Sub-regional Analysis of the Status of Aichi Biodiversity Targets 11 & 12

Capacity-building workshop for South, Central and West Asia on achieving Aichi Biodiversity Target 11 and 12
New Delhi, India

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Convention on Biological Diversity

7 December 2015

Explanation of the Elements for Aichi Targets 11

By 2020,

at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas,

... especially areas of *particular importance for biodiversity and ecosystem services,*

... are conserved through ... protected areas that are...

... effectively and equitably managed,

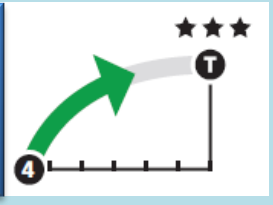
... ecologically representative,

... well connected systems, integrated into the wider landscapes and seascapes,

... and other effective area-based conservation measures

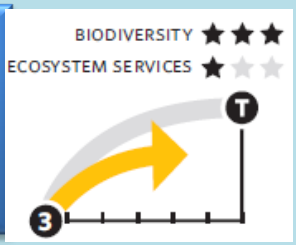
Status of Target 11s and 12

17 per cent of terrestrial and inland water are protected



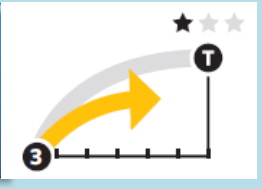
10 per cent of coastal and marine areas are protected

Areas of particular importance for biodiversity and ecosystem services are protected

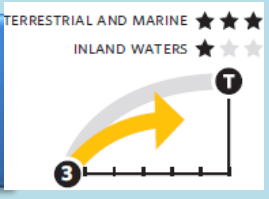


Protected areas are well connected and integrated into the wider landscape and seascape

Protected areas are effectively and equitably managed



Protected areas are ecologically representative



Extinction of known threatened species has been prevented

The conservation status of those species most in decline has been improved and sustained

Develop Country Data Dossiers

Target 11 Protected Area Country Dossiers

184 country dossiers

Information available from BirdLife International, the Digital Observatory for Protected Areas, and the World Database of Protected Areas.

- **Terrestrial and Marine Ecoregions**
- **Important Bird and Biodiversity Areas**
- **Alliance for Zero Extinction Sites**
- **Overlaps between unprotected and partially protected IBAs and AZEs and candidate ER for further protection**
- **Actions identified in their PoWPA Action Plan, Fifth National Report, or NBSAP**
- **Protected areas are ecologically representative**
- **Allocation and utilization of their Fifth and Sixth replenishment of the Global Environment Facility (GEF)**

Target 12 Threatened Species Country Dossiers

70 country dossiers

Information available from BirdLife International, the Digital Observatory for Protected Areas, and the IUCN Red List.

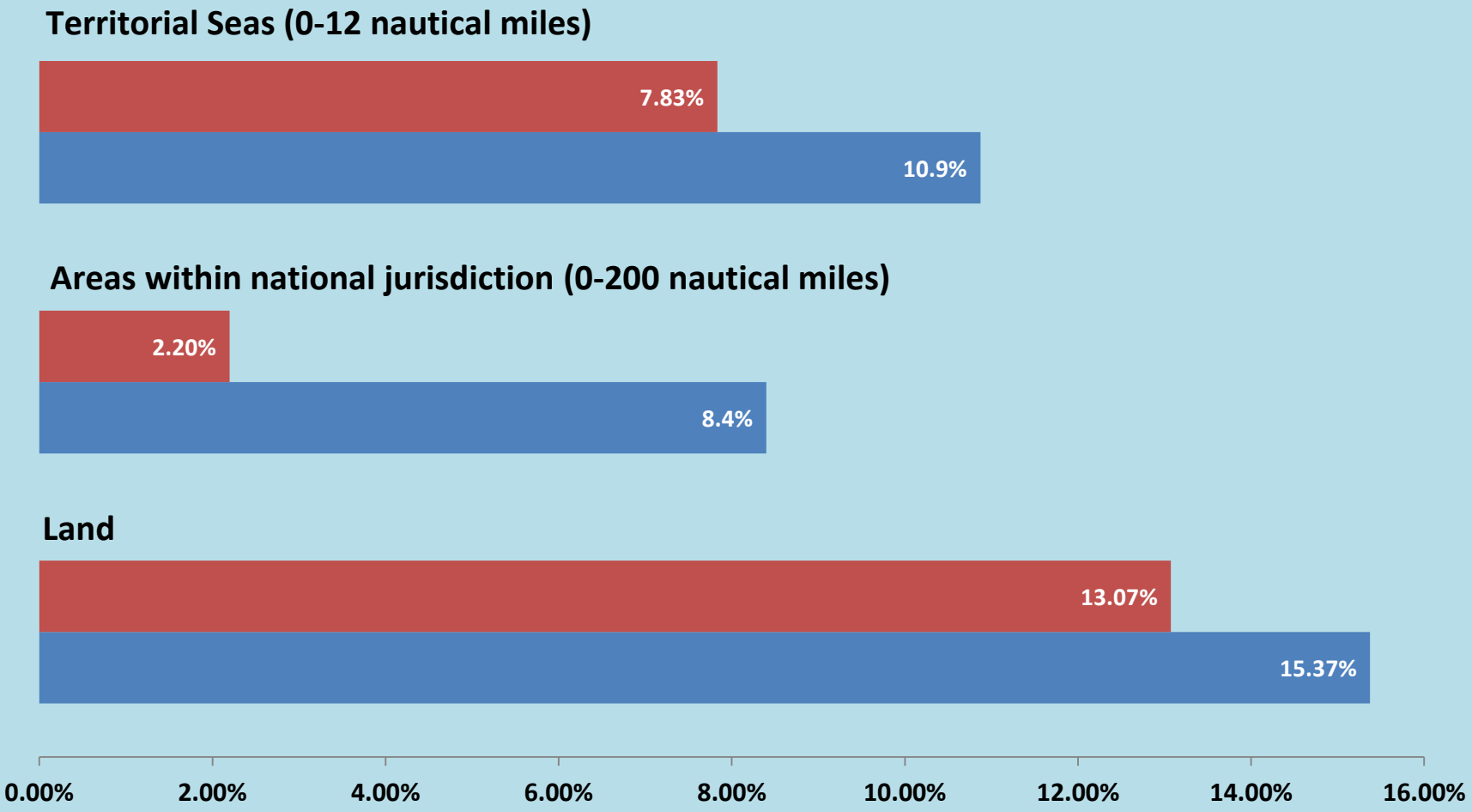
- **Threatened Species identified by the IUCN Red List for various taxonomic groups**
- **Threatened Bird Species**
- **Critically Endangered Endemic Species**

Dossiers have helped to compile the regional, sub-regional and global-level status of the target

Target 11- quantitative aspects

17% terrestrial and 10 % of coastal and marine areas ?

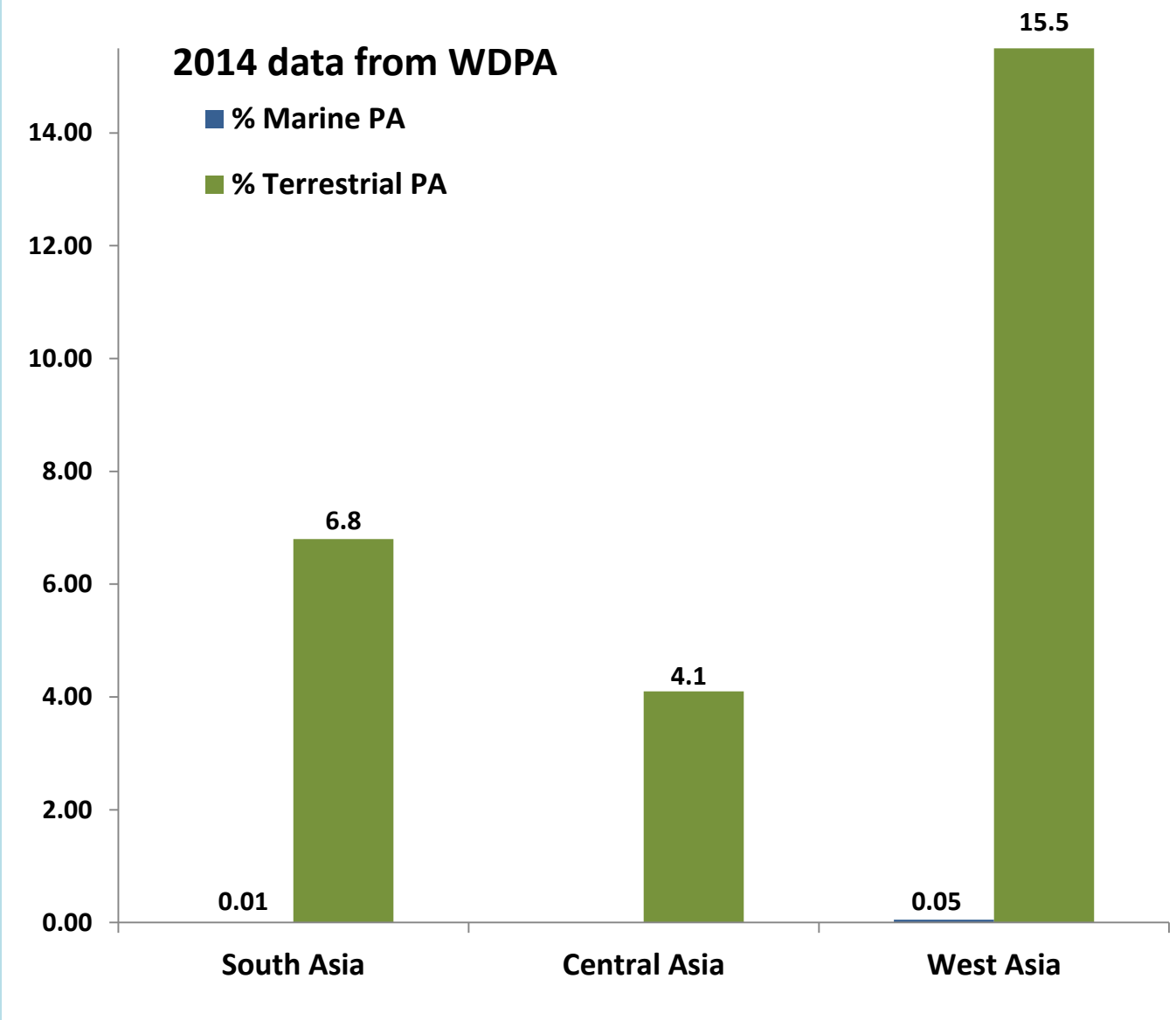
Percentage of global areas protected in 2004 (red) and 2014 (blue)



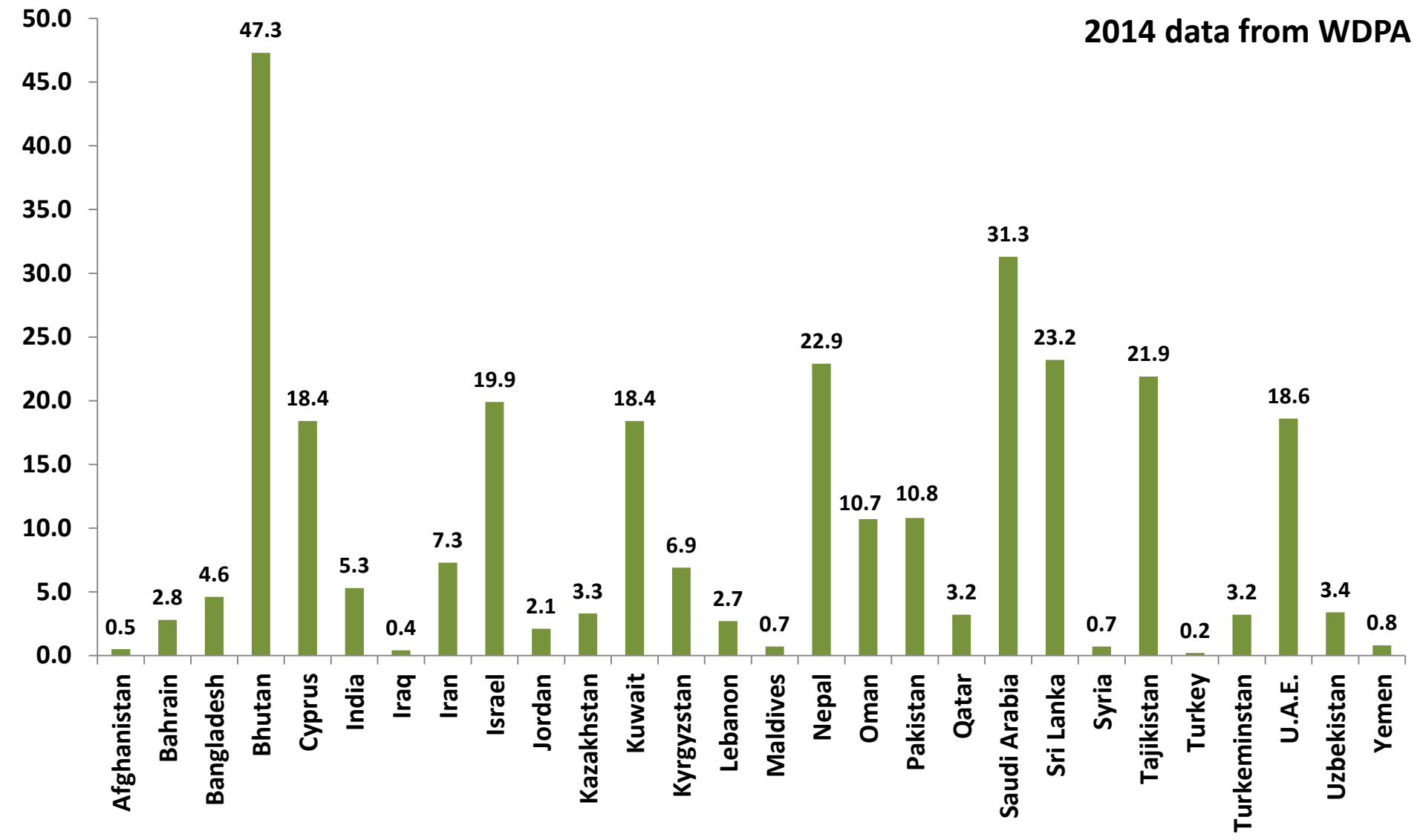
Percentage of Protected Areas in South, Central and West Asia

