



## Main achievements

for research on biodiversity,  
ecosystem services and  
Nature-based Solutions over 2008-2021



The BiodivERsA project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 642420

#### To cite this report

Blery C., Lemaitre F., Mandon C. & Le Roux X. (2021). BiodivERsA main achievements for research on biodiversity, ecosystem services and Nature-based Solutions over 2008-2021, 72pp.

#### Acknowledgements

We would like to thank the BiodivERsA partners for their input and careful proofreading.

#### Credits

Cover's photography: Crédits-© IRD - O.Dangles - F.Nowicki

Layout: Antoine Marinot

## Contact BiodivERsA

### BiodivERsA Coordination

Xavier Le Roux

Chair and Coordinator

*xavierleroux@hotmail.fr*

Tel: +33 (0)6 31 80 38 20

### BiodivERsA Secretariat

*contact@biodiversa.org*

Fondation pour la Recherche sur la Biodiversité  
195 rue St Jacques, 75005 Paris France

[www.biodiversa.org](http://www.biodiversa.org)



Follow us on twitter : @BiodivERsA3



[www.linkedin.com/company/biodiversa3](https://www.linkedin.com/company/biodiversa3)



[www.youtube.com/c/BiodivERsA](https://www.youtube.com/c/BiodivERsA)

# Foreword from the Coordination Team

*Towards better coordination of research programming and funding within Europe, mainland and overseas, on biodiversity, ecosystem services and Nature-based Solutions*

BiodivERsA is the European network of programmers and funders of research on biodiversity, ecosystem services and Nature-based Solutions. It currently gathers 39 agencies, ministries and local authorities from 25 European and associated countries. Over time, this network has become a strategic body developing and implementing a shared vision and joint activities for biodiversity research. Since its creation, BiodivERsA has developed a great array of activities, from research mapping and foresight activities to research programming and funding, promotion of stakeholder engagement, knowledge brokerage and dissemination of research projects' outputs. The main goal of BiodivERsA has been to strengthen the cooperation between biodiversity research programmers and funders and the European Commission, identifying and developing shared biodiversity research strategies well anchored in society and policy needs. This has been the basis for joint research planning and funding. Another major objective has

been to provide policy makers and other stakeholders with adequate interdisciplinary knowledge, tools and solutions to conserve and restore biodiversity and ecosystems, better manage biodiversity to deliver a range of ecosystem services, and develop Nature-based Solutions tackling major societal challenges. In the recent period, the BiodivERsA partners decided to evolve into a co-funded European Partnership, Biodiversa+ (start October 2021), co-designed with the European Commission as part of the European Biodiversity Strategy 2030 and pro-actively engaging environmental policy makers.

This brochure summarises key facts and figures to assess the track record of BiodivERsA along all these dimensions over the 2008-2021 period.

**Xavier Le Roux** (BiodivERsA Chair & Coordinator; Biodiversa+ Vice-Chair - French Foundation for Research on Biodiversity)  
**Hilde Eggermont** (BiodivERsA Vice Chair; Biodiversa+ Chair & Coordinator - Belgian Science Policy Office)  
**Henrik Lange** (BiodivERsA Vice Chair - Swedish EPA)  
& **Magnus Tannerfeldt** (Biodiversa+ Vice-Chair - Swedish Research Council Formas)

# Foreword from the European Commission

## *BiodivERsA's main achievements from the European Commission's point of view*

The seed for BiodivERsA was planted back in 2005, during the first generation of ERA-Nets, when the European Union initiated networks of national funding agencies, encouraging them to work together, aligning their programmes to build the European Research Area, co-funding projects with the EU. At the time, biodiversity was not very high on the agenda, compared with other research fields – or to the role it plays today in the Green Deal –, but aligning national programmes around different aspects related to biodiversity turned out to be very a powerful idea. Perhaps the most lasting legacy is that BiodivERsA itself has evolved into the European Biodiversity Partnership, which goes well beyond biodiversity research, by promoting innovation and policy implementation. Browsing through this brochure, one can realise two important ways in which BiodivERsA radically changed the biodiversity research landscape in sixteen years.

Firstly, just by looking at the figures, we see that BiodivERsA greatly expanded the biodiversity R&I field: it leveraged biodiversity funding in the order of 270 million euros, kick-started 147 transnational collaborative projects in a wide array of disciplines, and involved 39 research-funding agencies from 25 countries, spreading the model even beyond BiodivERsA membership. Excellent transnational research projects on biodiversity, ecosystem services and Nature-based Solutions were possible because BiodivERsA mobilised more than six times the amount invested by the EU research programmes, largely surpassing the initial objectives of an ERA-Net, to become a truly joint programming endeavour. Such close collaboration among BiodivERsA members is creating high impact for society and policy, through its long-term vision and a common pan-European strategic research and innovation agenda.

Secondly, the research landscape managed by BiodivERsA is getting more mature and robust, like healthy ecosystems do, with more connections to challenges such as climate change, sustainable agriculture and health. Engagement with a variety of stakeholders and outreach to other communities and disciplines have yielded fruitful collaborations in a number of fields, such as food supply, climate regulation, forestry, fishery, zoonosis risk management, urban planning... where biodiversity starts to be considered as part of the solution to challenges, rather than as a problem.

Biodiversity research has now gained global political attention. In the years to come, there will be an ever-increasing need for knowledge and evidence regarding biodiversity. For conservation, restoration, Nature-based Solutions and assessment of policy options, biodiversity-related research and innovation can provide sustainable solutions to the complex challenges and problems at stake. In line with the Green Deal, the current EU Research and Innovation programme, Horizon Europe (2021-27) features a 'Biodiversity

Destination', designed to serve the EU Biodiversity Strategy for 2030. In it, along with other EU-funded projects, the European Commission has co-designed with BiodivERsA, through an open and inclusive process, what is perhaps the most important joint biodiversity R&I programme in the world: the Co-Funded European Biodiversity Partnership, Biodiversa+, which brings to the conversation, for the first time, environmental ministries and agencies along with their research and innovation counterparts.

Continuous synergies will be sought to produce the systemic knowledge and evidence needed to make transformative changes in our society, to solve biodiversity and climate issues, and to live sustainably in a healthy planet. The pioneering work and achievements of BiodivERsA presented in this brochure will hugely help this, brilliantly closing the chapter we started sixteen years ago. I am looking forward to Biodiversa+ to write the rest of the story, together

*Jean-Eric PAQUET* (Director-General  
Directorate-General for Research and  
Innovation European Commission)



## Table of content

● Building the European Research Area on biodiversity	12-17
● Mapping and foresight	20-23
● Shared vision and priorities	26-27
● Capacity building for the research community	30-31
● Promoting scientific excellence and collaboration	34-41
● Stakeholder engagement	44-51
● Simultaneous promotion of scientific excellence and societal impact	54-55
● Collaboration with IPBES	58-59
● A growing visibility	62-64
● Preparing the future	66-69

# Building the European Research Area on biodiversity

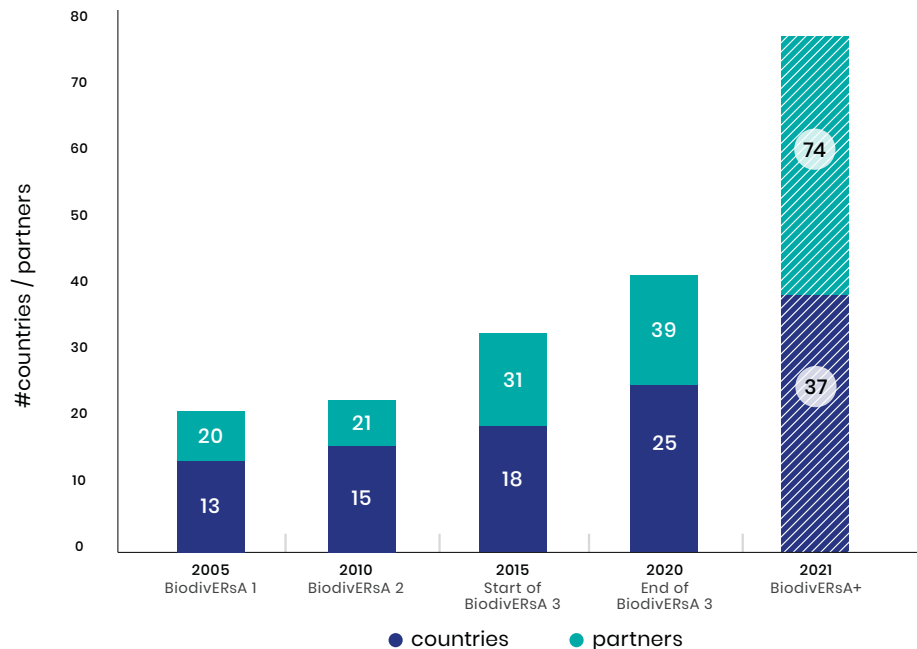


# BiodivERsA: reaching a critical mass to promote coordination of research on biodiversity, ecosystem services and Nature-based Solutions

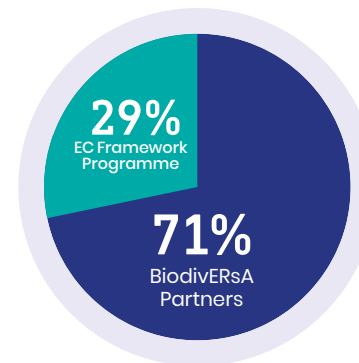
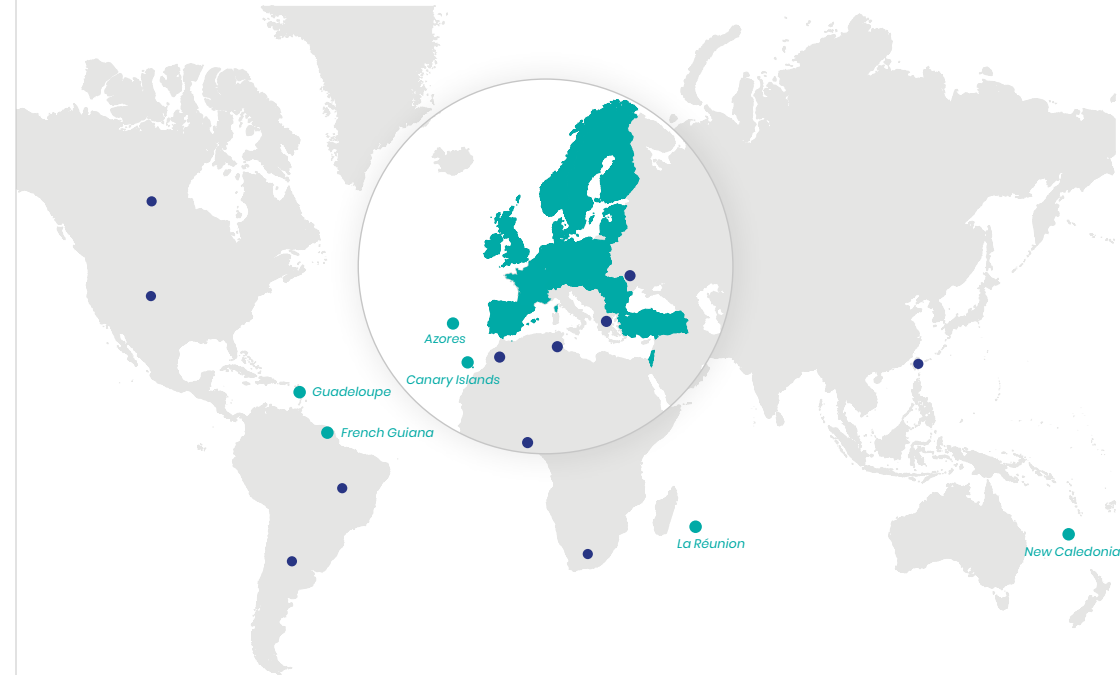
Our network of programmers and funders on biodiversity research across Europe...



