

# Progress and potential for reaching Aichi Target 11 sub-target on areas of importance for biodiversity

Dr Noelle Kumpel, BirdLife International  
Global Partnership on Target 11, Vilm, 26 April 2019

# Some areas of importance definitions and tools

**KBAs** are 'sites contributing significantly to the global persistence of biodiversity'; they are identified following the Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016). KBA locations can be accessed via the World Database of KBAs ([www.keybiodiversityareas.org](http://www.keybiodiversityareas.org)) or through the Integrated Biodiversity Assessment Tool (<https://www.ibat-alliance.org/>). Two priority types of KBAs to protect/conservate are:

**Alliance for Zero Extinction (AZE) sites** hold the last remaining refuge of one or more Endangered or Critically Endangered species. Map and info at: <http://zeroextinction.org/>

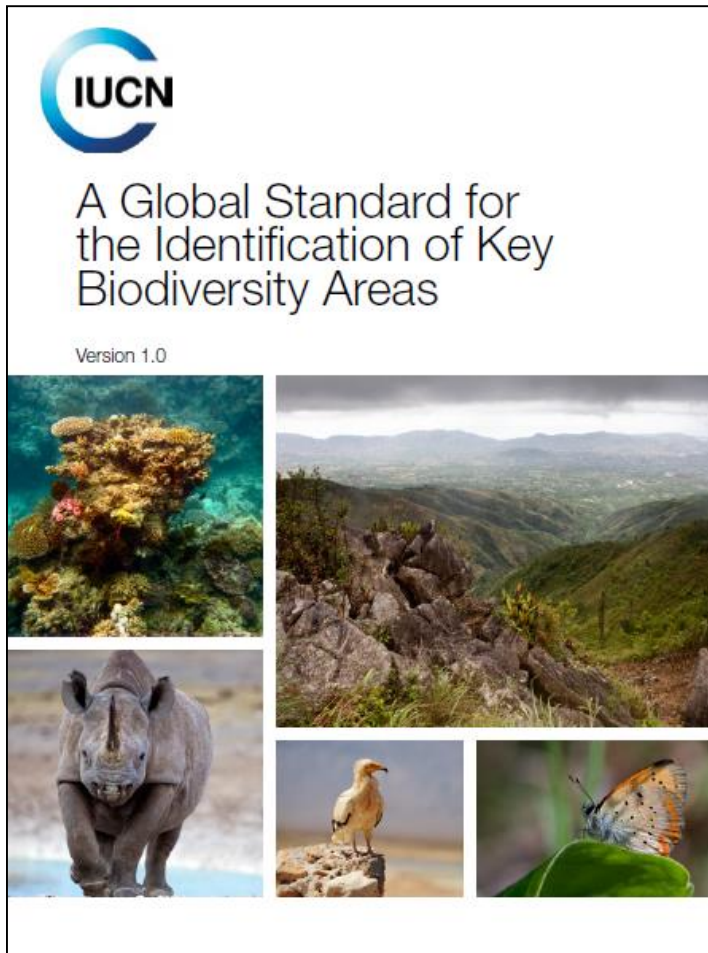
**IBAs in Danger** are a subset of IBAs (**Important Bird and Biodiversity Areas**) identified as being under very high pressure in recent years and in need of immediate action. See more at: <http://datazone.birdlife.org/site/ibasindanger>

Used in **IPBES Global Assessment** and **SDG Indicator 15.1.2**: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by PAs, by ecosystem type (terrestrial/freshwater, montane, marine)





# KBA Partnership and Standards



- First time conservation community has agreed on a common approach to identifying sites of importance for biodiversity (recognising existence of other types of designation, including at national level)
- Developed through consultative process over ~10 years via IUCN WCPA/SSC Biodiversity and Protected Areas Task Force
- Supports Aichi Targets 12 and 11



CONSERVATION INTERNATIONAL



CRITICAL ECOSYSTEM PARTNERSHIP FUND

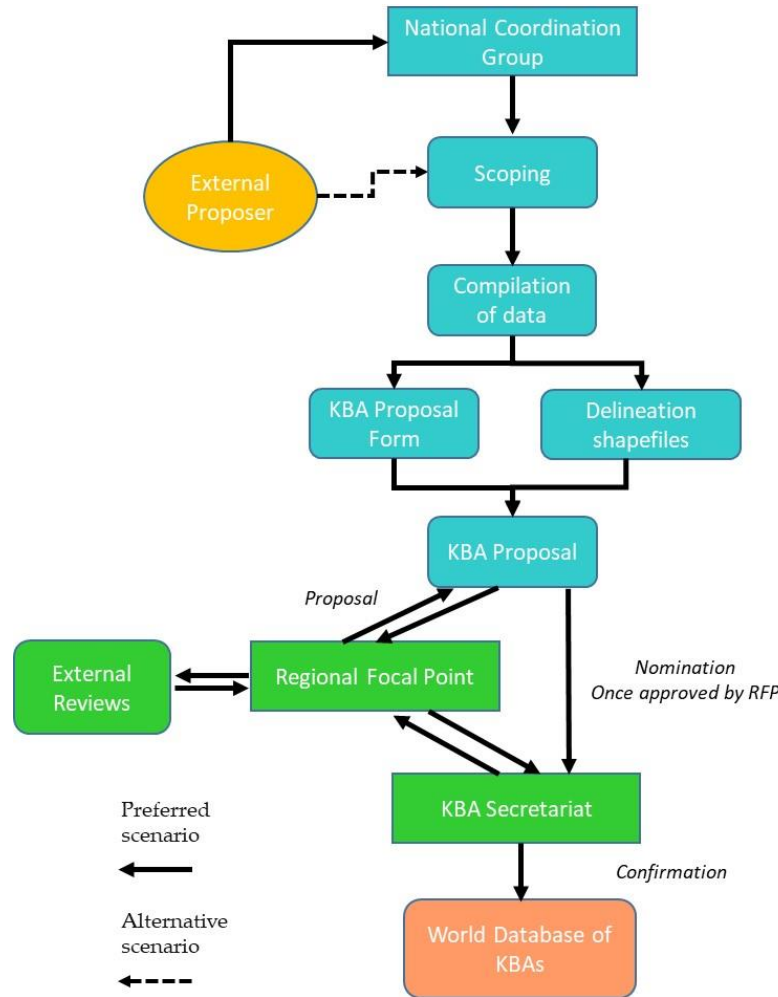


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# KBA identification process



