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PART 3/3

COMMISSION STAFF WORKING DOCUMENT

EU ASSESSMENT OF PROGRESS IN IMPLEMENTING THE EU BIODIVERSITY STRATEGY TO 2020

Accompanying the document

Report from the Commission to the European Parliament and the Council

The Mid-Term Review of the EU Biodiversity Strategy to 2020

{COM(2015) 478 final}

MID-TERM REVIEW OF THE EU BIODIVERSITY STRATEGY TO 2020

EU ASSESSMENT OF PROGRESS IN IMPLEMENTING THE EU BIODIVERSITY STRATEGY TO 2020

PART 3/3

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Target 4 – Ensure the sustainable use of fisheries resources and good environmental status

Achieve Maximum Sustainable Yield (MSY) by 2015*. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.

** **The reformed Common Fisheries Policy (CFP) which entered into force in 2014 aims to ensure maximum sustainable yield (MSY) exploitation rates for all stocks by 2015 where possible and at the latest by 2020.***

Socio-economic benefits of reaching this target: *Maintaining healthy fisheries has important implications for fishing economies. E.g., the Eastern stock of adult bluefin tuna had fallen by 80% since the early 1970s. This is also reflected by evidence from a recent Spanish report on the "Evaluation of Ecosystem Services Applied to Fisheries Management"[1], stating that kg prices of Tuna have risen significantly: 1-2 € / kg in the mid-eighties to more than 10 € / kg in recent years. Bluefin tuna is showing signs of recovery for the first time in decades due to the implementation of a long-term recovery plan, which has allowed to increase catch quotas. This recovery has already translated into real economic benefits through better fishing prospects in 2015[2]. With respect to high seas fisheries, nearly 10 million tonnes of fish are caught annually on the high seas, constituting just over 12% of the global annual average marine fisheries catch of 80 million tonnes. The landed value of this catch is estimated at about US$16 billion annually, which makes up about 15% of the total global marine landed value of around US$109 billion. The World Bank estimates that mismanagement of fisheries represents an annual loss of US$50 billion to the global economy, in large part to the detriment of developing countries. The gain from sustainably managing global fisheries is estimated at total net present value of US$ 125 billion by 2020, even though the full benefits of rebuilding fish stocks would not be realized for several decades. The long-term (2013 – 2050) gain in resource rent is estimated to have a net present value of US $1,076.5 billion, yielding a long-term benefit-to-cost ratio of 4.3. WWF's report "Reviving The Ocean Economy The Case For Action – 2015" conservatively estimates that the annual "gross marine product" (GMP) – equivalent to a country's annual gross domestic product – is at least US$2.5 trillion; the total "asset" base of the ocean is at least US$24 trillion. The results illustrate the economic case for ocean conservation in stark terms. The economic benefits generated by the marine Natura*

[1] https://www.dropbox.com/s/heh2hmaynmfebcq/Informe%20EME%20Pesca.pdf?dl=0
[2] Bluefin tuna fishing season 2015: EU benefits from recovery of the stock (May 2015) http://europa.eu/rapid/press-release_IP-15-5034_en.htm

2000 network have been estimated at approximately 1.5 billion EUR per year in 2011 across the EU, and could increase to 3.2 billion EUR if the marine Natura 2000 coverage doubled[3].

Important progress has been made in the context of the EU's Common Fisheries Policy (CFP) since 2002 (linked in particular to the introduction of long-term management plans for several stocks) and since the adoption of the Marine Strategy Framework Directive (MSFD) in 2008, in particular in the northern waters where most stocks (for which total allowable catches (TACs) are in place) are managed under the MSY and the precautionary approach. However in the Mediterranean and the Black Seas 90% of assessed stocks remain overexploited[4].

EU policy aims to restore and maintain stocks above levels that can produce maximum sustainable yield (MSY) by achieving MSY exploitation rates by 2015 where possible and — on a progressive incremental basis — at the latest by 2020 for all stocks. It also aims to achieve good environmental status of Europe's seas by 2020, as required by the MSFD. Fishing at sustainable levels, improving the management of fish stocks and decreasing fisheries impacts on the ecosystem are considered as key aspects to reach the good environmental status target[5]. Therefore the most recent reform of the CFP, effective as of January 2014 and the implementation of which is well underway, will also play a crucial role in supporting the objectives and targets of the MSFD.

Box 1: Relation between Maximum Sustainable Yield and Good Environmental Status

The environmental objectives of the new CFP are[6]:

- to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield, while applying the precautionary approach. (This objective has been translated into a management target for the level of fishing pressure, namely that the maximum sustainable yield exploitation rate shall be achieved by 2015 where possible and at the latest by 2020 for all stocks.)
- to implement the ecosystem-based approach to fisheries management

The MSFD (2008) overall objective is to reach Good Environmental Status (GES) of the marine environment by 2020. For its descriptor D3 on commercial fish stocks, this means "Populations of all commercially

[3] ten Brink P., Badura T., Bassi S., Daly, E., Dickie, I., Ding H., Gantioler S., Gerdes, H., Hart, K., Kettunen M., Lago, M., Lang, S., Markandya A., Mazza, L., Nunes P.A.L.D., Pieterse, M., Rayment M., Tinch R., (2011). Estimating the Overall Economic Value of the Benefits provided by the Natura 2000 Network. Final Synthesis Report to the European Commission, DG Environment on Contract ENV.B.2/SER/2008/0038. Institute for European Environmental Policy / GHK / Ecologic, Brussels 2011
http://www.ieep.eu/assets/955/Economic_Benefits_of_Natura_2000_Network_Synthesis_report.pdf

[4] COM(2015) 239 final

[5] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm.

[6] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1380

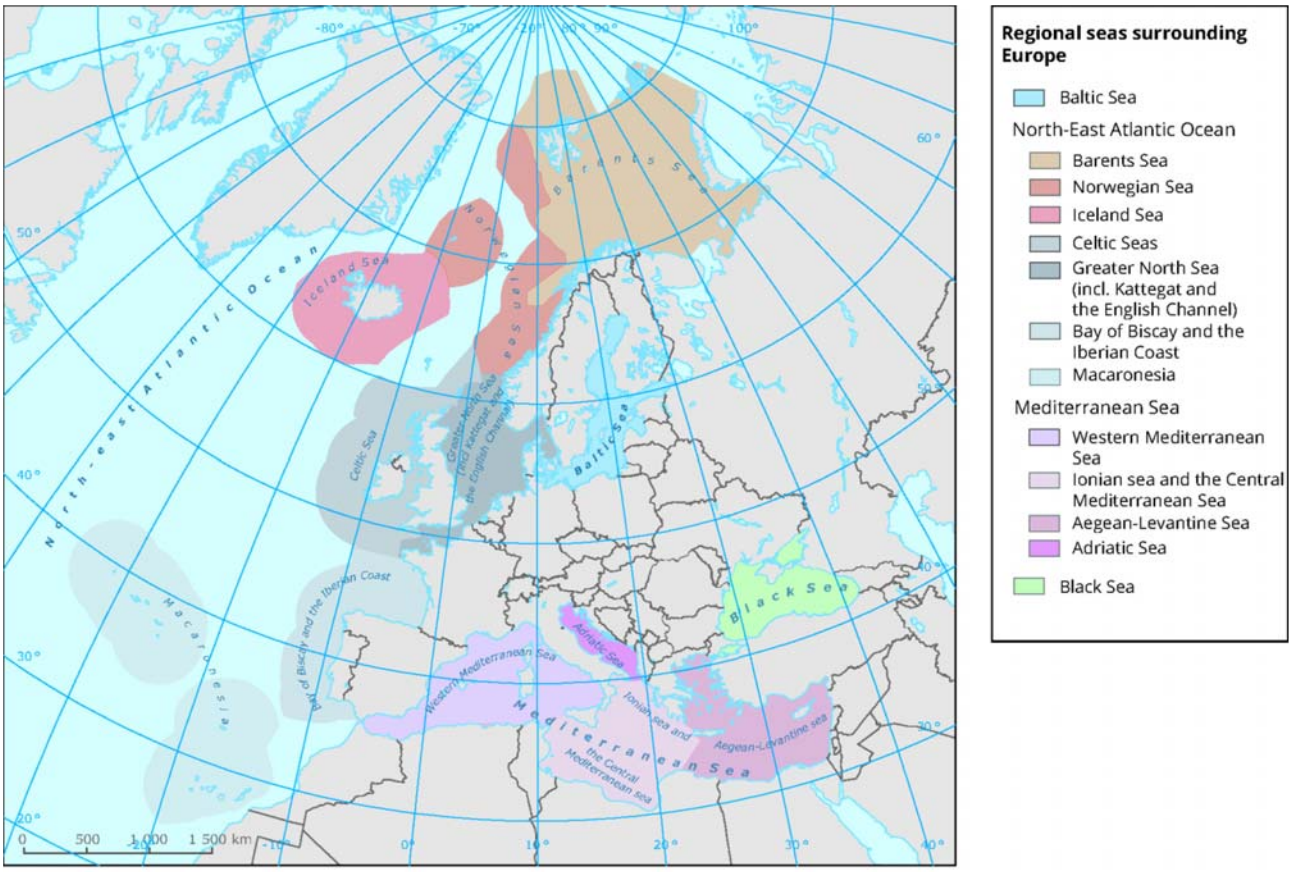
exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock". Concretely this means:

- Level of pressure of the fishing activity
- Reproductive capacity of the stock
- Population age and size distribution[7]

PROGRESS IN IMPLEMENTING ACTIONS

13a) The Commission and Member States will maintain and restore fish stocks to levels that can produce MSY in all areas in which EU fish fleets operate, including areas regulated by Regional Fisheries Management Organisations, and the waters of third countries with which the EU has concluded Fisheries Partnership Agreements.

Figure 1 – Regional seas surrounding Europe



[7] Commission Decision 2010/477/EU on criteria and methodological standards on good environmental status of marine waters.

Overfishing has been reduced in the European Atlantic waters, the North Sea and the Baltic Sea. For the stocks with MSY assessments, overfishing has gone down from 94% of the stocks in 2003, to 63% in 2009 and to 41% in 2012. An increasing proportion of the stocks have been assessed.

The number of stocks that, according to available estimates, are fished at levels corresponding to MSY has gone up from only 2 in 2003, to 13 in 2009 and to 26 in 2015. In the North East Atlantic 62 stocks have estimates of Fmsy (Fishing mortality consistent with achieving MSY), of those, 32 were found not to exceed Fmsy in 2015[8].

In the Mediterranean for the most recent assessment of 15 stocks among the demersal and small pelagic stocks, 13 are currently being exploited at rates not consistent with achieving MSY (overfishing is occurring) and 2 stocks were not assessed due to data deficiencies or poor model fits[9]. In the Black Sea, seven of the most recent stock assessments are considered to be of sufficient quality to provide analytical estimates of recent exploitation rates and stock status in relation to proposed biological reference points.[10] Of the seven carried out, six where found to be exceeding MSY. However, with the emphasis of the new CFP on achieving MSY for all commercial stocks, more significant reduction of overfishing also in these European waters is expected.

The EU 2020 Biodiversity Strategy and the new common fisheries policy aim to promote the sustainability of all stocks where the EU fleet operates, including those within external waters, such as the exclusive economic zones of other countries (accessed through bilateral fisheries agreements), or the high seas managed by regional fisheries management organisations.

13b) The Commission and Member States will develop and implement under the CFP long-term management plans by fixing fishing opportunities such as quotas in line with scientific advice with harvest control rules based on the MSY approach. These plans should be designed to respond to specific time-related targets and be based on scientific advice and sustainability principles.

As of April 2015 there are a total of 12 multiannual fisheries plans in place for EU waters[11] (8 within the north-east Atlantic; 2 in the Mediterranean and 2 in the Baltic Sea). Agreement of plans has been hindered in the past by a dispute between the European Council and the European Parliament, however in 2013 a task force was appointed and in April 2014 it produced an agreement on how to proceed with approving multi

[8] http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/fishing-opportunities-2016/index_en.htm See annex: http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/fishing-opportunities-2016/doc/com_2015_239_annex_en.pdf

[9] http://stecf.jrc.ec.europa.eu/documents/43805/823106/2014-12_STECF+14-17+-+Med+stocks+assessments+-+part+1_JRC93120.pdf

[10] http://stecf.jrc.ec.europa.eu/documents/43805/853348/2014-11_STECF+14-14+-+Black+Sea+assessments_JRC92536.pdf

[11] http://ec.europa.eu/fisheries/cfp/fishing_rules/multi_annual_plans/index_en.htm.

annual plans[12]. The new multi annual plan for the Baltic is the first since the agreement to be approved by the European Parliament in April 2015[13] and three more multi annual plans are expected to follow in the coming years. These multi-stock or mixed fisheries plans will replace the 12 single-stock plans, making further progress in relation to long-term management strategies in the harvesting of commercial stocks.

13c) The Commission and Member States will significantly step up their work to collect data to support implementation of MSY. Once this objective is attained, scientific advice will be sought to incorporate ecological considerations in the definition of MSY by 2020.

The number of stocks with full MSY assessments (in the Atlantic, North Sea and Black Sea) increased from 34 in 2005 to 46 in 2014. Significant progress has been made in the number of stocks with quantitative advice from almost 100 in 2003 to over 120 in 2014, bringing down the number of data-poor stocks to less than 10 % of the total (in 2013)[14]. There are, however, data gaps, particularly in the Mediterranean and the Black Seas.

The JRC is engaged in the Assessment for All (a4a) initiative aimed at providing a comprehensive and versatile tool to assess all fish stocks harvested in European waters under the remit of the Common Fisheries Policy[15]. The model fills the gap of conventional stock assessment methods that are not able to cope with such large numbers of stocks such as the (300+ stocks) covered by the Data Collection Framework.

14a) The EU will design measures to gradually eliminate discards, to avoid the by-catch of unwanted species and to preserve vulnerable marine resources and marine ecosystems in accordance with EU legislation and international obligations.

Fisheries have been identified as one of the main pressures on marine species and habitats. In support of reducing the adverse impact of fishing on non-target species and marine ecosystems, the new Common Fisheries Policy includes a specific landing obligation to eliminate discards[16], aiming to reduce bycatch of non-target species. The landing obligation will be implemented fishery by fishery, either through multi annual plans, or specific discards plans[17]. This change in regime serves as a driver for more selectivity, and provides more reliable catch data.[18] Already in 2004 a Council Regulation[19] laid down measures concerning

[12] http://www.europarl.europa.eu/meetdocs/2009_2014/documents/pech/dv/taskfor/taskforce.pdf
[13] http://www.europarl.europa.eu/news/en/news-room/content/20150427IPR46519/html/MEPs-vote-for-sustainable-fishing-in-the-Baltic-Sea
[14] http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/fishing-opportunities-2015/doc/com-2014-388_en.pdf
[15] https://ec.europa.eu/jrc/en/news/stock-assessment-methods-sustainable-fisheries?search
[16] http://ec.europa.eu/fisheries/cfp/fishing_rules/landing-obligation/index_en.htm
[17] http://ec.europa.eu/fisheries/cfp/fishing_rules/discards/index_en.htm
[18] http://ec.europa.eu/fisheries/cfp/fishing_rules/discards/index_en.htm.

incidental catches of cetaceans. To reduce seabird bycatch the Commission has also developed an 'Action plan for reducing incidental catches of seabirds in fishing gears'.[20] However, the most recent review of information carried out by ICES in 2014 concluded that better quality data on bycatch rates and fishing effort from more fisheries is required from Member States[21]. .