...has been continuously enlarging, reaching a critical mass to coordinate research...



...with a broad geographical coverage across Europe, in the mainland and the overseas and with strong cooperation with non European research funders (●)

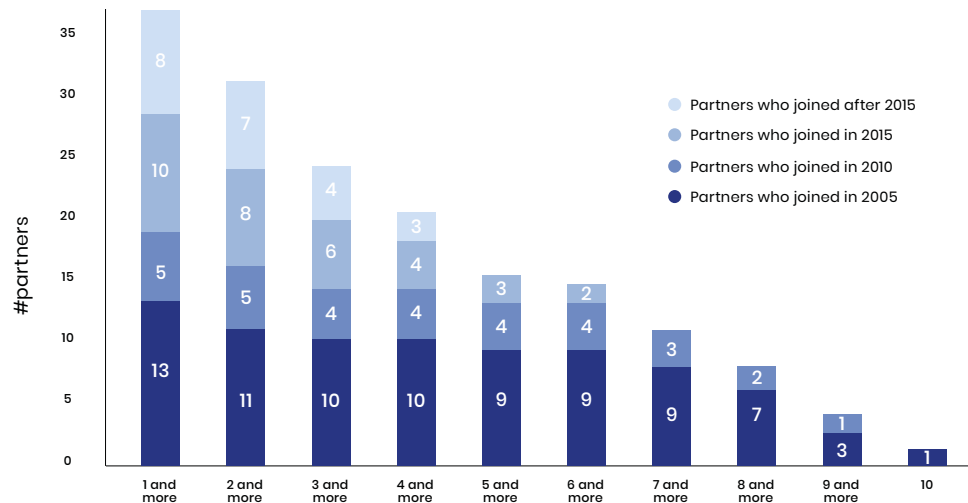


In Europe and over 2004–2016, the relative importance of the financial in-cash contributions to biodiversity research funding by BiodivERsA Partners and EC was of 71% and 29% respectively.

Source: BiodivERsA Database 2018

## Impact of the BiodivERsA partnership on collaboration across countries and territories

Over 2008-2021, 92% of the partners participated in at least one call...



...with an increased number of funders from EU-13 countries (i.e. countries that joined the EU after 2004)...



... along with a good participation and success of EU-13 countries



“ Czech Republic participated for the first time in a BiodivERsA Call in 2019 and got two teams selected in two different projects. ”

**Matej Stepanek** (Technology Agency of the Czech Republic)

“ In the 2015-2016 Call, Estonian teams participated to 4 pan-European funded projects: this makes BiodivERsA one of the success stories for Estonia. ”

**Aare Ignat** (Estonian Research Council)

“ Poland first participated to a BiodivERsA call in 2015 immediately leading to the funding of 5 Polish teams, including one coordination. Since then, 9 additional Polish teams have been funded through BiodivERsA calls. ”

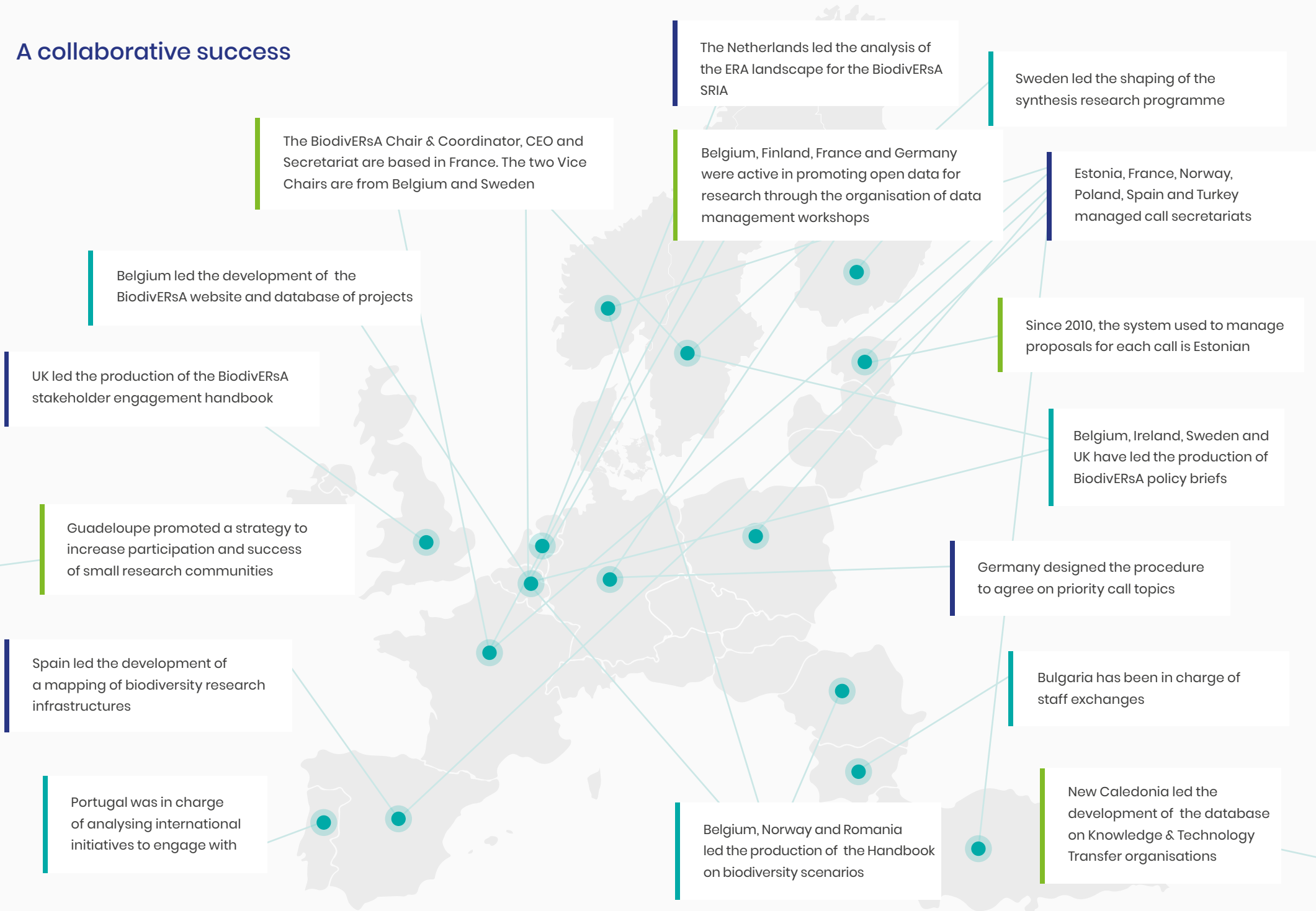
**Marcin Liana** (National Science Centre of Poland)

“ UEFISCDI participated so far in 6 BiodivERsA calls. This led to the funding of 11 Romanian teams participating in 8 different funded projects: a great success! This confirms the major importance given to biodiversity in Romania. ”

**Adrian Asanica** (Romanian UEFISCDI funding agency)



## A collaborative success



# Mapping and foresight



# Mapping the landscape of biodiversity research across Europe, and anticipating its evolution

## MAPPING ACTIVITIES

### The BiodivERsA database

for a comprehensive view on research programmes and projects within Europe



**11,500**  
funded projects  
already referenced

### Mapping biodiversity research infrastructures in Europe



### Mapping research collaborations

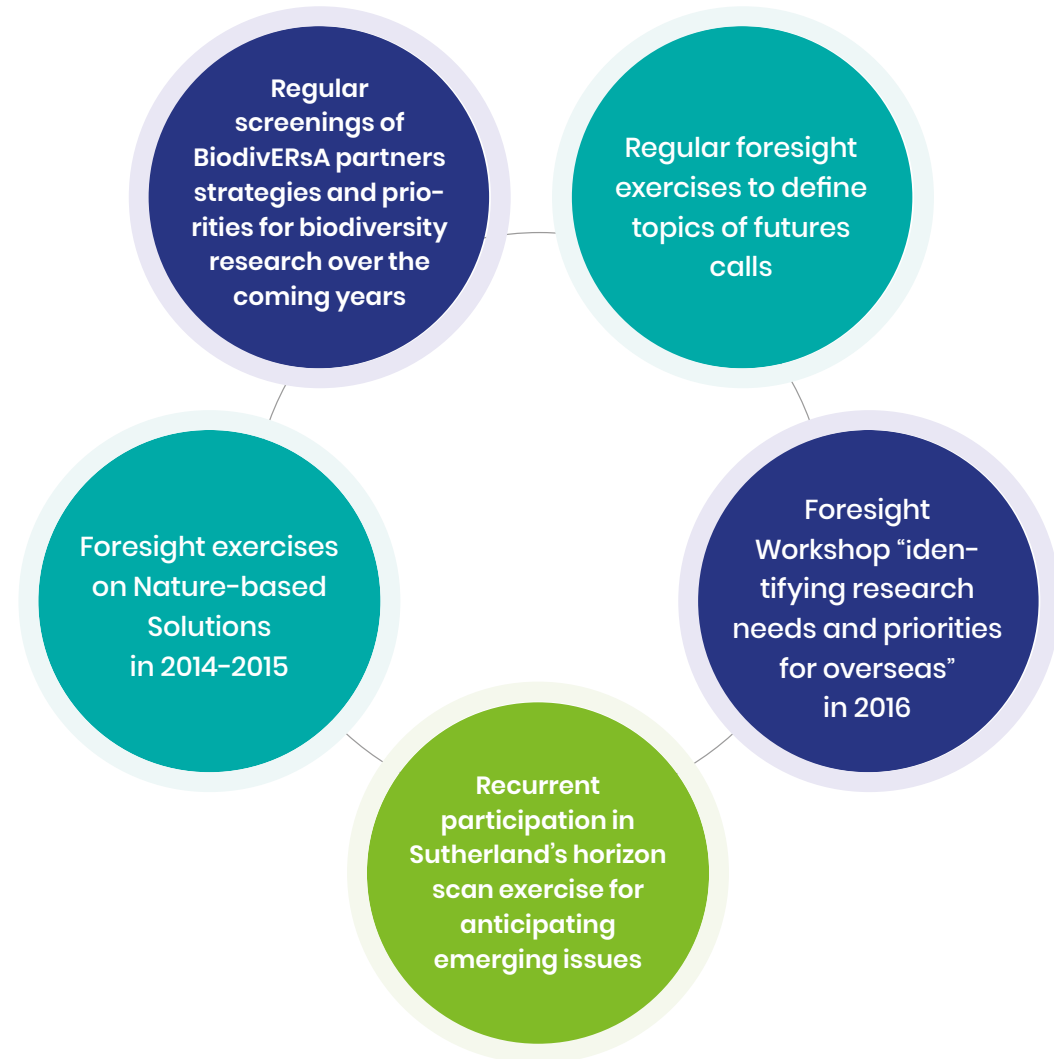
between Europe and other regions (e.g. ERA-LAC collaboration analysed with ALCUE-NET) and on specific domains (e.g. collaborations in the field of biodiversity scenarios with the Belmont Forum)