National identification of KBAs

Scoping of species and sites needed

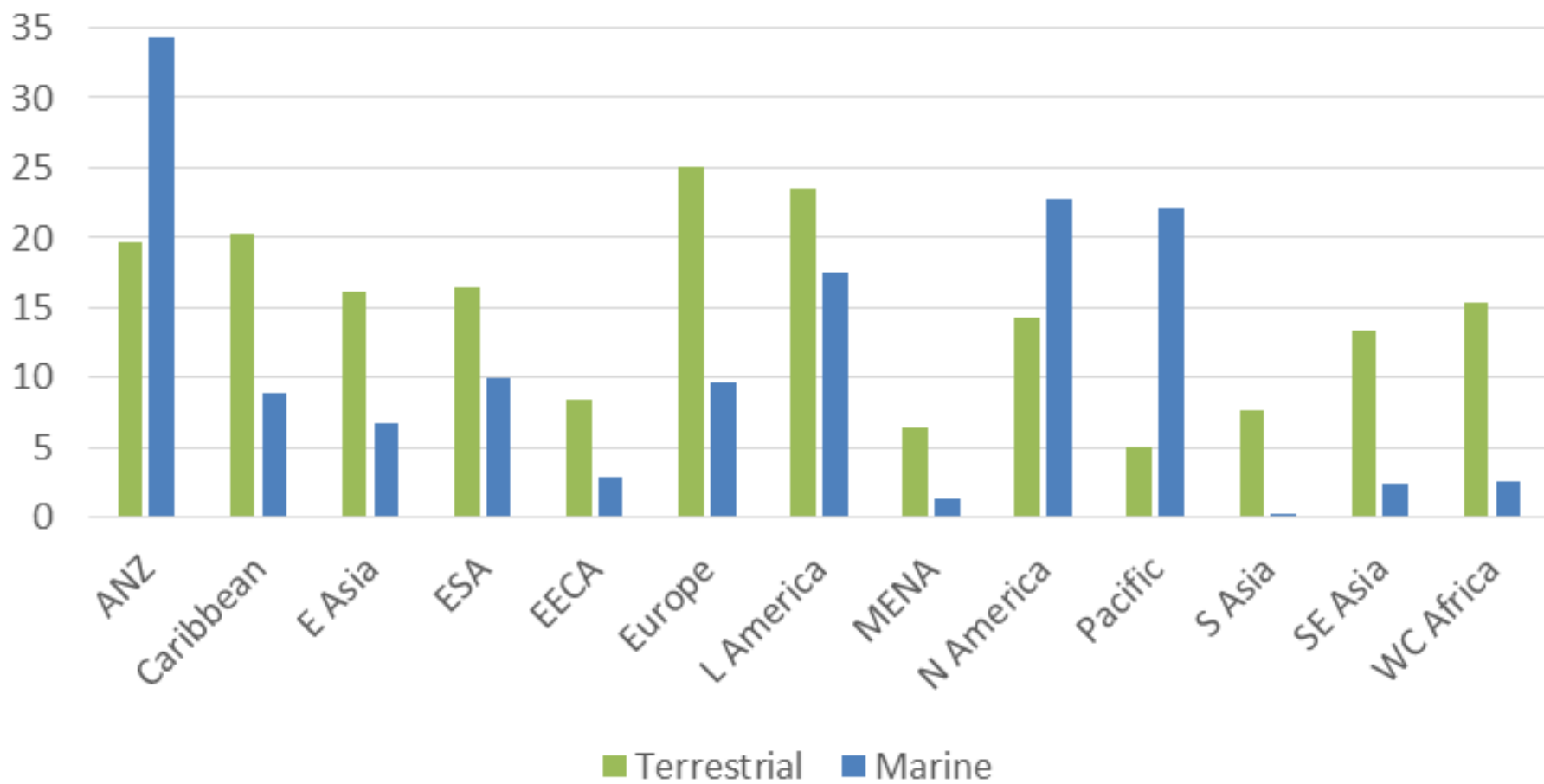
Review process to ensure consistency

# Progress to date

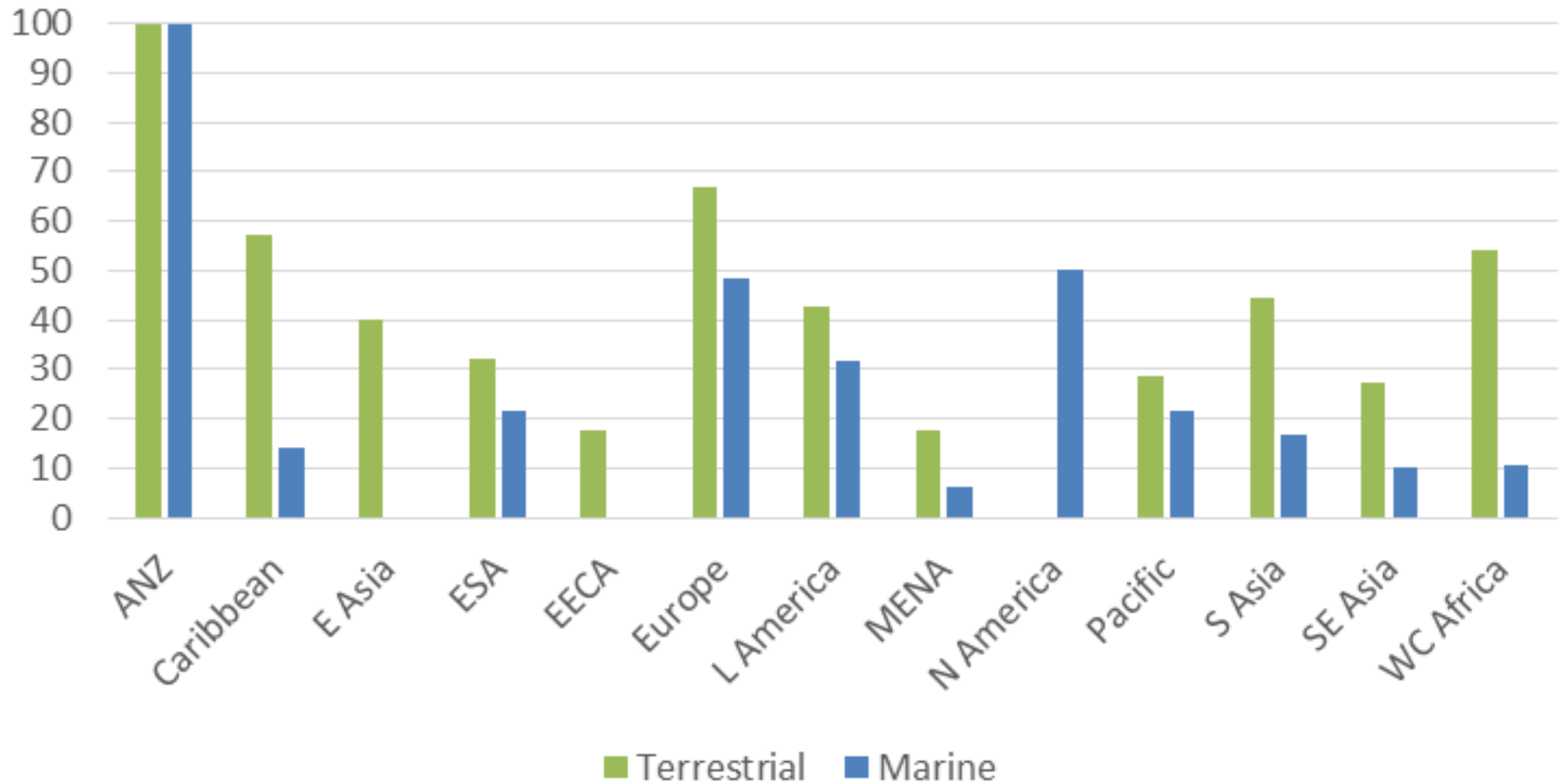


“By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas *and other effective area-based conservation measures*, and integrated into the wider landscape and seascape”

## Protected area coverage (%)



## Proportion of countries that have met target



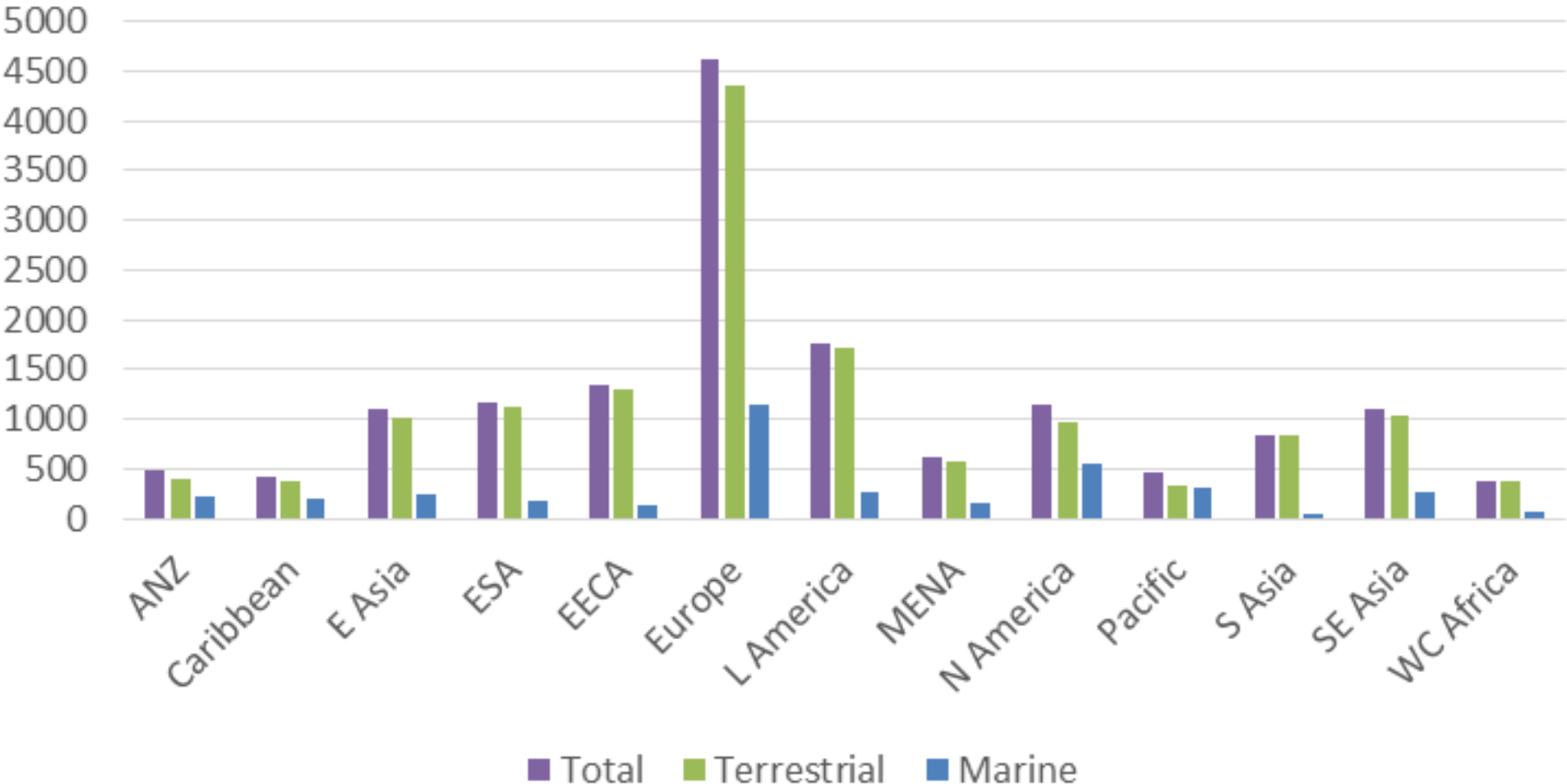
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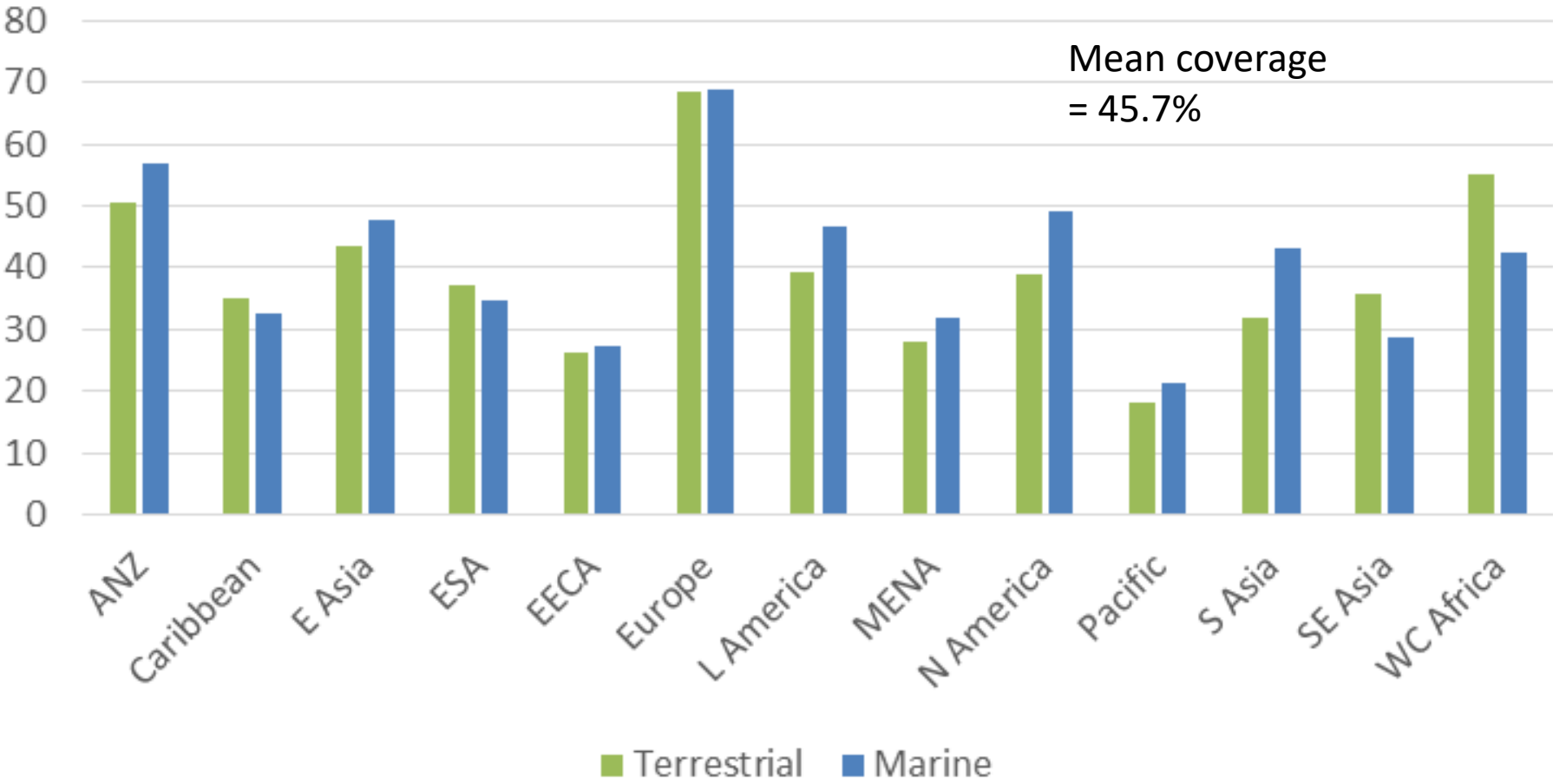
“By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, **especially areas of particular importance for biodiversity** and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas *and other effective area-based conservation measures*, and integrated into the wider landscape and seascape”