By 2020, (globally) at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas, are conserved through protected areas

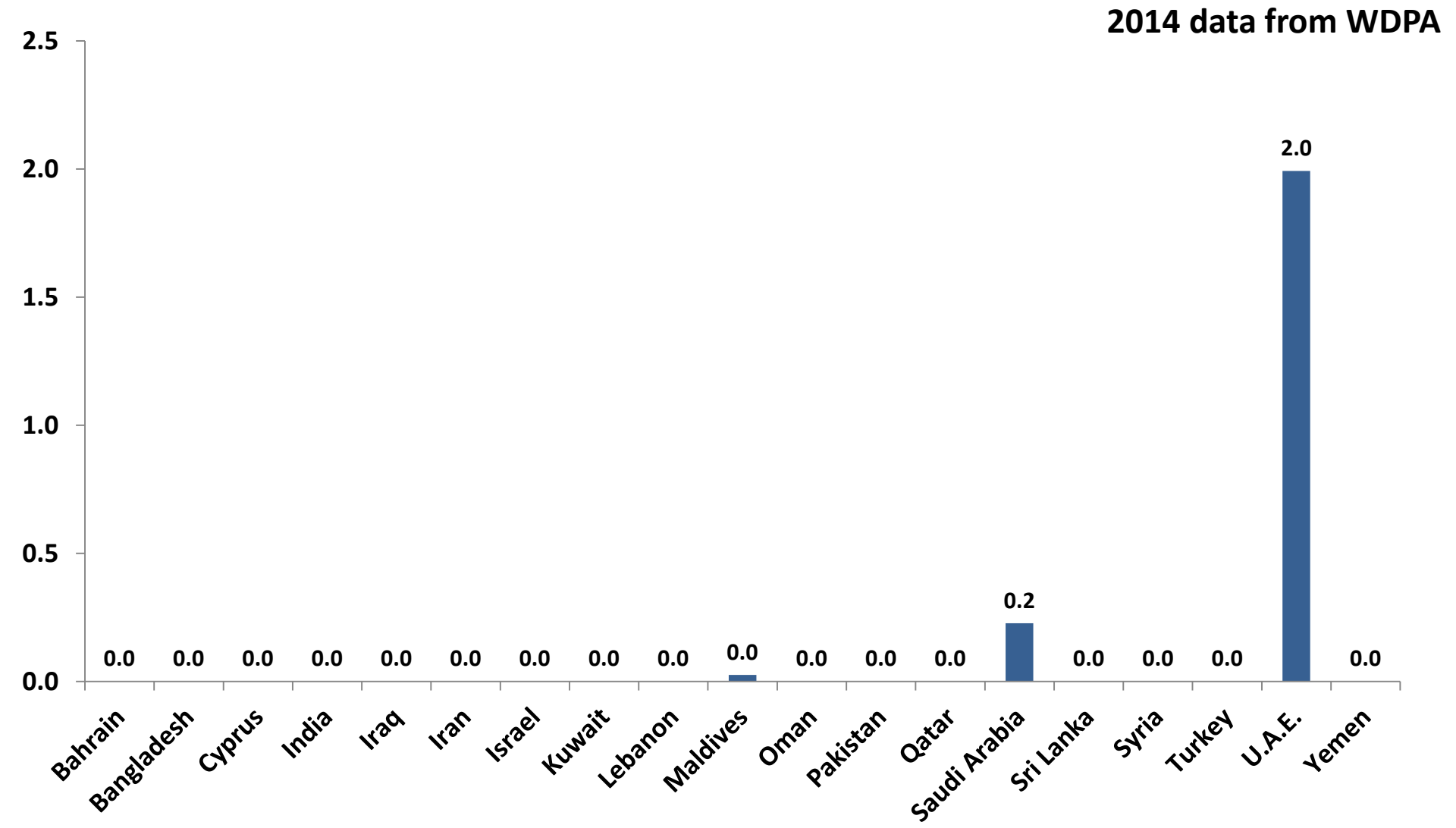
National targets should be accumulative to reach global target



Percentage of terrestrial protected areas in South, Central and West Asia



Percentage of marine protected areas in South and West Asia –
EEZ up to 200 nautical miles



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Areas of particular importance for biodiversity

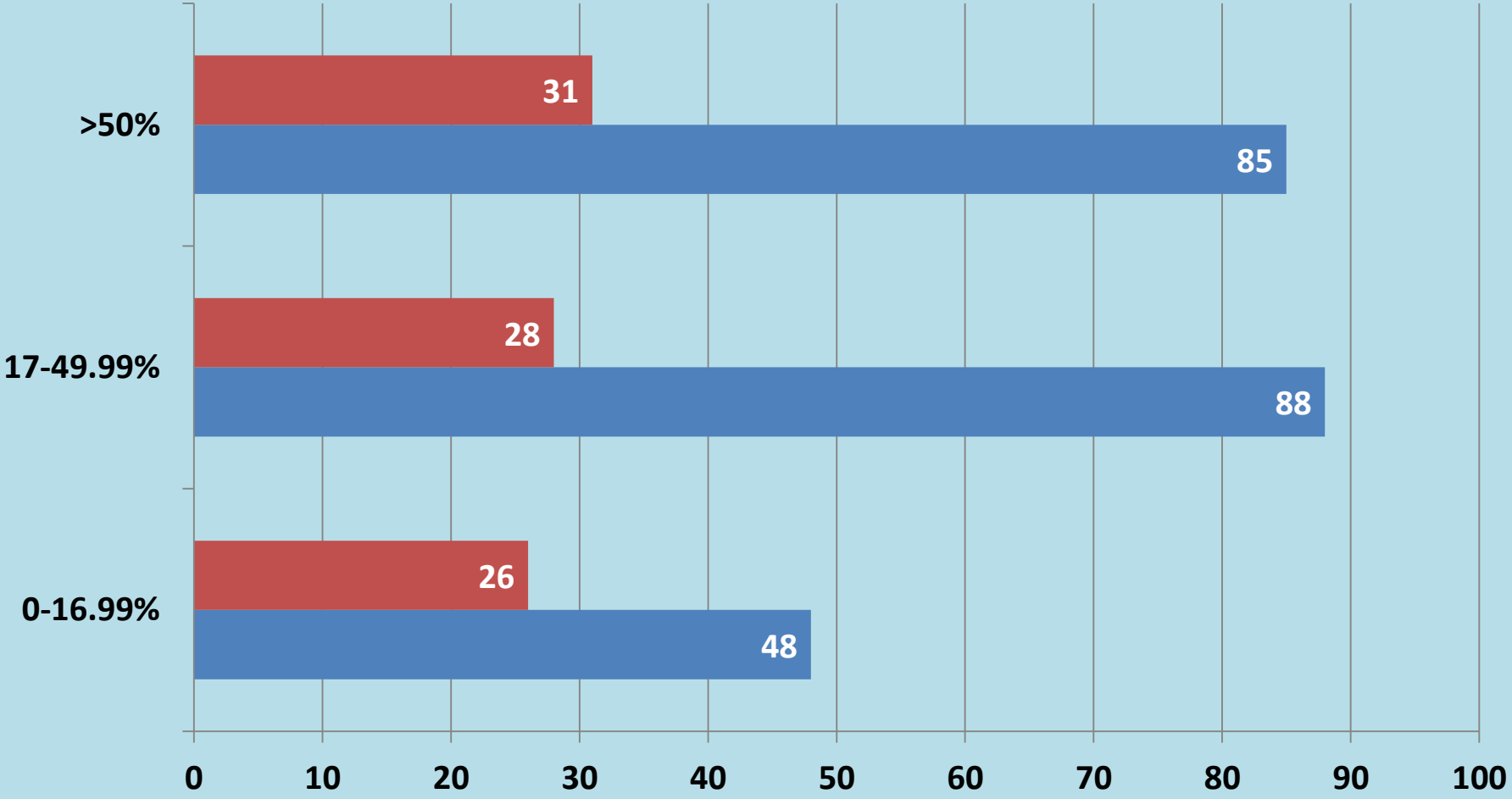
What are areas of particular importance for biodiversity?

Key Biodiversity Areas (KBAs)

- **Important Bird Areas**
- **Important Plant Areas**
- **Alliance for Zero Extinction sites**
- **Areas rich in wild relatives of crops**

Vulnerability and Irreplaceability

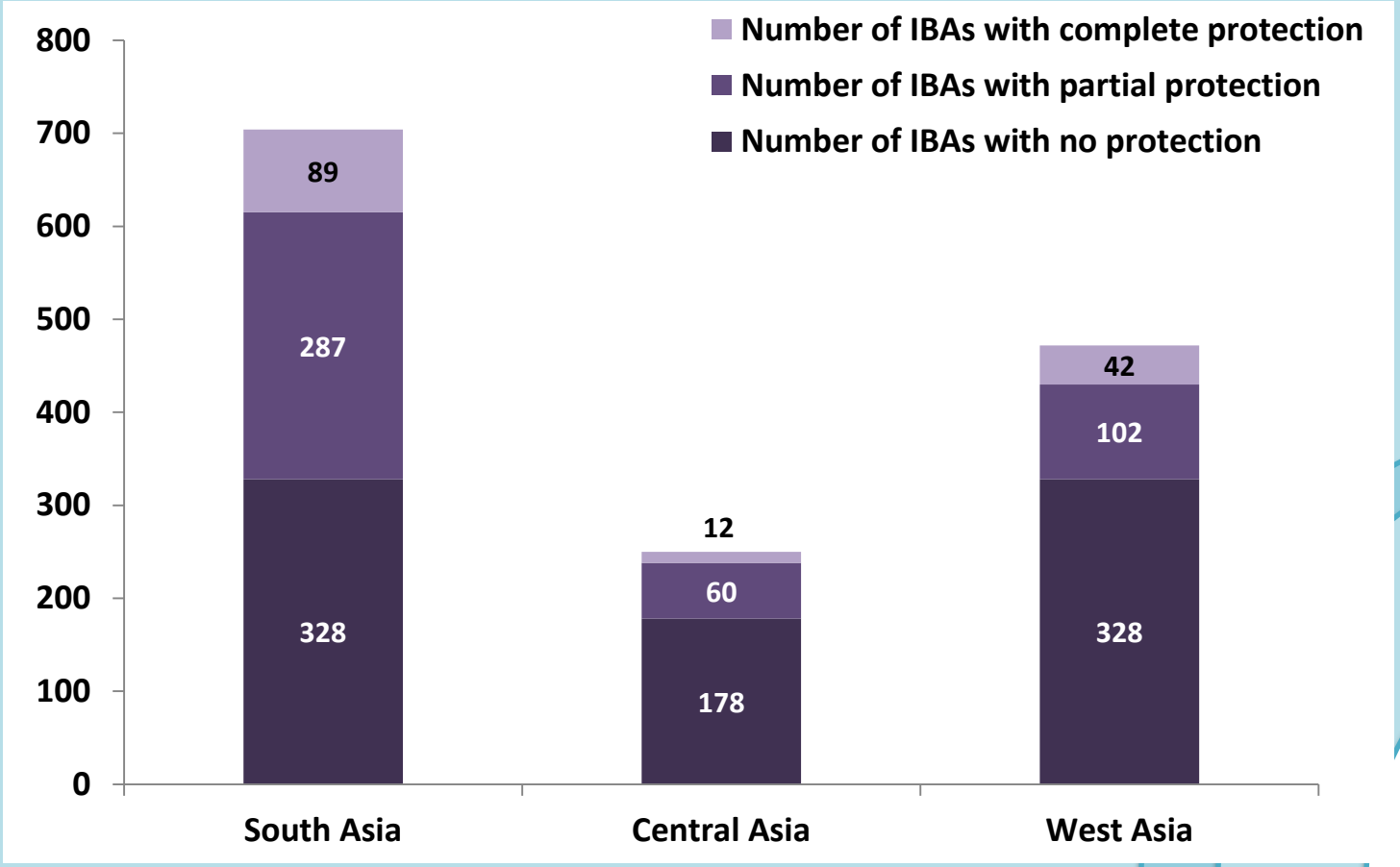
The number of countries with different levels of protected area coverage for Alliance for Zero Extinction Sites (red) and Important Bird and Biodiversity Areas (blue)



Protection Status of Important Bird and Biodiversity Areas (IBAs) in South, Central and West Asia

By 2020,

areas of *particular importance for biodiversity and ecosystem services*, are conserved