### Mapping Knowledge and Technology Transfer Organisations relevant for biodiversity research

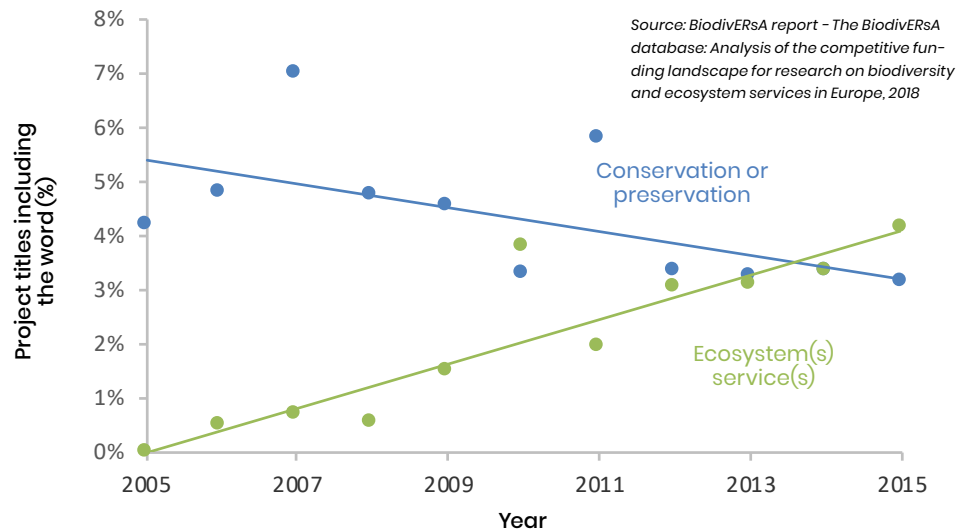


## FORESIGHT ACTIVITIES



## Impact of BiodivERsA mapping and foresight activities

The BiodivERsA database allowed an innovative characterisation of the trends in the type of biodiversity research funded in Europe, which guided the development of the BiodivERsA Strategic Research and Innovation Agenda



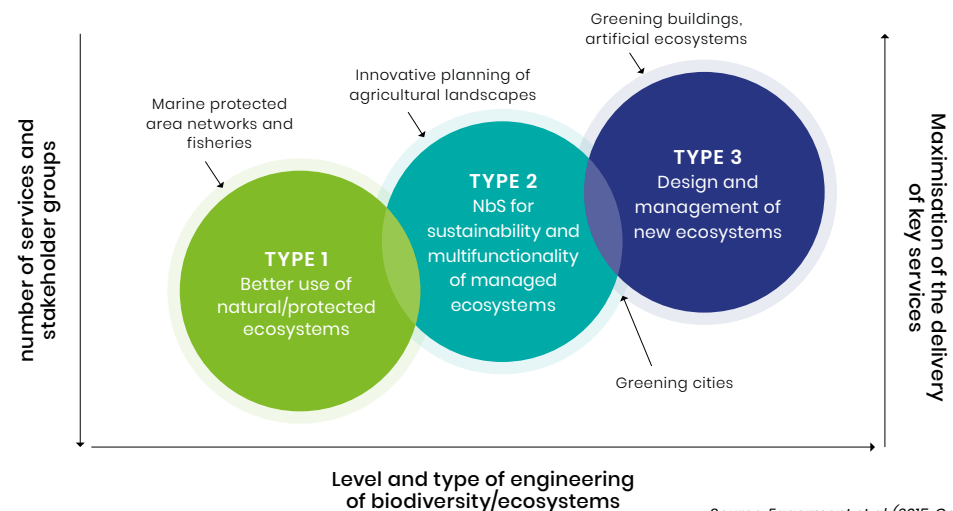
The mapping of biodiversity Research Infrastructures, RIs, allowed BiodivERsA to build a portal giving more visibility to these infrastructures.

The RI classification developed by BiodivERsA is now used in some countries to reflect on their RIs.

“ The approach and classification used by BiodivERsA to map biodiversity RIs were directly and successfully used in Belgium to refine the national RI survey.

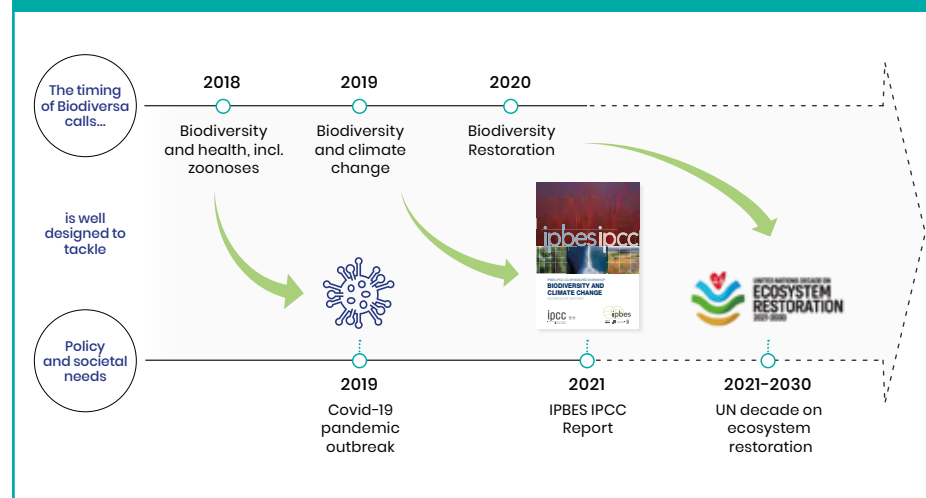
Lise Goudeseune & Maxime Coupremanne (Belgian Science Policy Office)

BiodivERsA foresight activities on Nature-based Solutions, NbS, led to the development of a new typology widely referred to in many arena (European Commission, IUCN Global Standard on NbS, Wikipedia, academia...).



This typology was notably used in 2021 by NetworkNature in collaboration with BiodivERsA to conduct one of the first comprehensive studies of NbS-related projects supported through major EU R&I programmes.

### Development of a R&I strategy, supporting research in a timely manner for policy and society needs



# Shared vision and priorities



## Developing a long-term vision and identifying common research priorities between partners

The BiodivERsA strategic research and innovation agenda (2017-2020)



Defining the BiodivERsA mission statement and major objectives...

...accounting for the views of a great variety of academic and non academic actors...

...while bridging the gap between complementary yet fragmented research communities and skills

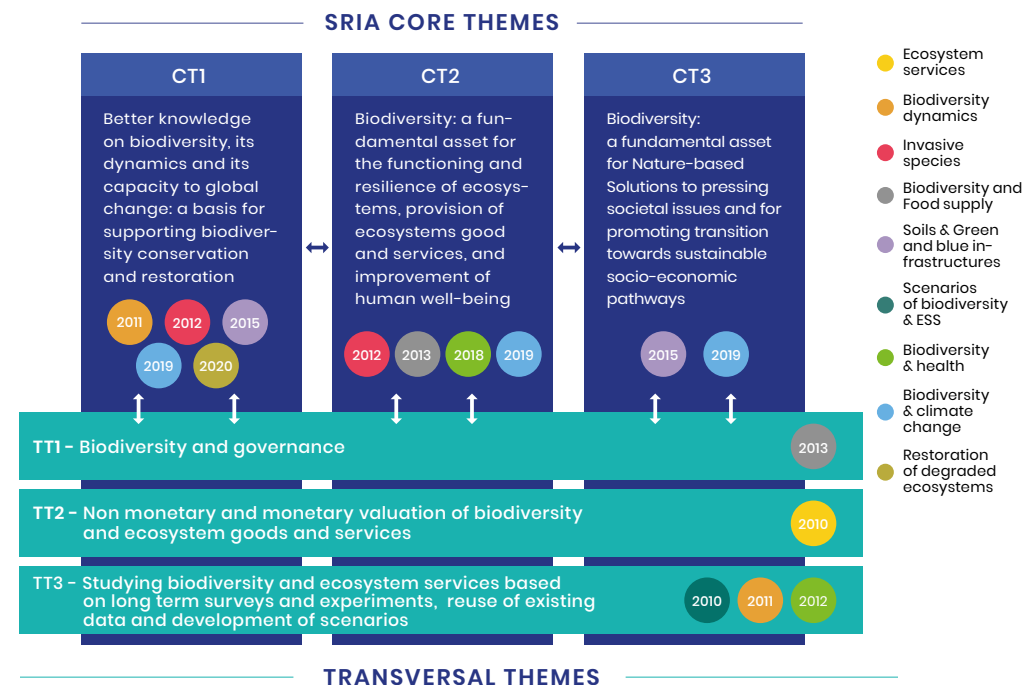
“ [BiodivERsA] had an impact in terms of the way in which the participants approached the challenge addressed. From dealing with threats to biodiversity, they turned to finding opportunities for biodiversity and Nature-based Solutions by escaping the linear model of basic-applied research and applying a multi-stakeholder approach that helped bridge the gap between different perspectives on biodiversity. **ERA-LEARN** brochure “15 years of European Public-Public partnerships in Research and Innovation” (BiodivERsA was one of the 6 initiatives selected to highlight the achievements of the ERA-Net instrument in this brochure) ”

## Impact of the long-term vision and research priorities agreed on between BiodivERsA partners

The BiodivERsA Strategic Research and Innovation Agenda (SRIA) is being used at the national / local levels when developing strategies to program and promote research on biodiversity and ecosystems

“ When The German Ministry of Education and Research (BMBF) updated its strategy for biodiversity research in 2017, it was decided that the BiodivERsA SRIA should be taken into account with other major documents for this exercise, to promote synergies and avoid duplications between the national, pan-European and global actions. ”  
**Rainer Sodtke** (DLR project management agency)

Since 2010, the BiodivERsA Calls contributed to tackle challenges identified in the SRIA



# Capacity building for the research community



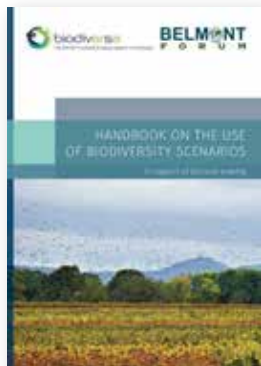
## BiodivERsA provides handbooks, guides and other capacity building tools for the research community...