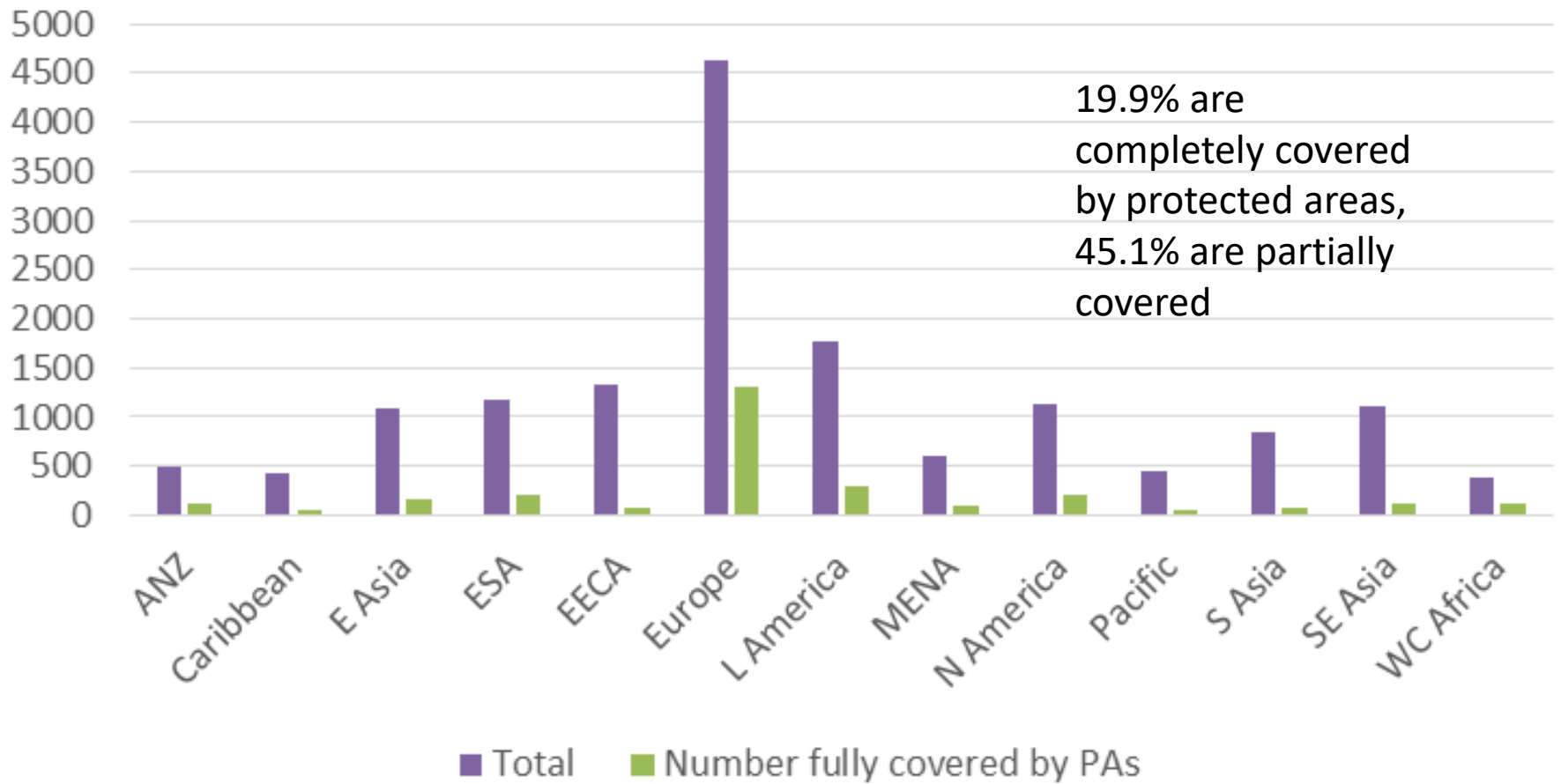
# Number of KBAs



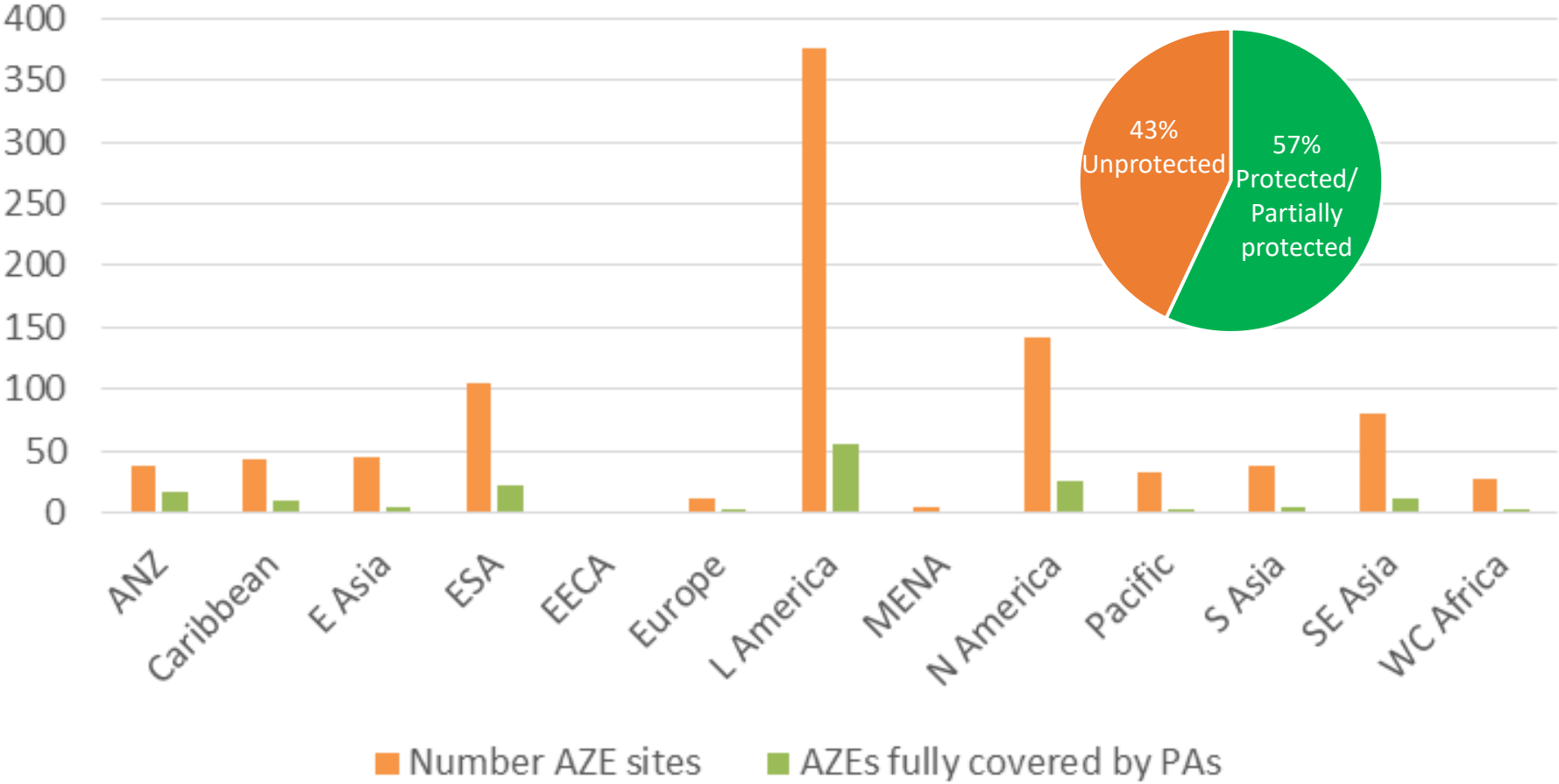
# Mean % coverage of KBAs by protected areas