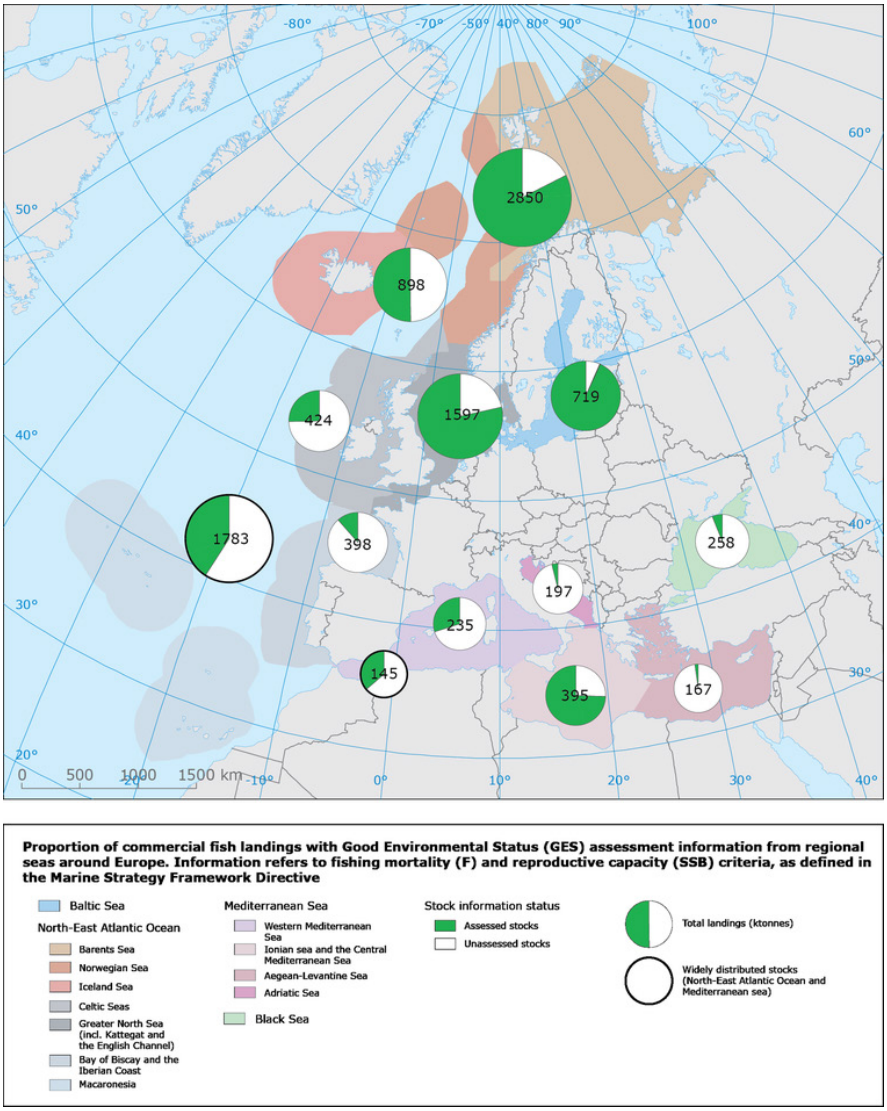
14b) The Commission and Member States will support the implementation of the Marine Strategy Framework Directive, including through providing financial incentives through the European Maritime and Fisheries Fund Regulation (EU) N° 508/2014 for marine protected areas (including Natura 2000 areas and those established by international or regional agreements). This could include restoring marine ecosystems, adapting fishing activities and promoting the involvement of the sector in alternative activities, such as eco-tourism, monitoring and managing marine biodiversity, and combating marine litter.

The new European Maritime and Fisheries Fund provides funding opportunities for various actions that can support the implementation of the Marine Strategy Framework Directive, e.g. projects limiting the adverse effect of fisheries on marine ecosystems, projects supporting MS efforts to increase Natura 2000 coverage and improve site management, projects improving marine knowledge etc. The operative programmes submitted by Member States are currently being adopted by the Commission.

The main goal of the MSFD is to achieve GES of EU marine waters by 2020. The type of indicators that can be used to assess the implementation of the MSFD includes the EEA status of marine fish stocks indicator (core set indicator CSI032) [22], which provides information on both the status of the stocks in relation to GES, and the availability of information to assess the stocks The text box titled "**Relation between Maximum Sustainable Yield and Good Environmental Status**" shows how this indicator is related to MSY. Most European landings of commercial fish and shellfish stocks come from the North-East Atlantic Ocean and Baltic Sea (86%) (see Figure 2). Approximately 60% of European landings come from stocks that are assessed - i.e. that have Good Environmental Status assessment information - although this is variable for the two analysed GES criteria on fishing mortality (F) and spawning stock biomass (SSB). There is, however, a clear trend from north to south, with most of the landings coming from assessed stocks in the north (more than 90% in the Baltic sea) and less than 10% of the landings in some of the southern (Mediterranean and Black sea) regions[23].

[19] Council Regulation (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98.
[20] http://ec.europa.eu/fisheries/cfp/fishing_rules/seabirds/seabirds_communication_en.pdf.
[21] http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2014/2014/Bycatch_of_small_cetaceans_and_other_marine_animals.pdf
[22] http://www.eea.europa.eu/data-and-maps/indicators/status-of-marine-fish-stocks-2/assessment
[23] http://www.eea.europa.eu/data-and-maps/indicators/status-of-marine-fish-stocks-2/assessment

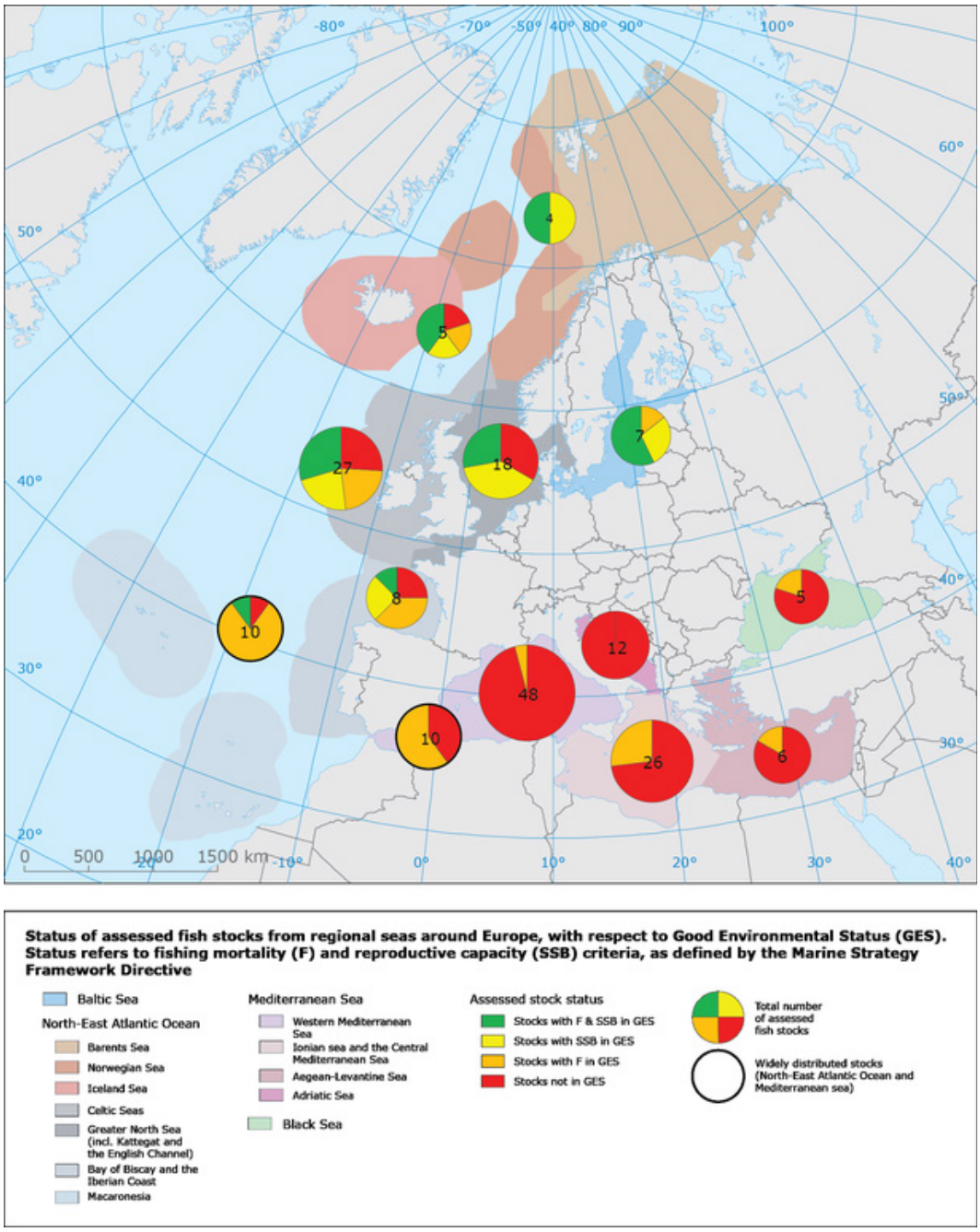
Figure 2 - Commercial fish landings with Good Environmental Status information



Currently, most of the assessed commercial stocks in European waters (58 %) are not in GES, with 19 % of the stocks exploited sustainably, 11 % with their reproductive capacity intact, and only 12 % considered in GES (i.e. fulfilling both F and SSB MSY criteria for GES) (core set indicator CSI032). These percentages vary considerably between regional seas. In North East Atlantic and Baltic waters, 22 % of the regionally assessed stocks are not in GES, 24 % are exploited sustainably, 25 % have their reproductive capacity intact, and 29 % are in GES. The situation is worse in the Mediterranean and Black Sea, with 84 % of the regionally assessed stocks not in GES and 16 % exploited sustainably. Estimates for status of reproductive capacity are not available for these stocks. Hence, no stocks can be considered in GES in these regional seas. [24]

[24] EEA Report No 2/2015 State of Europe´s seas. http://www.eea.europa.eu/publications/state-of-europes-seas

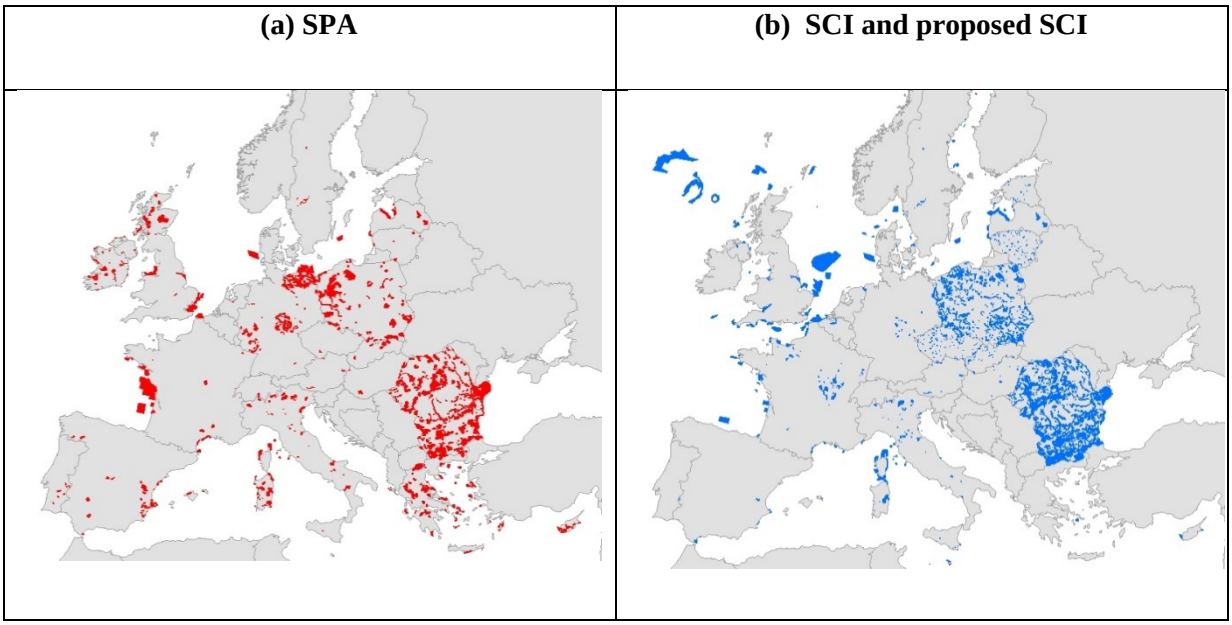
Figure 3 - Proportion of assessed stocks per regional sea that are in Good Environmental Status (GES), as described in the Marine Strategy Framework Directive.



The network of marine protected areas (MPAs) is growing, made up of both Natura 2000 sites and other designations. Data on Natura 2000 sites is given by the Natura 2000 Barometer[25] and the European Environment Agency is working on a new MPA indicator.

[25] http://ec.europa.eu/environment/nature/natura2000/barometer.

Figure 4 - Sites added to the Natura 2000 network during the reporting period (2007-12)



Note: a site may be both SPAs & SCIs

Source: Natura 2000 database & associated spatial files for end 2012. Sites shown are those where SCI or SPA date is between 01/01/2007 and 31/12/2012

The **marine component of Natura 2000** grew slowly at first, partly due to lack of knowledge and partly as it was not until 2005 that it was agreed that the two nature directives apply offshore (EC 2007). By 2014 Natura 2000 covered some four percent of the EU marine areas within 200 nautical miles of the coast.

The MS reported 1 573 marine SCI with an area of 177 325 km^2, Although not shown by the Article 17 reports, it is clear from Map 4.2 that only in the Atlantic are there significant areas offshore (i.e. more than 12 nautical miles from the coast).

As with the Natura 2000 network as a whole, the area and number of marine sites has grown significantly over time. However, unlike the terrestrial sites, the majority of growth has taken place over this reporting period with the marine area of SCI and SPA sites increasing by 12.7 and 6.7 million ha, respectively, over the Article 17 and 12 reporting periods. This represents a massive 163.5 % and 113.2 % increase in total area relative to 2006 for SCI and 2007 for SPAs, respectively. The United Kingdom (with 7.3 million ha) and France (with 4.2 million ha), rank 1st and 2nd highest in total marine site area, followed by Germany, Denmark, the Netherlands, Spain and Sweden, which also have sizeable marine areas.

In 2012, there were 7725 MPA sites covering 338 600km^2. The Natura 2000 network covers 4 % of European waters and other protected areas account for 1.9 %, making a **total of 5.9 % of European waters as marine protected areas**. Currently only three regional seas (Western Mediterranean and Greater North Sea — including Kattegat & English Channel and Baltic Sea) have MPA coverage above 10 %. The EEA has calculated that another 230 000 km^2 will be required to have protected area status, and effective area-

based conservation measures in place to achieve Aichi Biodiversity Target 11, i.e. for there to be '10 % cover of both coastal and marine/offshore marine protected sites.'

In addition to MPA's Member States can uses the EMFF to protect and restore marine biodiversity and ecosystems, through initiatives such as the collection of waste by fishermen from the sea such as the removal of lost fishing gear and marine litter in the framework of sustainable fishing activities. In the context of the preparation of the Circular Economy Strategy, the Commission will examine how marine litter can be prevented efficiently through improved waste, in particular plastic waste, management, increased recycling, avoidance of single use products and product eco-design (e.g. to minimise release of microplastics in the marine environment)

In terms of the MSFD's objective of achieving GES, available information on EU marine biodiversity is scarce. 80% of habitats and species under the MSFD are categorised as unknown, and only 4% have achieved the target of good status. Observations show that many marine species across all Europe's regional seas continue to experience a decrease in population size as well as a loss of distribution range and habitat. Effects of climate change, in particular acidification, add to the cumulative impacts of overfishing, pollution, habitat destruction and invasive alien species. Marine biodiversity monitoring remains a major need to be addressed both at national and regional level to improve marine knowledge. Developing marine biodiversity indicators and ensuring funding for monitoring are therefore among the key challenges for the successful implementation of MSFD.

