

# Financing biodiversity: Sectoral resource mobilisation to implement the global biodiversity targets

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# Potential of sectoral resource mobilisation to implement the Aichi targets in developing countries: A scoping study

by

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[http://www.ieep.eu/assets/1262/IEEP\\_report\\_sectoral\\_mobilization\\_of\\_bd\\_funding\\_Oct\\_2013\\_published\\_FINAL.pdf](http://www.ieep.eu/assets/1262/IEEP_report_sectoral_mobilization_of_bd_funding_Oct_2013_published_FINAL.pdf)



# Sectoral resource mobilisation – what and why?

## Aichi Biodiversity Targets

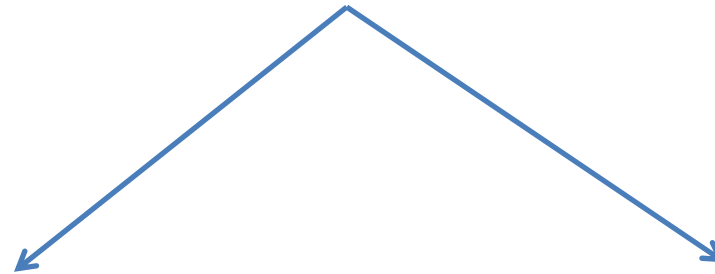


### Target 20

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should **increase substantially from the current levels**. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

# Sectoral resource mobilisation – what and why?

## Mainstreaming biodiversity into sectoral funding



### **Sectoral resource mobilisation:**

allocating funding (direct or indirect) within sectors to support conservation and sustainable use of biodiversity and ecosystem services

i.e. using different tools to leverage funding for biodiversity under sectors, including PES schemes, ecosystem-based adaptation to climate change, wetland restoration for water security etc.

### **Biodiversity proofing sectoral investment:**

ensuring that non-biodiversity related investment and financial support under different sectors does not harm biodiversity and ecosystem services

i.e. using different tools, such as environmental impact assessments and other screening tools, to ensure that negative impacts of sectoral investment, such as infrastructure projects, are prevented, minimised, mitigated and/or offsetted.

# State-of-play: global funding for biodiversity

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- **Types of funding**
  - Biodiversity funding: **dedicated biodiversity budget heading and funding biodiversity under sectors**
  - Under sectors: **direct (conservation) or indirect (sustainable use)**
- **Sources of funding**
  - **Domestic funding - public and private**
  - **International funding – public (ODA) and private (FDI)**

# State-of-play: global funding for biodiversity

- **Current**

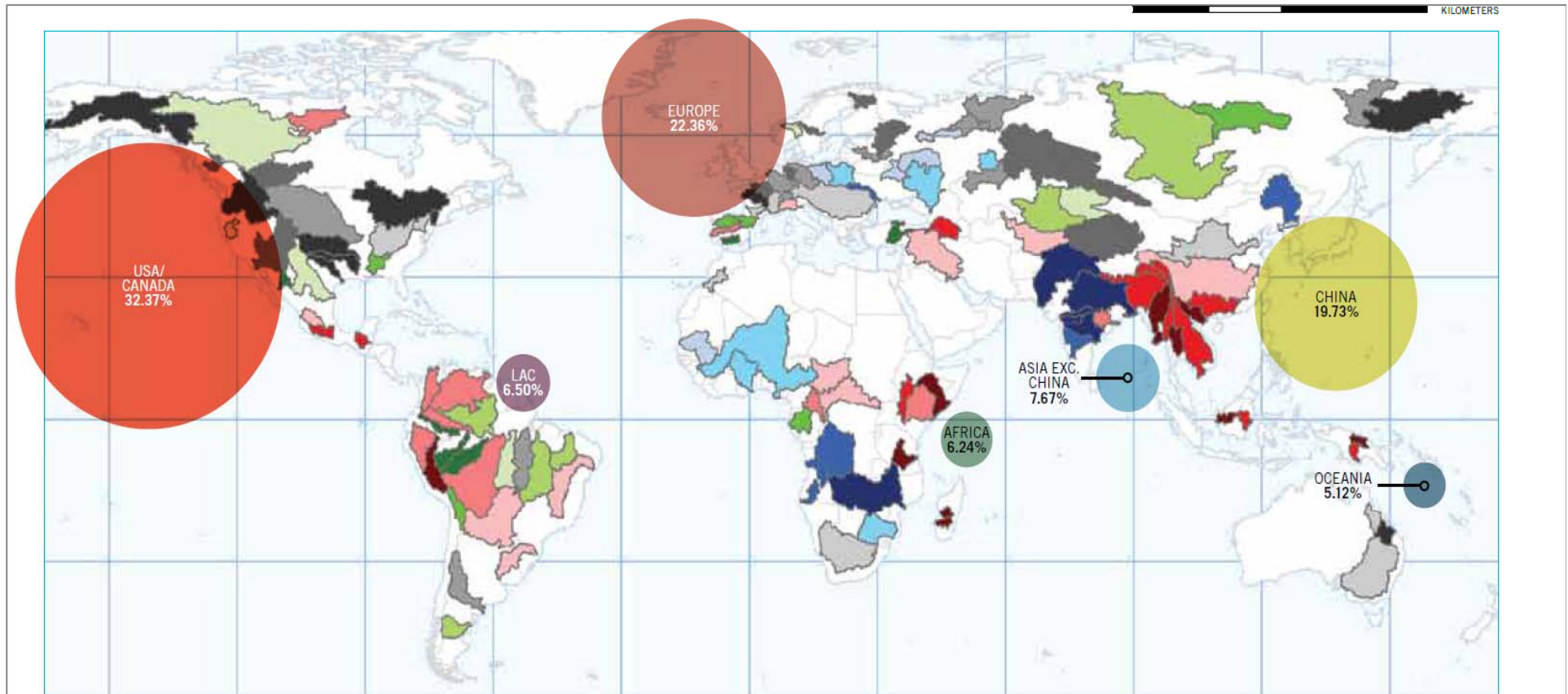
- **Global US\$51.5-53.4 billion / year** (Parker et al. 2012)
- **EU (earlier MFF est.) 0.5 – 1.15 billion EUR / year** for Natura 2000 from the EU budget (Gantioler et al. 2011)