2 guides developed on **stakeholder engagement** and **policy relevance** of research

1 guide and regular training workshops organized on developing **Data Management Plans** for research projects, promoting open science principles



1 handbook developed to support the **use biodiversity scenarios for decision-making** in policy and practice



1 toolkit with best practices for citizen science co-developed with BiodivERsA project researchers



... that have impact on the research community

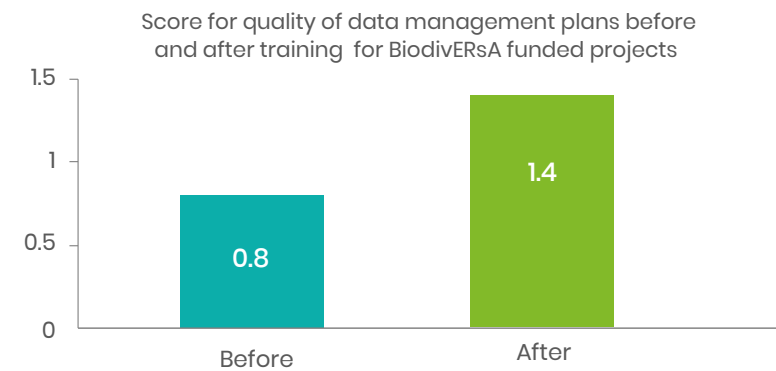
**36,335**  
downloads of  
the Stakeholder  
Engagement  
Handbook



“ Although we already coordinated several projects and would consider ourselves somehow experienced, the handbook was helpful to better structure the stakeholder engagement in the OSCAR project (BiodivERsA2015-16). ”

**Jochem Kail** (University of Duisburg-Essen, Germany)

### Biodiversa trainings on data management, contribute to improve funded projects' data management plans



Scoring based on the Data Curation Profile approach



# Promoting scientific excellence and collaboration

“ BiodivERSA covers a valuable niche at the interface between fundamental research and its application.

The (2015) call topic actually make me think in new perspectives and seek for new partners. My feeling is that BiodivERSA seeks for just the right level of inter- and transdisciplinarity among partners, pushing researchers to look beyond their immediate context without overstretching the demands.

”  
**Arndt Hampe** (INRA, Bordeaux, France)

“ BiodivERSA calls result in research which is highly esteemed by both scientists and practitioners/managers. These types of projects provide sound links between science and practice and are the only way to collaborate and to find target-oriented solutions in biodiversity research.

”  
**Janine Bolliger** (WSL, Birmensdorf, Switzerland)

“ I find the research supported by BiodivERSA very integrative, in terms of disciplines and social actors. BiodivERSA calls allow multidisciplinary and international teams to share experience and improve scientific and socio-ecological knowledge.

”  
**Laura Concostrina-Zubiri** (Universidade de Lisboa, Portugal)

## Promoting and funding pan-European research on biodiversity, ecosystem services and Nature-based Solutions

Since 2008, BiodivERsA has been launching calls nearly every year, supporting scientifically excellent and societal relevant research projects.



In 2018, BiodivERsA also began to support a new type of research: scientific synthesis through meta-analysis and re-use of existing data.

Through its calls, BiodivERsA supports a large, active research community. Over 2008-2020 it has already funded a large number of researchers.



“ My perception is that BiodivERsA offers a unique instrument in support of large-scale interdisciplinary efforts for preserving biodiversity and the capacity of Earth to support complex life. The most important aspect is that BiodivERsA operates on continental level, coordinating and steering the efforts of national funding agencies.

**Todor Ganchev** ”  
(Technical University of Varna, Bulgaria)

“ I think that the main contribution

of BiodivERsA calls is to promote tight collaboration and hence fast and efficient transfer of ideas between scientists and stakeholders. No other call, to my knowledge, is so directed to achieving this urgent aim.

**Mario Diaz** ”  
(CSIC, Madrid, Spain)

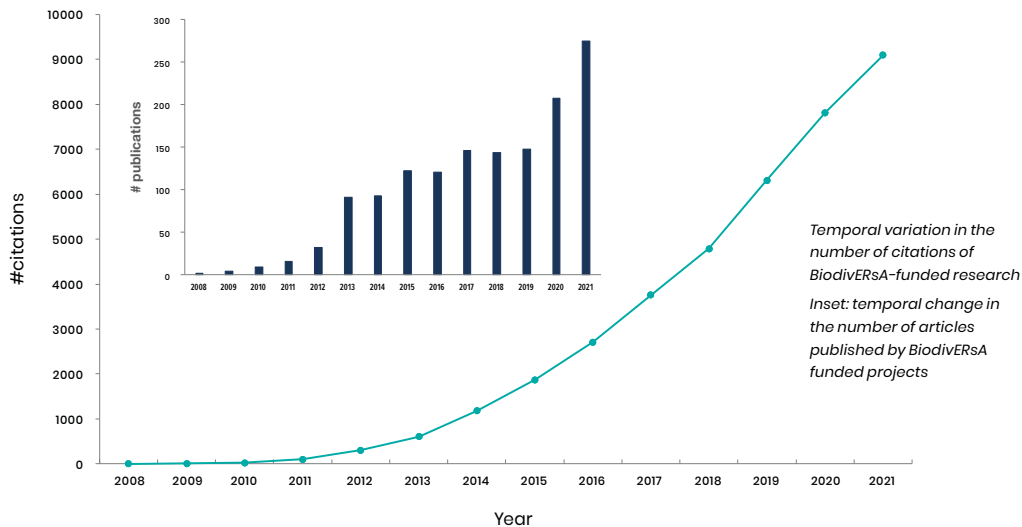
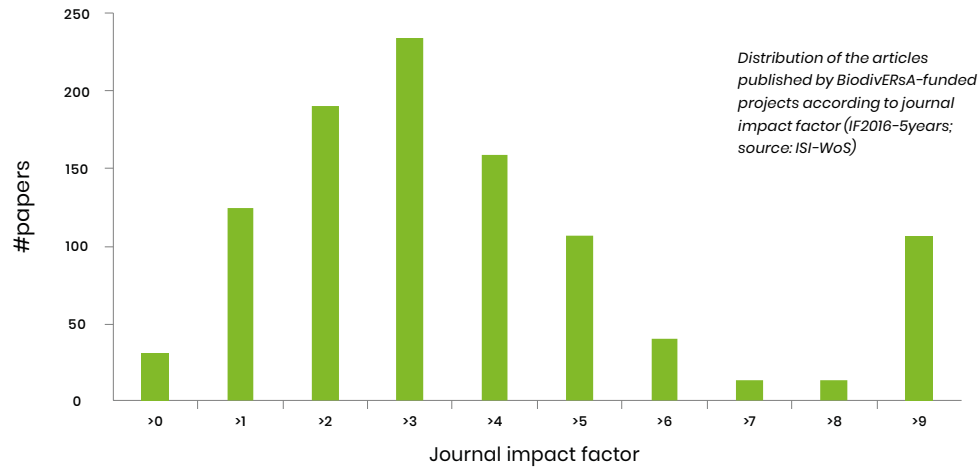
“ These are excellent opportunities to conduct fundamental research, while at the same time engaging with stakeholders. Our BiodivERsA project INVAXEN on invasive species even resulted in the submission of a project funded by LIFE geared directly towards the stakeholders and policy-makers.

**Anthony Herrel** ”  
(CNRS/MNHN, Paris, France)

# Impact of BiodivERsA support on advancing the academic excellence and the build-up of European research

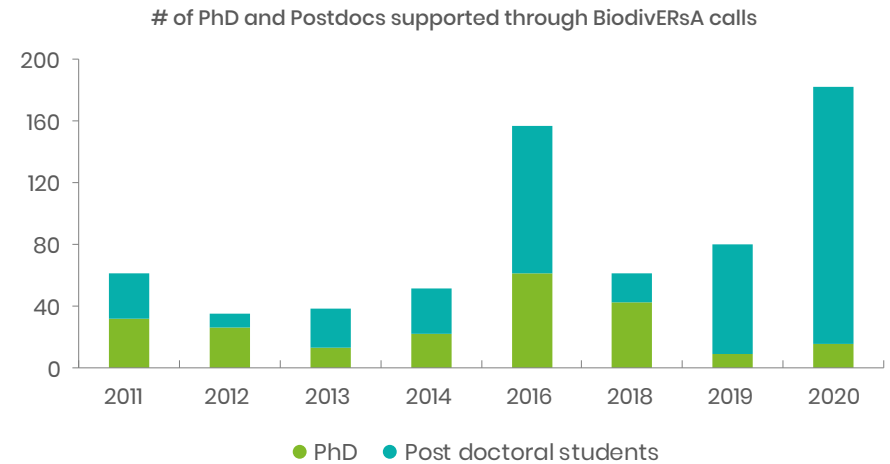
## BiodivERsA: promoting academic excellence

- Over 1,300 peer-reviewed articles to date
- Mean journal impact factor >4.8
- Over 10% of articles published in journals with impact factor >9
- >4% are highly-cited papers (4-fold the normal percentage)
- Since 2021, BiodivERsA research cited > 9,000 per year



“ BiodivERsA is quite unique in providing funding for very essential research on some of the most challenging issues we have, providing space for more interdisciplinary and transdisciplinary research. **Thomas Elmqvist**, Stockholm Research Centre and URBES project coordinator ”

## Through its support to early career researchers, BiodivERsA offers unique opportunities to develop new skills and collaborations



“ Being involved in REEF-FUTURES is an amazing research opportunity, and really helped advance my career. I am getting to work with people that are really high profile in my field. I got to expand my network so much working with these top scientists and learned new things from a variety of mentors. ”

**Matthew McLean**, University of Dalhousie (CA) and PhD in the REEF-FUTURES project (2016-17 call)

## Highlights from the BiodivERsA funded projects



### Factors explaining the spread of fungal diseases

The **RACE project** scientists demonstrated that fungal diseases in plants and animals are accelerating. They also reported on how human activity is intensifying fungal disease dispersal, while identifying steps to avoid wider impacts on humans and ecosystems.

*Fisher et al. (2012) Emerging fungal threats to animal, plant and ecosystem health. Nature 484: 186–194*



### Uncovering similar functional groups and traits in reef fish worldwide

Studying fish species' traits in coral and rocky reefs worldwide, the **REEF-FUTURES project** uncovered similarities of functional groups and traits that their fish communities have. They highlighted for the first time a backbone of 21 trait combinations that exist in all places with similar environmental conditions, with potentially huge consequences for predicting reef change and transferring management and conservation practices globally.

*McLean, M. et al (2021) Trait similarity in reef fish faunas across the world's oceans. PNAS 118.12 (2021): e2012318118*



### Demonstrating the effectiveness of heterogeneous agricultural landscapes

Working in hundreds of sites across 8 regions of Europe and North America, the **FarmLand project** provided large-scale evidence that reducing field size and increasing crop heterogeneity can be an effective way to increase biodiversity in agricultural landscapes without taking land out of agricultural production.

*Sirami et al (2019), Increasing crop heterogeneity enhances multitrophic diversity across agricultural regions, PNAS 13, 2019 116 (33) 16442–16447*



### Predicting grassland response to climate & management changes

By associating climate change scenarios and modeling of grassland managers' responses, the **VITAL project** developed a novel approach to quantify the trade-offs between different ecosystem services supported by biodiversity in the face of changing climatic conditions and management practices.