The mapping of seabed related ecosystem services will be displayed on the European atlas of the seas[26] in 2015. Compilation of the geospatial knowledge of the distribution seabed habitats covers 98% of the adjacent EU seas. In parallel, a matrix of the ecosystem services provided by each habitat was compiled based on published information. This is an expert-based presence-only matrix with services harmonized to CICES v. 4.3. Results of the analysis highlight the importance of continental shelves and slopes as well as oceanic elevations like seamounts, ridges and island flanks.

[26] http://ec.europa.eu/maritimeaffairs/atlas/index_en.htm

Target 5 – Combat Invasive Alien Species

By 2020, Invasive Alien Species and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

***Socio-economic benefits of reaching this target**: Invasive Alien Species are causing damage to the EU economy estimated at least 12 billion Euros annually[27]. It is estimated that 10-15% of the alien species present cause damage which is borne by society at large as well as by businesses, including primary producers and landowners[28]. The most affected sectors include agriculture, fisheries and aquaculture, forestry and health. Reaching the target would significantly reduce these costs. For example, Zebra mussels can cause economic damage by blocking pipes, vents or holes for the passage of water: a major macrofoulant of power generating plants, industrial and municipal water systems. The yellow-legged hornet is a highly effective predator of native bees and other beneficial insects, causing damage to pollinators and apiculture. Killer shrimp can quickly dominate the invaded habitats directly affecting fisheries quality with consequent impacts on recreational use of water bodies[29].*

Invasive alien species have become one of the fastest growing threats to biodiversity in Europe, affecting human life and health as carriers of diseases or as allergens, and also causing significant damage to agriculture, forestry, fisheries, etc. to the value of at least EUR 12 billion a year in the EU[30]. Scenarios have shown that the increasing global movement of people and goods contributes to an increasing amount of IAS in Europe in the future. Furthermore, the impact of climate change could potentially provide for new opportunities for IAS to spread and proliferate.

The pressure of IAS is expected to be steadily increasing over the next decade if significant actions are not implemented (GBO-4)[31]. To adequately address this problem, Europe has been developing a number of tools over the years. For example, in 2003 the Bern Convention adopted the European Strategy on IAS (Genovesi & Shine 2004), on the basis of which the European Union (EU) has been working to develop a dedicated policy and legislation on the issue. This work eventually resulted in the adoption of the EU Regulation No 1143/2014, which entered into force on 1st January 2015 (herewith referred to as the EU Regulation on IAS).

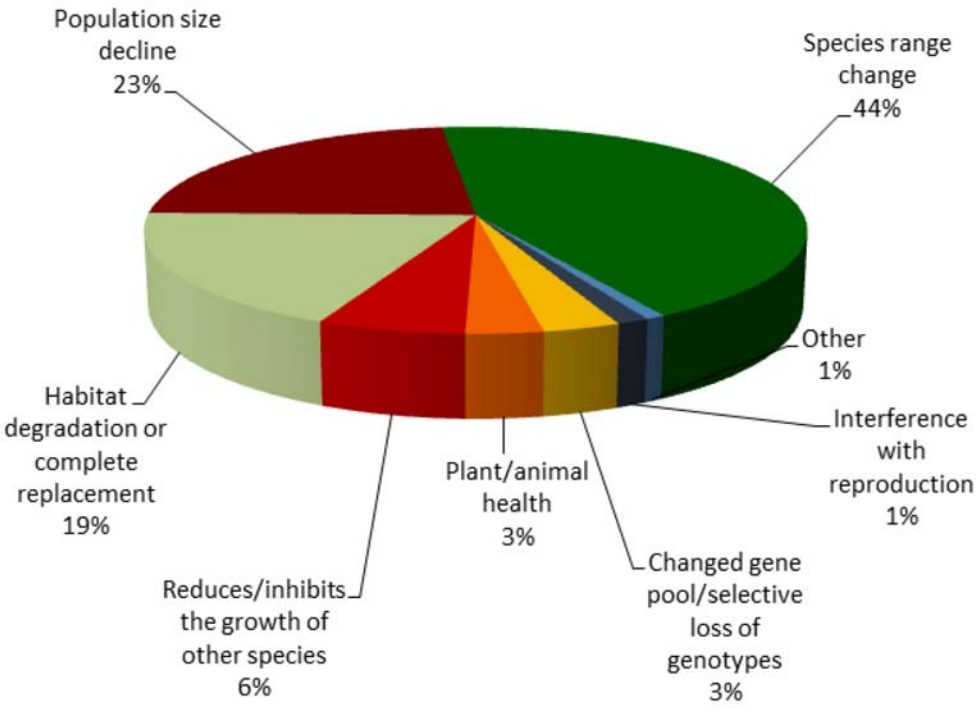
[27] Kettunen, M., Genovesi, P., Gollasch, S., Pagad, S., Starfinger, U. ten Brink, P. & Shine, C. 2008. Technical support to EU strategy on invasive species (IAS) - Assessment of the impacts of IAS in Europe and the EU (final module report for the European Commission). Institute for European Environmental Policy (IEEP), Brussels, Belgium. 44 pp. + Annexes. http://www.ieep.eu/assets/448/ias_assessments.pdf
[28] Vila *et al.*, 2010
[29] SFD (2013) 321 final
[30] Kettunen et al. 2009
[31] https://www.cbd.int/gbo4/

Priority species

Regarding the **number of alien species** in Europe, the European Alien Species information Network - EASIN[32] - catalogue includes 11,372 species with the status of alien to Europe. The number of invasive alien species is constantly increasing in Europe, with a rate of 76% in the 1970-2007 period[33].

According to a recent IUCN assessment of more than 9000 fauna and flora species encompassing all taxonomic groups (animals, plants, fungi, bacteria, chromista and protozoa) and environments (marine, terrestrial, freshwater), 20 % of them are threatened at European level and 19 % of these threatened species (229 animals, 124 plants and 1 fungus) are specifically affected by IAS.

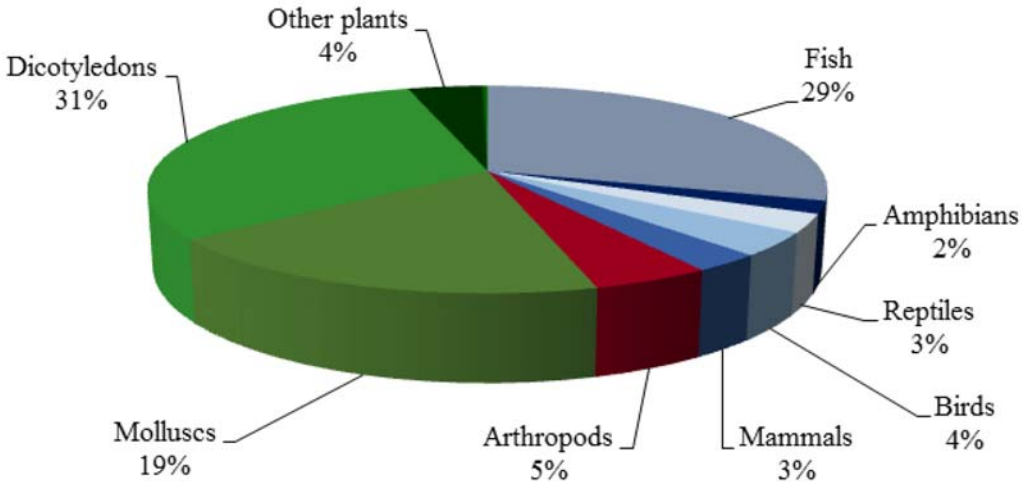
Figure 5 - Impact of invasive alien species on threatened species. The "Others" category includes soil erosion, indirect mortality, ecosystem change



Plants account for 35% of the total number of species particularly affected by invasive alien species,, followed by freshwater fish, molluscs and arthropods (see Figure 6).

[32] http://easin.jrc.ec.europa.eu/
[33] Butchart et al. 2010

Figure 6 - Percentage of species affected by IAS for the main taxonomic groups



Invasive alien species can also be the cause of habitat degradation or complete replacement/loss - with the local extinction of impacted species as in the case of the red squirrel (*Sciurus vulgaris*) in areas of expansion of the American grey squirrel (*Sciurus carolinensis*) (Bertolino et al. 2014) - that reached 19% of the impact outcomes.

Box 2: The success recovery of the Yelkouan shearwater (*Puffinus yelkouan*)

This "threatened" seabird has been recently object of a LIFE project aimed at the removal of black rats (*Rattus rattus*) from the island of Montecristo, where the shearwater nests with an estimated population of 400-750 pairs (3-10% of the known world population at the time). In this case the successful eradication of black rats allowed 93-95% of pairs to successfully fledge juveniles over two years. As a result, the number of breeding pairs is expected to increase over the next ten years, with an expansion of the breeding colonies in the Tuscan Archipelago[34].

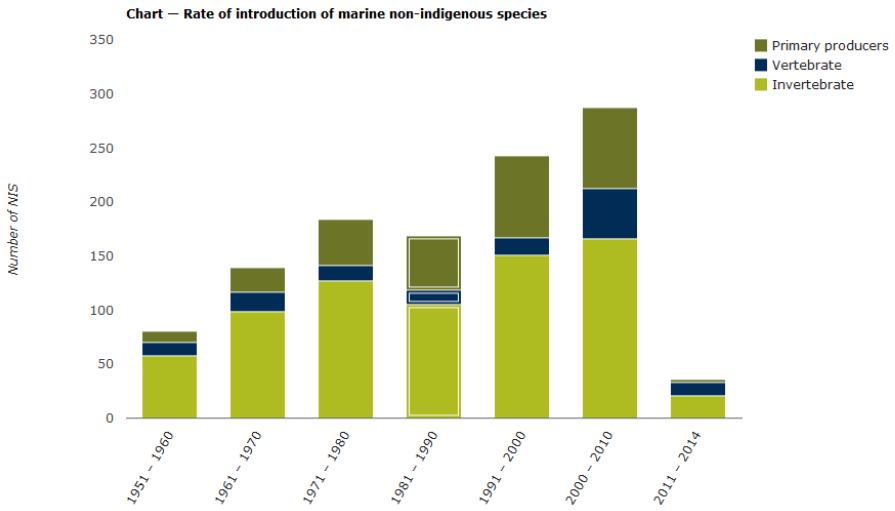
Latest findings on the 2015 State of Europe´s seas report on the **impact of invasive alien species on the environmental status of marine waters** show that invasive species are on the rise, hitting particularly hard the Mediterranean Sea through, for example, competition from invasive species like *Caulerpa racemosa* and *Caulerpa taxifolia*, which overgrows corals like *Cladora caespitose*. Pollution and overfishing facilitated the invasion of the alien combjelly *Mnemiopsis leidyi* and its significant impact on the Black sea and Sea of Azov ecosystems in the late 1980s, which led to fisheries collapse. But its predation by another alien

[34] http://www.montecristo2010.it/stealthV3_pubblica/0840425A0S1345033092.pdf

combjelly species, *Beroe ovata*, which arrived in 1999, has meant that the Black Sea ecosystem shows signs of recovery.

As shown in Figure 7, the current rate of introductions of NIS is unprecedented. Approximately 323 new species have been registered in European seas since 2000, although there are important regional differences. The Mediterranean is the European sea with the largest number of NIS. 63 % of these species are invertebrates – mostly crustaceans and molluscs. 25 % are primary producers such as marine plants and algae, while 12 % are vertebrates – mostly fish.

Figure 7 - Rate of introduction of marine non-indigenous species[35]



Source: EEA (2015) Trends in marine non-indigenous species (http://www.eea.europa.eu/data-and-maps/indicators/trends-in-marine-alien-species-mas-2/assessment)

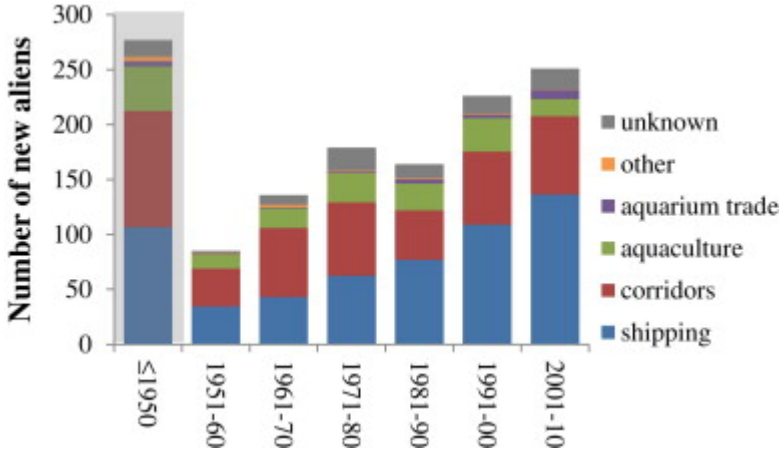
Priority pathways

According to the State of Europe´s seas report, available information shows that the main pathway of non-indigenous species introduction in European seas is shipping (51 %), followed by the Suez Canal (37 %), aquaculture-related activities (17 %), the aquarium trade (3 %), and inland canals (2 %). Large scale biodiversity patterns are modified causing entire shifts to the novel habitats, with substantially modified ecosystem functions.[36]

[35] http://www.eea.europa.eu/data-and-maps/indicators/trends-in-marine-alien-species-mas-2/assessment

[36] Katsanevakis S, Coll M, Piroddi C, Steenbeek J, Ben Rais Lasram F, Zenetos A and Cardoso AC (2014) Invading the Mediterranean Sea: biodiversity patterns shaped by human activities. Front. Mar. Sci. 1:32. doi: 10.3389/fmars.2014.00032.

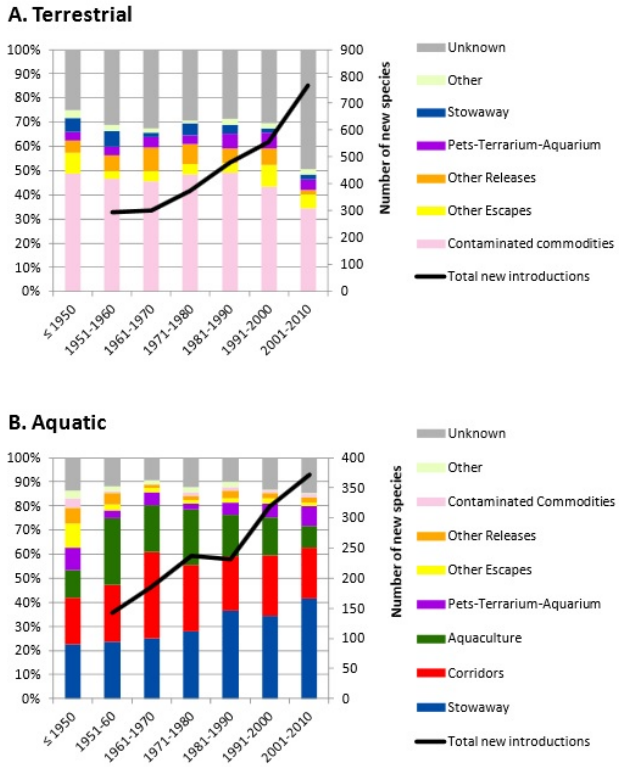
Figure 8 - Invading European Seas: Assessing pathways of introduction of marine aliens



Source: Katsanevakis et al. (2013)

Temporal trends in the numbers of new recorded marine aliens in Europe in relation to the pathways of introduction. Some species (n = 103) that were linked to more than one pathways were given a value of $1/k$ for each of the k associated pathways so that the overall contribution of each species to the total number of new aliens per decade was always 1.[37]

Figure 9 - Trends and temporal variation of the importance of main pathways of introduction in Europe, of terrestrial (A) and aquatic (B) alien species[38]



[37] Katsanevakis et al. (2013) Invading European Seas: Assessing pathways of introduction of marine aliens
[38] Katsanevakis et al. (2015) European Alien Species Information Network (EASIN): supporting European policies and scientific research

Source: Katsanevakis et al. (2015) European Alien Species Information Network (EASIN): supporting European policies and scientific research

Trends of new introductions (Figure 9) are valuable indicators for assessing the effectiveness of management measures, as the outcome of targeted measures for a specific pathway should be reflected in a decreasing trend.