- ***Current global inv. in agriculture over US\$200 billion / year*** (FAO 2012)

- **Future**

- **Global (total) US\$ 150 - 440 billion / year** implementing the **Aichi Targets** (UNEP/CBD/COP/11/INF/20)
- **Global (developing) US\$74 - 191 billion for 2014 – 2018** to implement the **2020 Aichi Targets for biodiversity in the developing countries** (UNEP/CBD/COP/11/INF/35)
- **EU needs (est.) 5.8 billion EUR / year for Natura 2000** (Kettunen et al. 2012)

# State-of-play: global funding for biodiversity



**FIGURE 1  
GLOBAL BIODIVERSITY  
VS. FINANCE DELIVERED**

Map showing current biodiversity finance delivery in 2010 distribution estimates overlaid with high priority areas for ecosystem services, and global priority areas for biodiversity.

MHP1	ESP1	BCP1	MLP1
MHP2	ESP2	BCP2	MLP2
MHP3	ESP3	BCP3	MLP3
MHP4	ESP4	BCP4	MLP4

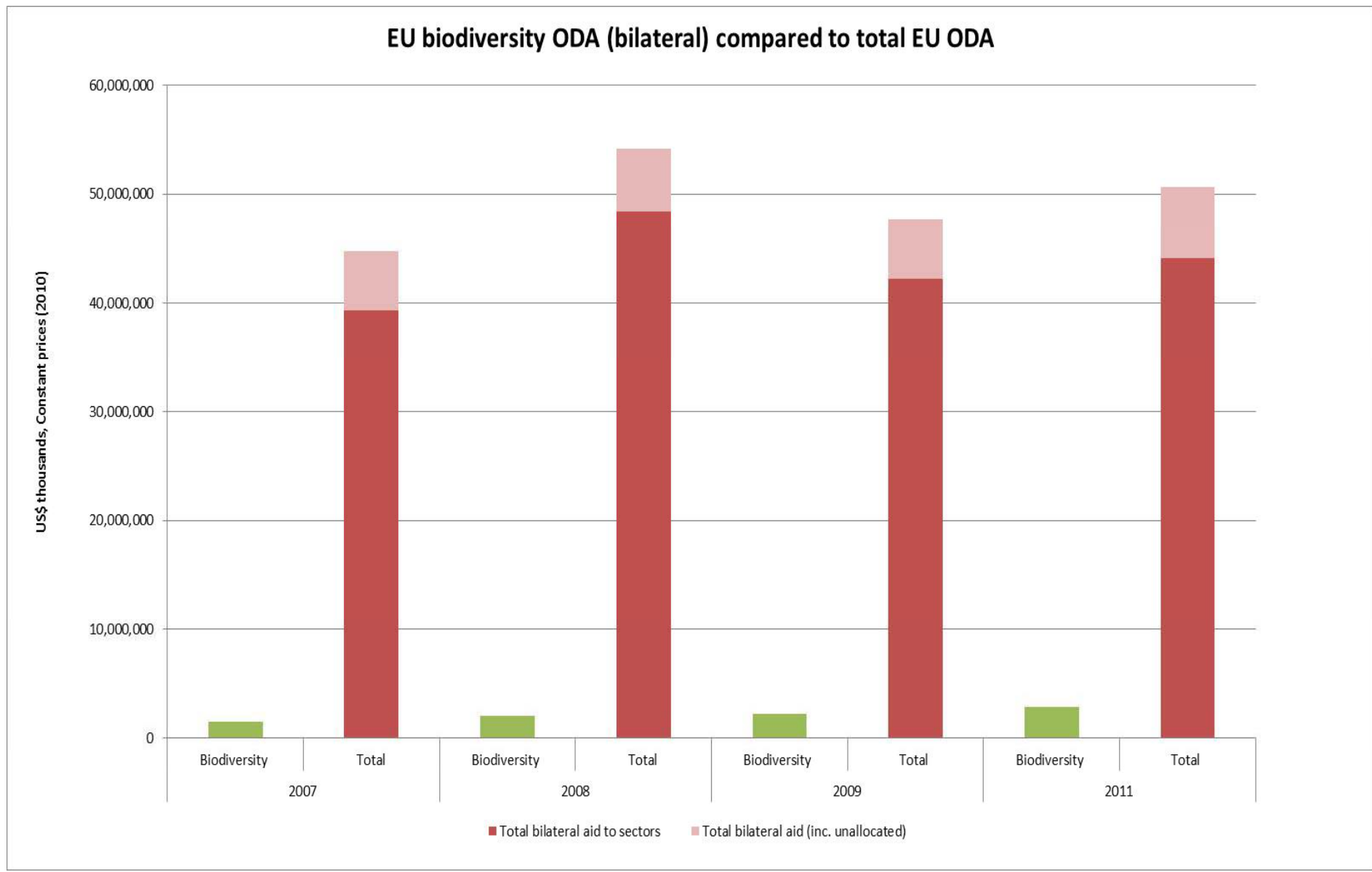
The map background data shows country priority watersheds for ecosystem services provision (e.g. flood mitigation, fresh water provision) combined with biodiversity hotspots, important ecoregions and endemic bird areas (EBAs).