*Lamarque et al. (2014) Plant trait-based models identify direct and indirect effects of climate change on bundles of grassland ecosystem services. PNAS 111: 13751–13756*



### Multi-driver scenarios to guide forest conservation and management in the Congo Basin

Combining spatial predictions with scenarios of climatic and anthropogenic change, the **CoForTips project** uncovered the high vulnerability of forests in the Congo Basin, providing key quantitative benchmarks to shape transnational conservation and management strategies for the sustainability of central African forests.

*Réjou-Méchain, M. et al. (2021) Unveiling African rainforest composition and vulnerability to global change. Nature 593, 90–94*



### Unveiling genetic adaptation of natural populations to climate change

Studying genetic change of water fleas through both a selection experiment and reconstruction of their evolution over 40 years, the **TIPPINGPOND project** demonstrated for the first time both the capacity for rapid evolution of thermal tolerance and actual genetic change over recent decades associated with climate change in natural populations.

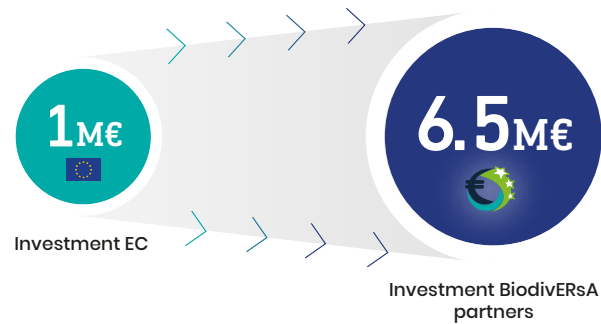
*Geerts, A. et al (2015) Rapid evolution of thermal tolerance in the water flea Daphnia. Nature Climate Change 5, 665–668*

Find more highlights at [www.biodiversa.org/highlights](http://www.biodiversa.org/highlights)

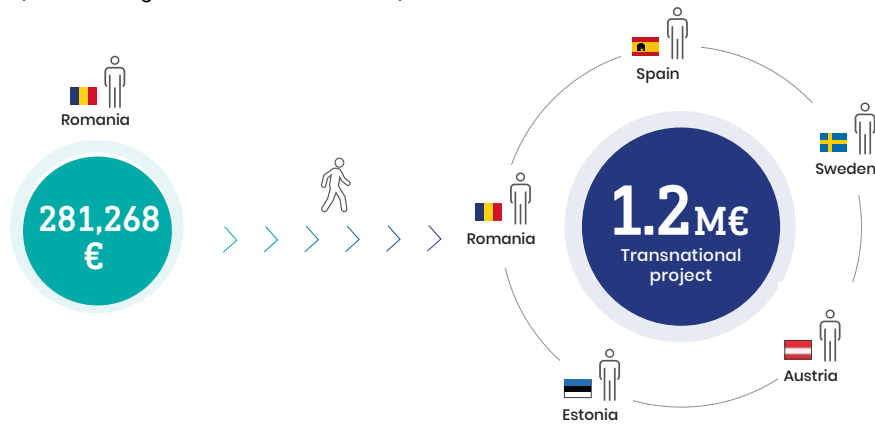
# Impact of BiodivERsA support to research in terms of leverage and networking effects

## BiodivERsA calls lead to high leverage effects:

- Over 2008-2021, BiodivERsA had an in-cash leverage effect for the European Commission (EC) of 6.5 (i.e. for 1 Million € invested by the EC in BiodivERsA, BiodivERsA partners contributed to an additional funding of research of 6.5 Million € in-cash).



- On average, a funding organisation spends 281,268€ in cash per project and allows its research teams to be part of a 1.2 Million € project (in-cash leverage effect for the national team close to 4.3). The total cost of a project averages 1.8 Million € (total leverage effect thus close to 6.3).

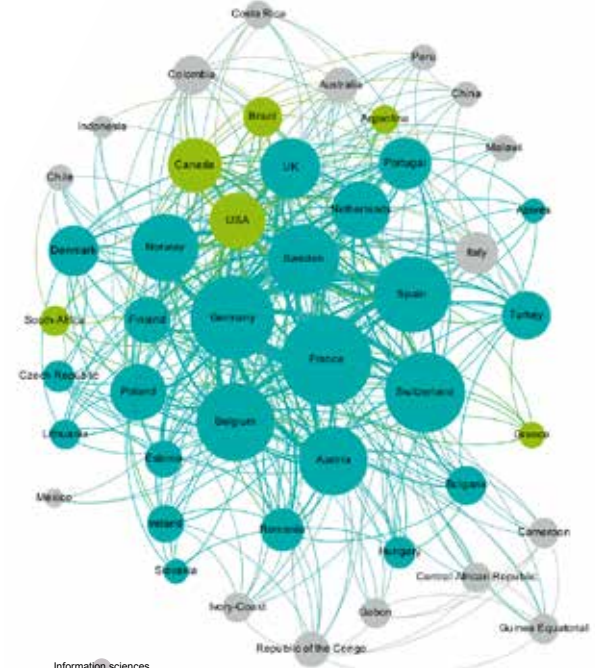


- For BiodivERsA COFUNDS, on average a funding organisation spending 1 Million € receives a top-up of **+0.26M€** from the EC.

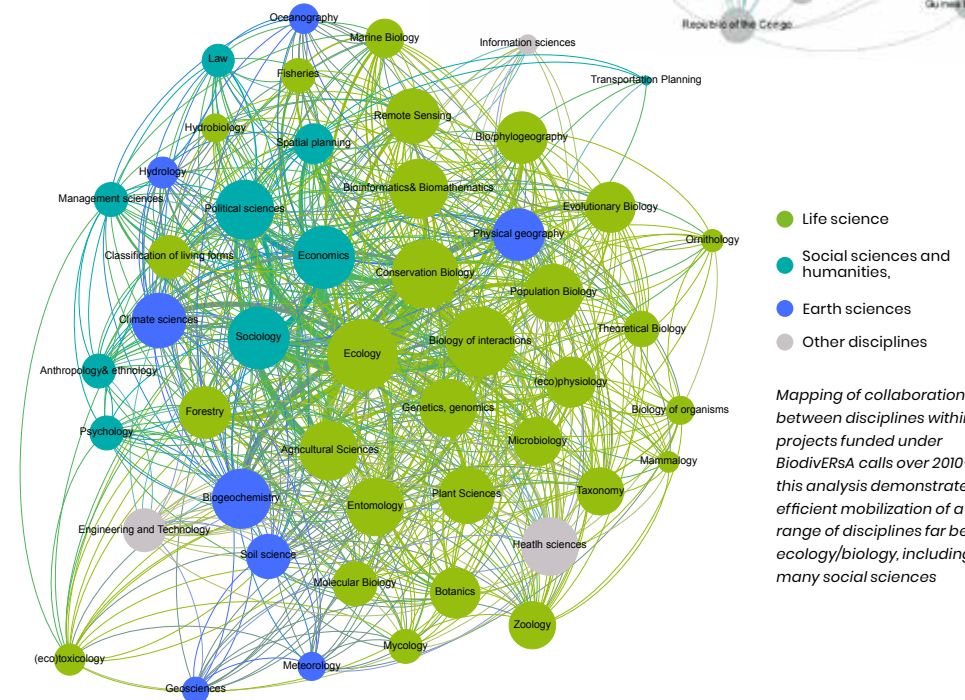
## Countries participating to BiodivERsA calls place their research teams at the heart of international research networks...

Mapping of collaboration between countries within projects funded under BiodivERsA calls over 2008-2020

- Countries that participated in calls as BiodivERsA members
- Countries not member of BiodivERsA who participated in calls
- Other countries



## ...and promote efficiently interdisciplinary research



Mapping of collaboration between disciplines within projects funded under BiodivERsA calls over 2010-2020: this analysis demonstrates efficient mobilization of a range of disciplines far beyond ecology/biology, including many social sciences

# Stakeholder engagement

“ *[BiodivERSA-funded research] is great at enabling scientists to engage with stakeholders, ranging from specific stakeholders to the public at large. This is something that scientists will always pay less attention to (not because of lack of interest, but because of lack of time). By specifically promoting this interaction, these projects are great at stimulating scientists to engage with stakeholders, and acquire methods and skills to do so, also in other projects.* ”

**Koen Sabbe** (Ghent University, Belgium)

“ *I find the type of research supported by BiodivERSA truly innovative in achieving significantly higher acceptance of the results by stakeholders and producing an impact on policy-makers.* ”

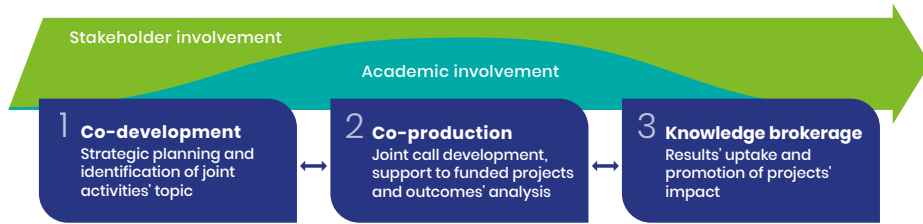
**Radu Suciu** (DDNI Tulcea, Romania)

“ *We encourage you to continue with this activity. For the research community, it is important to know the best methods to share opinions and build bridges between different actors in order to give response to real demands of society.* ”

**Francisco Otero Ferrer** (University of Las Palmas de Gran Canaria, Spain)

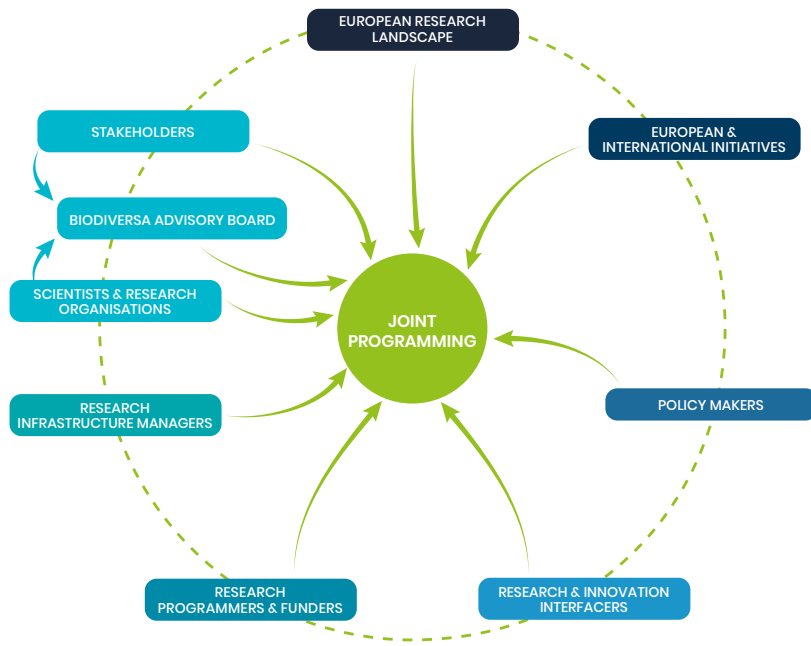
# The BiodivERsA approach: involving stakeholders at every step of the research process

BiodivERsA's approach to stakeholder engagement (adapted from Mauser et al. 2013)



## 1 Co-Development

- Involvement of the Advisory Board to identify priority activities and topics
- Co-development of the Strategic Research and Innovation Agenda with over 50 stakeholders



## 2 Co-Production with stakeholder engagement in research projects:

- Adequate evaluation of proposals
- Support to researchers with a Stakeholder Engagement Handbook and a policy guide
- Matchmaking events between researchers and stakeholders



## 3 Promoting research impact and supporting results dissemination:

- 15 BiodivERsA policy briefs produced so far
- Promotion of outcomes and case-studies on Oppla and NetworkNature platforms
- Mobilizing funded projects' results to feed IPBES assessments



## Impact of the co-development approach for research programming



### The BiodivERsA Strategic Research and Innovation Agenda (SRIA)

- ▶ Represents the shared long-term vision of BiodivERsA partners for research on biodiversity, ecosystem services and Nature-based Solutions.
- ▶ Takes into account inputs from 55 key international organisations for the domain.
- ▶ Was developed with the Advisory Board, at the crossroads of science, policy and practice.