Box 3: Important remaining gap: the EU ratification of the Ballast Water Management Convention

Since the introduction of steel-hulled vessels around 120 years ago, water has been used as ballast to stabilize vessels at sea. Ballast water is pumped in to maintain safe operating conditions throughout a voyage. While ballast water is essential for safe and efficient modern shipping operations, it may pose serious ecological, economic and health problems due to the multitude of marine species carried in ships' ballast water. As global response, the International Convention for the Control and Management (BWM) of Ships' Ballast Water and Sediments (BWM Convention) was adopted by consensus on 13 February 2004.

The Commission has 'strongly recommended' the ratification of the Convention and has participated in the development of interim measures to reduce the risk of non-indigenous species being introduced through the discharge of ship's ballast water in the four Regional Seas Organisations (HELCOM, the OSPAR Commission, REMPEC/Barcelona Convention and the Black Sea Commission)[39]. As of 10 April 2015, 7 EU Member States have ratified the Convention: Croatia, Denmark, France, Germany, the Netherlands, Spain and Sweden.[40]

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15) The Commission will integrate additional biodiversity concerns into the Plant and Animal Health regimes by 2012.

Animal health - Emerging infectious diseases play an important role in causing species to become extinct. . It is under the competence of the Member States to prevent or control wildlife diseases including those affecting the biodiversity.

However, in the future, the new Animal Health Regulation[41] will, following an appropriate risk assessment, provide for a possibility to take actions also at the EU level for animal diseases that

[39] http://www.emsa.europa.eu/implementation-tasks/environment/ballast-water.html
[40] IMO (2015, May) Status of Conventions. http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx
[41] http://ec.europa.eu/food/animal/animal-health-proposal-2013_en.htm

affect wildlife and pose a threat to biodiversity. Wildlife diseases have been included in the Commission proposal for a new Animal Health Regulation and diseases of wild plants are being addressed through the plant health regime[42].

Box 4: An example of emerging infectious disease threatening wildlife

The cytric fungus *Batrachochytrium salamandrivorans* has already caused rapid declines in the European fire salamander populations, and research further confirms that the fungus is particularly lethal for Salamandridae family, with 41 out of 44 of the Western Palearctic salamanders rapidly dying after being exposed to *B. salamandrivorans*[43]. The detection of the *B. salamandrivorans'* DNA suggests that the fungus is long-term endemic to Asia, with a recent incursion to Europe, where the fungus has caused severe outbreaks in Belgium and the Netherlands. The cause behind the introduction of the fungus is suggested to be pet trade in Asian salamanders and newts, as they are traded in large numbers annually.

Plant health – Contrary to the animal health regime, the Council Directive 2000/29/EC has already been addressing pests affecting natural ecosystems, in particular forests. An analysis by a group of scientists[44] showed that from 276 species addressed through the EU plant health regime, 37 (or 13%) may have an important ecological impact.

Species addressed under plant health	invertebrates	pathogens	total
Ecological impact may be important	20	17	37
Ecological impact cannot be excluded	54	27	81
Ecological impact very unlikely	31	84	115
Not alien to Europe	14	9	23
Widely spread	15	5	20
Total	134	142	276

16) The Commission will fill policy gaps in combating IAS by developing a dedicated legislative instrument by 2012.

[42] http://ec.europa.eu/food/plant/plant_health_biosecurity/legislation/new_eu_rules/index_en.htm

[43] Martel et al. (2014) Recent introduction of a chytrid fungus endangers Western Palearctic salamanders, Science 31 October 2014: Vol. 346 no. 6209 pp. 630-631, DOI: 10.1126/science.1258268

[44] Invertebrates assessed by Dr. Marc Kenis (CABI Switzerland), Dr. Alain Roques (INRA Zoologie Forestière, Orléans, France) and Dr. Wolfgang Rabitsch (Environment Agency Austria, Vienna, Austria), pathogens assessed by Dr. Alberto Santini (Institute for Sustainable Plant Protection - C.N.R, Sesto Fiorentino (FI) Italy and Prof. Andrea Vannini (University of Tuscia, Viterbo Italy)

The EU adopted a regulation on the prevention and management of the introduction and spread of invasive alien species, which entered into force on 1 January 2015[45]. The objective of the Regulation is to establish a framework for action to prevent, minimise and mitigate the adverse impacts of invasive species on biodiversity and ecosystem services. Furthermore, it will seek to limit social and economic damage. This will be achieved through measures to ensure coordinated action on invasive alien species of Union concern, focusing resources on priority species and on increasing preventive measures, in accordance with the approach of the Convention and with the EU's plant and animal health regimes.

The core of the Regulation will be the list of IAS of Union concern. For those species, the Regulation provides for measures preventing the intentional introduction of invasive alien species into the EU and their intentional release into the environment; measures preventing the unintentional introduction into the EU and release into the environment (pathway management); requirements to set up a system of surveillance to support early detection and rapid eradication; and requirements to manage the species that are established in EU Member States.

The next step in the implementation of the EU IAS policy will be the adoption of the first list of IAS of Union concern. Beyond the list, the regulation is providing for emergency measures and for IAS of regional and of MS concern.

The regime will be underpinned by an information support mechanism: the European Alien Species Information Network (EASIN).[46] This network was launched in 2012 by the European Commission to assist the implementation of European policies on biological invasions. Building on the very relevant outcomes of the EU research project DAISIE (Delivering Alien Invasive Species Inventories for Europe[47]), the North European and Baltic Network on Invasive Alien Species (NOBANIS[48]) and AquaNIS (Aquatic Non-Indigenous Species, including the Baltic Sea Alien Species Database)[49], EASIN aims to enable easy access to data and information on alien species across Europe, for the terrestrial, freshwater and marine environments. At the core of EASIN, there is an inventory of all known alien and cryptogenic species in Europe (the EASIN Catalogue[50]), which includes relevant information, such as taxonomic classification, pathways of introduction, year and country of first introduction. The EASIN datasets have been used for pan-European or regional assessments of pathways and gateways of alien invasions. In support

[45] Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species: http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1417443504720&uri=CELEX:32014R1143 .
[46] See http://easin.jrc.ec.europa.eu/.
[47] www.europe-aliens.org
[48] www.nobanis.org
[49] www.corpi.ku.lt/nemo/mainnemo.html
[50] http://www.reabic.net/journals/mbi/2013/1/MBI_2013_1_Katsanevakis_etal.pdf

of the new EU Regulation on the prevention and management of the introduction and spread of invasive alien species in Europe, a notification system for a European Early Warning and Rapid Response System is being developed within EASIN.

Target 6 – Help avert global biodiversity loss

By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

***Socio-economic benefits of reaching this target**: Biodiversity and ecosystem services form the fundamental natural capital of humanity. Balmford et al (2002) estimated that the failure to protect biodiversity leads to the loss of natural services worth US$140 billion a year. Policy inaction resulting in failure to halt the loss of biodiversity could result in annual losses in ecosystem services worth $14 trillion per annum by 2050, equivalent to 7% of world GDP[51]. This is especially important for the livelihoods and development potential of the poorest and most vulnerable people, who are highly dependent on biodiversity and ecosystem services - 'the GDP of the poor'[52]. A TEEB assessment suggested that ecosystem services contributed 10% of GDP in India, 16% in Indonesia and 21% in Brazil . As a percentage of the income of rural poor households however, these figures were 47% of GDP in India, 75% in Indonesia and 89% in Brazil[53]. Biodiversity-based industries such as tourism and fisheries account for more than half the gross domestic product of small island developing states. Coral reefs alone provide an estimated $375 billion annual return in goods and services. Many island species on land and sea are found nowhere else on Earth. Legacies of a unique evolutionary heritage, they hold the promise of future discoveries -- from medicines and foods to biofuels. According to the International Resource Panel[54], the ecosystem services provided by tropical forests - whether in terms of storing carbon, supporting the world's richest reservoir of terrestrial biodiversity, regulating water flows, reducing soil erosion, or providing a source of nutrition, timber and valuable genetic resources - are estimated to be worth an average of US$ 6,120 per hectare per year.*

The EU is fully committed to helping combat biodiversity loss across the globe and to fulfilling its global commitments under the Convention on Biological Diversity.

The European Union adopted the EU Biodiversity Strategy to 2020 that also provides the EU implementing measures of its commitment taken under the UN Convention on Biological Diversity to agree to the global Strategic Plan for Biodiversity to 2020. In 2010 the CBD Conference of the Parties adopted the Strategic Plan for Biodiversity 2011-2020, including the twenty Aichi Biodiversity Targets. This Strategic Plan

[51] Braat and ten Brink eds (2008) The Cost of Policy Inaction - The case of not meeting the 2010 biodiversity target.
[52] TEEB (2010) Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB
[53] Sukhdev (2009) (with H. Gundimeda and P. Kumar)
[54] UNEP (2014) Building Natural Capital: How REDD+ can Support a Green Economy'. **www.unep.org/resourcepanel**

constitutes the relevant overarching framework for all biodiversity-related conventions, and should contribute to the achievement of the Millennium Development Goals and future Sustainable Development Goals. The EU 2020 biodiversity strategy responds to this mandate, setting the EU on the right track with a view to meeting its own biodiversity objectives and its global commitments.

In international cooperation and development, the EU recently launched a new flagship initiative, called "**Biodiversity for Life"** (B4Life). B4Life is an umbrella framework to ensure better coherence and coordination of EU external actions in the area of biodiversity, natural capital and ecosystems. The purpose of B4Life is to highlight the strong linkages between healthy ecosystems and sustainable livelihoods in view of contributing to poverty eradication. It aims at tackling biodiversity loss by promoting good governance of natural resources, securing ecosystem services for food security and supporting innovative ways to manage natural capital in the context of green economy. Besides, B4Life also seeks to enhance policy commitment and resources mobilisation to address the wildlife crisis.

Wildlife crime, including illegal trade of endangered species, has a major impact on biodiversity, but also represents a real threat to national security and economic development of many African countries. Unprecedented poaching levels and sophisticated smuggling capabilities are indicative of organised criminal activity. On the other hand, unsustainable use of important natural resources, such as bushmeat, fuel wood or arable land, is increasing the long-term poverty and is leading to biodiversity loss. Therefore, all the financial instruments of international cooperation are explored synergistically for reducing this pressure on ecosystems and species that finance the instability and preclude any human development.

Box 5: Sustainable Development Goals

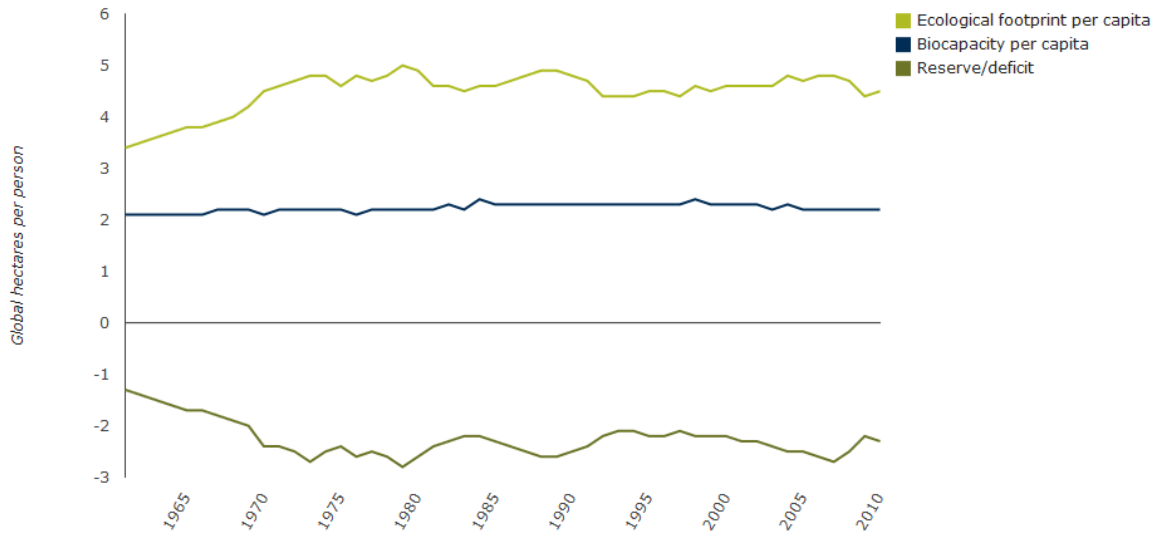
The EU has been working at global level through the UN system, with a view to reflect and mainstream the objective of averting global biodiversity loss in the proposed Sustainable Development Goals (SDGs) for the post -2015 period. Thanks to efforts from the EU and other Parties, biological diversity and ecosystems feature prominently in the proposal of a set of 17 Sustainable Development Goals[55] that the Open Working Group on Sustainable Development Goals agreed to be forwarded to the 68th session of the United Nations General Assembly. In particular, there are two goals directly related to biodiversity and ecosystems throughout the proposed SDGs: Goal 14 on oceans and coasts, and Goal 15 on terrestrial biodiversity. Furthermore, Goal 12 on sustainable consumption and production is also very relevant to CBD Strategic Plan 2011-2020. Language referring to biodiversity and ecosystems and/or natural resources is also included in many other goals, including Goal 2 on food security, Goal 6 on water and sanitation, and Goal 11 on cities and human settlements. Other goals which include “sustainability” considerations are also of

[55] https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf

relevance, as is Goal 17 on means of implementation. One of the most important achievements is the inclusion in Goal 15 of target 15.9 "by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts." This target is key as it makes a strong linkage between biodiversity, sustainable development and poverty eradication. Next steps will involve safeguarding a strong environmental dimension in the international Post-2015 negotiations and to ensure that biodiversity-related objectives are preserved. The Commission has started an internal reflection on how to implement and bring forward these objectives in the EU and internationally.

Since 2010, significant progress has been made in terms of resource mobilisation for biodiversity and regulation of access to genetic resources and the fair and equitable sharing of benefits arising from their utilization. But Europe's demand for natural resources generated by our present patterns of producing and consuming goods and services remains unsustainable and is causing direct and indirect pressures on biodiversity. Since the 1960s the EU's total biocapacity has changed very little and Europe's ecological deficit is considerable: the EU-28 region's ecological footprint is still twice the size of its biocapacity.

