of Science	LCS	600,000	600,00
Lithuania	Lietuvos mokslo taryba	LMT#	200,000	200,000
Moldova	National Agency for Research and Development	NARD#	200,000	200,000
Morocco	Ministry of Higher Education and Scientific Research and Innovation	MESRSI#	200,000	200,000
Norway	Research Council of Norway	RCN#	1,600,000	1,600,000

Country	Funding organisation	Acronym	Reserved budget (low) in euros	Reserved budget (high) in euros
Poland	Narodowe Centrum Nauki	NCN	1,000,000	1,000,000
Portugal	Fundação para a Ciência e a Tecnologia	FCT#	1,000,000	1,000,000
Portugal - Azores	Fundo Regional para a Ciência e Tecnologia	FRCT#	100,000	100,000
Romania	The Executive Agency for Higher Education, Research, Development and Innovation Funding	UEFISCDI	500,000	500,000
Slovakia	Slovak Academy of Sciences	SAS#	240,000	240,000
Slovenia	Ministry of Higher Education, Science and Innovation	MVZI#	900,000	900,000
South Africa	Department of Science and Innovation	DSI#	400,000	400,000
Spain	Agencia Estatal de Investigación	AEI#	1,500,000	1,500,000
Spain	Centre for the Development of Technology and Innovation	CDTI	300,000	300,000
Spain	Fundación Biodiversidad	FB#	600,000	600,000
Sweden	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning	Formas#	3,000,000	3,000,000
Switzerland	Swiss National Science Foundation	SNSF	3,714,285	3,714,285
Taiwan	National Science and Technology Council	NSTC#	810,000	810,000
The Netherlands	Dutch Research Council	NWO#	1,800,000	1,800,000
Tunisia	Ministry of Higher Education and Scientific Research	MHESR#	400,000	400,000

Country	Funding organisation	Acronym	Reserved budget (low) in euros	Reserved budget (high) in euros
Türkiye	Turkiye Bilimsel Ve Teknolojik Arastirma Kurumu	TUBITAK#	350,000 (participation tbc)	350,000 (participation tbc)

Please note that all Funding Organisations have defined <u>specific rules</u> – including restrictions with regards to the themes/environments they support. Carefully read the Funding Organisations' rules and contact your Funding Organisation Contact Point in case of any questions or doubts regarding these rules.

(7) PROGRAMME STRUCTURE AND MANAGEMENT

Programme activities

The funded projects are considered to form part of an international research programme for which joint activities will be organised, in particular:

- a **kick-off meeting** at the beginning of the funding period
- a **mid-term meeting** to present and discuss the mid-term reports,
- a **final conference** to present and disseminate the project results at the end of the funding period. These events will be possibly organised back-to-back with other workshops (such as clustering workshops, data management workshops, synthesis workshops, etc.)

At least the project coordinator of each funded consortium should participate in these joint activities. The costs for attendance to two physical meetings should be included in the budgets of their proposals (at least one event will be done remotely).

Project management and reporting

Funded projects will be required to submit via the project coordinator a **mid-term report and a final report** on research and activity progress. Some Funding Organisations may request additional specific reports.

(8) ELIGIBLE BUDGET ITEMS

Eligible costs and the maximum allowed requested budget per project and/or per research Partner are governed by Funding Organisations' specific rules. Specific questions should be addressed to the Funding Organisation Contact Points (updated list available on the Biodiversa+ website).

In case of a significant financial pressure on a Funding Organisation due to the high number of teams requesting budget from this Funding Organisation in the submitted applications, the applicants may be asked to adjust downward their budget.

(9) FURTHER INFORMATION

General management of the Call, including information on the call secretariat vs. funding organisation at a local level:

The Call Secretariat is responsible for organising the call implementation procedure and for all communication with applicants related to joint aspects of the call and procedure.

However, for Funding Organisation eligibility criteria, the Funding Organisations' documented rules must be consulted and Funding Organisation Contact Points should be approached (the information are published and updated on the Biodiversa+ website), in particular with regard to eligibility of research Partner, eligible costs and other country-specific aspects of the call. The compliance with Funding Organisations' rules is mandatory, and relevant Funding Organisation Contact Points should be contacted to obtain further information if needed.

According to their respective rules, the Funding Organisations may require that the project members selected for funding establish a project consortium agreement to release the funds. The requirement will thus apply to all the project members, even if their respective Funding Organisation does not require a project consortium agreement.

Data Management

Applicants' attention must be drawn to the fact that they will be requested to produce data management plans and regularly update them in the course of your project (data management plan should indeed be seen as living documents). Biodiversa+ strongly encourages applicants to make available publicly the new databases, with metadata that they will produce within their project. Please note that the respective Funding Organisation may also have specific requirements in terms of open access to data. Applicants are thus strongly encouraged to plan resources to ensure data open access and comply with the requirements of their Funding Organisations (if any). For more information, please refer to the data policy (see "data policy" document 5 in the call documents) and Biodiversa Guidance document on data management, open data, and the production of Data Management Plans (https://www.biodiversa.eu/wp-content/uploads/2023/02/Biodiversa-Data-Management WEB 2022.pdf).

Applicants' attention must be drawn to the fact that if they plan to use genetic resources and traditional knowledge associated with genetic resources in their project, they will have to ascertain towards the competent authorities and focal point that these used genetic resources and traditional knowledge associated with genetic resources have been accessed in accordance with applicable access and benefit-sharing legislation or regulatory requirements, and that benefits are fairly and equitably shared upon mutually decided terms, in accordance with any applicable legislation or regulatory requirements.² Please refer to the competent authorities for more information.

Additional resources

Biodiversa+ regularly publishes guides that can help in the application process and development of a project, see at https://www.biodiversa.eu/library/#1. Where relevant, applicants and grant holders are notably encouraged to consult the following material:

- The Stakeholder Engagement Handbook
- The Guide on Policy Relevance of Research
- The Citizen Science Toolkit
- The Guidance Document on Open Science and Data Management

² Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation (ABS) to the Convention on Biological Diversity and REGULATION (EU) No 511/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union and related implementing acts.

Main contact points:

- 2. For technical questions regarding submission, please contact the Call Secretariat: biodiversa.cs@agencerecherche.fr
- For technical questions regarding the Electronic Proposal Submission System (EPSS), please contact the EPSS technical helpdesk: Taavi Tiirik: epss.biodiversa@g.etag.ee
- For budgetary questions and other national/regional issues, please contact the relevant Funding Organisation Contact Point (FCP) who are listed and updated at www.biodiversa.eu/research-funding/open-call/participating-funding-organisations. Funding organisations' rules are also advertised and updated on the Biodiversa+ website and are mandatory. Should you have any question on these aspects, please contact the relevant FCP.