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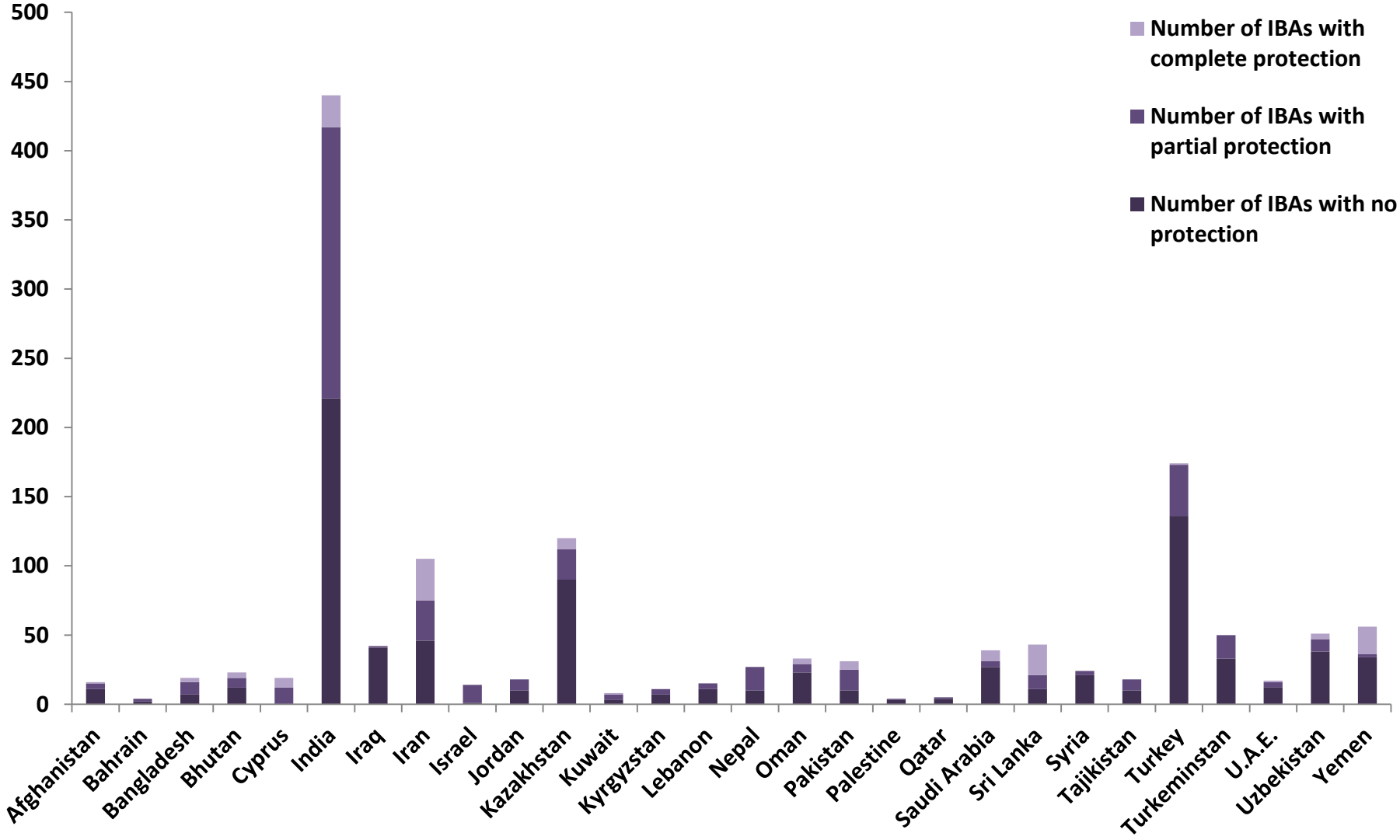
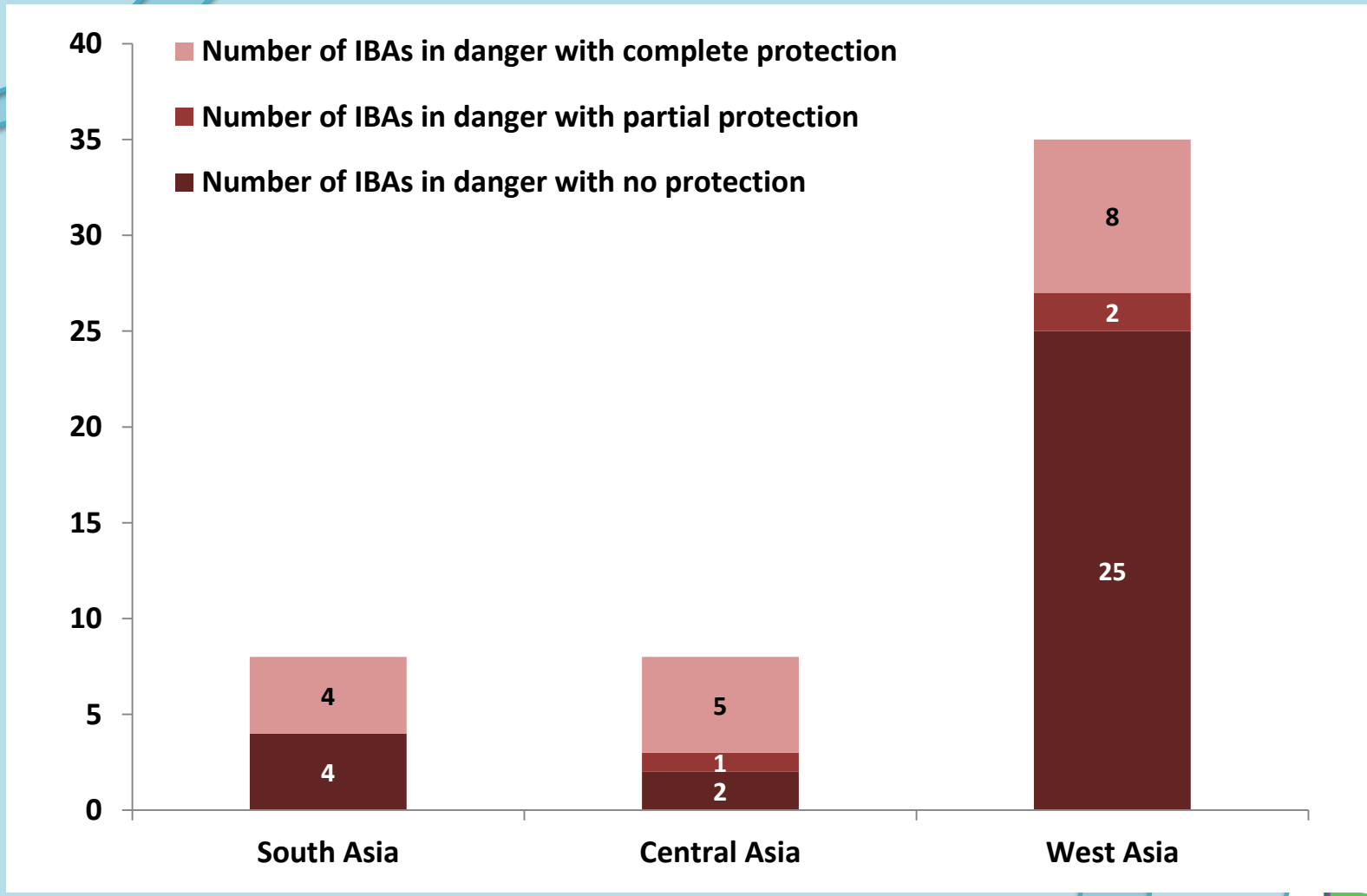


Protection Status of Important Bird and Biodiversity Areas (IBAs) in danger in South, Central and West Asia



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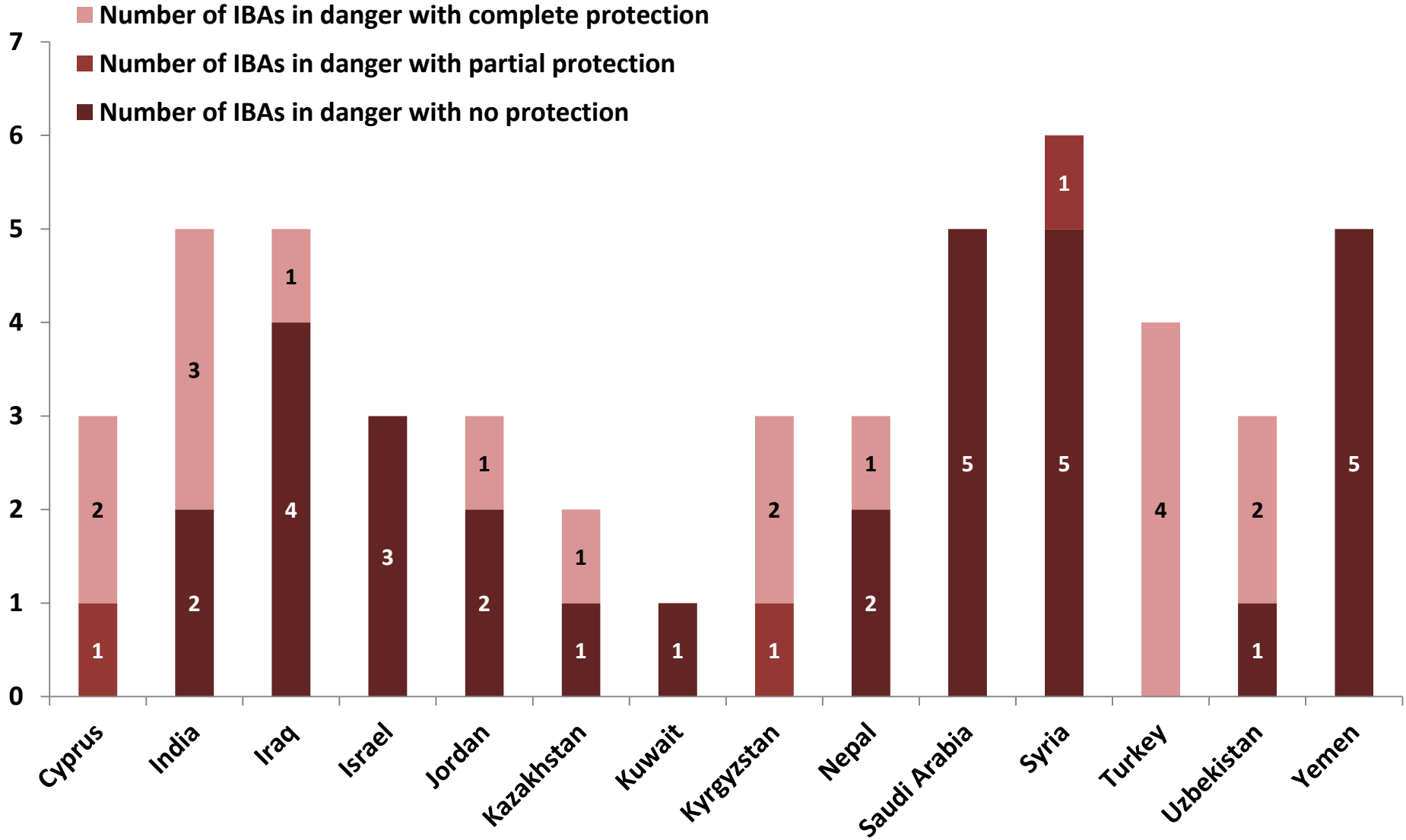
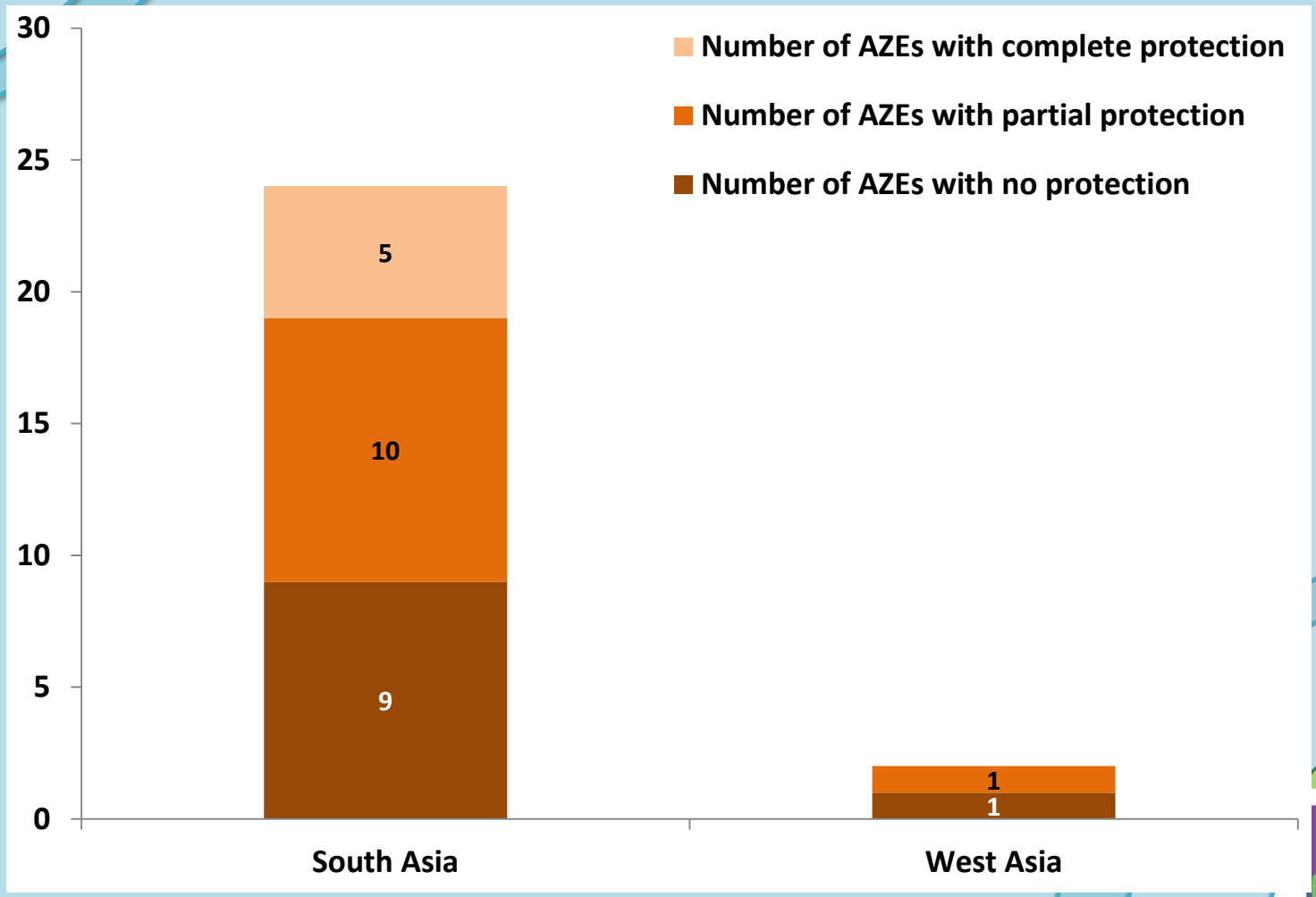


Protection Status of Alliance for Zero Extinction Sites (AZEs) in South and West Asia