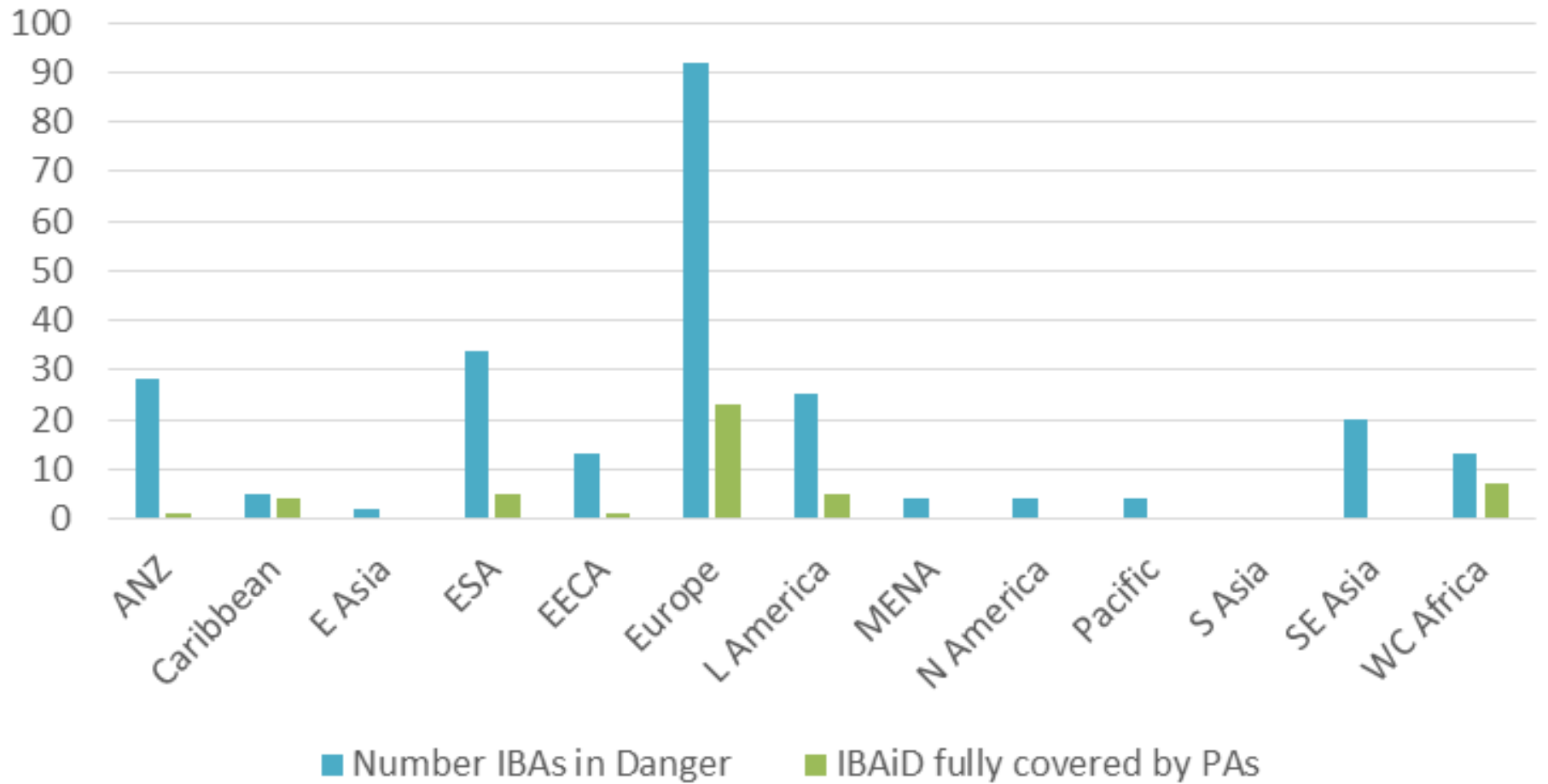
## Number of KBAs and number fully protected



# Number of AZE sites and number fully protected

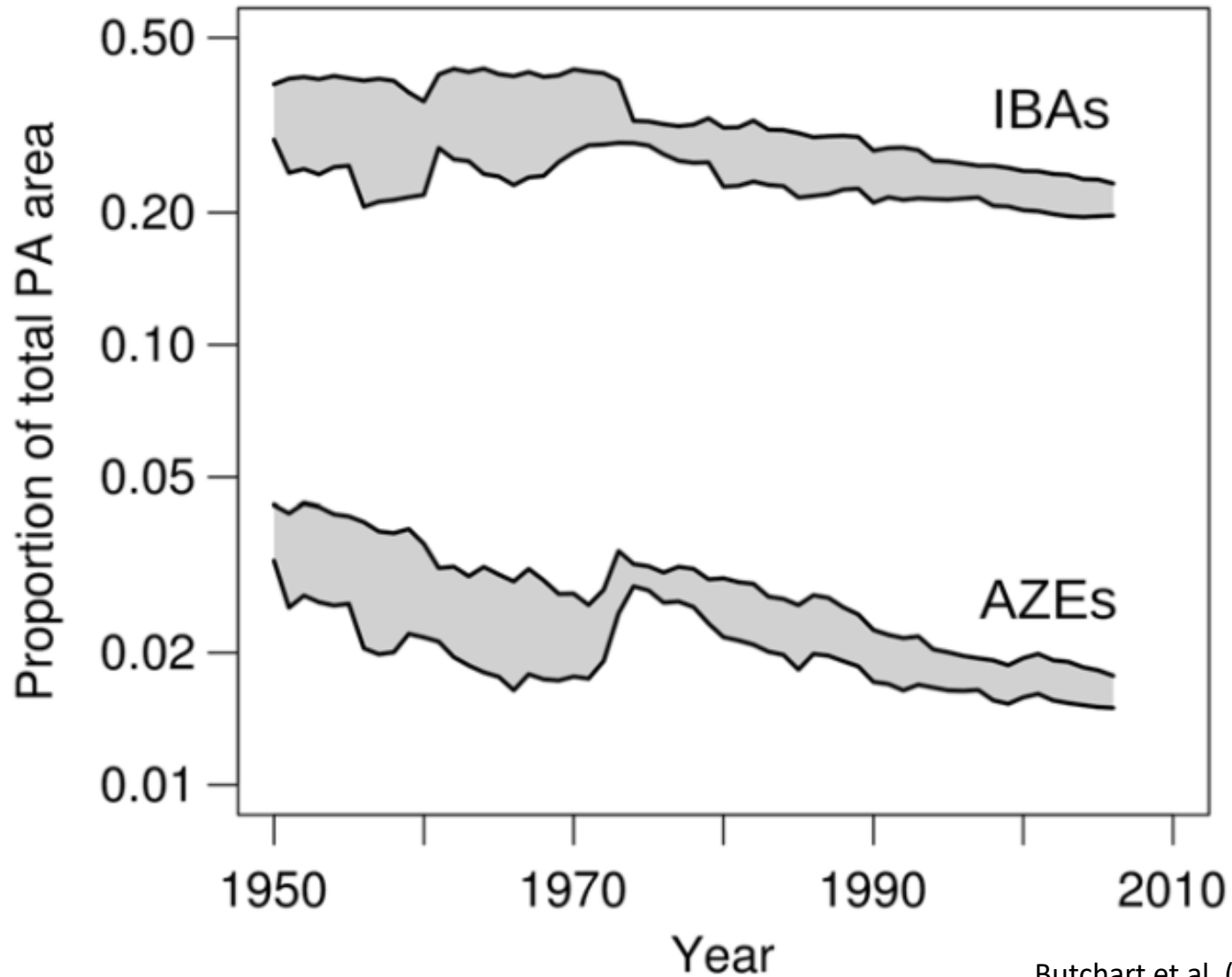


## Number of IBAs in Danger and number fully protected





So are we getting better at targeting our protected areas?

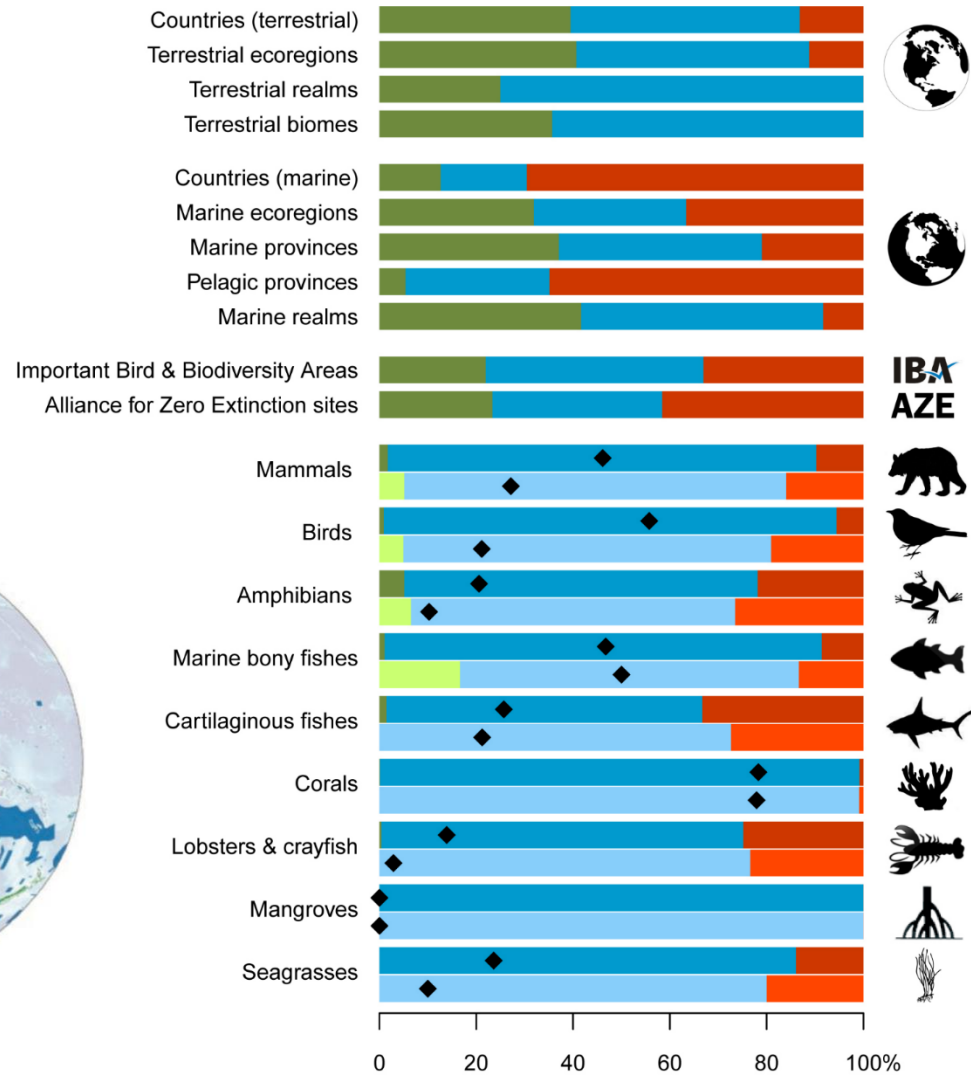
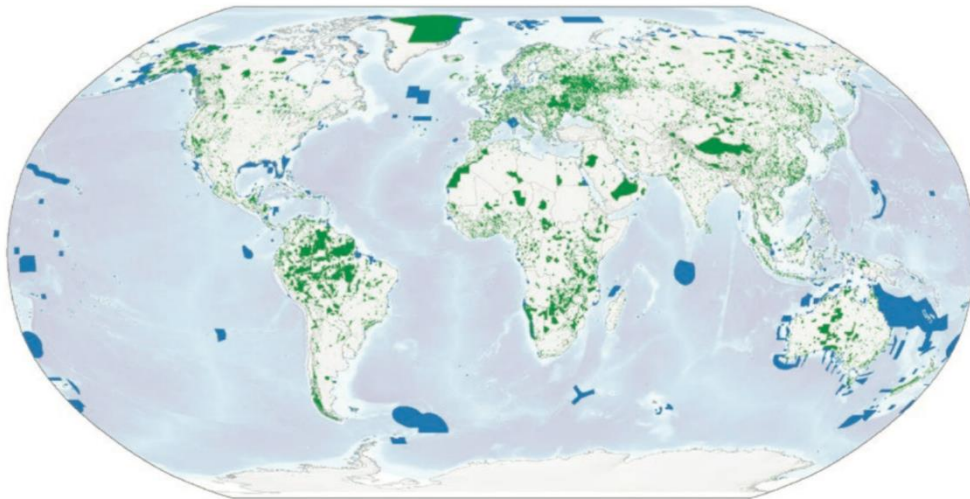