Figure 10 - Ecological footprint, biocapacity and reserve or deficit in EU28[56]

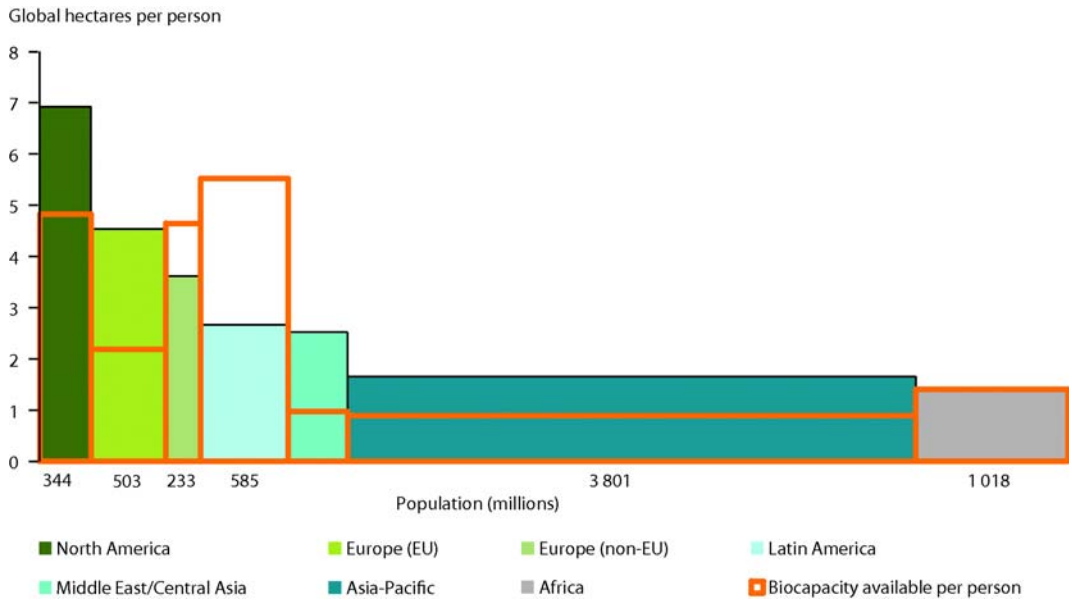


As the graph below demonstrates, Europe's own ecosystems do not have the capacity to meet the total demand of ecological goods and services, also known as natural resource-based products. This can have negative consequences for the environment and in particular for biodiversity, both within and outside Europe, such as degradation of ecological assets, loss of biodiversity and of ecosystem services, ecosystem

[56] See http://www.eea.europa.eu/data-and-maps/indicators/ecological-footprint-of-european-countries/ecological-footprint-of-european-countries-2

collapse and depletion of natural reserves.[57] Besides Europe, North America, Asia-Pacific and the Middle East/Central Asia regions also have ecological deficits[58].

Figure 11 – Ecological footprint variation per region



Note: Nations can operate with ecological deficits in different ways: import products and use the biocapacity of other nations; consume their own stocks of ecological capital; or exploit the global commons. Some nations overdraw their biocapacity in order to export goods, whilst importing additional biocapacity from other nations. However, all nations cannot be net importers, and nations relying on competition for scarce imports will be increasingly at risk.

Biodiversity in the EU overseas entities represents a unique and critical part of Europe's natural heritage. Together, they host much more biodiversity than on the European mainland (see Box). EU Outermost Regions and overseas countries and territories constitute an important part of global biodiversity for which the EU has a direct preservation responsibility.

Box 6: Biodiversity in EU ORs and OCTs

The European Union (EU) Outermost Regions (ORs) and Overseas Countries and Territories (OCTs) are home to an outstanding diversity of species, ecosystems and land and seascapes. These 34 regions and territories scattered worldwide host around 70 % of Europe's species, more than 20 % of the world's coral reefs and lagoons and are recognised as having biodiversity of global significance.

[57] http://www.eea.europa.eu/data-and-maps/indicators/ecological-footprint-of-european-countries/ecological-footprint-of-european-countries-2

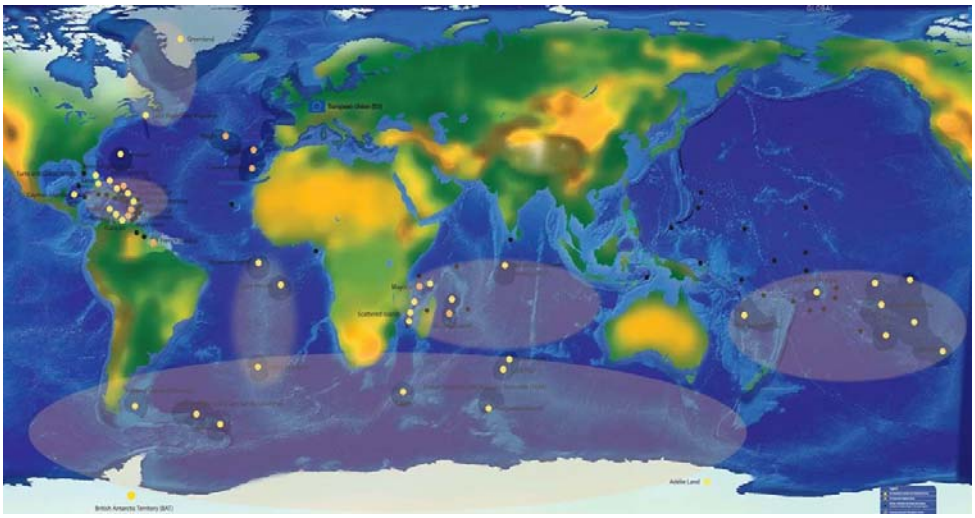
[58] http://www.eea.europa.eu/data-and-maps/indicators/ecological-footprint-of-european-countries/ecological-footprint-of-european-countries-2

This ‘natural capital’ supports the daily needs of local communities, their economies and plays a key role in both climate change mitigation and adaptation. In many places, ecosystems and their services are highly vulnerable given existing pressures. The management of these ecosystems is of the utmost importance in view of sustaining human well-being and models of development. However, much is still unknown about the natural capital in EU overseas entities. There is therefore a pressing need for an improved knowledge base. The ‘Message’ from the 2008 conference at Reunion Island underlined the critical need for establishing “long-term monitoring programmes as well as biological and socio-economic indicators adapted to the constraints specific to the ORs and OCTs”.

Examples of this unique natural capital…

The islands of New Caledonia (an OCT of France) have a similar number of endemic species if compared to the European Union mainland. Such diversity has led to France being included among the world’s 18 ‘mega diverse countries’- the only European country on the list. Greenland, an OCT of Denmark, has the largest terrestrial protected area on Earth (the Northeast Greenland National Park of 972 000 km2). French Guiana, an OR of France in northern South America, has one of the least disturbed areas of rain forest on Earth. Almost all European territories are located either in Biodiversity Hotspots or in High Biodiversity Wilderness Areas.

Figure 12 - Map indicating the geographic regions where the ORs and OCTs are situated



Source IUCN 2014

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17a) Under the EU flagship initiative on resource efficiency, the EU will take measures (which may include demand and/or supply side measures) to reduce the biodiversity impacts of EU consumption patterns, particularly for resources that have significant negative effects on biodiversity.

The **EU flagship initiative on resource efficiency** is one of seven initiatives that constitute the Europe 2020 Strategy, which is the EU's growth strategy for a smart, sustainable and inclusive economy. The strategy provides a long-term plan to integrate resource efficiency to achieve a resource-efficient low-carbon economy, which is based on sustainable growth. This involves a variety of sectors with implications to policies related to economy, energy, transport, industry, raw materials, agriculture, construction, fisheries and biodiversity. The EU Biodiversity Strategy to 2020 is one of the key proposals under the flagship initiative.

To turn the Union into a resource-efficient, green and competitive low-carbon economy is also one of the priority objectives of the **7th Environmental Action Programme** (EAP), which according to its paragraph 106, shall ensure amongst others that by 2020, the impact of consumption in the Union on the environment beyond the Union's borders is reduced. This requires assessing the environmental impact, in a global context, of the Union's consumption of food and non-food commodities and, if appropriate, developing policy proposals to address the findings of such assessments. The development of a Union action plan on deforestation and forest degradation also needs to be considered.

As illustrated by the ecological footprint, the EU's consumption and production are highly dependent on a wide range of goods imported from abroad, which increase the environmental pressures in exporting countries. Given the complexity that this issue entails, the European Commission has supported a study on the "Identification and mitigation of the negative impacts of EU demand for certain commodities on biodiversity in third countries"[60] with the aim of gaining a better understanding of possible ways to contribute to avoiding or minimising the loss of global biodiversity which is caused by certain production and consumption patterns in the EU. The study analysed the supply chains of the five selected commodities – namely soy, beef, cotton, fish, and gold – in order to determine the areas where EU policy intervention could be most effective.

[59] It is important to clarify that some of the actions in place for the achievement of Target 6 have recently been established and, as such, it is not yet possible to assess their progress.
[60] http://ec.europa.eu/environment/nature/pdf/study_third_countries.pdf

EU policies – such as the CAP - have a wide ranging influence. The increasing sophistication and scale of the production and consumption systems that meet European demand for goods and services create major challenges for policymaking and businesses, as well as opportunities for innovation. Driven by a combination of economic incentives, consumer preferences, environmental standards, technological innovation, development of transport infrastructure, and liberalisation of trade, production-consumption systems for many goods and services span the globe, engaging numerous actors.[61] The Commission is committed to promoting the sustainable production of agricultural commodities across the world. As an example, the EU has recently adopted **Ecolabel criteria** for rinse-off cosmetics[62] requiring the palm oil, palm kernel oil and their derivatives in the products to be sourced from plantations that meet criteria for sustainable management[63].

In response to **global deforestation**, the EU is committed to acting to halt it by 2030 at the latest and to reduce gross tropical deforestation by at least 50 % by 2020 compared to current levels[64]. Steps taken by the EU include the Forest law enforcement, governance and trade (FLEGT) action plan, the adoption of the EU Timber Regulation (TR), support for the successful implementation of 'Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries' (REDD+) initiatives and conservation of key ecosystems in forested regions, in particular in protected areas.

Significant progress has been made in implementing the **EU FLEGT action plan**, which dates back to 2003. The action plan provides for a combination of supply and demand-side measures to exclude illegal timber from markets, improve the supply of legal timber and increase the demand for wood products from legal sources. Its ultimate goal is to encourage sustainable forest management by improving forest governance frameworks and ensuring the legality of forest operations is considered a vital first step. A key element of the FLEGT action plan is the possibility for the EU to conclude Voluntary Partnership Agreements (VPAs). These bilateral trade agreements with timber exporting countries help to prevent illegal timber from being placed on the European market. These trade agreements promote the strengthening of forest governance in partner countries and provide for the establishment, through a multi-stakeholder process, of timber legality assurance systems to certify the legality of exports of timber and timber products into the EU. Cameroon, Central African Republic, Congo (Brazzaville), Ghana, Indonesia and Liberia have ratified agreements.

[61] EEA (2014 f) cited by The European Environment State and Outlook 2015 Synthesis Report. Available at: http://www.eea.europa.eu/soer-2015/synthesis/report/6-systemchallenges
[62] 2014/893/EU: Commission Decision of 9 December 2014 establishing the ecological criteria for the award of the EU Ecolabel for rinse-off cosmetic products (notified under document C(2014) 9302) (OJ L 354, 11.12.2014, p. 47–61).
[63] Certifications accepted include those developed by the Roundtable on Sustainable Palm Oil (RSPO), a multi-stakeholder organisation that has a broad- based membership including NGOs, industry and government.
[64] COM 2008(645) http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52008DC0645

Negotiations are ongoing with Côte d'Ivoire, Gabon, Guyana, Democratic Republic of Congo (Kinshasa), Honduras, Laos, Malaysia, Thailand and Vietnam.[65]

To complement the FLEGT VPAs, the EU has legislation in place laying down the obligations of operators who place timber and timber products on the market,[66] also known as the **EU Timber Regulation (TR)**. The Regulation came into force on 3 March 2013. It prohibits operators in Europe from placing illegally harvested timber and products derived from illegal timber on the EU market. The European Commission is monitoring how Member States are implementing and enforcing the EU Timber Regulation. Reports on its effectiveness are being compiled by the European Commission from reports by Member States. The consolidated report will be sent to the European Parliament and the Council before December 2015. Only recently the Commission launched a public consultation process on the review of the TR. The consultation aimed to contribute to the TR 2015 review by encouraging stakeholders to share their experiences and views on the application of the TR over the first two years. The public consultation closed in the beginning of July 2015.

Under the framework of the FLEGT action plan, the EU has also been promoting **public procurement policies** as a means to encourage trade in sustainable and verified legal timber (eleven EU Member States have adopted timber public procurement policies), and private sector initiatives (voluntary codes of conduct, procurement policies, chain-of-custody/certification initiatives, etc.). In addition, development cooperation funding has been used to support efforts of timber producing countries to strengthen their legal and policy frameworks in the forest sector and building capacity to tackle the problem of illegal logging.

In addition to the above mentioned frameworks, EU's approach on combating tropical deforestation is also being pursued within the UNFCCC negotiations and builds on international initiatives aimed at implementing **REDD+** such as the REDD+ Partnership, the Forest Carbon Partnership Facility, the EU REDD Facility and the UN-REDD Programme. In particular, the European Commission commits approximately EUR 25 million a year to initiatives piloting REDD+ in Asia, Africa and Latin America. The European Commission is investigating ways to stimulate private sector in addressing drivers of deforestation and further increase the effectiveness of REDD+ financing.[67] Moreover, the EU is actively engaged in REDD+ discussions within the UNFCCC so that drivers of deforestation are adequately addressed at all levels.

[65] http://ec.europa.eu/environment/forests/flegt.htm.
[66] Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market.
[67] http://ec.europa.eu/clima/policies/forests/deforestation/index_en.htm

Finally, at operational level, the Commission supports the management and the conservation of many **protected areas** in tropical forest countries. These protected areas are often the last remnants of primary tropical forests that would disappear under the pressure of local and global drivers, inter alia mining, oil exploration, agro-industry, infrastructures, etc. Large forest ecosystems are protected with the support of EU investments in Africa, Asia and Latin America, with Central Africa as main region of concentration.

17b) The Commission will enhance the contribution of trade policy to conserving biodiversity and address potential negative impacts by systematically including it as part of trade negotiations and dialogues with third countries, by identifying and evaluating potential impacts on biodiversity resulting from the liberalisation of trade and investment through ex-ante Trade Sustainability Impact Assessments and ex-post evaluations, and seek to include in all new trade agreements a chapter on sustainable development providing for substantial environmental provisions of importance in the trade context including on biodiversity goals.

All recent EU trade agreements with third countries include provisions aimed at strengthening the effective implementation of multilateral environmental agreements, as well as on the promotion of sustainable trade in areas such as forests and fisheries. This approach is also being followed in ongoing negotiations (e.g. Japan, USA). The Agreements with Colombia-Peru, Moldova and Georgia have specific articles on biodiversity. Ex-ante, Sustainability and ex-post impact assessments of trade agreements also cover impacts on biodiversity, in accordance with relevant Guidelines. Implementation of the trade and sustainable development provisions is, in most cases, at a relatively early stage, but as one example the EU is now the most important market for Peruvian organic products.