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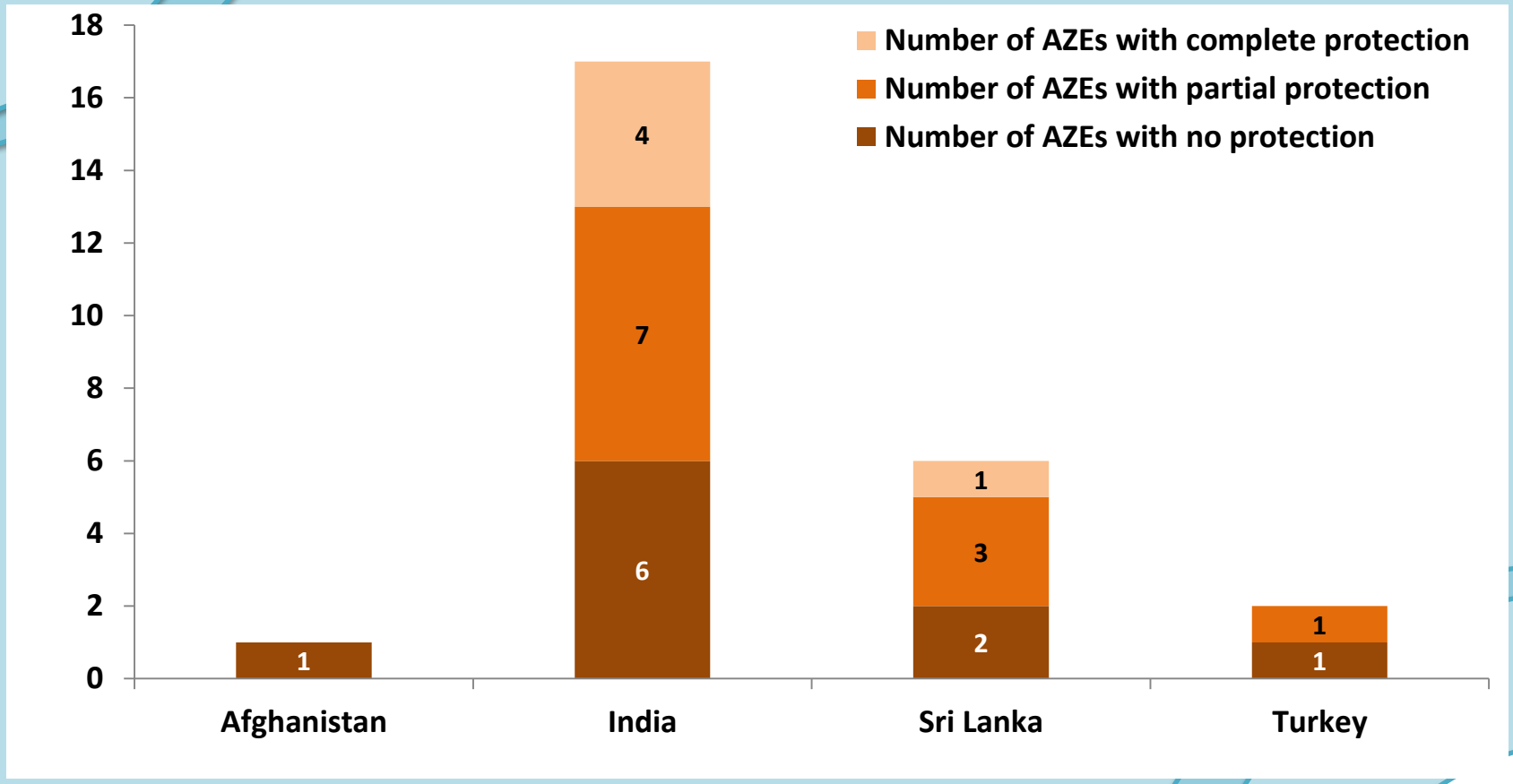
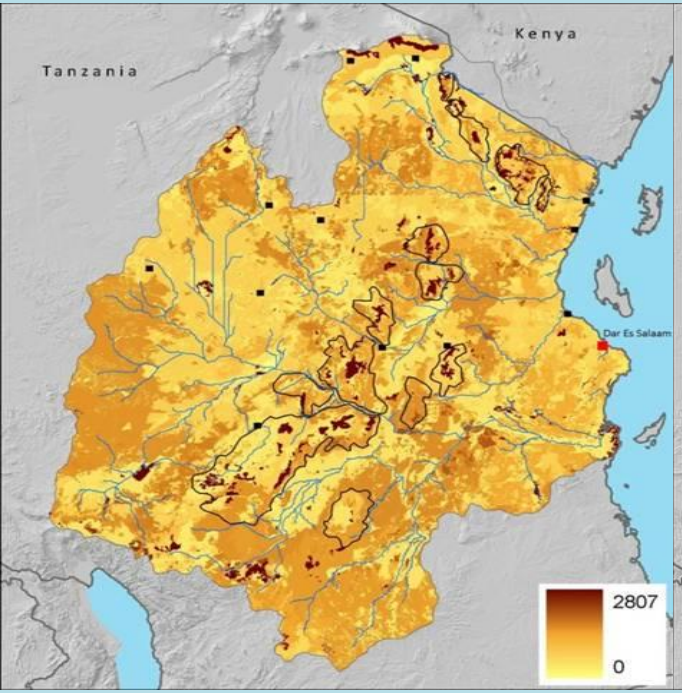
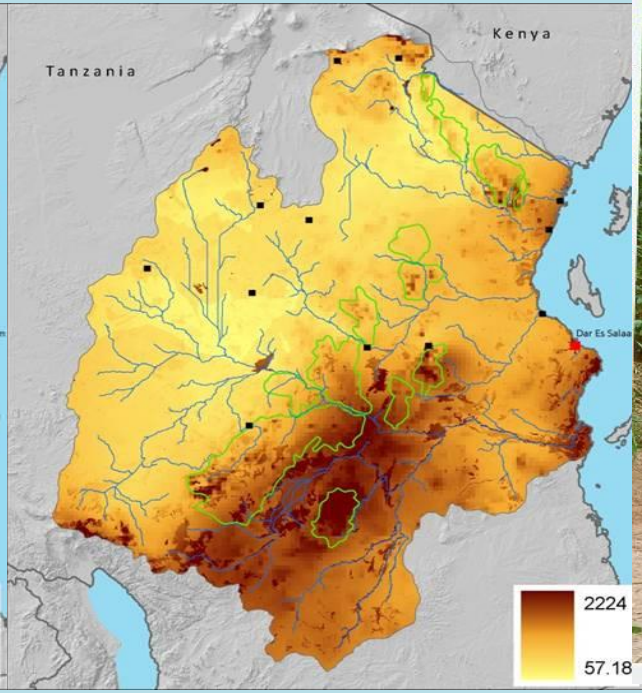


Ecosystem services of Protected Areas

- Water security
- Food and health security
- subsistence, livelihoods
- CC adaptation & mitigation





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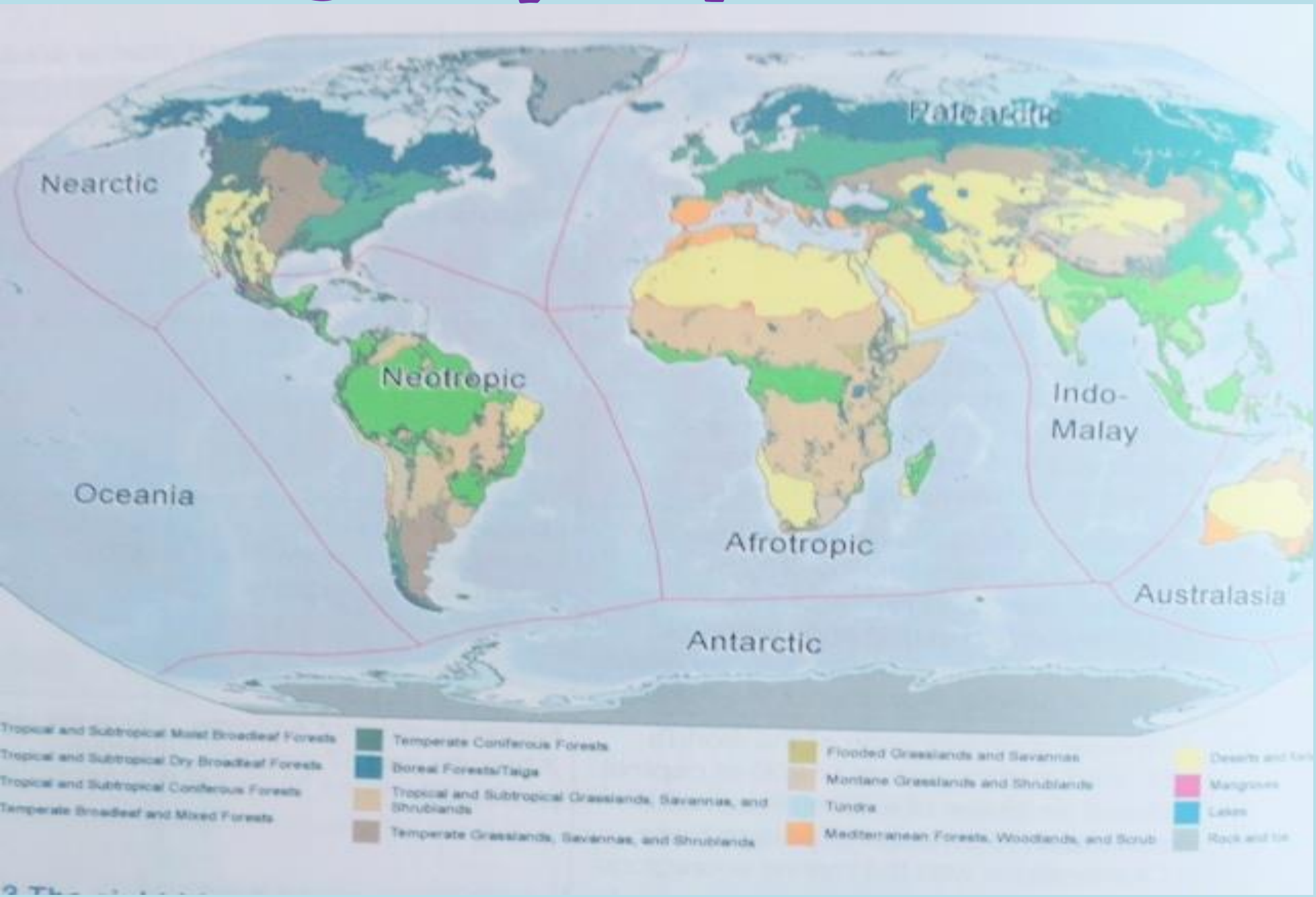
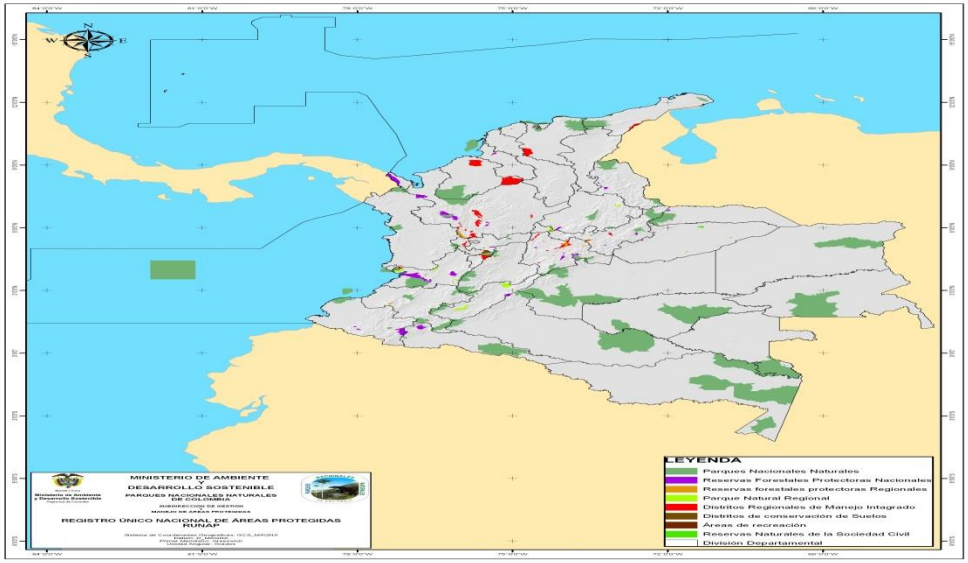
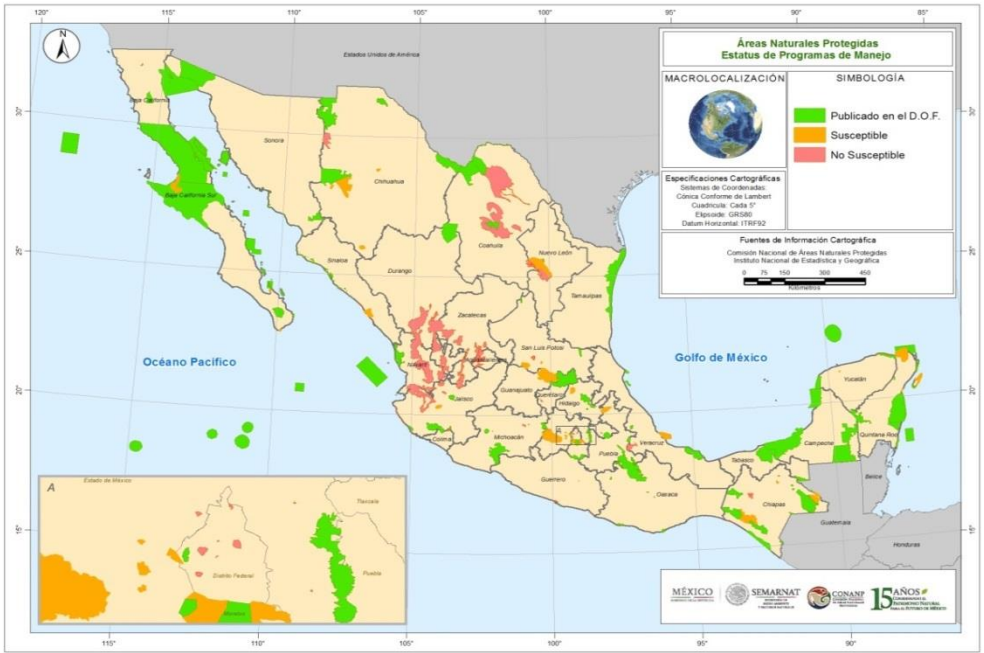
Ecologically Representative