## LETTER

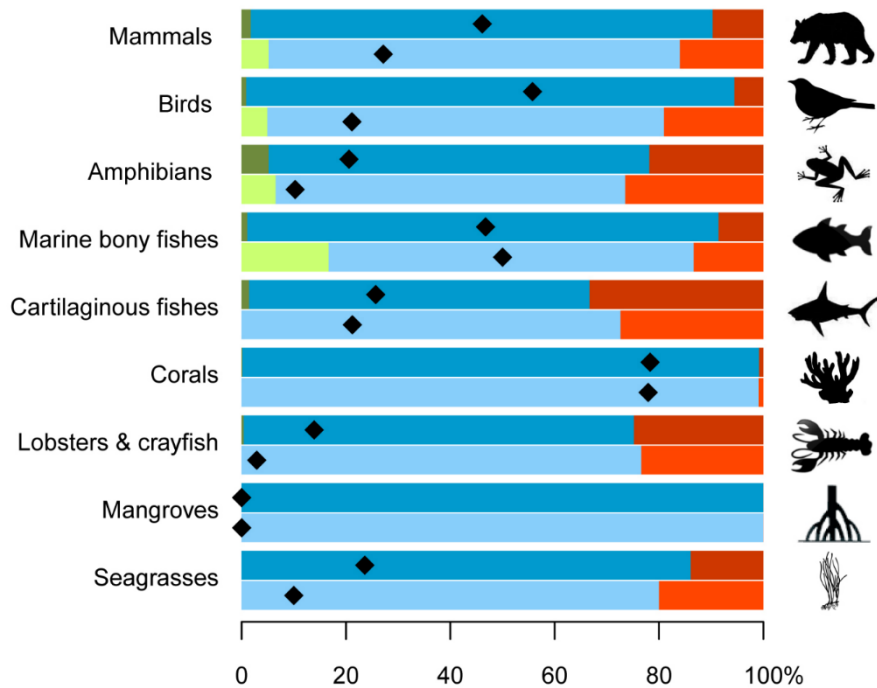
### **Shortfalls and Solutions for Meeting National and Global Conservation Area Targets**

Stuart H.M. Butchart<sup>1</sup>, Martin Clarke<sup>1</sup>, Robert J. Smith<sup>2</sup>, Rachel E. Sykes<sup>2</sup>, Jörn P.W. Scharlemann<sup>3</sup>, Mike Harfoot<sup>4,5</sup>, Graeme M. Buchanan<sup>6</sup>, Ariadne Angulo<sup>7</sup>, Andrew Balmford<sup>8</sup>, Bastian Bertzky<sup>4,9</sup>, Thomas M. Brooks<sup>7,10,11</sup>, Kent E. Carpenter<sup>12</sup>, Mia T. Comeros-Raynal<sup>12</sup>, John Cornell<sup>1</sup>, G. Francesco Ficetola<sup>13</sup>, Lincoln D.C. Fishpool<sup>1</sup>, Richard A. Fuller<sup>14</sup>, Jonas Geldmann<sup>15</sup>, Heather Harwell<sup>12,16</sup>, Craig Hilton-Taylor<sup>17</sup>, Michael Hoffmann<sup>4,7</sup>, Ackbar Joolia<sup>17</sup>, Lucas Joppa<sup>5</sup>, Naomi Kingston<sup>4</sup>, Ian May<sup>1</sup>, Amy Milam<sup>4</sup>, Beth Polidoro<sup>12,18</sup>, Gina Ralph<sup>12</sup>, Nadia Richman<sup>19</sup>, Carlo Rondinini<sup>20</sup>, Daniel B. Segan<sup>21,22</sup>, Benjamin Skolnik<sup>23</sup>, Mark D. Spalding<sup>24</sup>, Simon N. Stuart<sup>4,7,25,26</sup>, Andy Symes<sup>1</sup>, Joseph Taylor<sup>1</sup>, Piero Visconti<sup>5</sup>, James E.M. Watson<sup>21,22</sup>, Louisa Wood<sup>4,27</sup>, & Neil D. Burgess<sup>4,15</sup>

# What does the existing protected area network cover?



# What does the existing protected area network cover – for different taxonomic groups?



- 78% coral species have PA coverage > target
- 55% birds, 47% marine fish, 46% mammals
- But < 25% for other groups
- Coverage generally poorer for threatened species e.g. 21% birds, 27% mammals

Green = complete coverage (>98%)

Blue = partial coverage

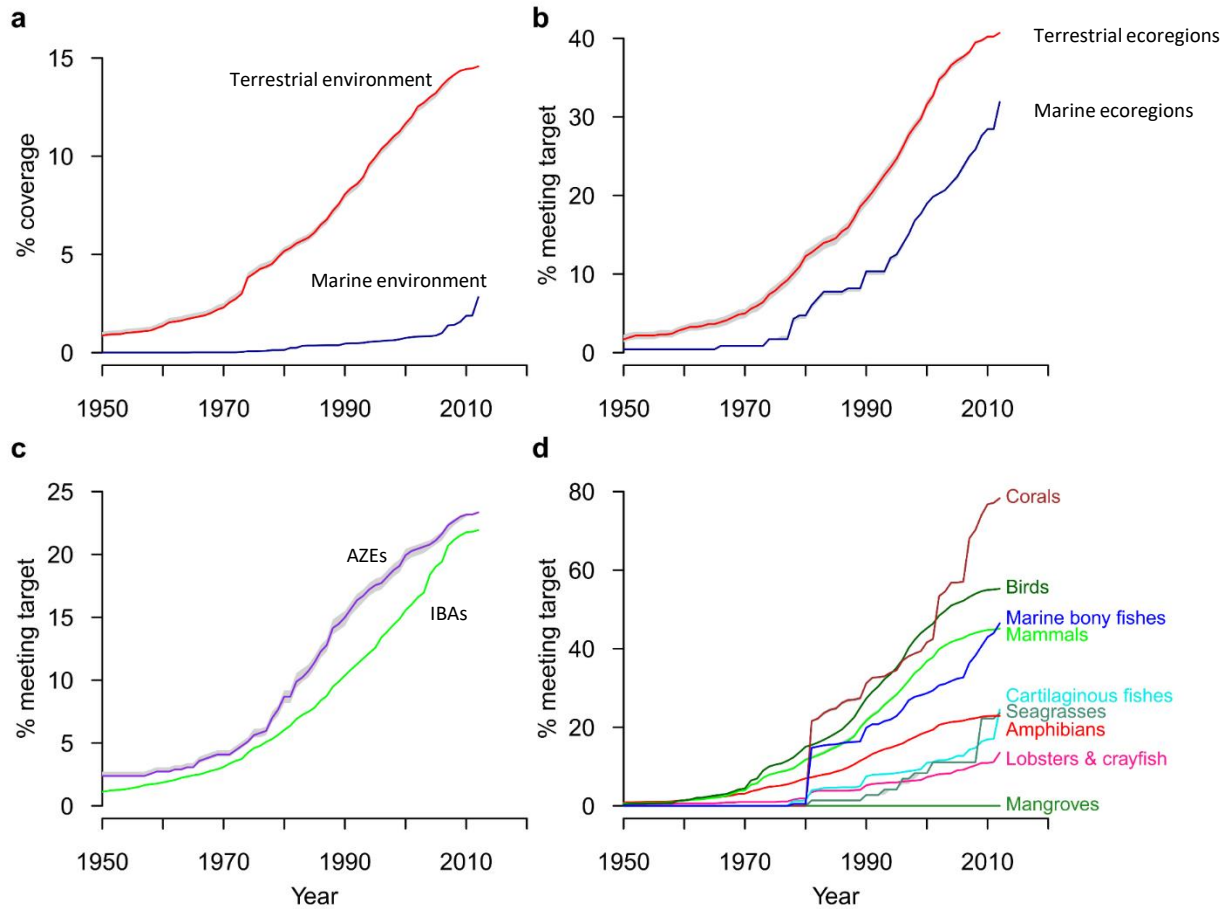
Red = no coverage (<2%)