Box 7: Free Trade Agreements (FTAs)

At bilateral level, the EU has developed a well-established practice of including in its trade agreements, with both industrialised and developing countries, comprehensive provisions devoted to sustainable development. The chapters on trade and sustainable development in the free trade agreements (FTAs) the EU concluded so far (e.g. Korea, Colombia/Peru, Central America, Singapore, Georgia and Moldova) are based on the following key elements:

- International labour and environmental commitments: EU FTAs establish international principles and agreements as the basic set of common rules, and include commitments by the parties to ratification and effective implementation of core ILO standards and conventions and multilateral environmental agreements.
- Domestic levels of protection and implementation of domestic laws: EU FTAs recognise the regulatory autonomy ("right to regulate") of the EU and its partners, which can freely decide their domestic rules and set their levels of environmental and labour protection, provided they respect

international commitments in these areas. Trade and sustainable development provisions also include obligations on both Parties to prevent 'ad hoc' derogations from labour and environmental laws, or persistent situations of lax enforcement, which may affect trade or investment – in order to avoid a race to the bottom.

- Pursuing a comprehensive positive agenda on trade and investment as a means to support sustainable development objectives: Trade and sustainable development provisions support the conservation and sustainable use of natural resources, such as biodiversity, forestry, and fisheries. They also promote Corporate Social Responsibility (CSR) as well as public and private market-based policies and practices that pursue sustainability objectives, such as eco-labelling and fair and ethical trade initiatives.
- A dedicated institutional set-up, with a strong role for civil society: EU FTAs foster accountability of the parties, transparency, and dialogue with civil society. Each EU FTA establishes a dedicated governmental body, composed of officials of all parties, that oversees the implementation of their trade and sustainable development provisions. This body interacts with a specific forum, also set up by the FTA, comprised of civil society representatives from all parties.
- A tailored mechanism to solve disputes: In cases of disagreements over implementation issues, the trade and sustainable development chapters of EU FTAs provide for procedures for inter-governmental consultations, as well as for the possibility for any party to refer matters to an independent and impartial panel of experts. The reports produced in this context are public and their follow-up must be monitored, including with the involvement of the civil society bodies established under the trade and sustainable development chapters.

In order to ensure that trade and sustainable development provisions are effectively implemented, the EU regularly meets with the countries with which it has concluded agreements to discuss the implementation of trade and sustainable development provisions of the FTA; and establishes, EU "domestic advisory groups" for each FTA, in cooperation with the European Economic and Social Committee and including Trade and Sustainable Development representatives of EU trade unions, employers' organisations, business associations, and non-governmental organisations.

In addition, the EU provides additional trade preferences through its **Generalised Scheme of Preferences** special arrangement (GSP+) to vulnerable developing countries which ratify and implement international conventions on sustainable development and good governance, including the CBD.

In order to enhance the contribution of trade policy to conserving biodiversity and addressing potential negative impacts, the EU is also undertaking measures to tackle illegal trade in wildlife. In February 2014,

the EC adopted a **Communication on the EU approach against wildlife trafficking**[68], which takes stock of EU involvement in global efforts to combat the alarming rate of poaching and illegal trade in wildlife. It launched a stakeholder consultation and set out the areas on which the EU and its international partners should enhance their efforts.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has been implemented throughout the EU by means of **EU Wildlife Trade Regulations**[69] that are directly applicable in the Member States. Four regulations constitute the legal framework for all Member States: they regulate international and internal trade in wild animals and plants in the EU. Those regulations are regularly amended to accommodate new measures agreed under CITES. In addition, the EU wildlife trade regulations contain measures that are stricter than the requirements adopted under the CITES framework. EU legislation has additional safeguards to ensure the sustainability and legality of trade in CITES listed species and provides the conditions under which wildlife products can enter the EU market. The EU Wildlife Trade Regulations require EU importing countries to make a Non-detriment-finding (NDF) for all species listed in Annexes A or B of the EU Wildlife Trade Regulations (approximately equivalent to CITES Appendix I and II species), which goes beyond the CITES requirement for an NDF for imports of Appendix I species. Through this process, individual EU Member States and the Commission are in dialogue with many authorities of EU trading partner countries to discuss concerns over the sustainability of specific trade and to ensure that there is awareness and transparency of steps taken within the EU regularity framework.

The EU WTR also enables the EU to introduce trade restrictions; there are currently 347 taxa in approximately 120 countries for which trade suspensions are in place. Measures are decided by the Commission based on inputs from EU scientific experts and are regularly adapted to changing species' status and trade patterns. The Commission is in regular contact with Member States, trading partner countries, trade operators and civil society to ensure a smooth application of the rules across the EU, avoid loopholes and provide guidance when necessary.

Between September 2011 and February 2013, UNEP-WCMC on behalf of the EC provided detailed reviews for 188 species/country combinations, and between March 2013 and September 2014 UNEP-WCMC provided detailed reviews for another 102 species/country combinations; a total of 290 species reviews were conducted for the period of 2011-2014. These reviews help the EU to ensure that trade in CITES-listed species into the EU does not threaten species.
In addition, a UNEP-WCMC report "Analysis of the impact of EU decisions on trade patterns – Report 4: Conclusions and Recommendations", commissioned by the EC and submitted on 9th of March 2015,

[68] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014DC0064
[69] http://ec.europa.eu/environment/cites/home_en.htm.

investigate whether EU trade restrictions lead to shifts in trade patterns and explore potential implications. The reports highlight that more than 70% of EU trade restrictions successfully reduce pressure from global trade on populations. At the same time, the Commission and individual Member States also support capacity building in trading-partner countries, for example through support of CITES efforts to strengthen CITES implementation in developing countries, or cooperation with exporting countries on particular species. The EU also plays an active role in communicating EU concerns over trade levels to the CITES platform as appropriate, for example where species/country combinations warrant inclusion in the CITES Review of Significant Trade process.

The EU also monitors the implementation by Member States of the EU wildlife trade framework, notably through the work done at the wildlife trade enforcement group, which meets twice a year and is chaired by the Commission.

The EU officially became a Party to CITES on 8 July 2015.

17c) The Commission will work with Member States and key stakeholders to provide the right market signals for biodiversity conservation, including work to reform, phase out and eliminate harmful subsidies at both EU and Member State level, and to provide positive incentives for biodiversity conservation and sustainable use.

The European Commission ordered a study on reforming environmentally harmful subsidies for a resource efficient Europe.[70] The study aimed to support the Commission in implementing the call in the Roadmap to a Resource Efficient Europe to phase out harmful subsidies by 2020. The study, published in December 2012, identifies a number of existing harmful subsidies in EU Member States across a range of environmental sectors and issues, such as agriculture and land, climate change and energy, fisheries, food, forestry, materials, transport, waste, and water. The study identified obstacles to reform, as well as potential solutions. The reform of environmental harmful subsidies is also a regular item, for a number of EU countries, in the European Semester process, the annual governance process of the Europe 2020 strategy for smart, sustainable, and inclusive growth.

Also, considering the importance of advancing on this issue at the global level, at the CBD COP12, the EU and other Parties adopted "milestones" for the full implementation of Aichi Biodiversity Target 3 on phasing out incentives harmful to biodiversity, and developing and applying positive incentives for the conservation and sustainable use of biodiversity. The decision[71] includes a timetable and concrete activities for the

[70] http://www.ieep.eu/publications/2012/12/reforming-environmentally-harmful-subsidies-for-a-resource-efficient-europe
[71] https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-03-en.pdf

elimination, phasing out or reform of incentive policies that are harmful to biodiversity, as well as the promotion of positive incentive policies.

Through the successive reforms of the main EU sectoral policies and corresponding funding instruments, the European Commission has sought to provide more positive incentives for biodiversity conservation and sustainable use, most notably through the latest reforms of the CAP and the CFP.

18a) The Commission and Member States will contribute their fair share to international efforts to significantly increase resources for global biodiversity as part of the international process aimed at estimating biodiversity funding needs and adopting resource mobilisation targets for biodiversity at CBD CoP11 in 2012 (as set out in CoP10 Decision X/3).

The EU remains the largest contributor to biodiversity-related Official Development Assistance (ODA). As a party to the CBD, the EU is committed toward the internationally agreed target of doubling biodiversity-related flows to developing countries by 2015, based on an average from 2006–2010, and to maintain this level until 2020. Average ODA spent by EU institutions for biodiversity in 2006-2010 was EUR 166.3 million. After a significant drop in 2011, commitments achieved in 2012 and 2013 show that the EU is making progress, while further efforts are required to deliver on this target.

	2006	2007	2008	2009	2010	2011	2012	2013
Direct	56	76	83	59	95	19	217	82
Indirect	76	53	47	141	151	107	180	237
Total	132	129	130	200	246	126	397	319

In the Council Conclusions of 12 December 2013[72] the EU and its Member States reaffirmed their resolve to contribute to the achievement of the Hyderabad commitments to double total biodiversity-related financial resource flows to developing countries by 2015, using as a reference level the average of annual biodiversity funding for the years 2006–2010. They committed to at least maintaining this level until 2020. The table below indicates international biodiversity funding commitments from the EU and the 23 Member States that reported data. As explained in the EU Accountability Report on Financing for Development 2015, only 16 Member States reported data on committed or disbursed funding in 2014 and 2015. Therefore, related figures of those years are not included in the table below.

International biodiversity funding, EU (commitments, EUR million)

	2006	2007	2008	2009	2010	**Average (2006-2010)**	2011	2012	2013
Member States (23)	639.2	685.8	848.1	917.6	1137.5	**845.5**	1240	1452.8	1584.9

[72] http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/EN/foraff/140060.pdf

EU	127.1	129.4	129.7	199.5	245.8	**166.3**	125.9	396.9	319.3
TOTAL	766.3	815.2	977.8	1117.1	1383.3	**1011.9**	1365.9	1849.7	1904.2

Source: Information extracted from EU Accountability Report on Financing for Development 2015[73]

At CBD COP12, a good and balanced agreement was reached on resource mobilisation[74], which reaffirmed all the elements of the Hyderabad package (CBD COP11), whilst also stressing the importance of domestic resource mobilization and the need for all CBD Parties to mobilise resources, and to increase efforts to mainstream biodiversity across their policy frameworks[75]. Parties including the EU also agreed to increase domestic financing for biodiversity and identified a set of actions to allow the increased mobilization of financial resources from all sources. These decisions echoed and responded to the conclusions of the fourth Global Biodiversity Outlook (GBO4), which indicated that while progress was being made in conserving biodiversity, governments needed to increase funding efforts if they were going to end the loss of biodiversity.

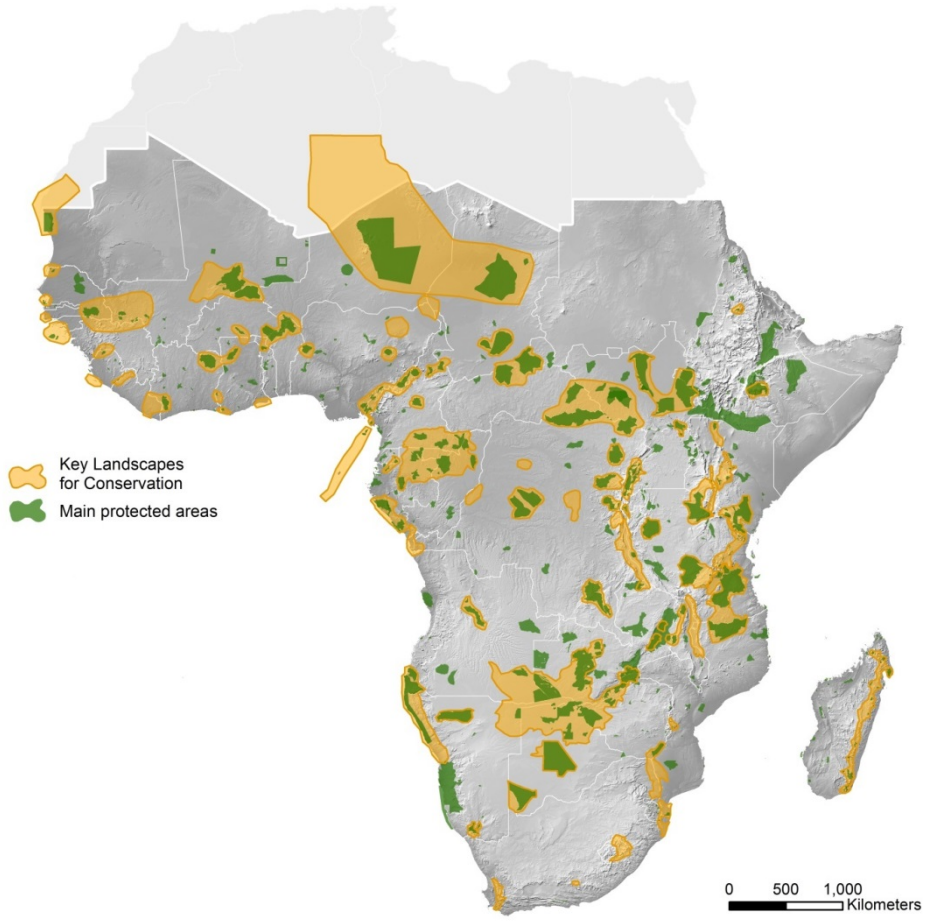
In response to the increasing challenges with regard to global environmental issues such as biodiversity loss, the EU under the 2014-2020 multiyear financial framework has allocated significant budgetary resources to the Thematic Programme on Global Public Goods and Challenges (GPGC) under the Development Cooperation Instruments (DCI) and increased the part dedicated to natural resources in the European Development Fund. The share of GPGC that has been earmarked to environment and climate change is EUR 1.3 billion, which is significantly bigger than the Environment and Natural Resources Thematic Programme (ENRTP) under the previous MFF (€ 804 M). Out of this, about € 250 million will target biodiversity specifically, i.e. roughly € 36 million per year, though the GPGC shares that are specifically allocated to other issues such as climate change and forest governance may also contain significant relevance for biodiversity. These investments are framed in the context of B4Life. It must be noted that many projects belonging to other main thematic domains (agriculture, climate change adaptation/mitigation, infrastructure, energy) have positive effects on biodiversity conservation and are taken into account in the reporting of resources dedicated to biodiversity.

[73] https://ec.europa.eu/europeaid/eu-accountability-report-financing-development-2015_en
[74] http://www.cbd.int/decision/cop/default.shtml?id=13366.
[75] The EU and its Member States, alongside other CBD Parties, reaffirmed that they commit, together, to contribute to doubling total biodiversity-related financial resource flows from a variety of sources to developing countries, in particular least developed countries and Small Island Developing States, as well as countries with economies in transition, by 2015, using as the reference level the average of annual biodiversity funding for the years 2006-2010, and at least maintaining this level until 2020.

18b) The Commission will improve the effectiveness of EU funding for global biodiversity inter alia by supporting natural capital assessments in recipient countries and the development and/or updating of National Biodiversity Strategies and Action Plans, and by improving coordination within the EU and with key non-EU donors in implementing biodiversity assistance/projects.

In order to tackle global issues in a consistent manner taking into account the transboundary aspects, the Commission has always privileged large conservation programs with a regional approach (such as ECOFAC or PAPE). More recently, the Commission has produced a study "Larger than elephants. Inputs for an EU strategic approach for African Wildlife Conservation" aiming at defining a consistent approach for the EU investments for the next 10 years. This work, supported by the broad conservation community, includes activities in 85 Key Landscapes for Conservation covering 300 National Parks (protection of key ecosystems and local development around the sites), institutional strengthening and capacity-building of national authorities, and global action against wildlife crime (fight against organised crime organisations, demand reduction, political dialogue). This work is now discussed with EU and non-EU donors in order to identify very concretely the priority actions, the gaps and the overlaps.