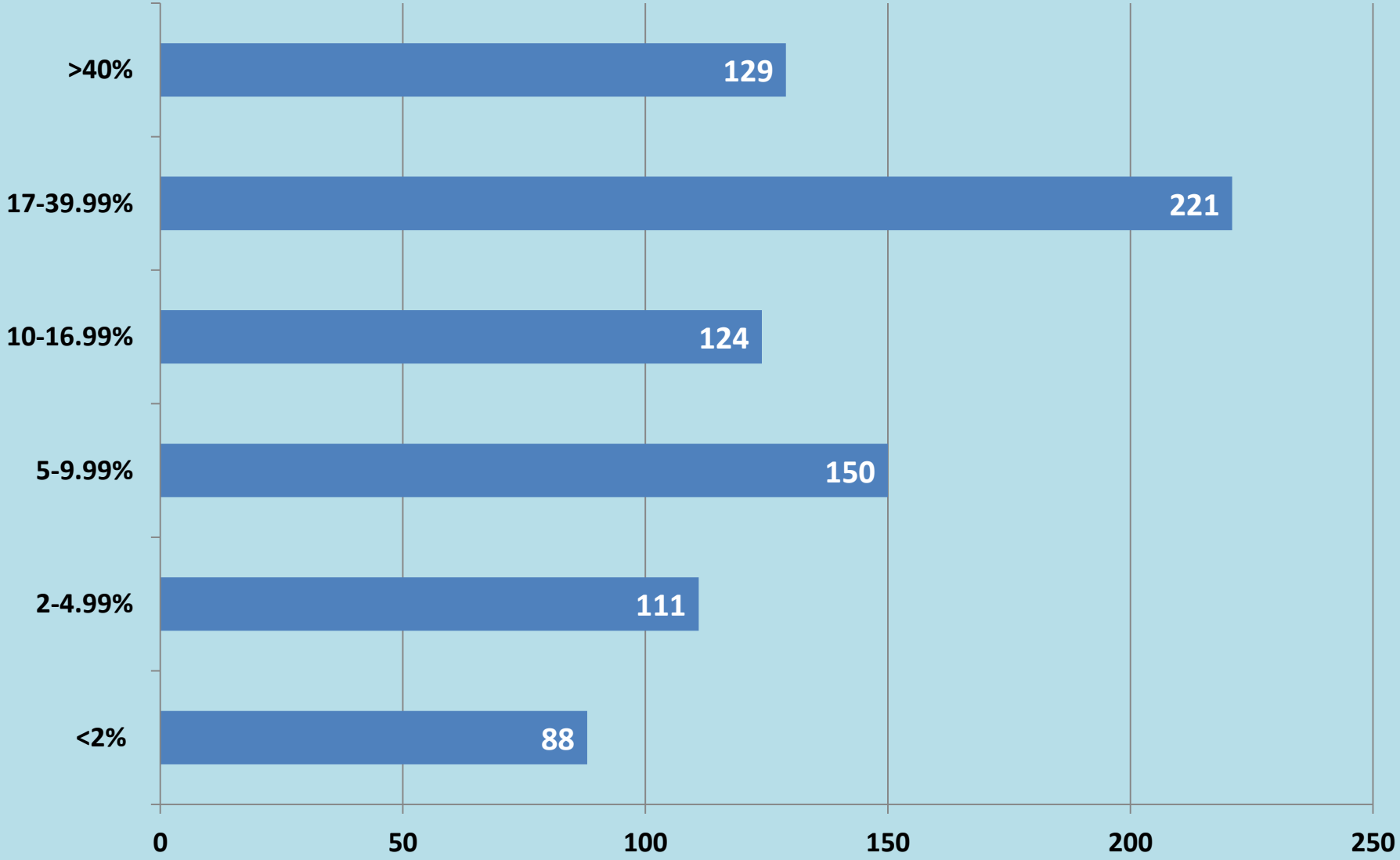


Ecological Gap Assessment

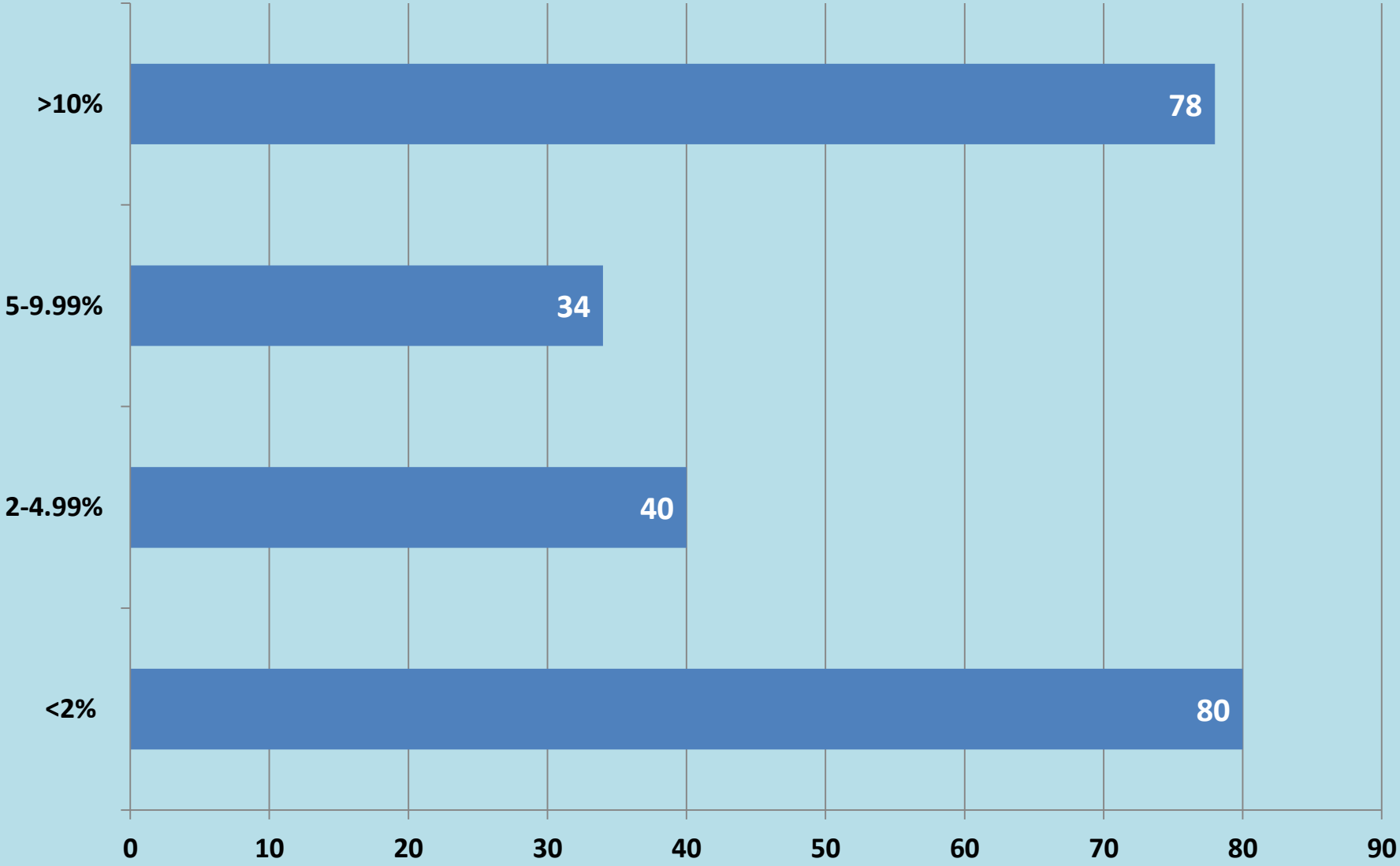




Number of terrestrial ecoregions at different levels of protection (2014)

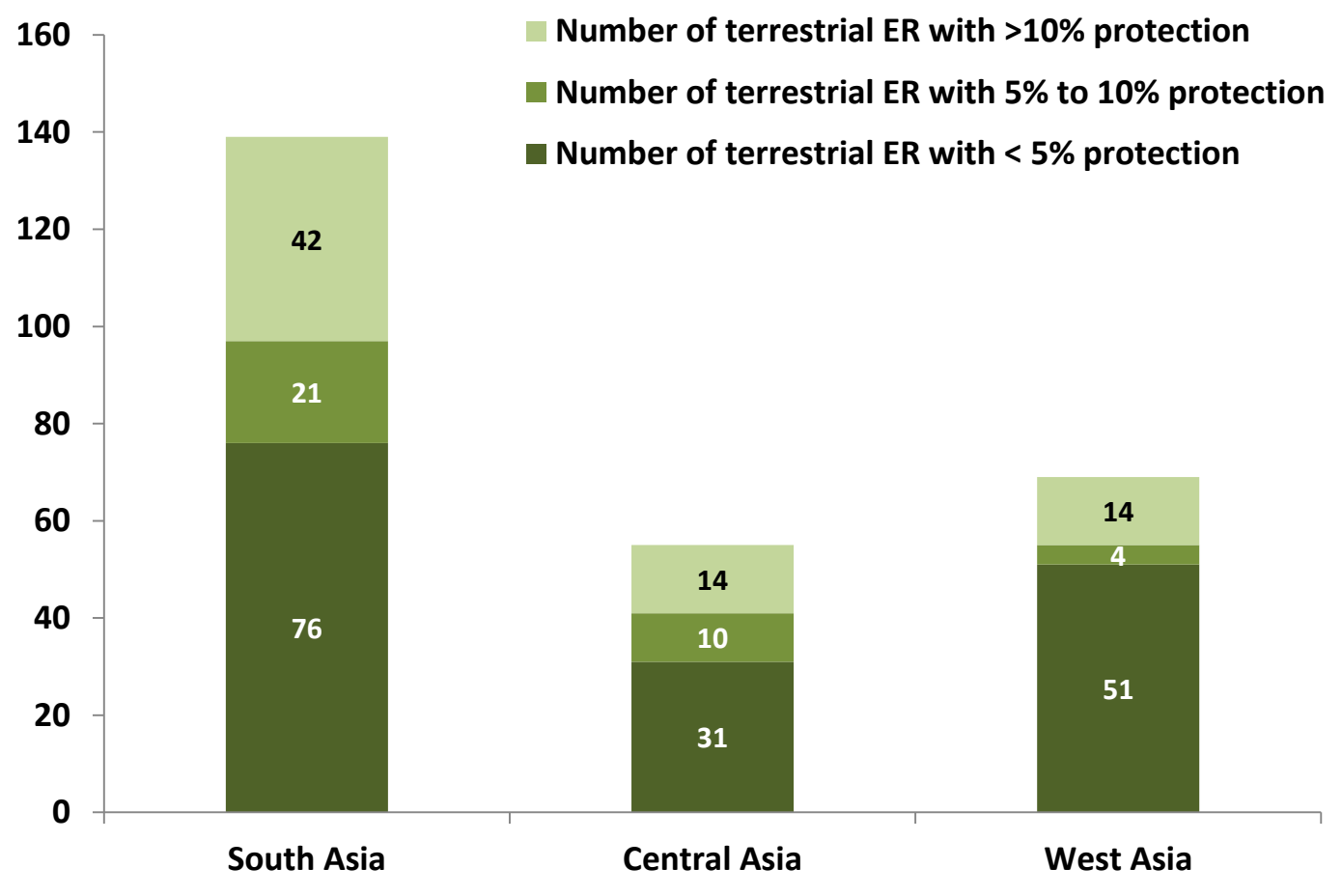


Number of marine ecoregions at different levels of protection (2014)



Ecological Representativeness in South, Central and West Asia

Number of terrestrial ecological regions (ER) and level of protection in the country