Upper bars = all species

Lower bars = threatened species

◆ = % species for which PA coverage > target

# Trends in protected area coverage



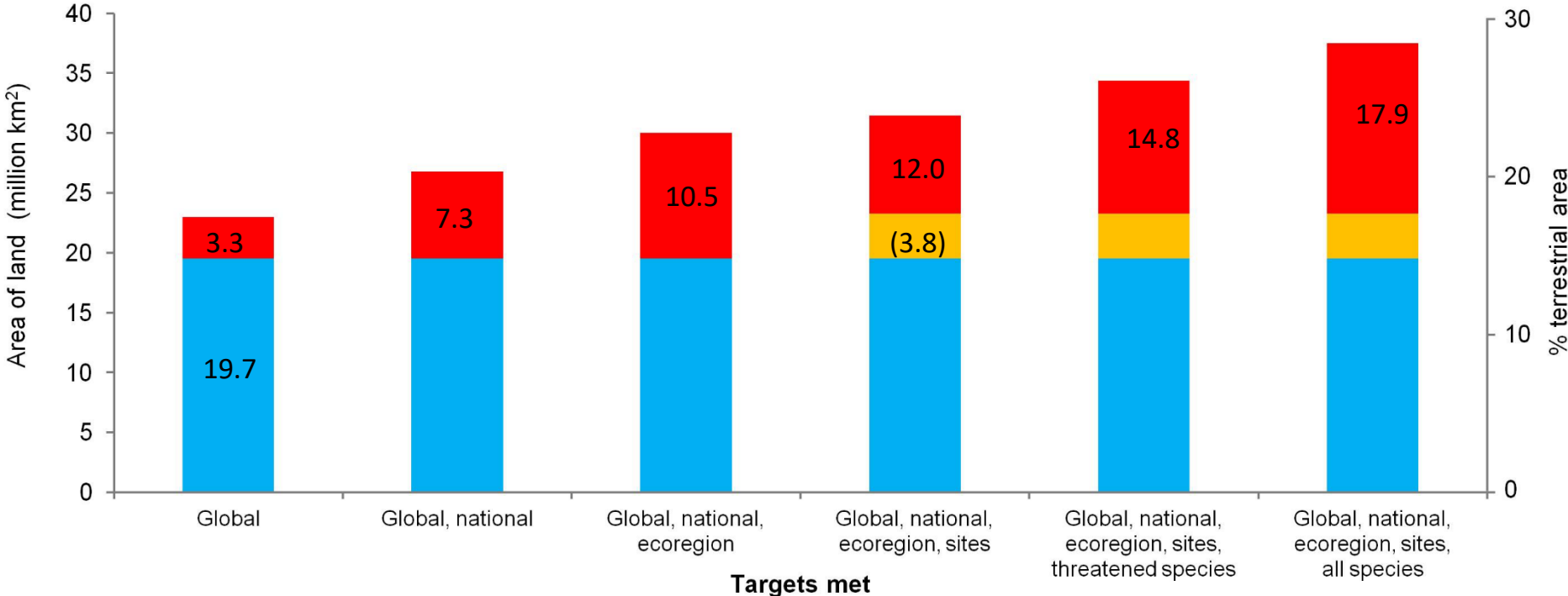


So how much more land is needed?

- Used Marxan to identify near-optimal portfolios of 30 x 30 km planning units that meet specified conservation feature targets while minimizing costs
- Used human population size as a surrogate for opportunity cost and difficulty of establishing PAs in any new areas to be conserved
- Terrestrial only because comparable cost data unavailable for marine environments
- For each scenario, we ran Marxan 100 times, each with 100 million iterations. Determined area of portfolio with lowest cost.

# So how much more land is needed?

17.9 million km<sup>2</sup>, i.e. total 27.9% of terrestrial surface



Blue = existing PAs; Orange = unprotected KBAs; Red = other unprotected land

## So how much more land is needed?

Total % land requiring conservation was:

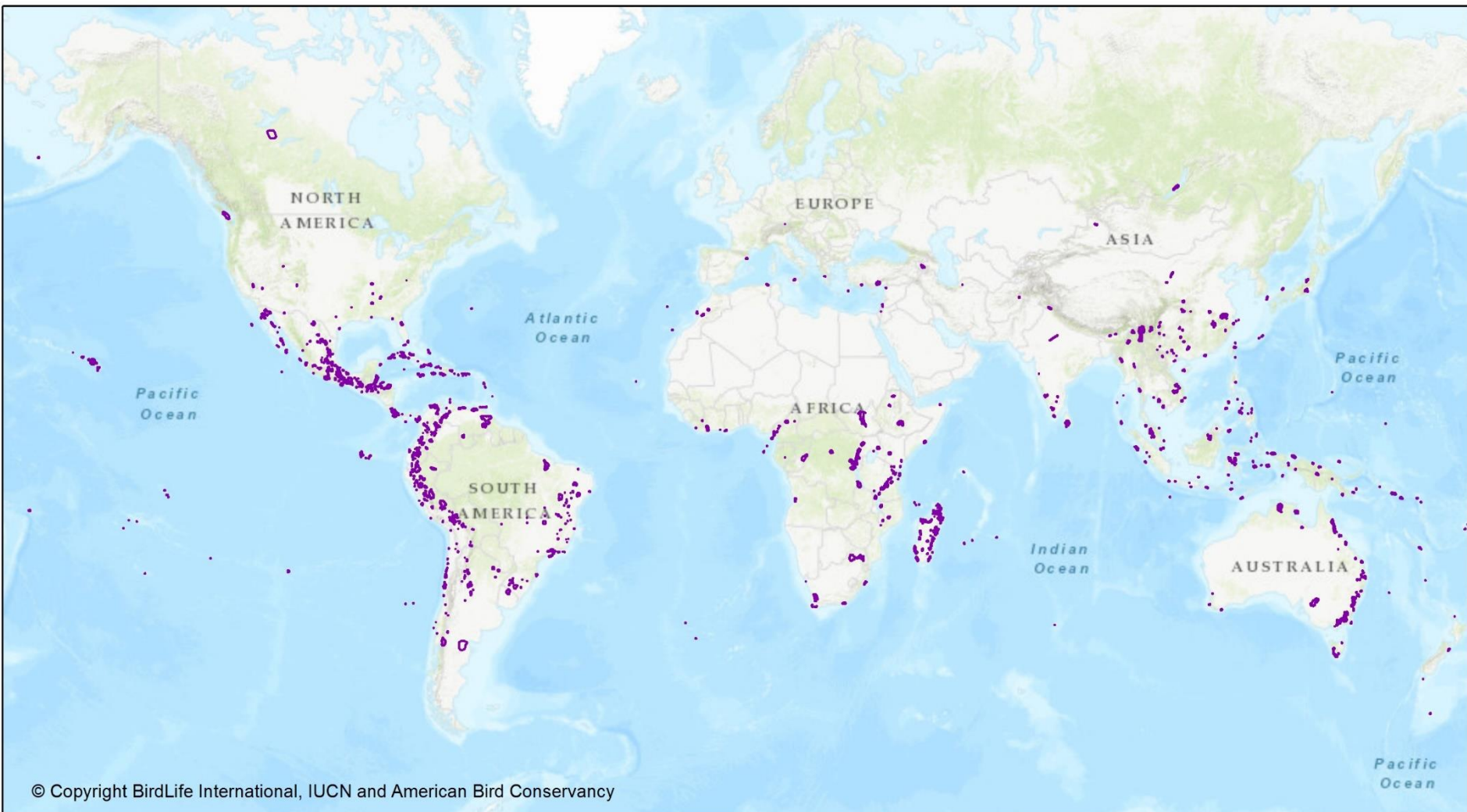
- Same if cap the target for each species at 0.5 million km<sup>2</sup>
- 24.5% if the target for each species was halved (i.e. not substantially inflated by targets for broad-ranging species)
- 27.0% if target for each ecoregion is reduced to 10% (as previously adopted by CBD parties;
- 27.1% if the target for ecological representativeness is set at a larger spatial scale (17% coverage of biome-realms)
- i.e. overall result is robust to varying interpretations of Aichi Target 11

# GEF-funded AZE project 2015-2019

Alliance for Zero Extinction (AZE): Conserving Earth's Most Irreplaceable Sites for Endangered Biodiversity

UNEP, BirdLife International, American Bird Conservancy, IUCN, Brazil, Chile, Madagascar governments and NGO partners





## Alliance for Zero Extinction (AZE) sites 2018

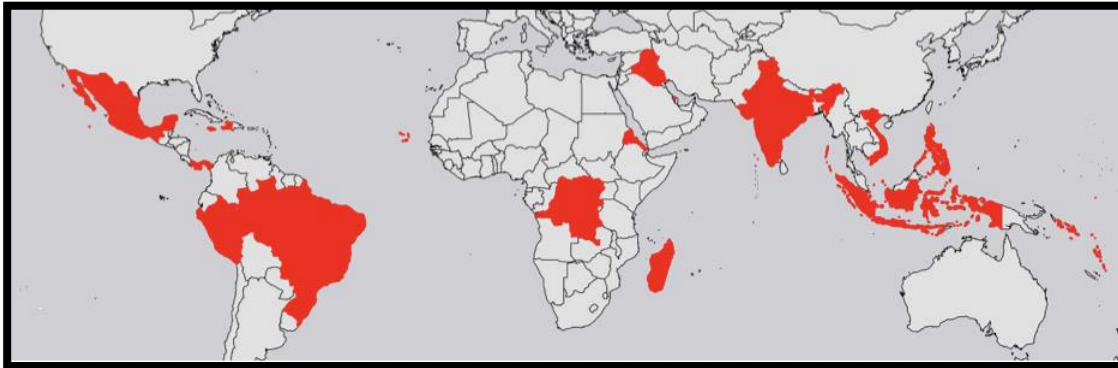
ALLIANCE FOR  
**Zero Extinction**





# AZE recent achievements

- Global update/map of AZE sites 2018 – 853 sites, 1483 trigger species
- Formal recognition of all AZE sites as KBAs
- National AZE alliances and national AZE maps e.g. Brazil AZE map launched at CBD COP14
- Integration of AZE conservation in NBSAPs and national CBD reports of 20 countries, with national ordinance for Brazil
- Inclusion of AZEs in safeguards and policies of international financial institutions e.g. World Bank and IFC
- CBD Decision XIV/1 to expand protected and conserved areas to conserve AZEs and other KBAs



# Actions before and post-2020



“By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas *and other effective area-based conservation measures*, and integrated into the wider landscape and seascape”

# Definition of an OECM

“A geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values”

N.B. biodiversity conservation does not have to be a *primary* governance or management aim

The guiding principles, common characteristics and criteria for the identification of OECMs can be found in Annex III of CBD/COP/14/L.19

# Examples of potential OECMs

- Indigenous peoples' areas
- Spiritual or cultural sites
- Community conservancies
- Private/state nature reserves (if not in WDPA)
- Reserved forests
- Sea wrecks (esp. war grave sites)
- Military training areas
- Fisheries management agreements