The boxed scale identifies four categories: Mutual-high priorities (MHP; red) for priority protection of both ecosystem services and biodiversity; high priorities for

protecting ecosystem services (ESP; blue); high priorities for protecting biodiversity (BCP; green); and mutual-low priorities (MLP; gray/black) for protecting both ecosystem services and biodiversity. White areas were not included in the original analysis.

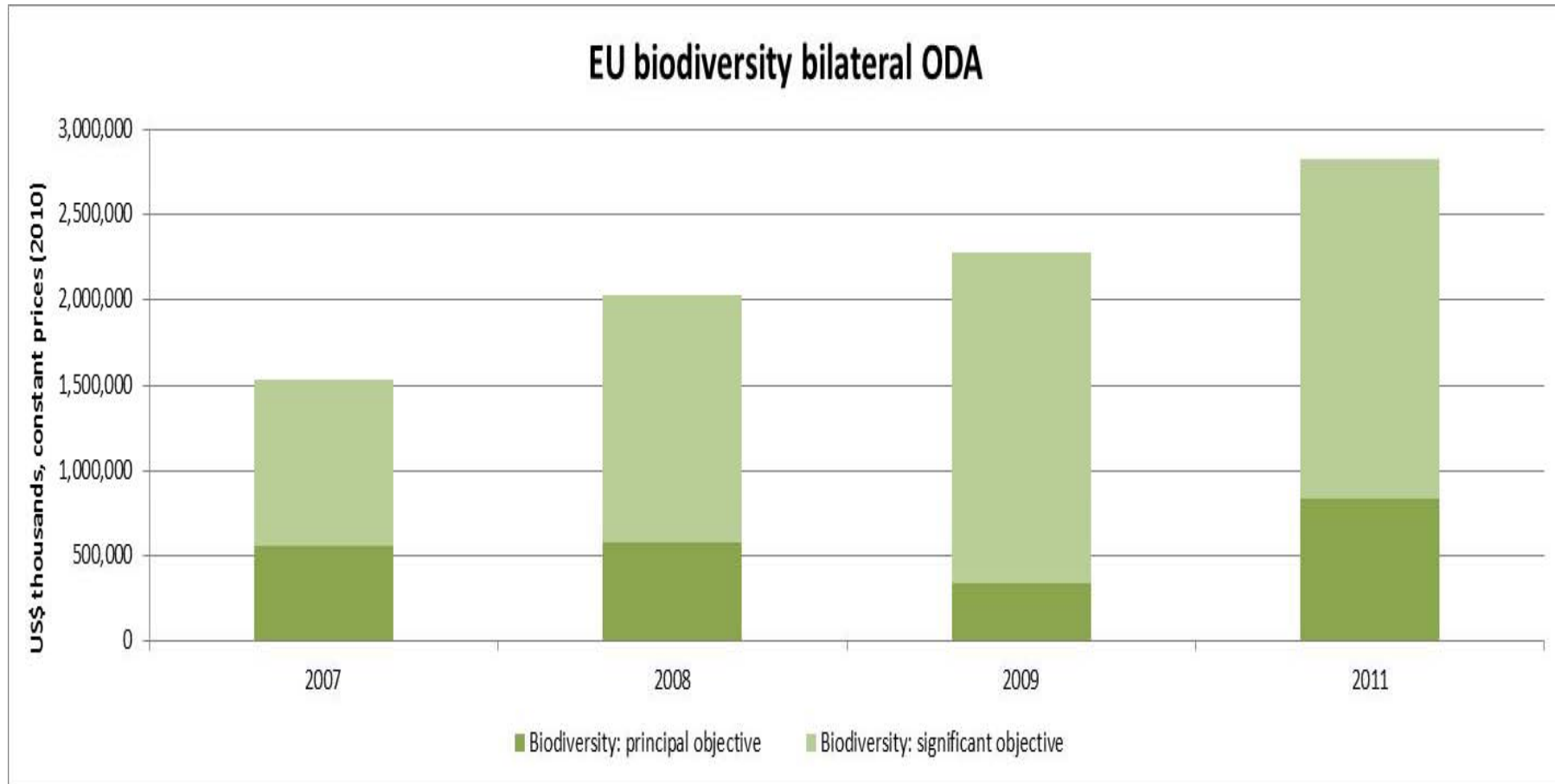
Gary W. Luck, Kai M.A. Chan, John P. Fay. *Conservation Letters*, Vol 2, issue 4, August 2009, p. 179-188.