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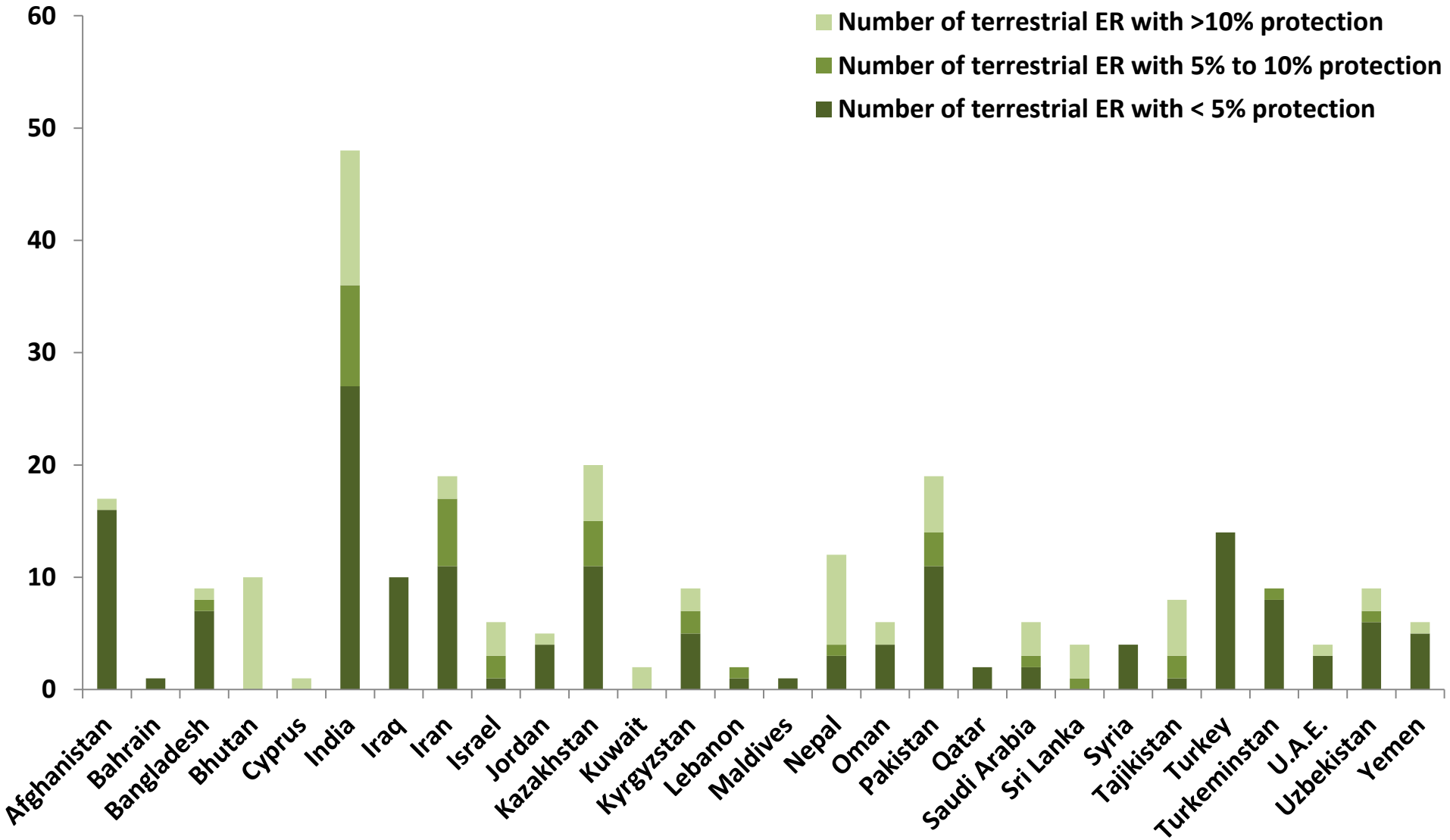
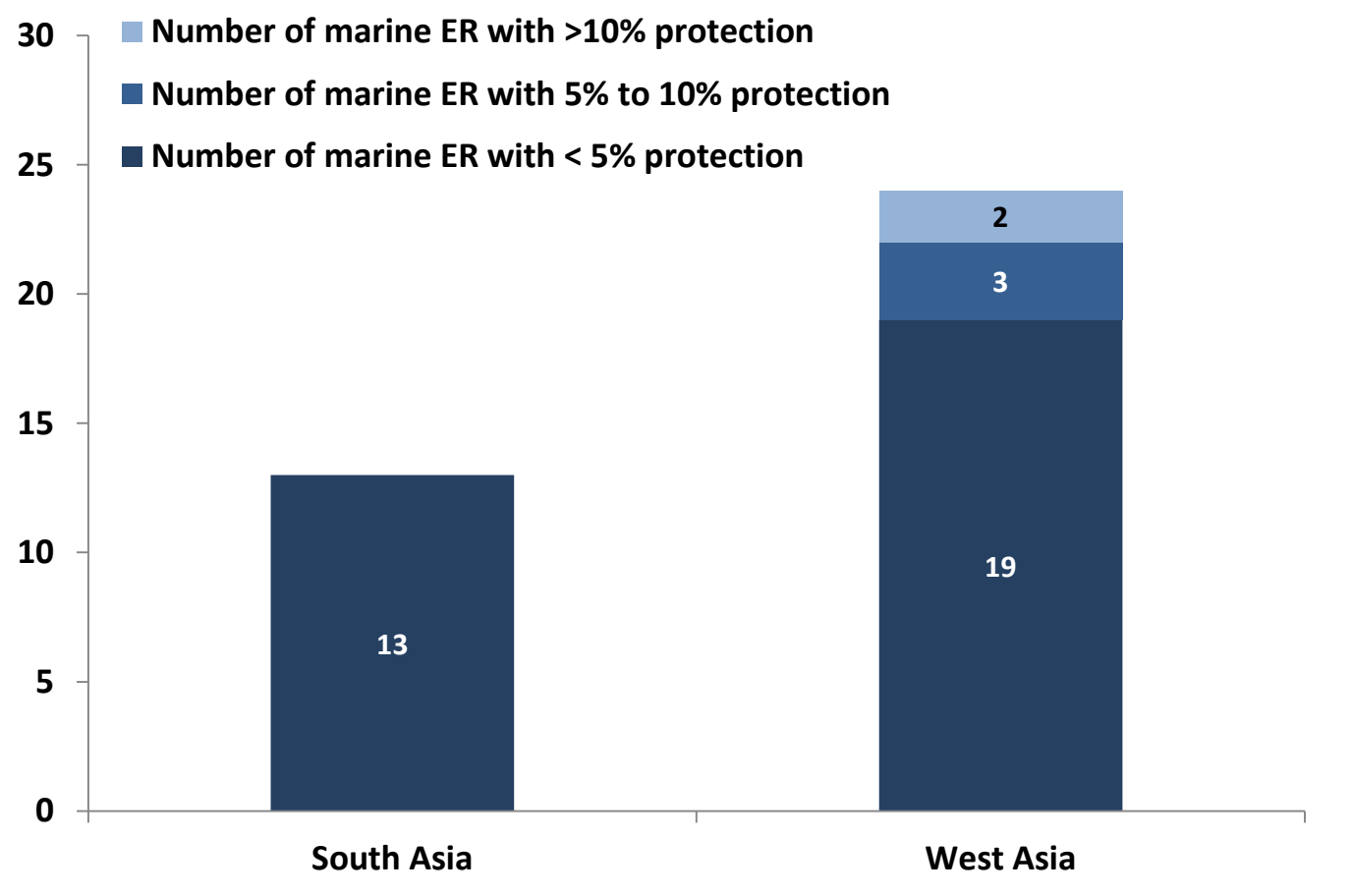


Ecological Representativeness in South and West Asia

Number of marine ecological regions (ER) and level of protection in the country



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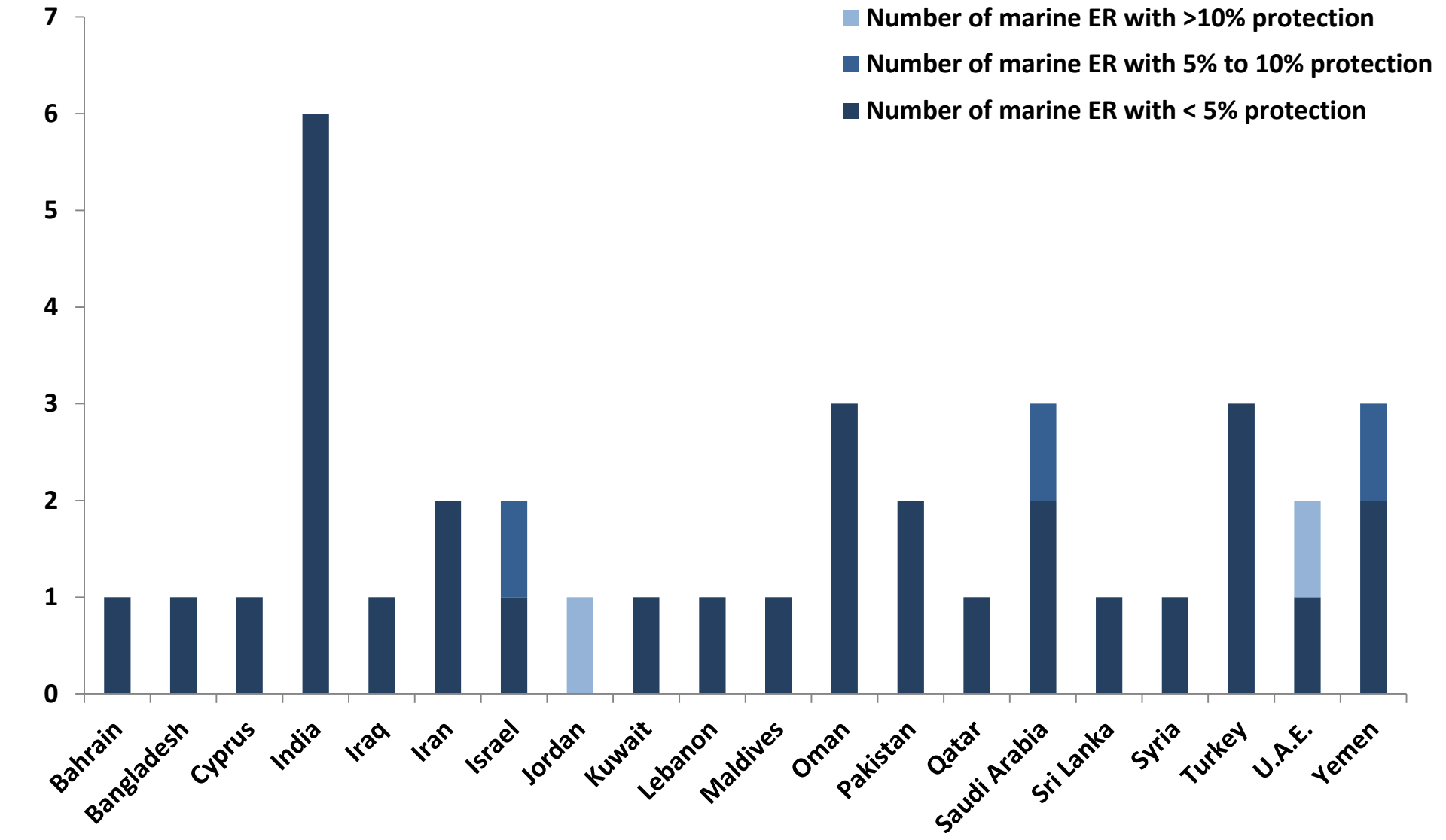
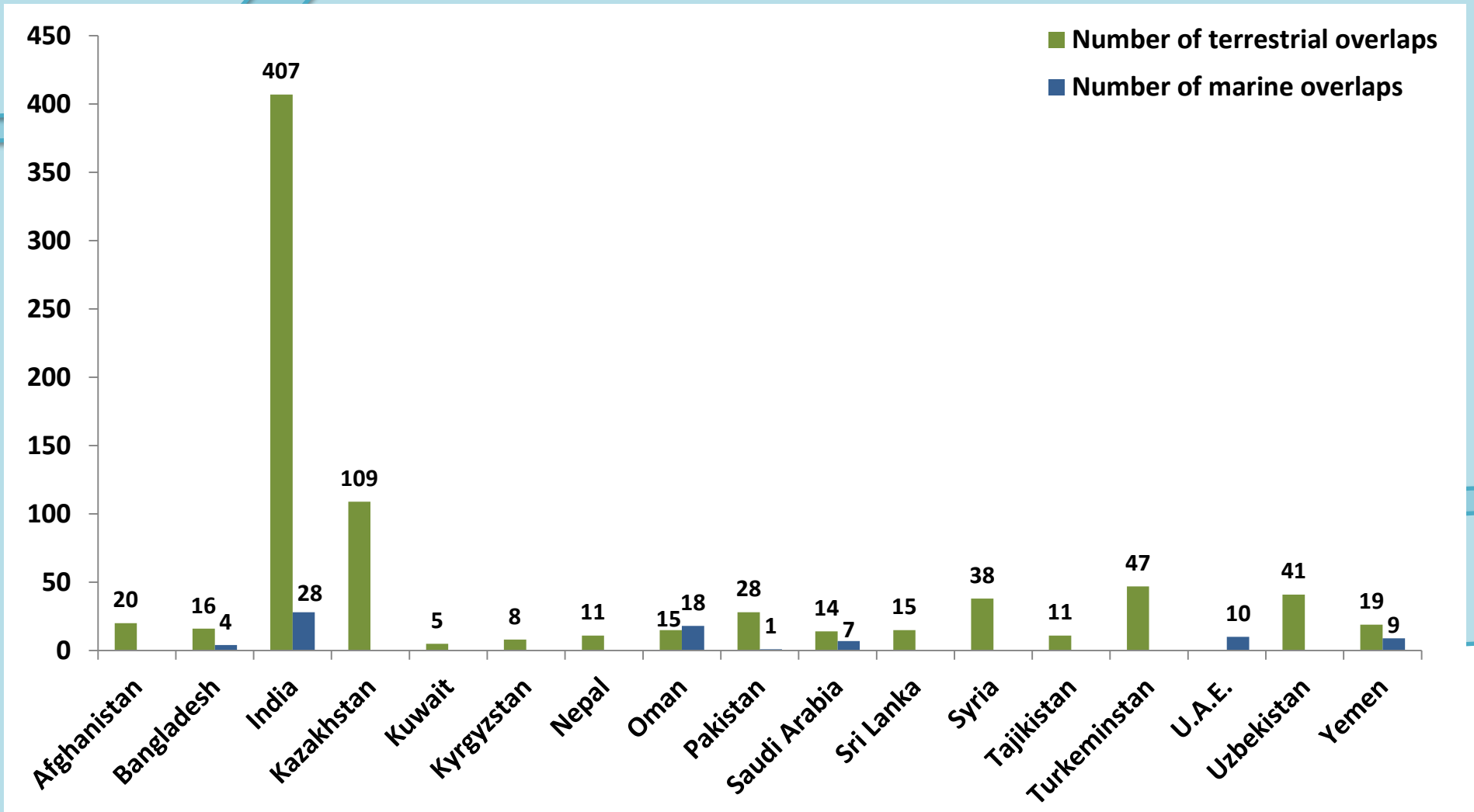


Overlaps between candidate ecoregions and Alliance for Zero Extinction Sites (AZEs) – An example

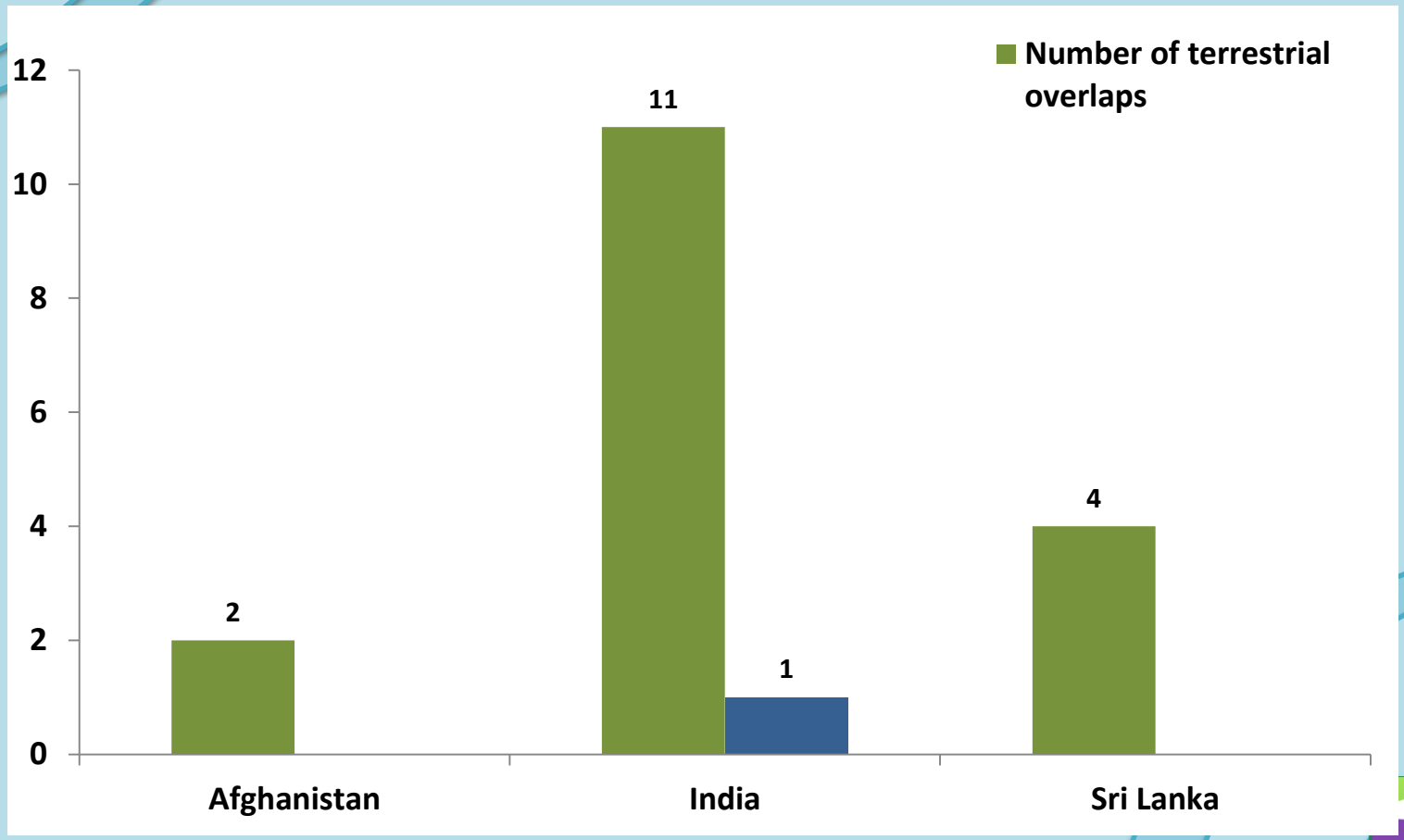
If protection is extended to **4** AZEs which are not protected hitherto in Kyrgyzstan, those actions also improve protection status of terrestrial ecoregions that have a worldwide protection of less than 10% and a significant occurrence in Kyrgyzstan (20-80% in the country).
If protection is extended to 4 AZEs which are partially protected in Kyrgyzstan, those actions also improve protection status of terrestrial ecoregions that have a worldwide protection of less than 10% and a significant occurrence in Kyrgyzstan (20-80% in the country).