“ Joining the BiodivERsA Advisory Board was an opportunity to propose subjects and priorities relevant to business at the earliest stage, and then to refine the contents part of this mixed and lively group of key personalities for biodiversity research and practice. ”

**Sylvie Bénard** (Director of Sustainable development - LVMH Group, Vice-Chair of the BiodivERsA Advisory Board)

“ This co-developed SRIA has been a very useful tool for the French Ministry of research when contributing to building Horizon Europe. It frames the biodiversity research domain and associated challenges and scientific issues in a really up-to-date manner. This also paves the way for reinforced collaboration with the EC, JPIs and international initiatives like IPBES and the Belmont forum. ”

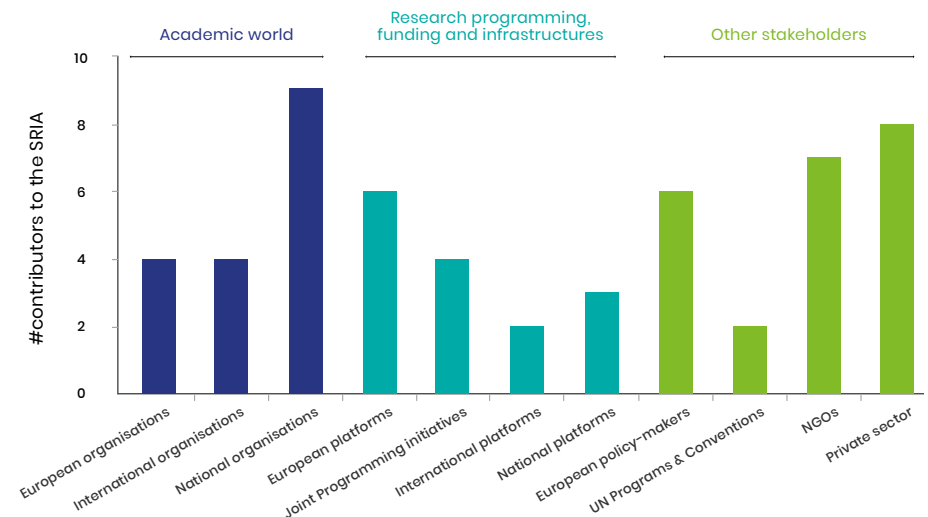
**Marie-Hélène Tusseau-Vuillemin** (French Ministry of Research & Innovation)

“ The BiodivERsA SRIA bridges the biodiversity and ecosystem services research with the Nature-based Solutions agenda, with a close attention to supporting policy making. **Humberto Delgado Rosa** (Natural Capital Director - European Commission's DG Environment) ”

“ [The SRIA] contributes to the implementation of the Strategic Plan for Biodiversity 2011-2020, and in particular Aichi Biodiversity Target 19 which relates to generating, improving and sharing biodiversity information. **Braulio Ferreira de Souza Dias** (Executive Secretary - Convention on Biological Diversity) ”

“ This valuable document provides a multi-disciplinary vision and insights to key reports and pieces of research that NGOs need to be aware of. **Ivan Ramirez** (Head of Conservation - BirdLife International) ”

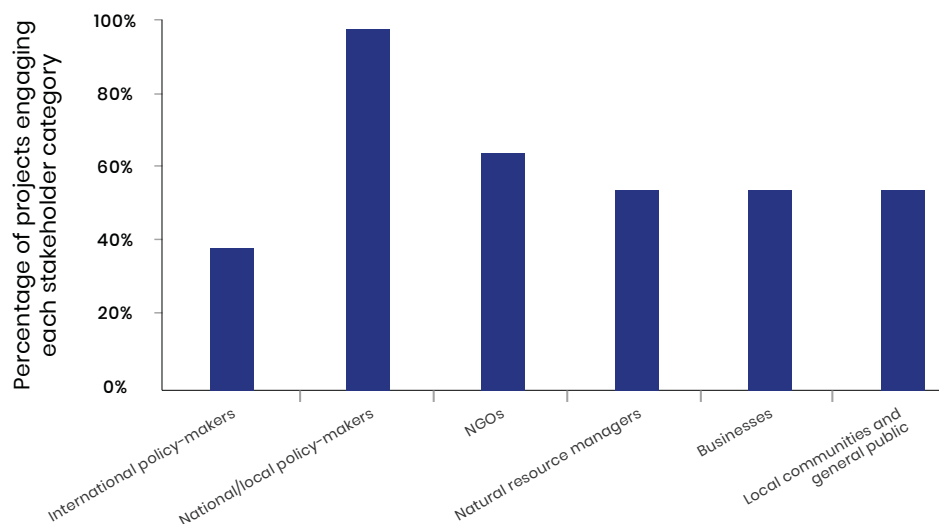
Institutional feedbacks accounted for in the SRIA were received from:





## Impact of the co-implementation of research projects between researchers and stakeholders

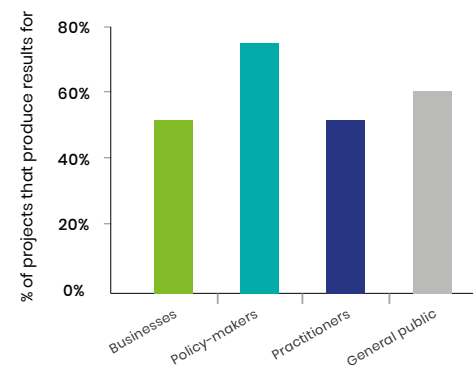
Close to 90% of BiodivERSA projects actively *involve or collaborate* with stakeholders



“ The approach to assessing policy and societal relevance and likely impacts in BiodivERSA projects is the result of years of mutual learning and fine tuning, would it be for the evaluation criteria used in calls or hands-on guidance for researchers such as the Stakeholder Engagement Handbook. This explains that stakeholder engagement is a reality in BiodivERSA-funded projects.

Simon Gardner (Head of Digital Environment)

”



### Highlight of transfers to policies

#### FarmLand project:

- Synthesis of key levers in the context of the CAP's update to meet SDGs and public demands on sustainability and the environment

#### FISHCON project:

- Co-designed with the Norwegian Water Agency to support the national implementation of the EUs Water Framework Directive

#### CONNECT project:

- Toolbox for the modelling of ecosystem services that is used by policy consultancies advising the European Commission

### Highlight of transfers to businesses

#### CoForTips project:

- Helped resolve conflicts between authorities, local communities and foresters/logging companies in the Congo Basin

#### GC-INVAMOFECT project:

- Novel CO<sub>2</sub> based mosquito capture methods transferred to the German company Biogents for potential application in product development

#### UrbanMycoserve project:

- Identifying soil microorganisms able to enhance urban trees' resilience ; work with companies for bio-stimulant product development

### Highlight of transfers to practitioners

#### BUFFER project:

- Novel regulation-based classification system for marine protected areas, (applied, e.g., in the Global Ocean Refuge System)
- Easy use through a four-step decision tree and an online platform at [classifympas.org](http://classifympas.org)

#### URBES project:

- Trainings with ICLEI for local authorities on valuation of urban biodiversity and ecosystem services

#### INVALUABLE project:

- Consulting work with WWF, Green Cross International and Conservation International on payments for ecosystem services (PES)

# Impact of knowledge brokerage and promotion of uptake of results

## BiodivERSA policy briefs are used and appreciated by stakeholders

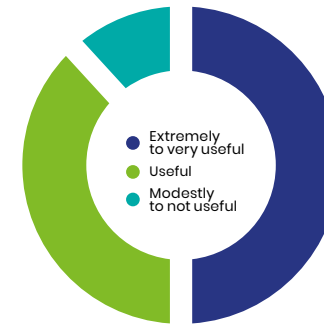


“ BiodivERSA’s policy brief on the role of forest genetic resources sets recommendations for precise policy changes needed for climate change adaptation. ”

**Michele Bozzano** (Coordinator of the European forest genetic resources programme)

- Several BiodivERSA policy briefs have been translated in national languages (and in one instance directly by a Ministry of Environment)
- The policy brief on natural forest expansion was cited in discussions for the development of the EU Horizon Europe work programme for 2022 on the topic of Rewilding landscapes for carbon sequestration, climate adaptation and biodiversity support

## Feedbacks on BiodivERSA policy briefs



Close to 90% of policy makers indicated that BiodivERSA policy briefs are useful (40%) or very to extremely useful (50%) to them

Source: Feedback from 59 international to local policy makers on the first set of BiodivERSA briefs

## Some LIFE projects build on BiodivERSA results, e.g.

- The BiodivERSA LinkTree project results provided indicators and guidance for best practices for tree conservation in Mediterranean Natura 2000 sites, which was further developed as part of the BACCATA project funded by the LIFE programme
- The BiodivERSA RACE project’s protocols were used in the Amphibienvorbund project funded by LIFE, particularly for the compliance with standards on health checks to be performed on the donor population
- Models developed in the BiodivERSA INVAXEN project allowed for better predictions of the invasion potential and the identification of areas of priority concern, were transferred into eradication and management efforts part of the follow-up CROAA project funded by LIFE



Simultaneous  
promotion of scientific  
excellence and  
societal impact



## Promoting scientific excellent research with societal impact...

Launch of the BiodivERsA Prize in 2018, highlighting some of the most successful projects working on biodiversity at the crossroads of excellence and impact



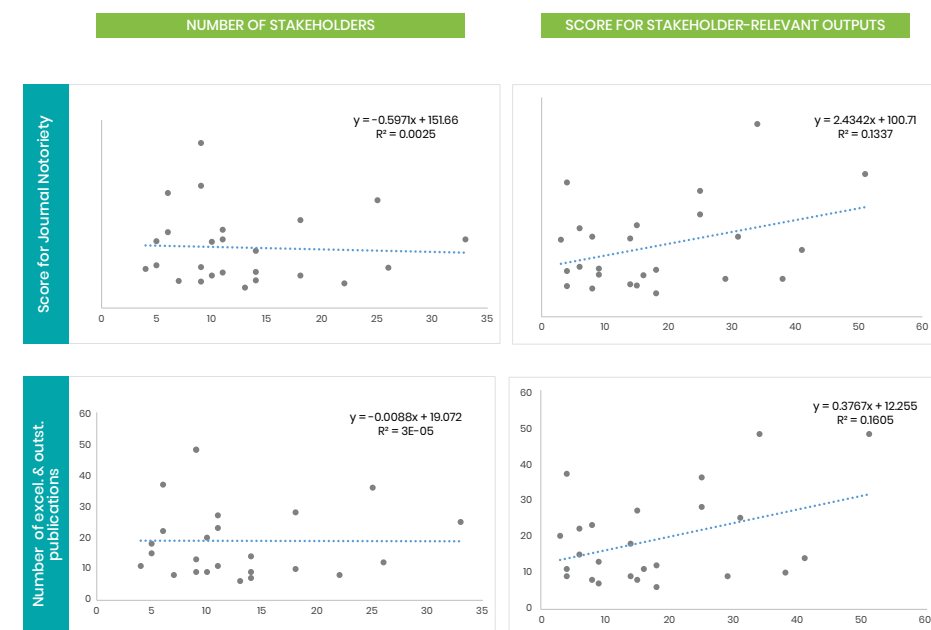
Development of **novel methods for monitoring project outputs** across academic excellence, engagement of stakeholders and research outcomes for society and policy

- 2 brochures presenting the projects' outputs both at the academic and policy/societal level produced
- BiodivERsA was invited by ERA-LEARN in 2016 and the French National Research Agency in 2021 to share insights on its methods



## ...without generating a trade-off between academic excellence and stakeholder engagement

BiodivERsA demonstrated there is no trade-offs between academic excellence and the investment in stakeholder engagement or the generation of research products relevant to society. Some positive tendencies were even observed between academic excellence and the generation of research outputs relevant to stakeholders.