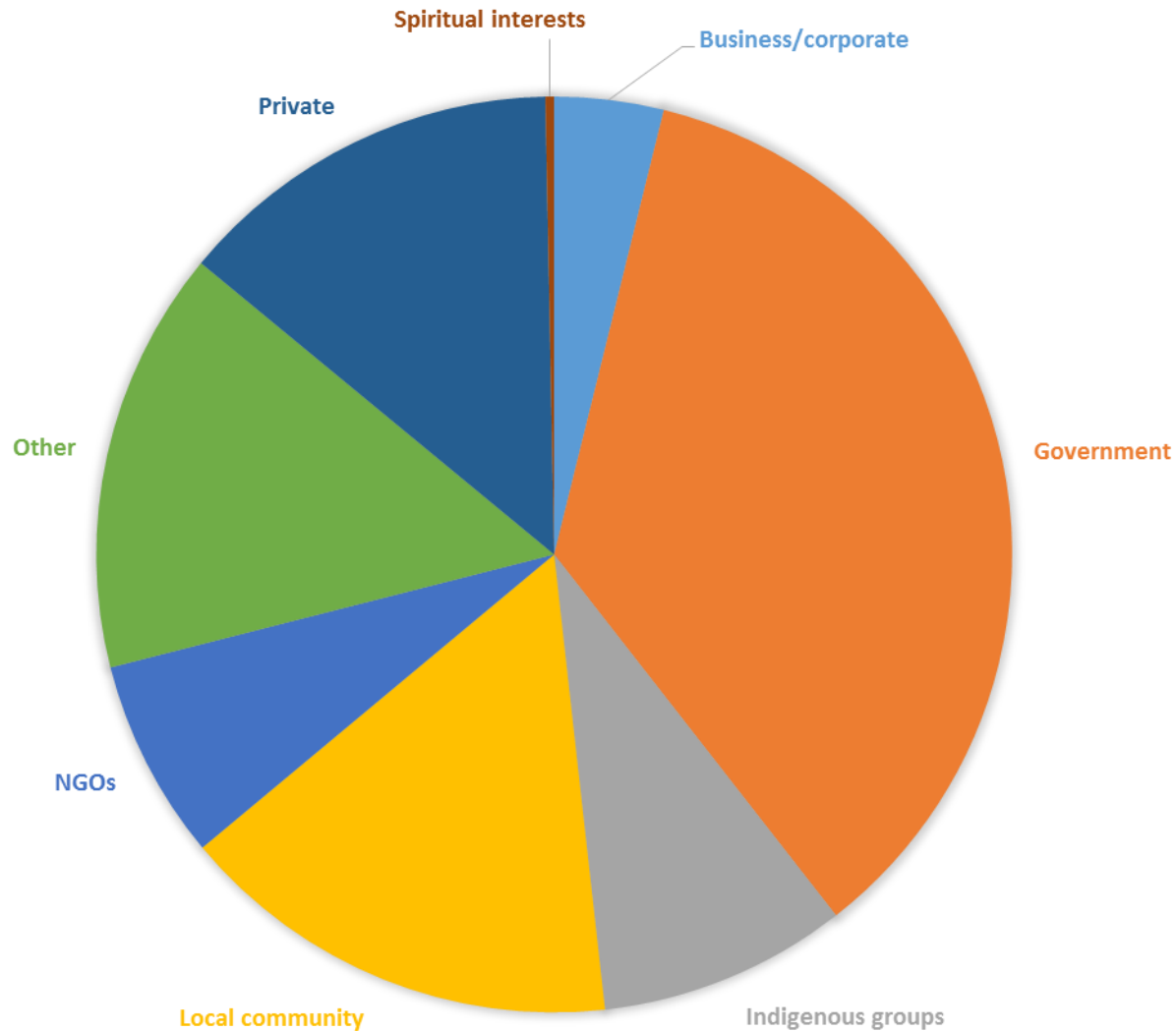
# CCI-funded project on OECMs

- How many unprotected KBAs have management systems potentially meeting OECM definition?
- What are the characteristics of those management systems?
- How effective are they?
  - IBA monitoring data
  - Satellite imagery

# In-country surveys

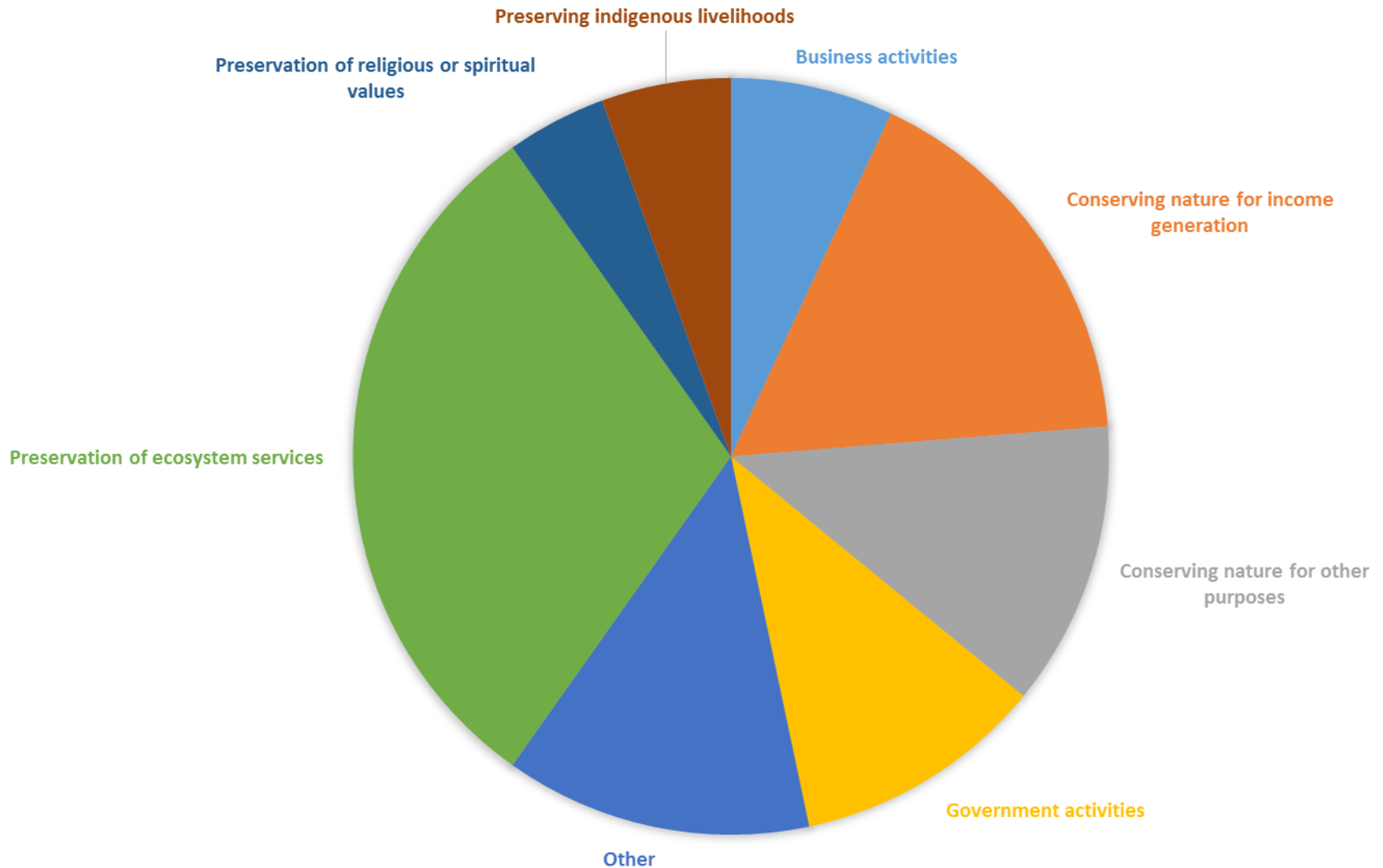
- Survey by BirdLife Partners of **740** unprotected terrestrial KBAs in: Australia, Bolivia, Canada, Ecuador, India, Indonesia, Kazakhstan, Kenya, Philippines, South Africa
- 566 (**76.5%**) KBAs have at least one potential OECM system in place (data for a total of 616 potential OECMs)
- **73%** of OECMs have biodiversity conservation or ecosystem services as a stated (though not necessarily primary) objective
- Of these, **80%** aim to conserve biodiversity generally, only 20% aim to protect particular species or groups