# Biodiversity ODA – Share of total

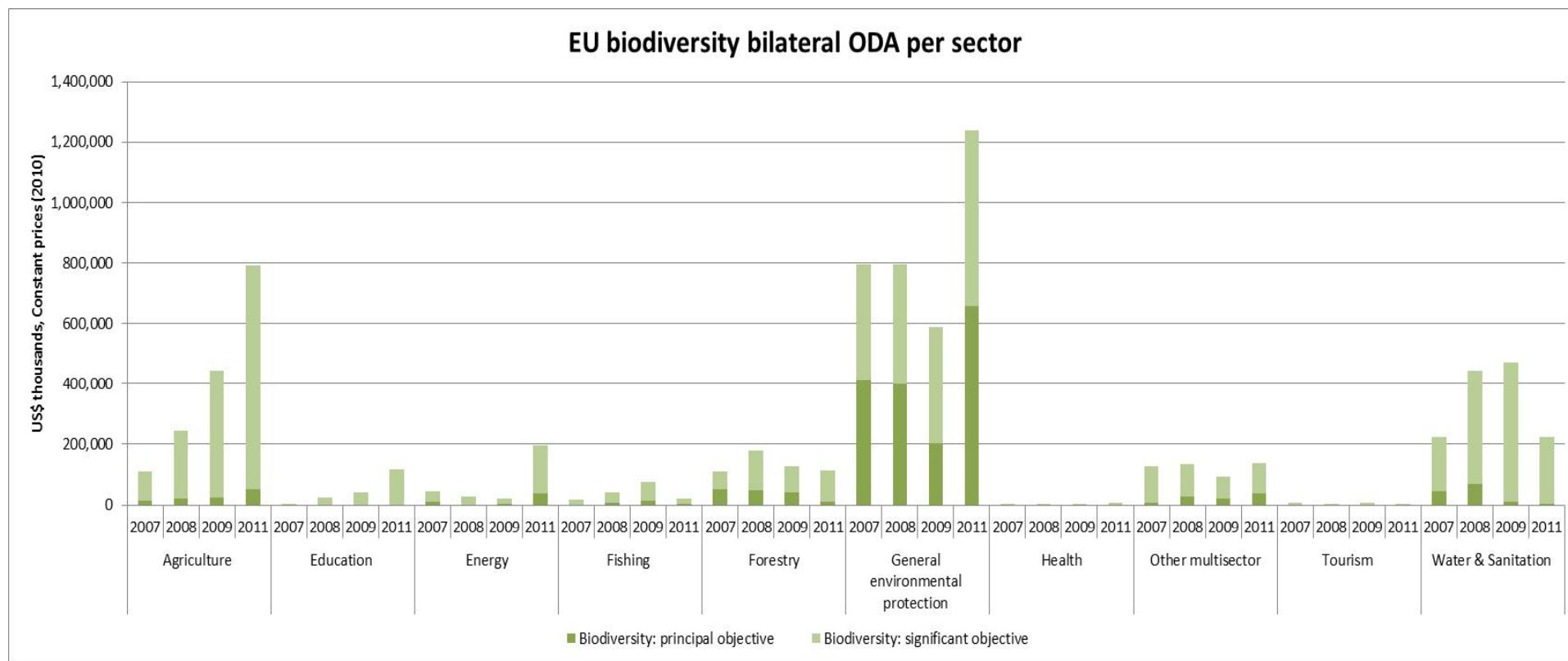




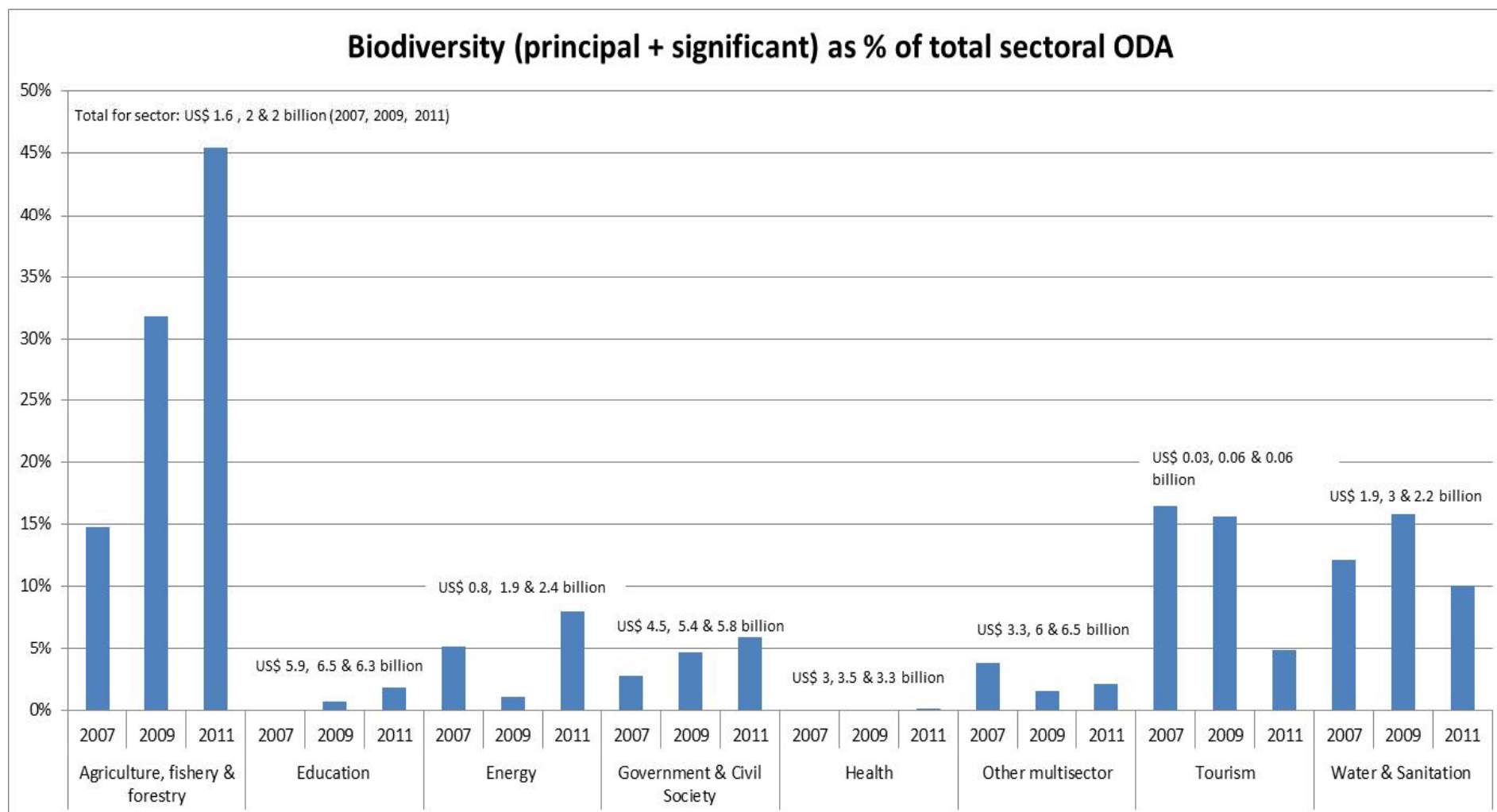
# ODA: Where biodiversity a principle or main objective