Site Number	Site Name	Total area (ha)	Ecoregion Number	T/M	Ecoregion Name	% in country	Overlap (ha)	Overlap (%)
27414	Western Issyk Kul Lake	57,044.6	80818	T	Tian Shan foothill arid steppe	39.57	41,218.2	72.3
27415	Eastern Issyk Kul Lake	99,987.6	80818	T	Tian Shan foothill arid steppe	39.57	64,240.7	64.2
27416	Son-Kul Lake	34,998.7	80818	T	Tian Shan foothill arid steppe	39.57	34,998.7	100.0
27417	Lake Chatyr-Kul	24,740.6	81019	T	Tian Shan montane steppe and meadows	23.78	24,740.6	100.0
27418	**Gorge Tash-Rabat**	**11,662.1**	**81019**	**T**	**Tian Shan montane steppe and meadows**	**23.78**	**11,662.1**	**100.0**
27419	**Karkyra Valley**	**15,048.2**	**80521**	**T**	**Tian Shan montane conifer forests**	**36.07**	**5,554.5**	**36.9**
27419	**Karkyra Valley**	**15,048.2**	**81019**	**T**	**Tian Shan montane steppe and meadows**	**23.78**	**9,493.8**	**63.1**
27423	**Eastern Alai**	**10,508.4**	**81019**	**T**	**Tian Shan montane steppe and meadows**	**23.78**	**5,801.8**	**55.2**

Overlaps between candidate ecoregions and Important Bird and Biodiversity Areas (IBAs) in South, Central and West Asia



Overlaps between candidate ecoregions and Alliance for Zero Extinction Sites (AZEs) in South Asia



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Management Effectiveness

What is effectively managed ?

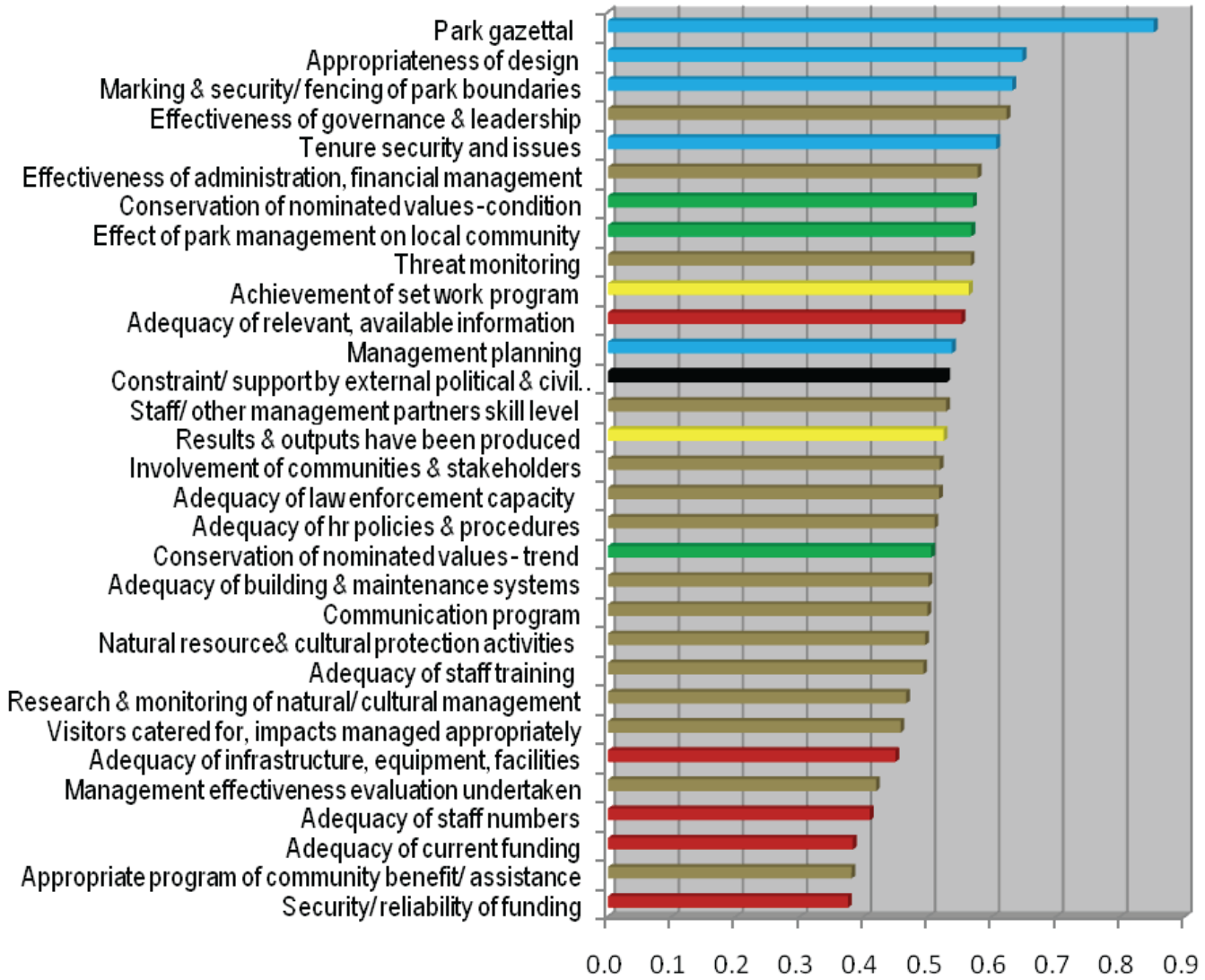
It is the degree to which protected area management protects biological and cultural resources, and achieves the goals and objectives for which the protected area was established.

Protected areas only work as conservation tools and provide ecosystem services if they are managed effectively to maintain their values in perpetuity.

Global Study on Management Effectiveness Evaluation in Protected areas

- The Global Study developed a 'common reporting format', defining headline indicators which represent the major themes and elements of the thousands of indicators used in the various assessment systems.
- Data was then 'translated' into the common reporting format, combined into one database and analyzed.
- The average score of 2,488 'most recent' assessments with available data was calculated at 0.53 on a zero to one scale
- It was considered that overall scores of less than 0.33 indicate clearly inadequate management, while average scores above 0.66 represent sound management.
- Only 14% were in the clearly inadequate range while *22% were in the sound management range*. Most protected areas were therefore clustered in the middle third (basic management), with 27% of the total in this range but below 0.5.
- Of the five management aspects assessed as strongest overall (scoring over 0.6) four are from the 'planning' element of the IUCN-WCPA Framework: gazettal and legal status, marking of protected area boundaries, tenure issues, and design of protected areas. The 'process' indicator relating to governance and leadership also scores highly.

Management Effectiveness Global Study – Headline Indicators



IUCN-WCPA Framework:

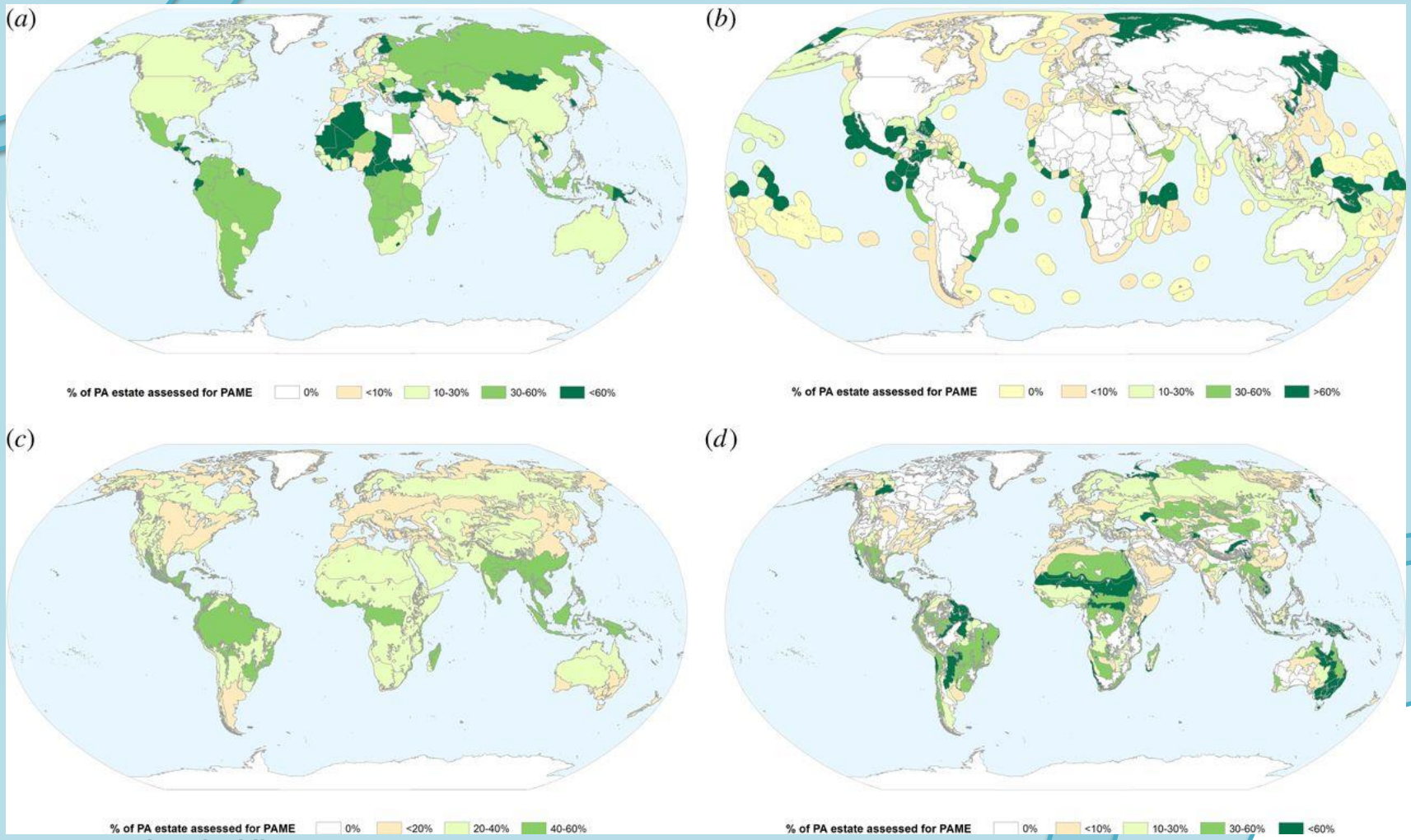
- Black indicates 'context' factors,
- Aqua 'planning' ,
- Red 'inputs',
- Brown 'process' ,
- Yellow ' outputs',

Green 'outcome'

Management Effectiveness– Dimensions of Management and Fields

- **Natural Integrity**
  - Biodiversity
  - Ecosystem function
  - Landscape and geology
  - Climate change resilience
- **Cultural and Spiritual**
  - Material culture
  - Cultural (other)
  - Spiritual
  - Aesthetic/ scenic
- **Socio-economic, Community Engagement and Recreation**
  - Recreation
  - Sustainable resource use
  - Economic
  - Science and educational use
  - Community
  - Human health and wellbeing

Progress towards the 60% PAME assessment target of the CBD Programme of Work on Protected Areas, by (a) terrestrial territory of countries, (b) marine territory of countries, (c) WWF biomes and (d) WWF terrestrial ecoregions.



Lauren Coad et al. Phil. Trans. R. Soc. B 2015;370:20140281

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PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

Management Effectiveness

By 2020, areas are conserved through effective management…

- **Conservation needs equity: a fair sharing of the costs and benefits of preserving biodiversity and managing natural resources in a sustainable way**
- **Conservation needs respect to human rights: "do not harm"…and have a positive impact on livelihoods wherever possible**
- **So…what can we do to avoid further loss of habitats, species and natural resources?**
- **How can we ensure the very base of life, of livelihoods, and development ?**

By 2020, is it possible to have management effectiveness evaluations conducted for 100% of protected areas and ensure that 40% are under sound management?