# Who manages potential OECMs in unprotected KBAs?

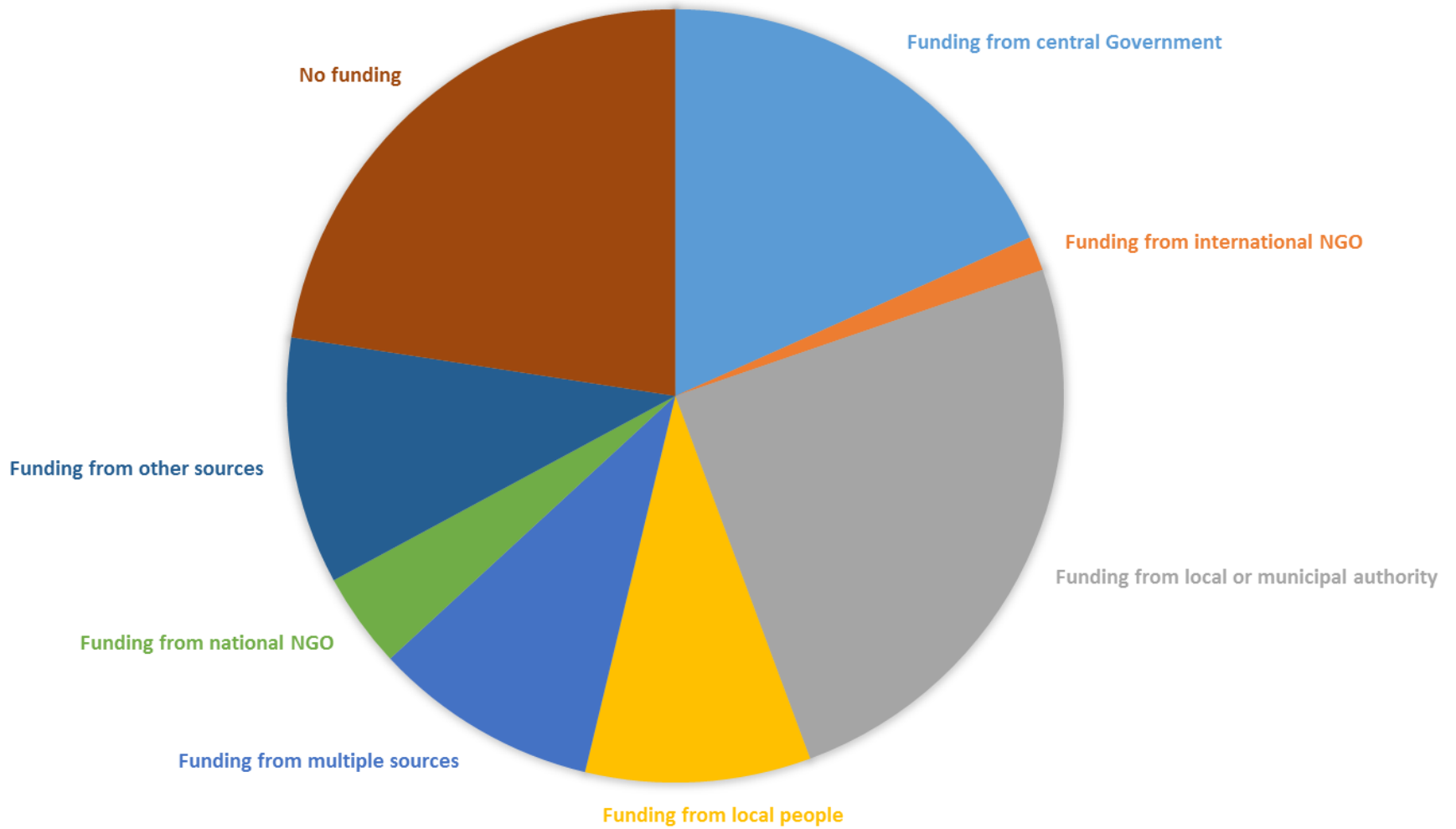




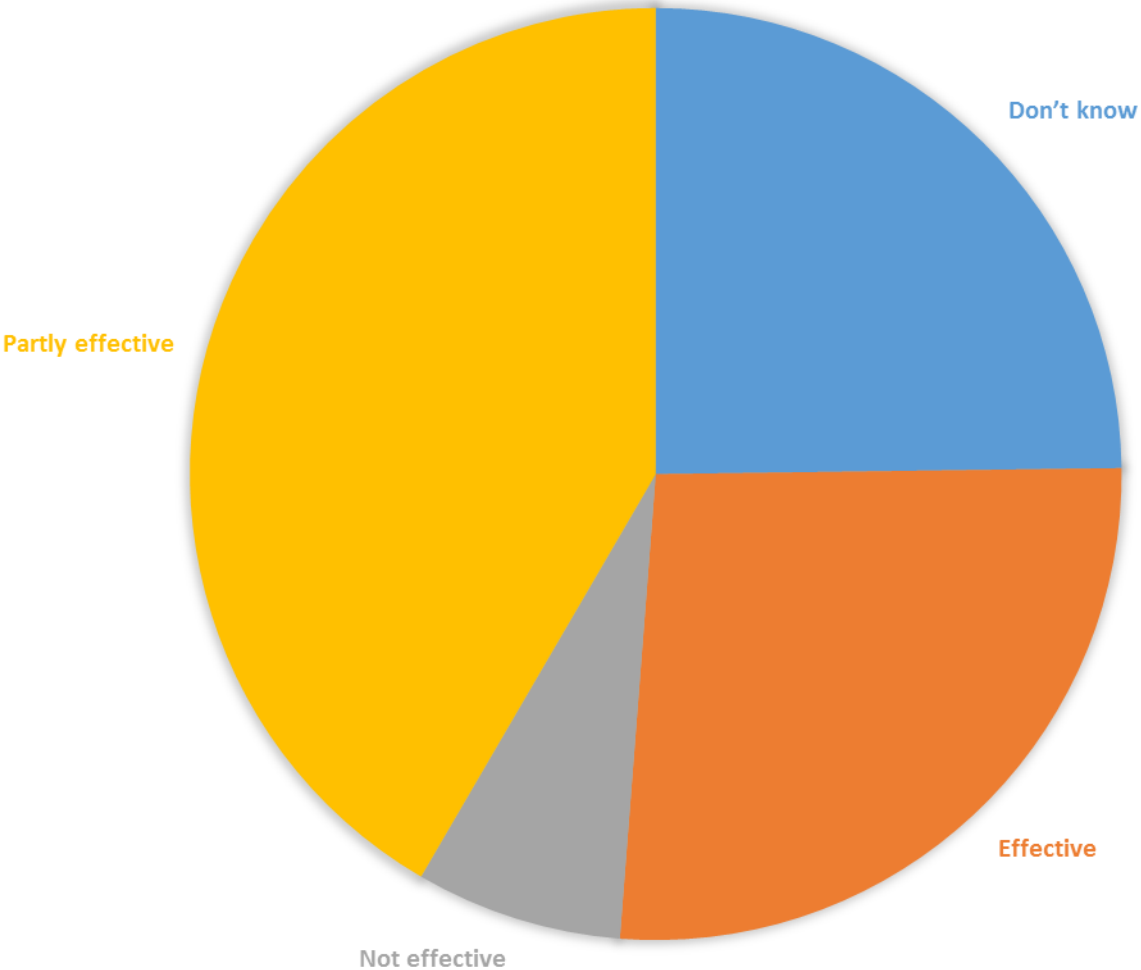
# What is the primary management objective?



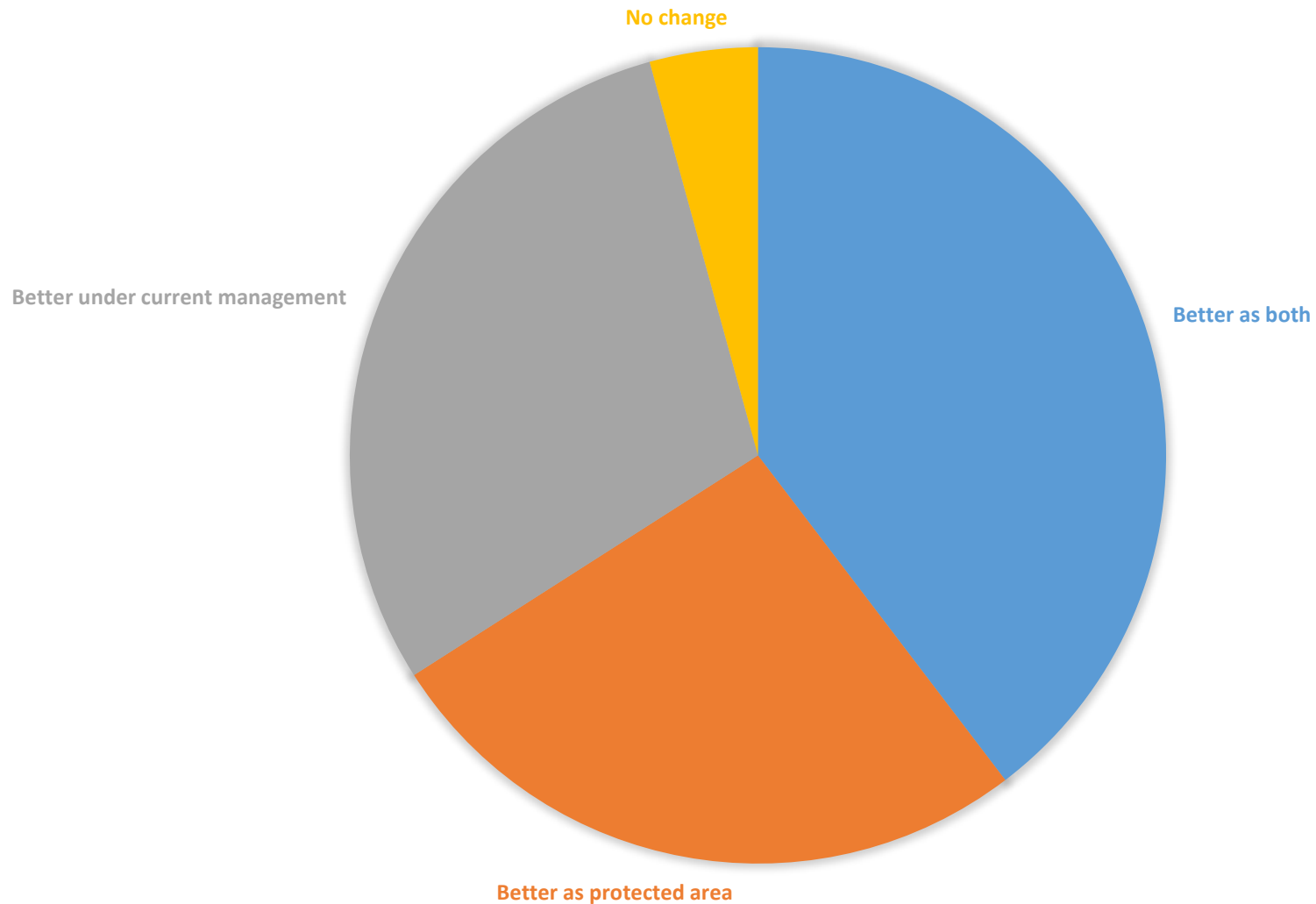
# Who funds OECMs?



# How effective are OECMs at conserving biodiversity?



# Would biodiversity be better conserved under current management or as a protected area?



# Potential of OECMs in KBAs

- Appear to be prevalent in unprotected KBAs
- Cover a wide range of management systems
- Many have the conservation of biodiversity or ecosystem services as a stated or a primary aim
- Appear to have little NGO involvement or support
- May not be as effective as PAs (forest loss measure) but often in areas of higher pressure and concept may be preferred by local people to PA?
- Further questions:
  - What happens in unprotected KBAs without OECMs?
  - Are OECMs equally prevalent outside KBAs, or is one a good predictor of the other?
  - How can we collect information on OECMs in other countries?
  - What does this mean for CBD reporting?

# Actions before and post-2020

## BY 2020:

- Letter to CBD Focal Points asking to follow up on Decision XIV/1 and scale-up efforts to meet Aichi Targets 11 and 12 by protecting and conserving KBAs with AZEs as a priority
  - Gazettement of new protected areas? Unlikely time left to start process or adjust plans (if required) by mid-2020?
  - Identification/registration of new OECMs more feasible?
- Followed up by regional coordinators, with support (webinars, factsheets, etc.) by KBA Secretariat and ABC/BirdLife

## POST-2020:

- Promote expansion and effective management of PAs/OECMs in KBAs
- Need regular monitoring of biodiversity features to achieve **conservation outcomes** – for both PAs and OECMs – ensuring quality AND quantity
- New AZE-KBA project for GEF-7 planned – more partners encouraged

# Actions before and post-2020



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