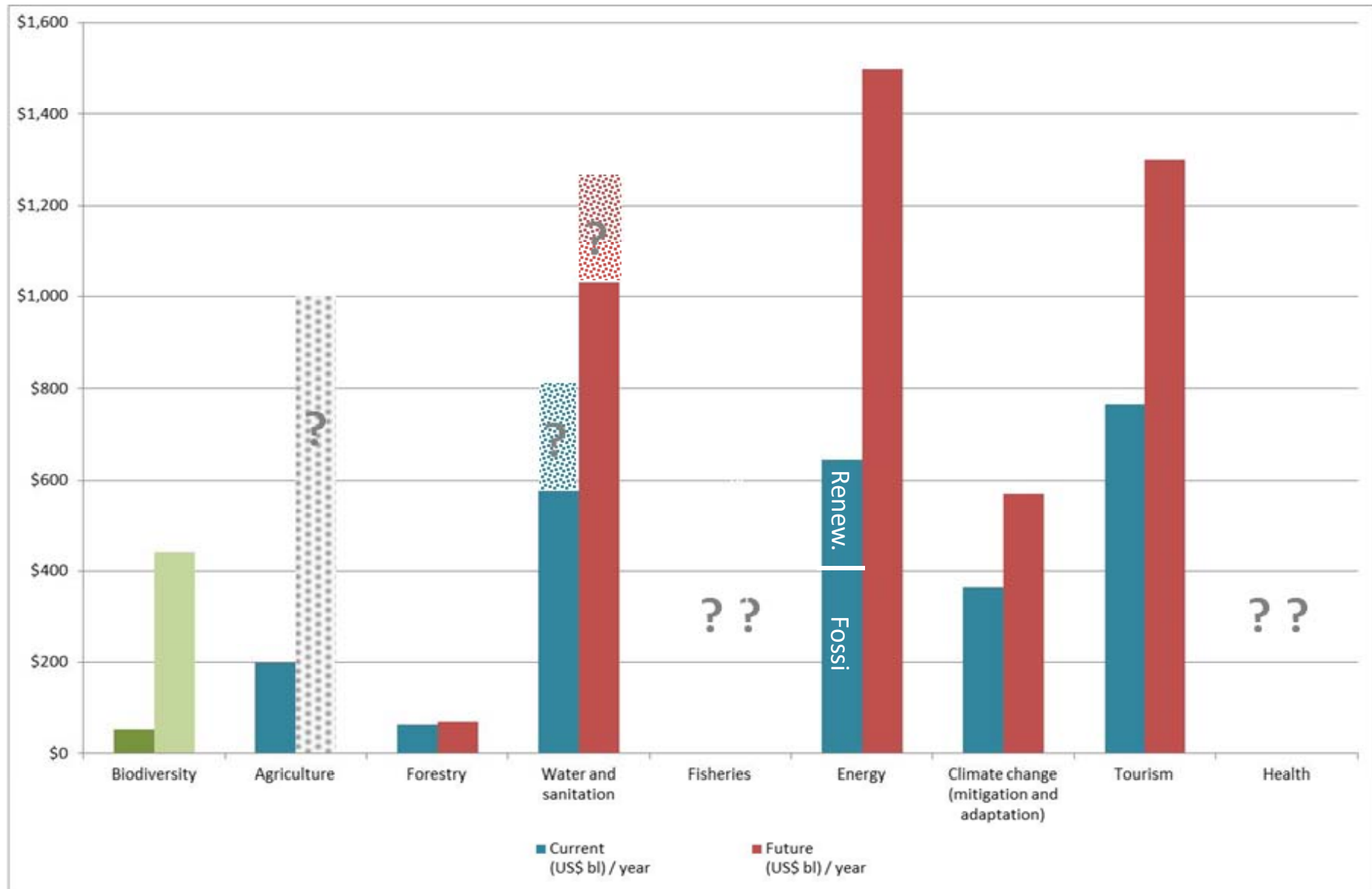
# Biodiversity ODA – Sector integration



# Biodiversity share of sectoral ODA

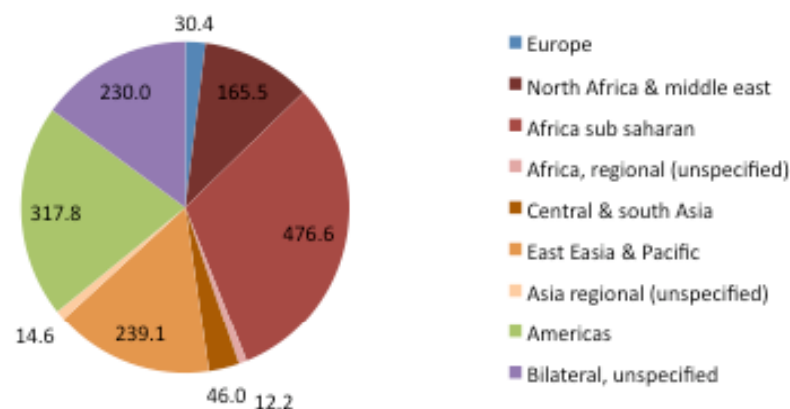


# State-of-play: total global sectoral flows, orders of magnitude

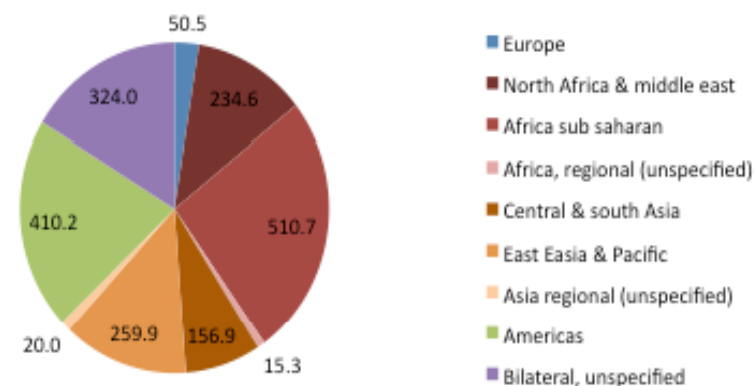