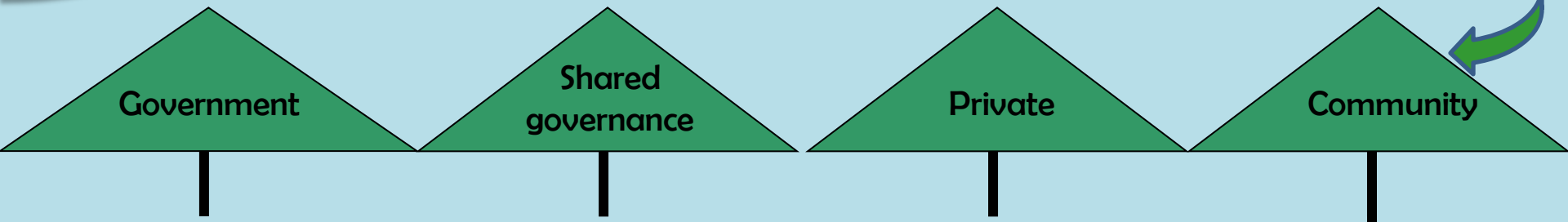
Equitable Management: IUCN matrix of protected areas categories and governance types

Governance type / Category (mngmt. objective)	A. Governance by Government			B. Shared Governance			C. Private Governance			D. Indigenous Peoples & Community Governance	
	Federal or national ministry or agency	Local/ municipal ministry or agency in change	Government-delegated management (e.g. to an NGO)	Trans-boundary management	Collaborative management (various forms of pluralist influence)	Joint management (pluralist management board)	Declared and run by individual land-owner	…by non-profit organisations (e.g. NGOs, univ. etc.)	…by for profit organisations (e.g. corporate land-owners)	Indigenous bio-cultural areas & Territories-declared and run by Indigenous Peoples	Community Conserved Areas - declared and run by traditional peoples and local communities
I - Strict Nature Reserve/ Wilderness Area											
II – National Park (ecosystem protection; protection of cultural values)											
III – Natural Monument											
IV – Habitat/ Species Management											
V – Protected Landscape/ Seascape											
VI – Managed Resource											

Equitable Management

By 2020, areas are conserved through equitably managed…

i.e. Indigenous and Community Conserved Areas, ICCA



IUCN WCPA

CEESP

TILCEPA

ICCA

Community Management

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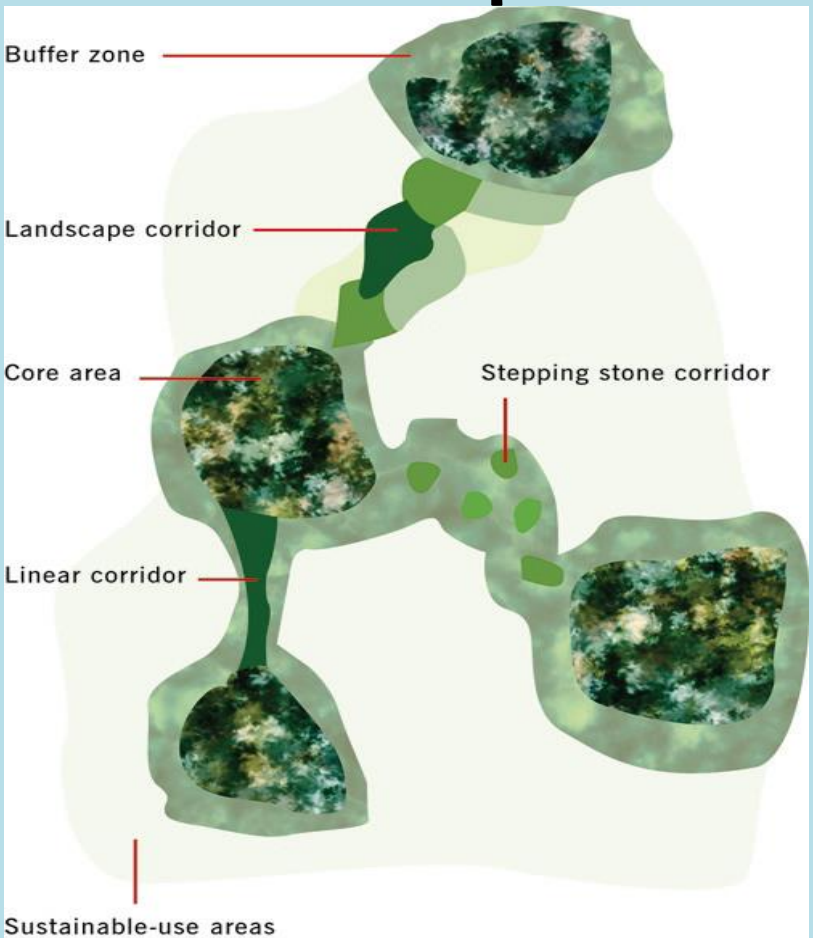
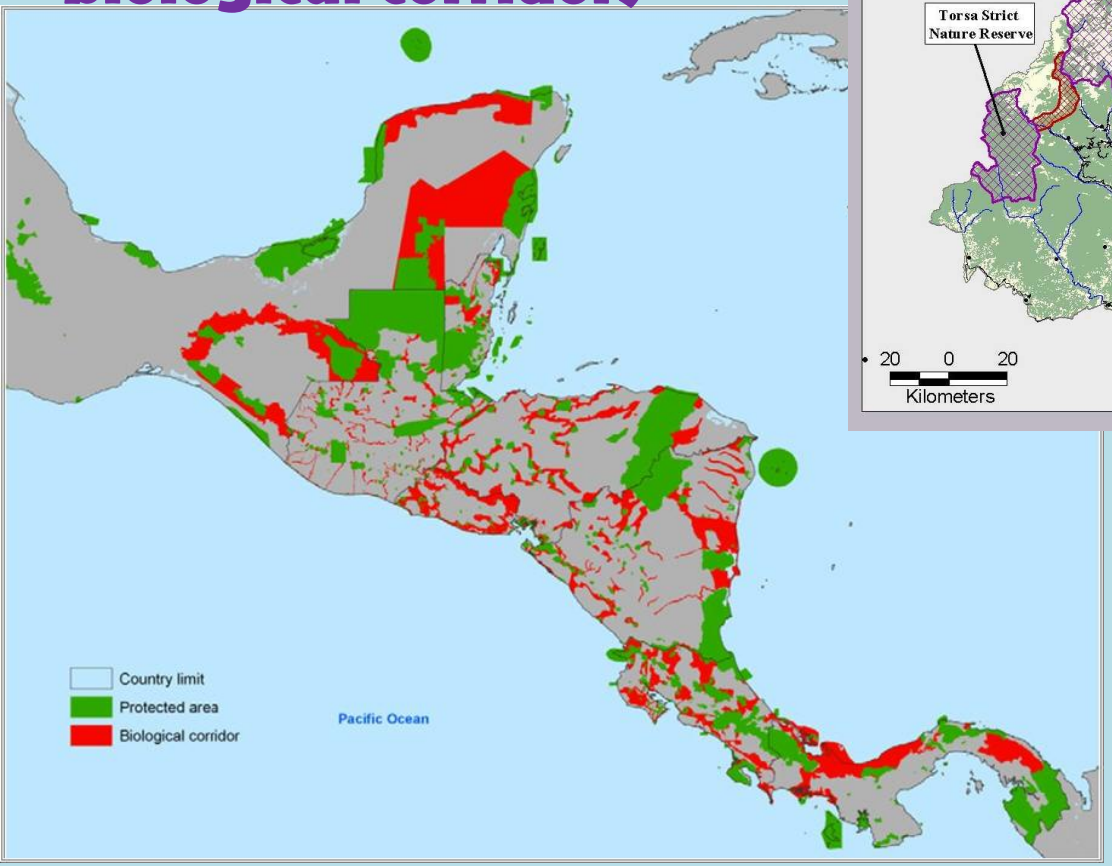
Integration and Connectivity

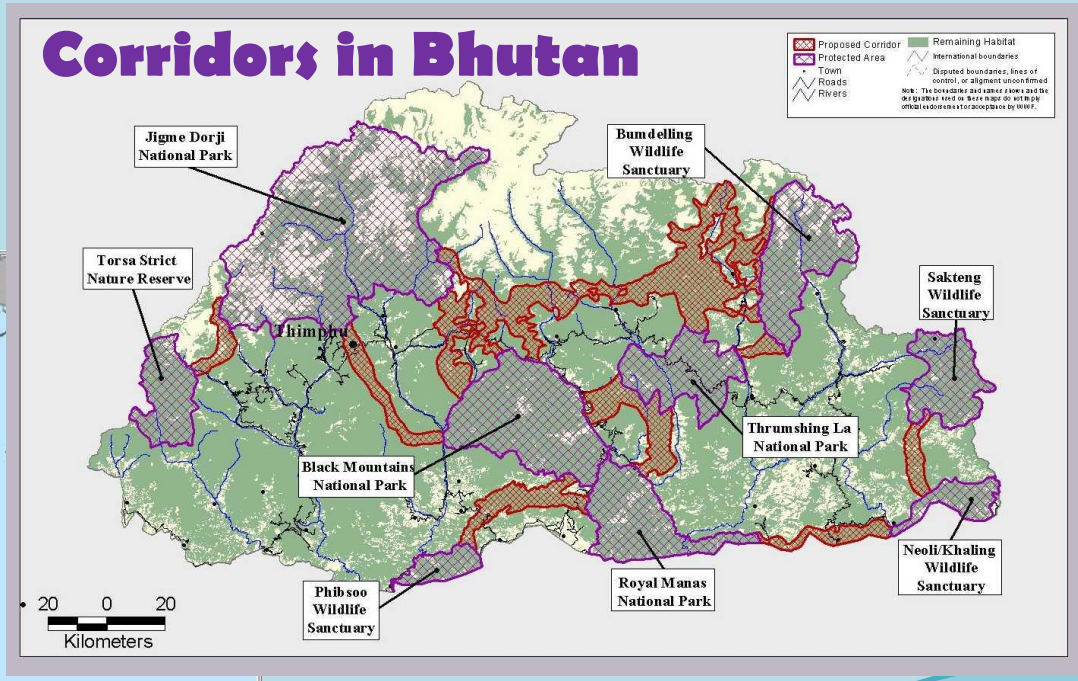
By 2020, areas are conserved through well connected systems, integrated into the wider landscapes and seascapes



Integration and Connectivity

Mesoamerican biological corridors





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Other effective area-based conservation measures

What are other effective area-based conservation measures?

- ***ICCAs including LMMAs***
- ***Private PAs***

TASK FORCE ON OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES

Some core traits may include:

1) They should be well-defined geographically;
2) They should have objectives for biodiversity conservation, achieved through conservation of biodiversity as a whole;
3) Their conservation objectives must receive first priority when in conflict with other objectives;
4) The mechanisms by which the areas are established must have the comprehensive ability to exclude, control, and manage all activities likely to have impacts on biodiversity, and must compel the prohibition of incompatible activities;
5) They should be in place for the long term;
6) The mechanisms by which they are established must be difficult to reverse; and
7) They should be in effect year-round.

Aichi Biodiversity Target 12

By 2020,

...the extinction of known threatened species has been prevented and...

...their conservation status, particularly of those most in decline, has been improved and sustained.

Number of Threatened Species in the South Asia

Key:

- CR: Critically Endangered Species
- CRE: Critically Endangered Endemic Species

COUNTRY	Amphibians		Birds		Mammals		Plants		Reptiles	
	CR	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*
Afghanistan	1	1	3	0	0	0	1	0	0	0
Bangladesh	0	0	8	0	3	0	5	0	3	0
Bhutan	0	0	4	0	2	0	3	1	1	0
India	21	20	7	5	11	7	74	59	7	3
Iran	3	2	4	0	0	0	0	0	2	0
Maldives	0	0	0	0	0	0	0	0	1	0
Nepal	0	0	7	0	2	0	2	0	2	0
Pakistan	0	0	5	1	0	0	4	0	1	0
Sri Lanka	13	13	3	0	0	0	79	78	2	1

Number of Threatened Species in the Central Asia

COUNTRY	Amphibians		Birds		Mammals		Plants		Reptiles	
	CR	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*
Kazakhstan	0	0	3	0	3	0	5	4	0	0
Kyrgyzstan	0	0	1	0	0	0	6	2	0	0
Tajikistan	0	0	1	0	0	0	6	3	0	0
Turkmenistan	0	0	2	0	1	0	0	0	1	1
Uzbekistan	0	0	3	0	1	0	4	1	0	0

Number of Threatened Species in West Asia

COUNTRY	Amphibians		Birds		Mammals		Plants		Reptiles	
	CR	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*	*CR*	*CRE*
Bahrain	0	0	0	0	0	0	0	0	1	0
Cyprus	0	0	0	0	0	0	6	6	0	0
Iraq	0	0	3	0	0	0	0	0	0	0
Israel	2	1	2	0	0	0	0	0	1	0
Jordan	0	0	2	0	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0	0	0	1	0
Lebanon	0	0	1	0	0	0	0	0	0	0
Oman	0	0	1	0	0	0	0	0	1	0
Palestine	1	-	1	0	0	-	0	-	1	-
Qatar	0	0	1	0	0	0	0	0	1	0
Saudi Arabia	0	0	3	0	0	0	0	0	1	0
Syria	0	0	2	0	0	0	1	0	0	0
Turkey	2	2	3	0	0	0	63	59	7	3
U.A.E.	0	0	1	0	0	0	0	0	1	0
Yemen	0	0	2	0	0	0	6	6	2	1

Group Work

Element of Aichi Target 11 and 12	Status	Gaps	Opportunities
Quantitative aspects	i.e. % of total protected areas for terrestrial and marine	i.e. % to reach national target	i.e. % gap between current status + implementation and national target
Improving ecological representation	i.e. % of ecoregions protected to national target	i.e. % of ecoregions needing protection to reach national target i.e. tools and partnerships needed to develop ecological gaps assessment	i.e. 20% of 5 endemic ecoregions will be protected i.e. partnership with X for national training on ecological mapping
….			

Summarize quantitative information collected from the questionnaire in one or two points.

What is needed to complete conservation gap?
Points made can be:
- tangible/ quantitative
- in-tangible/ qualitative

What specific elements are feasible?
Points made can be:
- tangible/ quantitative
- in-tangible/ qualitative

Sub-regional Groups

Central Asia

- Tajikistan
- Turkmenistan
- Uzbekistan

South Asia

- Afghanistan
- Bangladesh
- Bhutan
- India
- Sri Lanka
- Maldives
- Nepal
- Pakistan

West Asia

- Kuwait
- UAE
- Saudi Arabia
- Jordan
- Lebanon
- Syrian Arab Republic
- Oman