Figure 13 - Map of the Key Landscapes for Conservation identified by the study Lrger than elephants



Map of the Key Landscapes for Conservation identified by the study Lrger than elephants

An ongoing EU-funded project "Strengthening MEA synergies and indicators in National Biodiversity Strategies and Action Plans (NBSAPs) for the Pan-European region" aims to strengthen NBSAP implementation through improving synergies across various environmental agreements, enhancing the reporting process and developing effective indicators in pan-Europe, with a transboundary focus in the sub-regions of Eastern Europe, Southern Caucasus and Central Asia. Hence, this project will increase the capacity in the countries, develop accessible knowledge and skills through the production of practical outputs.

The Commission currently financially supports two projects directly related to the assessment of biodiversity values (TEEB and WAVES) and one project indirectly related to biodiversity valuation (BIOFIN), which support partner countries to develop comprehensive national resource mobilization strategies which help to strengthen the implementation of their NBSAPs. These projects will contribute to improving the effectiveness of EU funding for global biodiversity.

Regarding biodiversity actions in G20 countries, a €7 million project under the Partnership Instrument on Natural Capital Accounting will cover a number of strategic partners, including Brazil, China, India, South Africa and Mexico. The overall objective of the project is to engage at national level with the EU strategic partners where biodiversity is at stake, so as to enhance their knowledge of valuation of ecosystems and their services. Building on an EU-agreed (and internationally agreed) methodology (UN SEEA) and on the development of national competences, the project will initiate pilot testing in NCA in each country and help develop capacity in this area.

Box 8: World Bank WAVES (Wealth Accounting and the Valuation of Ecosystem Services)

WAVES is a global partnership with collaboration among different actors at global, national and sub national levels, all working towards accomplishing WAVES' four objectives: 1) help countries adopt and implement accounts that are relevant for policies and compile a body of experience;
2) develop an ecosystem accounting methodology; 3) establish a global platform for training and knowledge sharing; and 4) build international consensus around natural capital accounting.
Work considers looking beyond GDP by fully accounting for minerals and energy, fisheries, water, forests and ecosystems. Work centres on implementation in eight pilot countries (Guatemala, Botswana, Philippines, Colombia, Costa Rica, Madagascar, Indonesia, and Rwanda). Policy messages derived from accounts have guided policy making in countries. The EU and Member States (E.g. France, Germany, Italy, and UK) contribute financially to World Bank Multi-Donor Trust Fund on WAVES which has a total value over 33 million dollars. An expanded programme, WAVES+, with more partner countries is being considered.

TEEB (The Economics of Ecosystems and Biodiversity) at national level

The EU supports five developing countries in conducting TEEB country studies (Ecuador, Bhutan, the Philippines, Tanzania and Liberia) and Germany supports several partner countries, notably India and Brazil. Several other Member States have started their own TEEB-inspired initiatives including Belgium, Czech Republic, Poland and Slovakia Other countries with TEEB or TEEB-inspired assessments include Georgia, Japan, Norway, Republic of Korea and South Africa[76].The TEEB study has also encouraged business engagement with the biodiversity agenda recognising that the economic invisibility of nature poses significant risks to their business models and supply chains. The Natural Capital Coalition[77] (which evolved from TEEB) is a global platform which brings together the many different initiatives and organizations working in natural capital under a common vision. It aims to develop a harmonised framework for natural capital valuation and accounting in the private sector and apply it in business decision making to facilitate the development of more sustainable long term business models.

BIOFIN: The Biodiversity Finance Initiative

BIOFIN supports partner countries to develop comprehensive national resource mobilization strategies which help to strengthen the implementation of their NBSAPs. Launched in October 2012 by the United Nations Development Programme (UNDP), the initiative is managed by the UNDP Ecosystems and Biodiversity Programme, in partnership with the EU, and the Governments of Germany, Switzerland, Norway and Flanders. GEF is a further financing partner of in-country projects.[78] BIOFIN works along two main axes: the Globally-led development of a new methodological framework; and the Adaptation and implementation of this new methodological framework at national level. To help countries increase the importance attributed to biodiversity, and in consequence bridge the financing gap, the work at national level will be led by Ministries of Finance, Economics or Planning and the Ministry of Environment. It is articulated through the following components: 1) Analyse the integration of biodiversity and ecosystem services in sectoral and development policy, planning and budgeting; 2) Assess future financing flows, needs and gaps for managing and conserving biodiversity and ecosystem services; 3) Develop comprehensive national Resource Mobilisation Strategies to meet the biodiversity finance gap; 4) Initiate implementation of the Resource Mobilisation Strategy at national level. As of January 2015, there are a total of 29 core participating countries. While discussions are ongoing in several countries to formally join the Initiative, the following 19 countries are already fully engaged: Botswana, Chile, Colombia, Costa Rica, Ecuador, Fiji, Guatemala, India, Indonesia, Kazakhstan, Malaysia, Mexico, Peru, Philippines, Seychelles, South Africa, Thailand, Uganda and Zambia. Further countries can be supported as additional resources are

[76] http://www.teebweb.org/resources/teeb-country-studies/
[77] http://www.naturalcapitalcoalition.org/
[78] BIOFIN (2015) BIOFIN Factsheet [Online] Available from: http://www.biodiversityfinance.net/links-and-publications/biofin-factsheet [Accessed: 10 February 2015].

leverages. Tools developed through BIOFIN will also be applied in the 45 countries that are receiving UNDP-GEF support towards the development of new national biodiversity strategies, and will be made available to all CBD Parties through an ongoing collaboration with the CBD Secretariat and UNEP-WCMC, such as on regional workshops on resource mobilisation.

19) The Commission will continue to systematically screen its development cooperation action to minimise any negative impact on biodiversity, and undertake Strategic Environmental Assessments and/or Environmental Impact Assessments for actions likely to have significant effects on biodiversity.

In 2012, a Commission review of the opportunities for **biodiversity-proofing the EU budget**[79] found that numerous tools exist to facilitate the process. Biodiversity-proofing is a structured process to ensure the effective application of tools to avoid — or at least minimise — biodiversity-harmful spending and to act as a catalyst for biodiversity-friendly spending. In 2014, the Commission published a practical common framework for biodiversity-proofing the EU budget, which includes general and fund-specific guidelines[80] for national and regional authorities and for Commission services.

Regarding biodiversity-proofing of the EU development cooperation, actions over the last decade have been encompassed within a broader approach, meant to enhance the integration of environment and climate change into development cooperation strategies, programmes and projects (environmental mainstreaming). A specialised environment help-desk was set up in 2004 and provided the Commission with appropriate training, guidance and technical assistance. It also developed a 'EU handbook for the integration of environment into development cooperation", for which the latest version was released in 2009.

Among the key measures that have been introduced since the former multiyear financial framework (2007-2013), is a compulsory environmental screening that must be applied to any new development cooperation action to be committed under an EU financing decision, at its identification stage. From this screening, the action can be ranked as 'A' - potentially significant negative environmental impacts, always requiring an **Environmental Impact Assessment** - EIA (if it is a stand-alone project) or a **Strategic Environmental Assessment** - SEA (if it is a sector policy support programme) B' - potentially 'non-negligible' impacts → environmental aspects to be addressed during formulation, or 'C' - minor or no negative environmental impacts → no need for further assessment.

[79] http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/BD%20Proofing%20Main%20Report.pdf.
[80] All guidance documents available on http://ec.europa.eu/environment/nature/biodiversity/comm2006/proofing.htm

Although biodiversity is not explicitly addressed in such screening, concepts that are relevant to it are: 'protected area'; 'area classified as vulnerable'; 'environmental services'; 'introduction of alien species'; 'use of fertilisers, pesticides or other chemicals', etc.

The information available so far (report covering years 2008 to 2010) is presented in the following table:

	2008	**2009**	**2010**
Number of 'A' type projects	13	20	4
number of EIA undertaken	11	13	4
Rate	85%	65%	100%

In parallel to the stand-alone project approach, a significant share of development cooperation is delivered through **Sector Policy Support Programmes** (SPSP). This enables more effective ownership and accountability of the beneficiary country, since it is designed so as to be fully aligned on the partner country's own policies. This approach is thus expected to generate more structural changes that may lead to more sustainable impacts. SPSP are also submitted to environmental screening and distinguished between environmental sensitive and non-sensitive sectors. The formers are subject to a Strategic Environmental Assessment (SEA). Data are available for 2009 and 2010 only and are displayed in the table below.

	2009	**2010**
Number of ENV-sensitive SPSP	21	13
SEA	3	6
no SEA	5	2
uncertain/no evidence found	13	5
rate	14%	46%

Information over more recent years is currently being compiled by a contracted technical assistance and is expected to be available by September 2015 at the soonest.

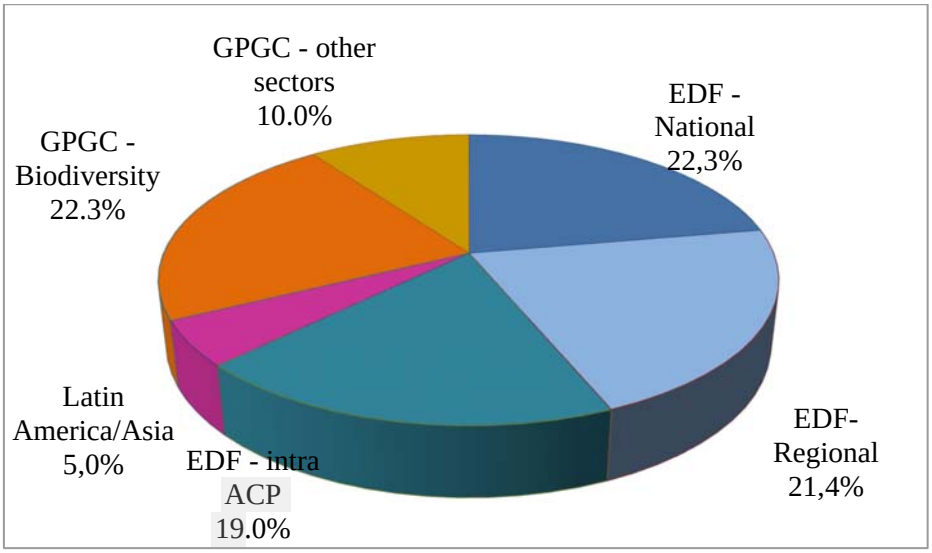
Number of Multiannual Indicative Programmes, National Indicative Programmes or Regional Indicative Programmes where the support per **sector section** or the **crosscutting issue section** or the **risk assessment section** explicitly and significantly address biodiversity/ecosystems:

Geographic area:	**Number of NIP/RIP**	**Number of NIP/RIP where biodiversity is a specific sector (RM2)**	**Number of NIP/RIP where a chosen sector is significant for biodiversity (RM1)**
Sub-Saharan Africa (NIP)	41	2	11

Geographic area:	Number of NIP/RIP	Number of NIP/RIP where biodiversity is a specific sector (RM2)	Number of NIP/RIP where a chosen sector is significant for biodiversity (RM1)
Latin-America & Caribbean (NIP)	24	1	6
Asia & Pacific (NIP)	33	0	5
North-Africa, Near-East, Eastern Europe (NIP)	13	0	3
Total country (NIP)	111	3	25
Regional or multi-country (RIP)	14	4	5
Global NIP+RIP	125	7	30

The adoption of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets in 2010 and the EU Biodiversity Strategy in 2011 boosted the need for increasingly singling biodiversity out as a specific matter to be looked at, among the general environmental agenda. Therefore, during the programming phase under the current 2014-2020 multiannual financial framework, the environmental mainstreaming exercise has paid attention to identifying where the future cooperation actions of the EU with its partners – either single developing countries or regional integration organisations – offers potential for biodiversity-relevant action according to the choice of concentration sectors (every partner is required to choose up to two sectors where EU resources from the bilateral cooperation will be concentrated). This programming phase, including negotiations rounds with partners, leads to the adoption of **National Indicative Programmes** (NIP) or **Regional Indicative Programme** (RIP). To date, nearly all NIP and RIP have been completed. The table above shows the numbers of NIPs and RIPs where one of the concentration sectors chosen is either specifically, or significantly, relevant to biodiversity. The NIPs and RIPs concerned are funded by the European Development Fund (EDF) for the Africa-Caribbean-Pacific countries (ACP) and by the geographic programmes of the Development Cooperation Instrument (DCI) for the Latin-American and Asian countries. When the amounts associated with these RIPs and NIPs are added to the funds allocated under the thematic programme of the DCI (Global Public Goods and Challenge - GPGC), this leads to an estimated €1-billion budgeted for the EU development aid for projects with biodiversity as principal objective for the 2014-2020 period. The chart below shows that NIP and RIP in the ACP (thus funded by the EDF) will provide for 62.7%.

Figure 14 – EU development aid with biodiversity as principal objective 2014-2020



An increasing share of Development Cooperation is delivered through budget support, in opposition to the traditional project/programme approach. Budget Support is expected to be more effective in terms of involving partner countries' ownership and accountability to deliver positive impacts on development. This has been largely developed and promoted since 2005 under the Aid Effectiveness process[81]. Budget support generally exists under two main approaches: 1) Sectorial Reform Contract (SRC). Up to 2012, 8 SRC interventions addressed the environmental sector; 2) General Budget Support (GBS).

The environment integration tool that is used for this type of approach is typically the Strategic Environment Approach. Nonetheless, effective environmental integration at budget support level has been rather poor. Data for 2009 and 2010 show that, out of, respectively, 6 and 16 GBS interventions assessed, no SEA has been actually carried out. On the other hand, the actual delivery of budget support (disbursements) is subject to a strict 'Risk Management Framework' – where macroeconomic aspects and public finance management issues are carefully looked after – and also need to respond to a set of indicators within a 'Performance Management Framework', where progress in toward the objectives of the policy or sector reform is assessed. Unfortunately, data with regard to these indicators were not available on time for this Mid-Term Review.

20) The Commission will propose legislation to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the European Union so that the EU can ratify the Protocol as soon as possible and by 2015 at the latest, as required by the global target.

[81] See e.g. in http://www.oecd.org/dac/effectiveness/

The Commission proposed in October 2012, and the co-legislators adopted in April 2014, **EU Regulation**[82] **implementing core elements of the 'Nagoya Protocol'**. In particular, the regulation implements at EU level the compliance "pillar" of the Nagoya Protocol. It puts in place measures to ensure that genetic resources from countries that are Parties to the Nagoya Protocol, accessed after the entry into force of the Protocol, are used in the EU in compliance with the Nagoya Protocol requirements. The EU Regulation will be complemented by measures taken at Member State level (e.g. designation of competent authorities, definition of systems of penalties for instances of non-compliance) and by a Commission implementing act on voluntary tools to facilitate compliance (registered collections, best practices) and on the monitoring of user compliance. The EU ratified the Nagoya Protocol on 16 May 2014.[83]

[82] Regulation (EU) No 511/2014 of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union (EU ABS regulation).
[83] http://ec.europa.eu/environment/biodiversity/international/abs/index_en.htm;.

IV. HORIZONTAL MEASURES

Mobilising resources to support biodiversity

Since 2010, biodiversity aspects have been integrated to different degrees into European Structural and Investment Funds (ESIF), notably the European Agricultural Fund for Rural Development (EAFRD), the Cohesion Policy Funds (i.e. the European Regional Development Fund, the European Social Fund, and the Cohesion Fund) as well as the European Maritime and Fisheries Funds (EMFF).