# Biodiversity ODA: Geographic Distribution

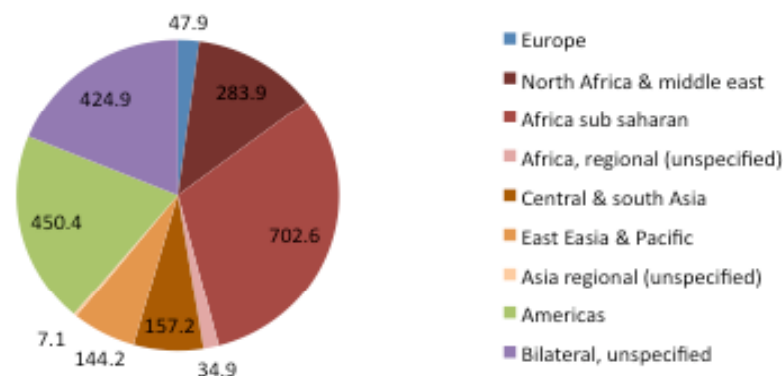
Geographical distribution of EU biodiversity ODA - 2007



Geographical distribution biodiversity of EU ODA - 2008



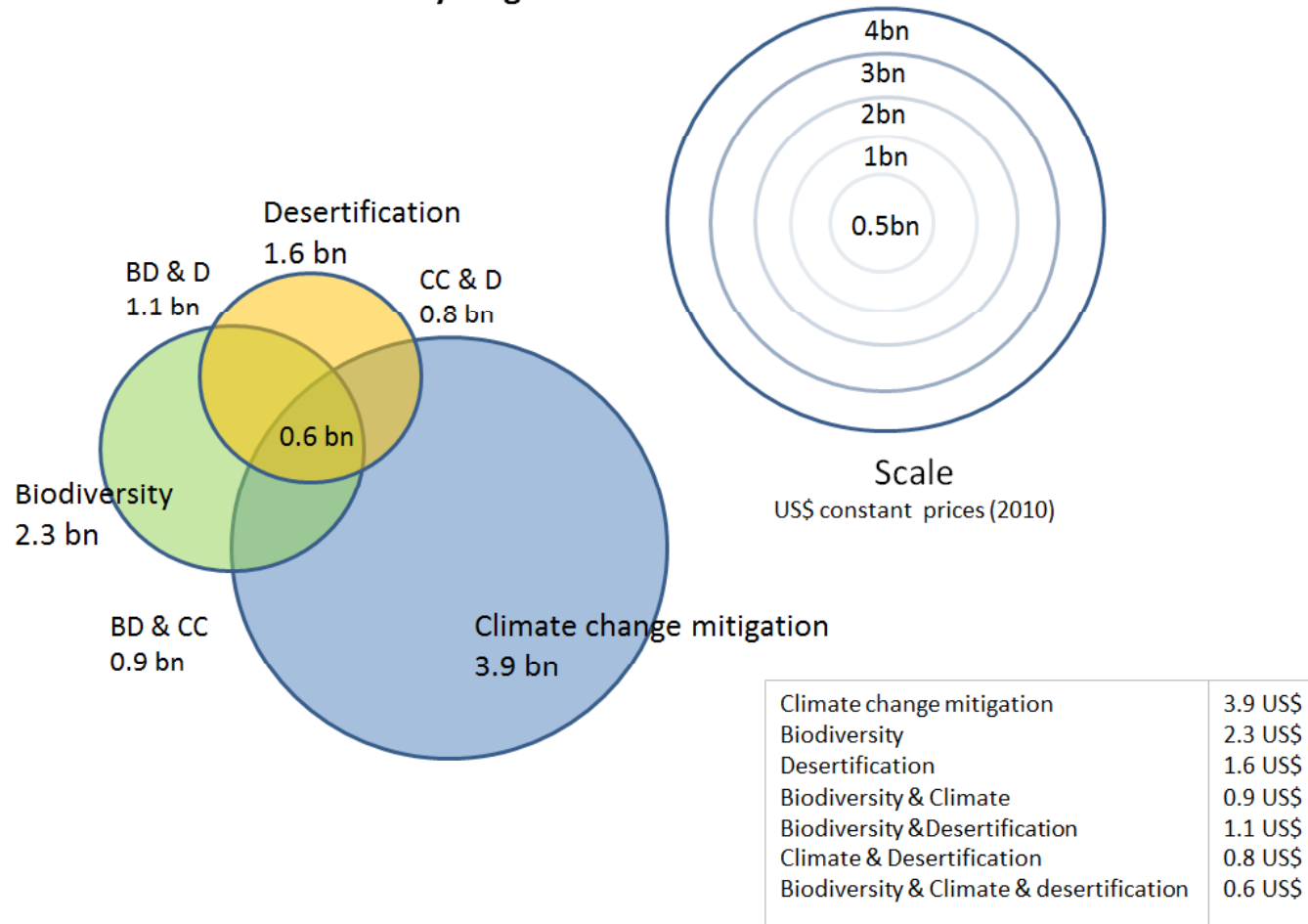
Geographical distribution biodiversity of EU ODA - 2009



