Workshop on Implementation of Nature-based Solutions to tackle climate change
Session 3a: research and stakeholder engagement
Marseille (France)
22-24 January 2019
BiodivERsA:
* Promoting research on Nature-based solutions
* Promoting stakeholder engagement for maximizing the impact of this research

Xavier Le Roux (FRB - Coordinator and CEO of BiodivERsA)

www.biodiversa.org
@BiodivERsA3

NBS Conference (Marseille, 21/01/2019)
BiodivERsA: the European network of national/local programmers & funders of research on Biodiversity and NbS (Ministries and agencies)

- **Green**: BiodivERsA partners
- **Blue**: international partners in BiodivERsA calls

Strong link to the EC

- 23 Countries
- 35 Partners
  - 6 Overseas
  - 8 EU-13
Usual ‘solutions’ based on non sustainable exploitation of biodiversity

- Over-fishing
- Intensive agriculture
- Cities based on grey infrastructures

Nature-based ‘solutions’ based on the protection and sustainable management of biodiversity

- MPAs and reduced fishing on target species
- Agro-ecological approaches
- Urban NbS

BiodivERsA Strategic Research & Innovation Agenda (2017)
NBS are addressed across the range of BiodivERsA activities

Framing & typology of Nbs
Mapping & foresight activities

Science-society/policy interfacing for NbS
Stakeholder engagement
Knowledge brokerage & dissemination

Common strategic roadmap
Research funding
Other joint activities (programme alignment; mobility schemes...)
NBS in research programming
NBS in BiodivERsA calls
TYPOLOGY OF NbS:

- **TYPE 1**: better use of natural / protected ecosystems
  - marine protected area networks and fisheries

- **TYPE 2**: NBS for sustainability and multifunctionality of managed ecosystems
  - innovative planning of agricultural landscapes
  - greening cities
  - greening buildings, artificial ecosystems

- **TYPE 3**: design and management of new ecosystems
  - maximization of the delivery of key services

Type 1 NBS: No/weak intervention on ecosystems. Objectives = preserve/reinforce a range of ecosystem services within and beyond the protected ecosystems

Ex: protection of mangroves; set up of MPAs

Type 1 NBS related to the concept of biosphere reserves (core zones for nature protection + buffering and transition zones)

Eggermont et al. (2015) GAIA
**Type 2 NBS** : Approches for increasing the sustainability / multifunctionality of ecosystems, and service delivery

Ex: development of multifunctional agricultural landscapes; management of tree species and genetic diversity for increasing forest resilience facing extreme events

*Type 2 NBS related to concepts like Natural Systems Agriculture, agro-ecology, evolutionary-orientated forestry...*

*Eggermont et al. (2015) GAIA*
Type 3 NBS: Intensive management of ecosystems, possibly creating new ecosystems

Ex: Creation of new assemblages of species/genotypes for greening cities

Type 3 (et 2) NBS related to concepts of GBIs, ecological engineering, restoration of disturbed/polluted ecosystems

Eggermont et al. (2015) GAIA
NBS are addressed in BiodivERsA activities

- Mapping & foresight activities
- Common strategic roadmap
- Stakeholder engagement
- Research funding
- Knowledge brokerage & dissemination
- Other joint activities (programme alignment; mobility schemes...)

NBS in research programming
NbS at the core of joint programming for research

The latest BiodivERsA SRIA : 2016

http://www.biodiversa.org/1226
2009: BiodivERsA foresight activities on NBS (incl. workshop & typology)

2009: IUCN UNFCCC report; first scientific paper on NBS

2011: NBS: 1/3 of IUCN global programme

2013: EC report of H2020 expert group on NBS; NBS at core of H2020

2015: Gaia paper published (incl. typology)

2015: World bank report including the term NBS

2016: BiodivERsA SRIA 1/3 core themes focused on NBS; Wikipedia article out

2017: EC presidency conference on NBS

2018: EC report on EKLIPSE evaluation framework
NBS are addressed in BiodivERsA activities

- Mapping & foresight activities
- Common strategic roadmap
- Stakeholder engagement
- Research funding
- Knowledge brokerage & dissemination

Other joint activities (programme alignment; mobility schemes...)
Calls for research proposals, incl. NbS projects

- 2017-18 AAP COFUND (with Belmont Forum) on scenarios:
  - 135 proposals; 21 funded projects (for 28 Mio €)

- 2018-2019 AAP on biodiversity & health:
  - >10 Mio €

- 2019-2020 AAP on biodiversity & climate change:
  - >18 Mio €

- Proposal for a 2020 COFUND (with Water JPI) on ‘restoration’:
  - >15 Mio €

2008-2017: 113 Mio €
2008-2020: 160 Mio €
• **Call texts**: by scientists & stakeholders

• **Selection criteria**: Academic excellence + societal relevance + stakeholder engagement

• **Evaluation committee**: scientific experts + stakeholders

• **Monitoring**: academic impacts & impacts for stakeholders, policy stakeholders, innovation...
Research projects on all types of NBS supported by BiodivERsA:
Ex: the BUFFER project

23 scientific papers

Ecological efficiency / protection types

Representatives of AMPs
Regional fisheries committee
1 SME
Local policy makers
Revision of AMP management plans
Ex: Arrabida Marine Park (PT)

Guide for decision uptaken by managers
(MedPAN -> global)
Knowledge brokerage & dissemination

Mapping & foresight activities

Common strategic roadmap

Research funding

Other joint activities (programme alignment; mobility schemes...)

Science-society/policy interfacing for NbS

Stakeholder engagement

Knowledge brokerage & dissemination

NBS are addressed in BiodivERsA activities
Knowledge brokerage & dissemination

- Policy briefs
- Collaboration with IPBES
- OPPLA platform
- Video (BiodivERsA prize for excellence and impact)
STAKEHOLDER ENGAGEMENT

• A devoted handbook with tool-kit

(2014)
BiodivERsA web site

ENGAGEMENT OF POLICY STAKEHOLDERS

• A guide for engaging policy stakeholders

(Dec 2018) BiodivERsA web site
The NbS agenda: a change of mindset needed!

Disciplinarity ➔ Inter/Trans-disciplinarity
One silo ➔ Desoloing, addressing tradeoffs and underlying conflicts
Simplicity ➔ Complexity
Predictibility ➔ Uncertainty
Short term benefits ➔ Longer term sustainability

... calling for more **systemic** approaches in research...

... thanks to more **systemic** approaches in research programming and funding
Thank You!

BiodivERsA3 is funded by EC part of its H2020 programme
Announcement: 2 forthcoming BiodivERsA calls

Call to be launched in 2019
« Biodiversity & climate change »;
with a theme on NbS
>18 Mio €
20 countries participating

Call to be launched in 2020
« Restoration of biodiversity & degraded ecosystems »
>15 Mio €
17 countries participating