Correlations between indexes for academic excellence (turquoise) and stakeholder engagement or generation of stakeholder relevant products (green) based on the monitoring of funded projects (grey dots) – see Lemaitre and Le Roux (2021) Outputs of funded projects

# Collaboration with the IPBES



## Our collaboration with the IPBES...

BiodivERSA has collaborated with IPBES – the Intergovernmental Platform on Biodiversity and Ecosystem Services – through a mutually beneficial approach.



“ The way BiodivERSA synthesised research results from its funded projects to contribute to our assessment was highly appreciated by our unit and helped the authors. ”

**Amor Torre-Marin Rando**  
(Science Officer – IPBES Technical Support Unit)



1 research programme implemented in 2017 with the Belmont Forum for over 28 Mio€ building on gaps identified in the IPBES assessment on biodiversity scenarios

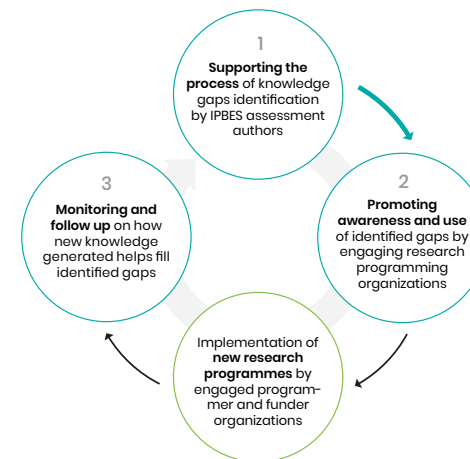


1 training session led by BiodivERSA building on its Guide on Policy Relevance of Research, part of an IPBES Fellowship Programme in 2017

## ... reinforced over time.

**A success story: BiodivERSA selected in 2019 to co-host the IPBES Technical Support Unit for the Task Force on Knowledge and Data**

The TSU hosted by BiodivERSA promoted a 3-step process for knowledge generation catalysis



“ One of the four functions of IPBES is to identify gaps in knowledge and to catalyse the generation, by the scientific community, of new knowledge to address the identified gaps. In coordinating the launch of new research calls with gaps identified by the IPBES Assessment of Scenarios and Models of Biodiversity and Ecosystem services (IPBES 2016), and generating new research projects on that topic, BiodivERSA has illustrated how this function of IPBES can be successfully implemented ”

**Anne Larigauderie** (Executive Secretary – Intergovernmental Platform on Biodiversity and Ecosystem Services)

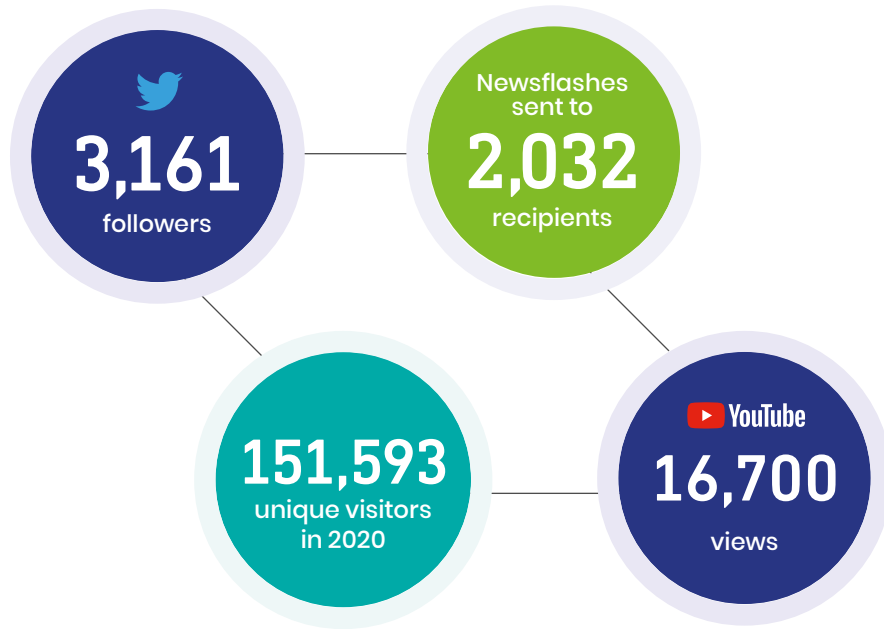
### KNOWLEDGE TRANSFER TOWARDS IPBES ASSESSMENTS – HIGHLIGHTS

- ▶ One success story on the Large Blue butterfly conservation is a direct result from a BiodivERSA-funded project in the Chapter 3 «*biodiversity status and trends*»
- ▶ The analysis of contrasting urbanization trends across Europe and examples of emerging science-policy linkages for improving human health and well-being in urban landscapes were derived from the URBES project in the Chapter 6 «*Options for governance and decision-making across scales and sectors*»
- ▶ A Europe-wide reporting on mismatches between demand and supply of pollination in the European Union was used, based on results of the CONNECT project in the Chapter 2 «*Nature’s contributions to people*»

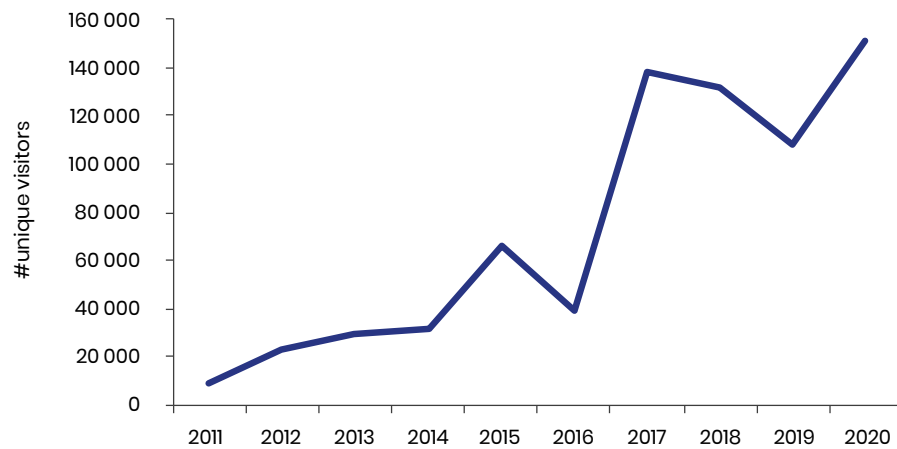
A growing  
visibility



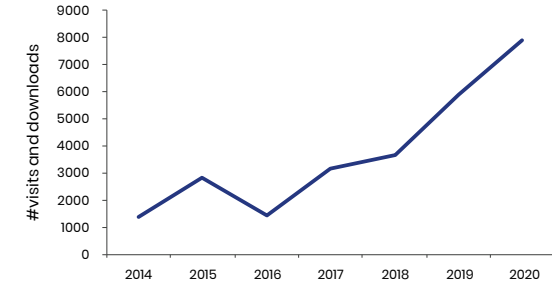
## BiodivERsA activities attract an increasing number of followers and users



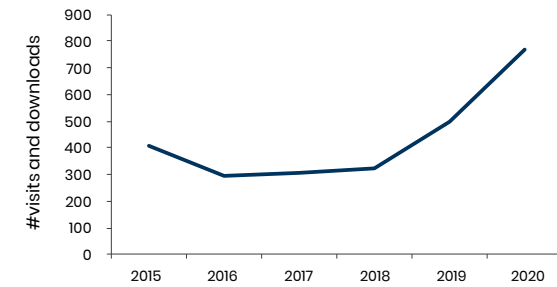
Evolution of the number of visitors on the BiodivERsA website



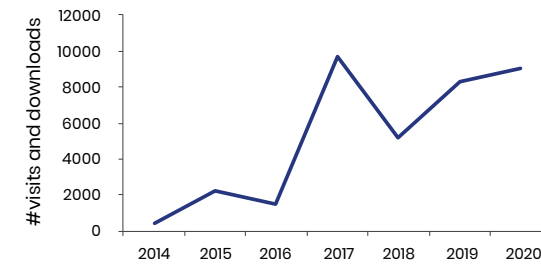
Nb of visits and downloads on the BiodivERsA Policy briefs



Nb of visits and downloads of the 2008 Output brochure



Nb of visits and downloads of the stakeholder engagement handbook



In 1 year,  
**2,544**  
views & downloads  
of the Citizen Science  
Toolkit

“ BiodivERsA has designed a fantastic **#CitizenScience** toolkit for **#biodiversity scientists**, to inform about the benefits of citizen science, current best practices, and useful resources in the field. ”

[ResBios: Responsible Research in Biodiscoveries on LinkedIn](#)



# Preparing the future



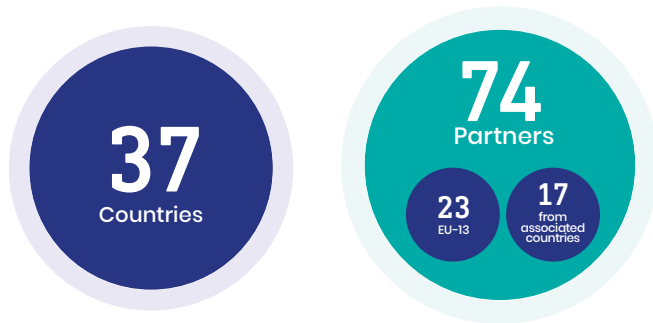
# Establishing a European co-funded biodiversity partnership

BiodivERSA prepared the creation of a European-co-funded Partnership on biodiversity, part of Horizon Europe: **Biodiversa+** (starts in October 2021 for 7 years)

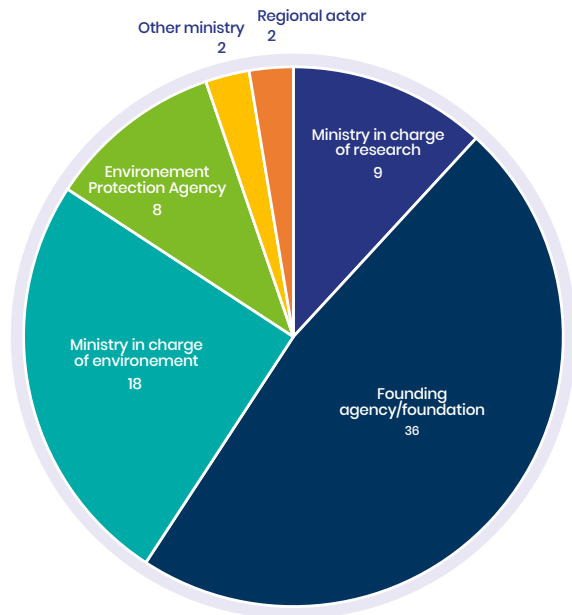


An increased ambition...