Geographical distribution of EU bilateral ODA to biodiversity 2007 – 2009 (US\$ millions, constant prices 2010). *Source: OECD-DAC (2010a)*

# Synergies among European bilateral ODA to biodiversity, climate change mitigation and desertification 2009 (US\$ billions, Constant prices 2010)

## EU bilateral ODA Biodiversity, Climate & Desertification Synergies 2009



Sources OECD-DAC (2010a): EUaid for 2009 OECD-DAC (2010b): EU aid for 2009; OECD-DAC (2010c): EU aid for 2009

## State-of-play: overall global sectoral flows: notes on sources

Visualisation of the existing estimate of total global sectoral financing flows, reflecting the orders of magnitude. Note: information originates from a range of different sources and therefore the different flows / sectors are not directly comparable. Depending on the source of information, current flow refers to a year between 2005 - 2013 and future flow to a year between 2025 – 2035. For biodiversity, the available estimate for future funding needs only covers developing countries. For water and sanitation, the available estimate covers OECD and BRIC countries only.

*Source*: own presentation based on information Kettunen et al. 2013.

Biodiversity: ‘current’ based on Parker et al. (2012) in Chapter 3 and ‘future’ high bound estimate of US\$440 billion / year funding needs for global Aichi Targets (UNEP/CBD/COP/11/INF/20);

Agriculture: FAO (2012a);

Forestry: UN (2006) ‘future’ based on high bound est. of US\$70bn for forestry & sustainable forest management;

Water and sanitation: OECD (2011) including OECD and BRIC countries only.

Energy: ‘current’ based on subsidies to fossil fuels (IEA 2011) combined with invest. in RES (Frankfurt School-UNEP Centre/BNEF 2013) & ‘future’ based on calculation of annuity for US\$38 trillion investment needs between 2011-2035 (24 years) (IEA 2011);

Climate change: based on World Economic Forum (2013);

Tourism: WTTC (2013).

### **ODA sources:**

[OECD.stat Extracts \(2013a\)](#), Individual Aid Projects, Aid activities targeting Global Env Objectives,

[OECD.stat Extracts \(2013b\)](#), Aggregate sector level data, Aid (ODA) by sector and donor [DAC5],

[OECD-DAC \(2010a\)](#) List of aid activities marked as targeting the objective of biodiversity 2007-2009,

[OECD-DAC \(2010b\)](#) List of aid activities marked as targeting the objective of desertification 2007-2009,

[OECD-DAC \(2010c\)](#) List of aid activities marked as targeting the objective of climate change mitigation 2007-2009

# Future: how to increase sectoral mobilisation?

## Approaches and tools : Example Agriculture

### Public financing/investment

(domestic and foreign, inc. ODA)

### Not-for-profit private financing/investment

(domestic and foreign)

- **Earmarked direct financing / investment** under sectoral budget to support initiatives benefiting both biodiversity conservation and agricultural production, productivity or food security (**e.g. management of PAs hosting wild crop varieties**)
- Public support to **market creation for / certification** of sustainable agricultural products (**e.g. capacity building and training**, support to cover the costs of certification process for organic food)
- Establishment of public **PES schemes** supporting ecosystem services / public benefits maintained by extensive agriculture (**e.g. PES schemes maintaining pollination**)
- **Loan and investment funding** from public sources to support profit creating pro-biodiversity businesses within the agriculture sector, such as agri-tourism, production of value-added certified products etc.
- In domestic context, creating **tax incentives** to support private pro-biodiversity funding and investment

### Private investment

**(business/for profit)**

(domestic and foreign)

- Investment in **market creation for / certification** of sustainable, pro-biodiversity agricultural products
- Opportunities for **private PES schemes** (e.g. payment schemes established between producers of organic food and the related organic food industry)
- Establishment of **offsetting schemes** within agricultural context
- Investment in initiatives that support **pro-biodiversity business** opportunities indirectly, for example in situ conservation as a source for material supporting future 'product' development (e.g. drought resistant crops)
- **Loan and investment funding** from private sources to support profit creating pro-biodiversity business



# Future: increasing green markets

Market opportunities	Market size (US\$ per year)		
	2008	Estimated 2020	Estimated 2060
Certified agricultural products	US\$40 billion (2.5% of global food and beverage market)	US\$210 billion	US\$900 billion
Certified forest products	US\$5 billion of FSC certified products	US\$15 billion	US\$50 billion
Bio-carbon / forest offsets	US\$21 million (2006)	US\$10+ billion	US\$10+ billion
Payments for water-related ecosystem services (government)	US\$5.2 billion	US\$6 billion	US\$20 billion
Payments for watershed management (voluntary)	US\$5 million for various pilots	US\$2 billion	US\$10 billion
Other payments for ecosystem services (government-supported)	US\$3 billion	US\$7 billion	US\$15 billion
Mandatory biodiversity offsets	US\$3.4 billion	US\$10 billion	US\$20 billion
Voluntary biodiversity offsets	US\$17 million	US\$100 million	US\$400 million
Bioprospecting contracts	US\$30 million	US\$100 million	US\$500 million
Private land trusts, conservation assessments	US\$8 billion in the US alone	US\$20 billion	Difficult to predict

## Future: how to increase sectoral mobilisation?

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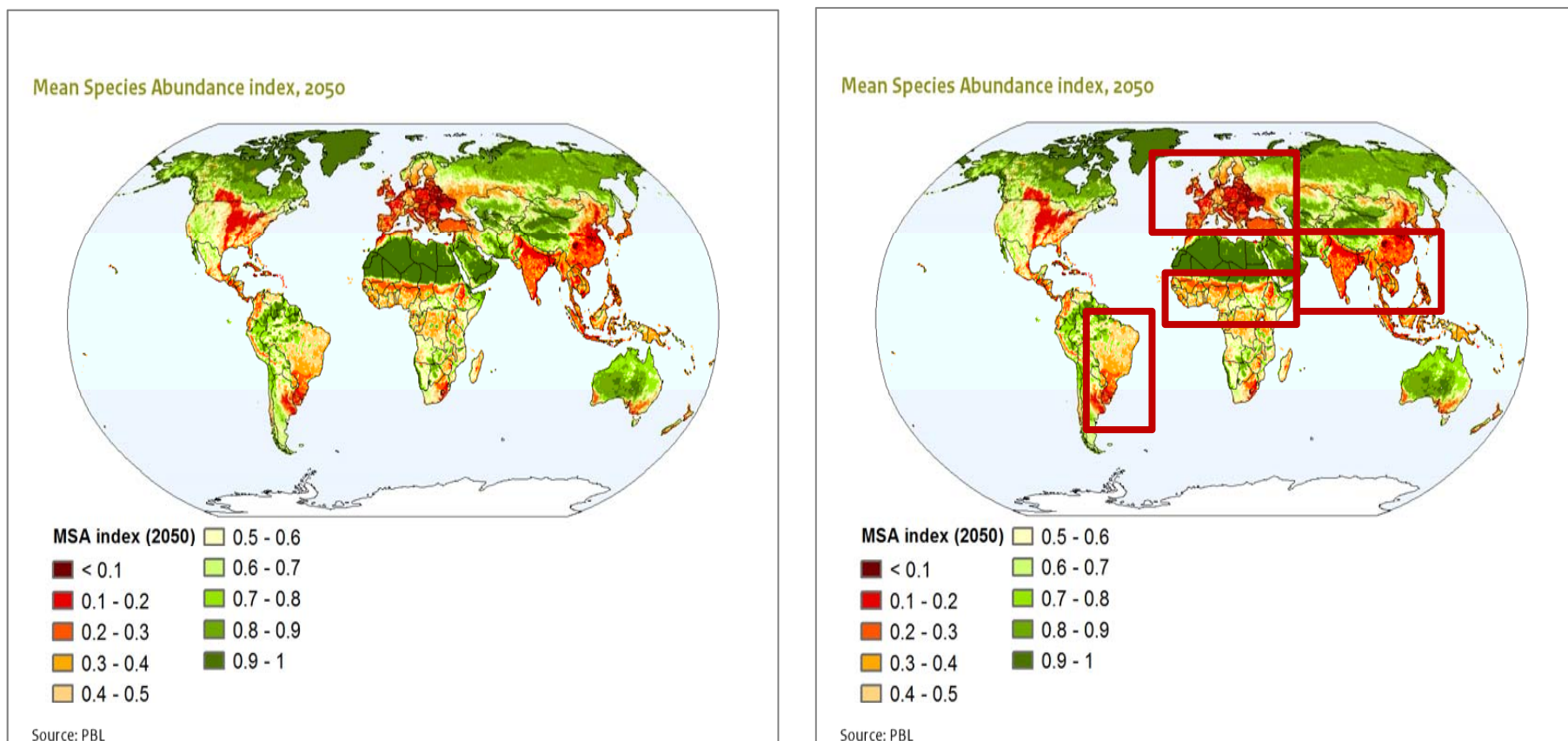
- Significant **gaps in information** on current flows of funding for biodiversity within different sectors!
- However, **sectoral resource mobilization** is a promising complementary approach to **providing additional funding for biodiversity**
- **Socio-economic value of nature** should be used as a **leverage point** for accessing **different sectoral funding** sources
- In addition to mobilisation, **biodiversity proofing is of fundamental importance** → final net benefits for biodiversity

## Future: how to increase sectoral mobilisation?

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- **Foreign investment** – both **public and private** alike – can help to pioneer novel and innovative approaches and instruments within different sectors
- Need for a systematic analysis of the most suitable ‘roles’ different sectors and/or approaches and instruments can play in resource mobilisation.
- Role of **EU ODA** should be strategically assessed to ensure the most value-added for global biodiversity conservation

# Future: where to target sectoral mobilisation?



**Figure:** Current and projected global loss of biodiversity, based on the Mean Species Abundance Index (Source: PBL)

Thank you !

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