## ... in terms of geographical coverage

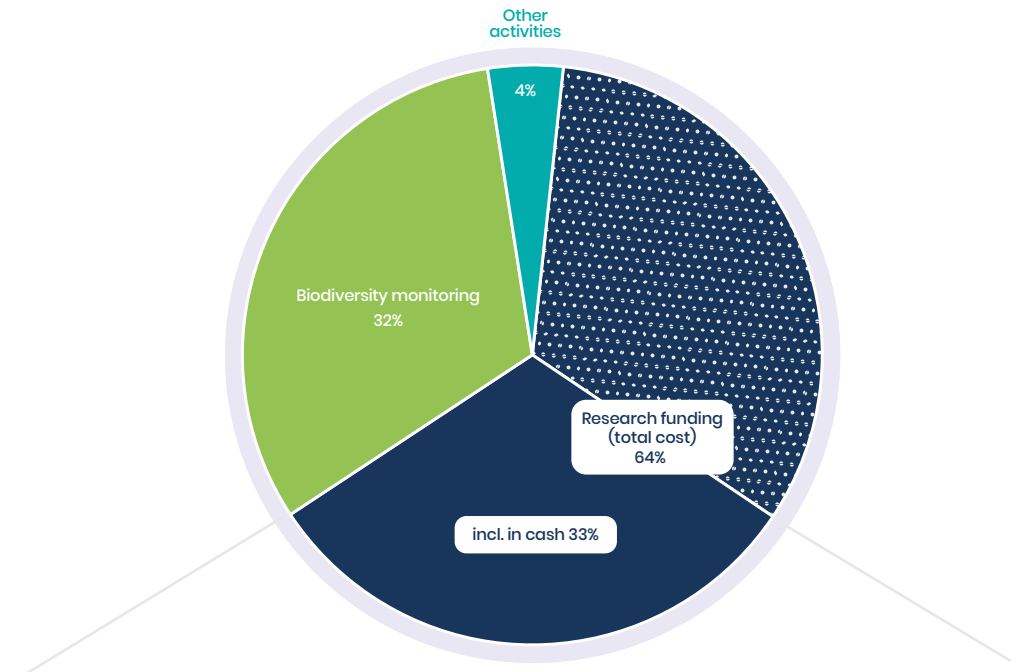


## ... in terms of membership

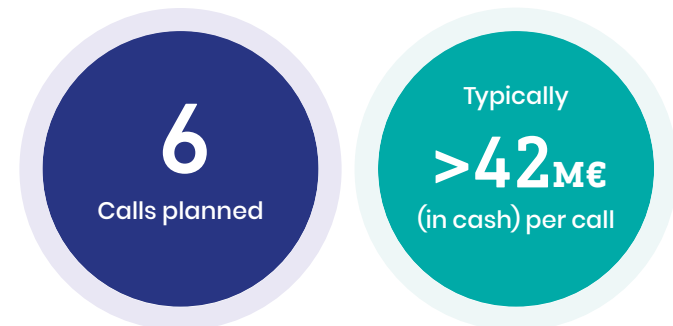


## ... in terms of resources

> 800Mio€ of investment planned over 7 years

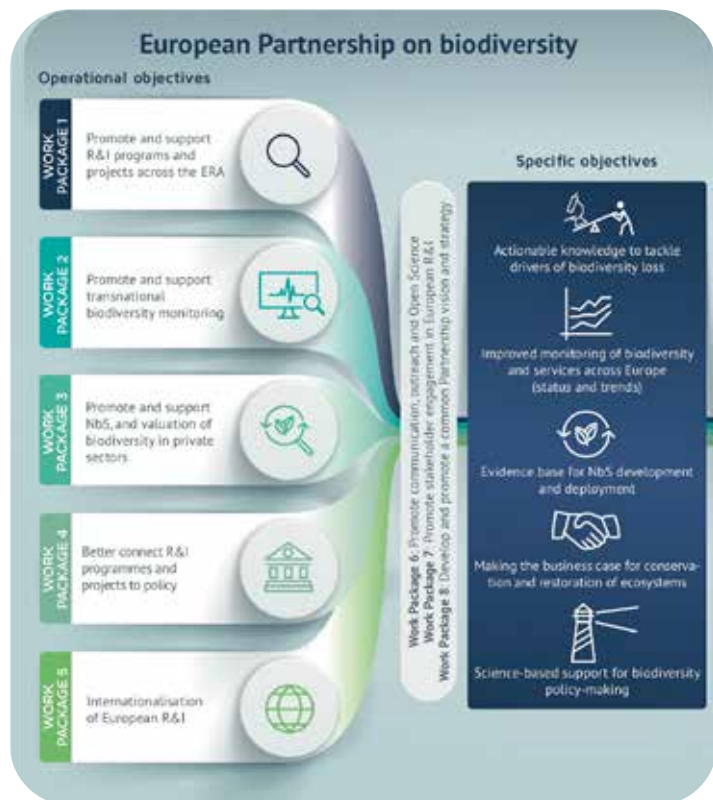


## ...with a continuous support to research



... in terms of activities

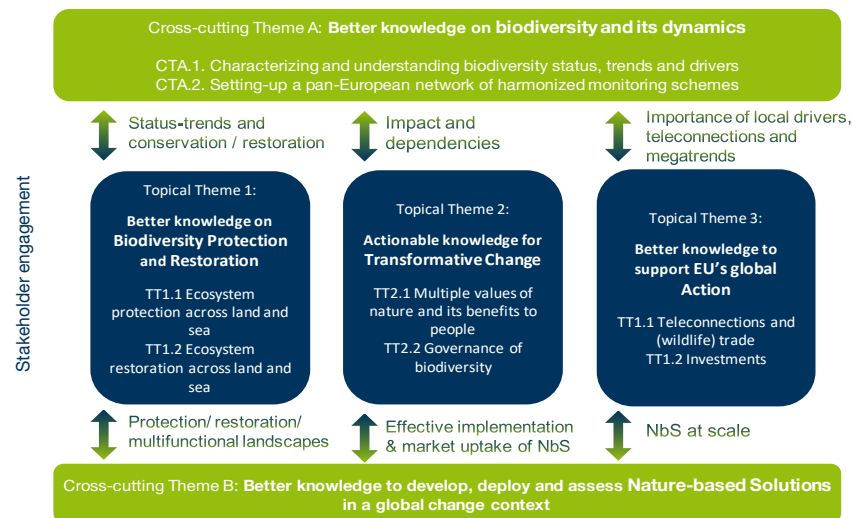
Building on BiodIVERsA, Biodiversa+ will implement a more ambitious portfolio of activities to catalyze relevant transformational changes at transnational level.



An updated vision: the Biodiversa+ Strategic Research and Innovation Agenda



A SRIA developed in consultation with a broad range of actors and covering the whole biodiversity domain



Communication, outreach and Open Science

# The BiodivERsA Partners

1. French Foundation for Research on Biodiversity, *France (coordinator)*
2. Austrian Science Fund, *Austria*
3. Belgian Science Policy Office, *Belgium*
4. The Research Foundation – *Flanders, Belgium*
5. the Fund for Scientific Research, *Belgium*
6. National Science Fund Bulgaria, *Bulgaria*
7. Ministry of the Environment, *Czech Republic*
8. Innovation Fund Denmark, *Denmark*
9. Ministry of Environment and Food, *Denmark*
10. Estonian Research Council, *Estonia*
11. Academy of Finland, *Finland*
12. French National Research Agency, *France*
13. French Ministry of Ecology, Sustainable Development and Energy, *France*
14. French Ministry for Higher Education, Research and Innovation, *France*
15. Innovation and Technology Park of New-Caledonia, *France*
16. Guadeloupe Region, *France*
17. French Guyana Region, *France*
18. Reunion Region, *France*
19. German aeronautics and space research centre, *Germany*
20. German Research Foundation, *Germany*
21. Ministry of Agriculture, *Hungary*
22. Environmental Protection Agency, *Ireland*
23. Ministry of Environmental Protection, *Israel*
24. Latvian Ministry of Environmental Protection and Regional Development, *Latvia*
25. Research Council of Lithuania, *Lithuania*
26. Research Council of Norway, *Norway*
27. National Science Centre, *Poland*
28. Portuguese national funding agency for science, research and technology, *Portugal*
29. Regional Fund for Science and Technology, *Portugal*
30. The Executive Agency for Higher Education, Research, Development and Innovation Funding, *Romania*
31. Slovak Academy of Sciences, *Slovakia*
32. State Research Agency, *Spain*
33. Regional Government of the Canary Islands, *Spain*
34. Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, *Sweden*

35. Swedish Environmental Protection Agency, *Sweden*
36. Swiss National Science Foundation, *Switzerland*
37. The Netherlands Organisation for Scientific Research, *The Netherlands*
38. Ministry of Agriculture and Forestry/General Directorate of Agricultural Research and Policies, *Turkey*
39. Joint Nature Conservation Committee, *United Kingdom*



# Reading this brochure, you will learn that...

## Research coordination

...39 research programmers and funders from 25 countries, incl. ORs & OCTs, develop and implement coordinated activities through BiodivERsA.

## Communication & outreach

...our website had more than 150,000 different visitors in 2020

## Knowledge transfer to policy

...our approach has been cited as exemplary in terms of feeding new knowledge in IPBES assessments.

## Mapping of research

...the BiodivERsA database includes 11,500 projects and was used to characterise the temporal trends in the type of research funded in Europe since 2004.



## Knowledge transfer to practitioners

...BiodivERsA-funded projects provide novel science-based tools and consulting services to conservationists and managers and users of biodiversity.

## Foresight activities

...foresight activities on Nature-based Solutions led BiodivERsA to propose a typology for these solutions, which is now used by many stakeholders.

## Stakeholder engagement

...90% of BiodivERsA-funded projects actively engage or collaborate with non-academic stakeholders.

## Research funding

...since 2008, BiodivERsA has launched 10 calls representing a in-cash funding amount for 180 million €.

...and many more facts  
and figures!



The BiodivERsA project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 642420