LIFE — the Financial Instrument for the Environment — is the only EU financial instrument fully dedicated to the environment. Previous evaluations have shown that LIFE is an effective instrument for protecting the environment, although it is limited in size[84]. Since 1992, LIFE has supported over 3100 projects. The new LIFE Regulation, published on 20 December 2013, sets a budget for the 2014–20 funding period of EUR 3.4 billion. The 2014-20 LIFE programme has two components: environment and climate action. It is the sub-programme for environment that provides the possibility to support projects addressing threats to biodiversity and contributing to the achievement of the targets of the EU Biodiversity Strategy to 2020. Two out of three priority areas of this sub-programme — LIFE Nature & Biodiversity in particular and LIFE Information & Governance — take into account biodiversity questions. The project topics under the nature & biodiversity priority area, defined in the LIFE multiannual work programme for 2014-17, prioritise projects contributing to Targets 1, 2, 3, 4 and 5 of the EU 2020 Biodiversity Strategy. Under the information & governance priority area, one of the project topics covers information and awareness-raising campaigns on the EU biodiversity strategy. LIFE also contributes to financial instruments, for instance the Natural Capital Financing Facility (NCFF - (see box).

Box 9: Natural Capital Financing Facility (NCFF)

The Commission and the European Investment Bank (EIB) have established the Natural Capital Financing Facility (NCFF), a new financial instrument which provides loans and investments to support projects in EU member states, which demonstrate that the preservation of natural capital can generate revenues or save costs, whilst delivering on biodiversity and climate adaptation objectives. Currently there are clear barriers to the uptake of many natural capital projects, including lack of experience, long investment and project payback periods, and uncertainties about target markets, revenue streams and profit margins. The NCFF is a pilot to establish a pipeline of replicable, bankable projects that will serve as a "proof of concept" and demonstrate the attractiveness of such projects to potential investors. Eligible projects will address payments for ecosystem services, green infrastructure, biodiversity offsets and investments for innovative pro-biodiversity and adaptation businesses. The final recipients for NCFF are public or private entities, including public authorities, land owners and businesses. The total budget for the Investment Facility amounts to € 100

[84] http://ec.europa.eu/environment/life/about/documents/COMM_PDF_SEC_2011_1542_annexes_en.pdf

– 125 million for 2014-2017. The European Commission contributes € 50 million as a guarantee for the investments and finances a € 10 million support facility."[85]

The **reforms of the common agricultural policy and the common fisheries policy** aim at reducing support that has a negative environmental impact, whilst rewarding practices that deliver public goods, including biodiversity. Under the common agricultural policy during the period 2007-13, progress has been made in conserving and restoring biodiversity and ecosystem services in the countryside as a whole. During this period, funding through rural development programmes under the policy's second pillar provided the principal means of supporting biodiversity protection, management and restoration measures in agricultural and forest habitats. The rural development policy gave Member States options to support measures that aim to preserve biodiversity through various means including advice, training and land management measures, and to draw up management plans related to Natura 2000 sites. Two new 'CAP reform' regulations — establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy,[86] and on support for rural development by the European Agricultural Fund for Rural Development[87] — apply from 1 January 2014 to 31 December 2020. A new direct payments system for farmers replaces the current Single Payment Scheme. A key change is that 30% of the direct payment will be dependent on meeting certain 'greening' requirements relating to environmental measures that go beyond cross-compliance, namely: crop diversification; permanent grassland; and ecological focus areas.

EU funding for European fisheries covers measures in support of biodiversity or marine environmental protection. In the 2007-13 funding period, specific measures related to biodiversity accounted for about 6% of total expenditure commitments, increasing to up to one third of the total funds if measures with indirect positive impacts are included. Under the 2014-20 European Maritime and Fisheries Fund, there will be built-in indicators to track biodiversity-related spending and to measure environmental impacts.

Cohesion policy funds will continue to support key biodiversity and Natura 2000 investments. The European Regional Development Fund (ERDF) and the Cohesion Fund both aim to redress the main regional and national imbalances by supporting the development and structural adjustment of Member States' economies. The major reform of the Cohesion policy means that the support for the 2014-2020 period is closely linked with the Europe 2020 objectives for smart, sustainable and inclusive growth. The integration of sustainable development, environmental protection is also introduced as a horizontal requirement for all projects supported by the funds. In this respect, the funds may support Member States in financing measures related to biodiversity, including green infrastructure and Natura 2000. Support is also available for a range of broader sustainable regional development measures, with possible indirect links to biodiversity and Natura

[85] http://ec.europa.eu/environment/life/funding/financial_instruments/ncff.htm.
[86] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013R1307.
[87] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1305.

2000. These include supporting investment in adaptation to climate change and disaster risk reduction (e.g. through ecosystem-based solutions), protecting, promoting and developing cultural heritage (e.g. on Natura 2000 sites) and integrating nature conservation into broader plans to regenerate deprived urban and rural communities. In this context, it is worth highlighting that a Court of Auditors report assessed that in the 2007-2013 period, ERDF financing opportunities had not been exploited to their full potential by the Member States[88]. Funding provided under the European Social Fund could also contribute to the achievement of biodiversity objectives through supporting education and training, investments in skills and the creation of new jobs.

Other instruments relevant for biodiversity financing include **EU external financing instruments**, in particular to deliver on the Hyderabad commitments on biodiversity-related flows to developing countries. These instruments are key in delivering on international biodiversity commitments, in particular through the Development and Cooperation Instrument (DCI) and the European Development Fund (EDF), as well as the Partnership Instrument[89]. EU efforts to enhance resources mobilisation from these external instruments are enshrined in the 'Biodiversity for Life' (B4Life) flagship initiative. B4Life is an umbrella framework to ensure better coherence and coordination of EU actions in the area of biodiversity, natural capital and ecosystems. The purpose of B4Life is to highlight the strong linkages between healthy ecosystems and sustainable livelihoods in view of contributing to poverty eradication. In accordance with the EU's overall develop cooperation policy – An Agenda for Change – B4Life aims at tackling biodiversity loss by promoting good governance of natural resources, securing ecosystem services for food security, supporting innovative ways to manage natural capital in the context of green economy and enhancing policy commitments and stakeholders mobilisation to address the wildlife crisis.

To further identify gaps and overlaps in funding conservation activities, the Joint Research Centre of the European Commission is developing a web-based information system (eConservation), mapping past, current and planned biodiversity conservation projects funded by the major donors[90].

The EU is also investing significant resources in research and innovation related to biodiversity through its **Horizon 2020 Work Programme** relating to climate change and food security, sustainable agriculture and forestry, bioeconomy, and marine and inland water.

To better assess the contribution of the EU budget to biodiversity objectives, the Commission has started **tracking biodiversity-related expenditure** across all relevant policy areas (such as agriculture, fisheries,

[88] Special Report No 12 / 2014: "Is the ERDF effective in funding projects that directly promote biodiversity under the EU biodiversity strategy to 2020?" http://www.eca.europa.eu/Lists/ECADocuments/SR14_12/QJAB14012ENC.pdf
[89] Regulation (EU) No 234/2014 of the European Parliament and of the Council of 11 March 2014 establishing a Partnership Instrument for cooperation with third countries
[90] http://econservation.jrc.ec.europa.eu/

transport, regional policy, and environmental protection)[91]. This methodology was applied ex post to report to the Convention on Biological Diversity on EU domestic and international financing flows for biodiversity[92]. Although it is too early to provide a comprehensive assessment of how much the new 2014-2020 budget is contributing to biodiversity objectives, preliminary estimates of how much relevant EU instruments are expected to contribute have been published as part of the communication on the draft annual EU budget at the beginning of each year[93].

In addition, the role of the private sector in the funding of biodiversity protection is being strengthened, including through setting up of the NCFF (see box 9), which will contribute to implementing EU policy and legislation by demonstrating the financial viability of natural capital projects and attracting funding from the private sector. Potentially, the European Fund for Strategic Investments can also provide complementary funding.

Partnerships for Biodiversity

The EU 2020 Biodiversity targets cannot be achieved without strong partnerships and the full engagement and efforts from key actors at all levels. Soon after the adoption of the strategy, a **common implementation framework (CIF)[94]** was adopted, involving the European Commission and Member States in partnership with key stakeholders and civil society.

Specifically, the implementation framework aims to:

i. facilitate implementation of the EU Biodiversity Strategy to 2020 by putting in place a clear and logical EU-level governance framework that is as efficient and effective as possible;
ii. create ownership for the implementation of the strategy across all relevant policy areas by involving representatives from a wide range of services, ministries and institutions in its implementation;
iii. ensure the involvement of all interested stakeholders beyond the traditional 'biodiversity community' at the appropriate level of policymaking; and
iv. minimise duplication of work and maximise synergies between efforts undertaken at different levels by various actors and stakeholders; share information and best practice; and address common challenges.

The CIF also serves the purposes of monitoring, assessing and reporting on progress in implementing the strategy. Most of the factual information used in this mid-term review is drawn from the consultation process that took place within this context (cf. meetings of the Nature Directors and the Coordination Group for

[91] http://ec.europa.eu/environment/nature/biodiversity/financing_en.htm
[92] https://www.cbd.int/financial/reporting.shtml
[93] See biodiversity financing table in annex V of political presentation documents: http://ec.europa.eu/budget/annual/index_en.cfm#statementEstimates
[94] http://biodiversity.europa.eu/policy

Biodiversity and Nature, involving Member States and key stakeholder groups). Representatives of various European Commission services also provided updates on specific actions and targets.

Local and regional authorities[95] have a key role in the sustainable management of biodiversity and ecosystem restoration on the ground. To this end, they need to be equipped with the necessary human and financial resources, supported by appropriate legal and policy tools, and their capacities built through decentralized cooperation, partnerships and experience exchange.

There has been considerable progress in establishing partnerships and engaging stakeholders and civil society. Amongst others, the **EU Business and Biodiversity Platform** (B@B platform) was successfully re-launched and ensures the active involvement of businesses in the implementation of the Strategy.
The Platform has over 250 Members today including +20 multinationals, +100 SMEs, +10 Member State Representatives and numerous NGOs. Most importantly, many of the multinationals and SMEs are actively working with the Commission on delivering on the Platform's work streams, which focus on natural capital accounting; innovation for biodiversity and business; and access to finance and innovative finance mechanisms. B@B is a member of the Global Platform on Business and Biodiversity under the Convention on Biological Diversity representing the EU region.[96] It takes part in the international network of business and biodiversity initiatives hosted by the Convention and ensures that the B@B Platform objectives are in line with the Convention targets, e.g. with respect to resource mobilisation and innovative financial mechanisms. The EU B@B Platform also helps raise awareness of numerous Member State business and biodiversity platforms (including in Central and Eastern Europe, France, Germany, Netherlands, Poland, Portugal, Spain, Portugal and the UK)[97] and other international initiatives besides the Global Platform.[98]

Since 2000, the European Commission organises each year a major communication event focusing on environmental policy, known as "**Green Week**". In 2015, Green Week's theme was on biodiversity and nature. As the biggest annual conference on European environmental policy, it attracted more than 2000 participants from government, business and industry, non-governmental organisations, academia and the media, and the webstreaming was watched by about 4000 people in more than 30 countries. Green Week offers a unique opportunity for stakeholders' debate and exchange of experiences and best practices.

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[95] See Opinion of the Committee of the Regions on "Multilevel governance of our natural capital: the role of local and regional authorities in promoting the EU Biodiversity Strategy 2020 and implementing the Aichi targets" http://www.toad.cor.europa.eu/corwipdetail.aspx?folderpath=ENVE-V/045&id=22633

[96] http://www.cbd.int/business/nri/eu.shtml.

[97] http://ec.europa.eu/environment/biodiversity/business/links-to-platforms/national-platforms-in-europe/index_en.html.

[98] http://ec.europa.eu/environment/biodiversity/business/links-to-platforms/global-initiatives-and-platform-outside-europe/index_en.html.

The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative drawing attention to the economic benefits of biodiversity including the growing cost of biodiversity loss and ecosystem degradation. TEEB can help decision-makers recognize, demonstrate and capture the values of ecosystem services & biodiversity. The TEEB study was launched by Germany and the European Commission in response to a proposal by the G8+5 Environment Ministers in Potsdam, in 2007, to develop a global study on the economics of biodiversity loss. The study and its reports have gained recognition by environmental experts and beyond, including in the economics community, thanks to its objective analysis of the economic benefits and externalities associated with biodiversity. Over the years, TEEB's popularity has developed into a TEEB "brand" and new TEEB studies[99] have/are been published during the so called "TEEB Implementation" stage. The Commission continues to support the TEEB initiative through the ENRTP-financed TEEB National Implementation Project "Reflecting the Value of Ecosystems and Biodiversity in Policy-Making"[100] and through TEEB for Agriculture and Food[101]. Additionally, the Commission published a TEEB-inspired study on ecosystem accounting and valuation, "A synthesis of approaches to assess and value ecosystem services in the EU in the context of TEEB"[102] and is working on follow-up actions in the EU and its Member States.

The TEEB initiative has attracted many additional partner organisations and donors including the UK and Japan. Most notably, Brazil and India announced to conduct their own TEEB studies at national level. They were soon followed by several European countries including Germany who has launched several TEEB reports[103] for the period 2012-2017 to raise awareness of the diverse natural services and assets in Germany (including TEEB for Business, TEEB for Cities, and TEEB for Rural Areas and a report on Natural Capital and Climate Policy) and France who has launched the same year its national assessment of the French ecosystems and ecosystem services (*Évaluation française des écosystèmes et des services écosystémiques* – EFESE). Similar to France, the UK National Ecosystem Assessment[104] is another TEEB-inspired assessment although it does not carry the TEEB name. Spain also published a TEEB-inspired initiative in September 2014 called the Spanish Ecosystem Assessment[105], followed by further reports in 2015 on "Ecosystems and Biodiversity for Human Wellbeing" [106] and on an "Evaluation of Aquatic Ecosystems Applied to Fisheries Management"[107].TEEB Netherlands produced six TEEB reports[108] between 2012-2014 including on Regional cases, TEEB for Business, Health, TEEB for Cities, TEEB for Bonaire, and TEEB for Land Use

[99] For more information see the box on TEEB under the section "Progress Towards Actions".
[100] http://www.teebweb.org/areas-of-work/teeb-country-studies/
[101] http://www.teebweb.org/agriculture-and-food/
[102] http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/EU%20Valuation.pdf
[103] http://www.teebweb.org/countryprofile/germany/
[104] http://uknea.unep-wcmc.org/
[105] http://www.ecomilenio.es/wp-content/uploads/2015/04/34.EMEC_con-portada_web.pdf
[106] http://www.ecomilenio.es/ecosystems-and-biodiversity-for-human-wellbeing-snea-synthesis-of-key-findings-download/3661
[107] http://www.ecomilenio.es/nuevo-informe-eme-evaluacion-de-los-servicios-de-los-ecosistemas-aplicada-a-la-gestion-pesquera/3785
[108] http://www.teebweb.org/countryprofile/netherlands/

Management. In 2013 a TEEB Nordic[109] report was also published analysing the socio-economic importance of ecosystem services in the Nordic Countries. In 2015 Finland published a TEEB for Finland[110] report analysing the value and social significance of ecosystem services in Finland. Portugal launched a TEEB for Portugal[111] in 2011 planned to be implemented over a period of five years. The Portuguese TEEB for business was finished, commissioned by EDP, *Energias de Portugal*.

To empower civil society around the world to protect and benefit from the conservation of critical ecosystems, the European Commission contributes to an amount of € 20 million in the **Critical Ecosystem Partnership Fund** (CEPF). CEPF is a multi-donor initiative that aims. CEPF targets the richest yet most threatened areas of the world, the Biodiversity Hotspots, and supports local, regional, national and international civil society organizations to strengthen the conservation of these unique ecosystems, while alleviating poverty of local communities. CEPF's approach is bottom up, with wide participation of stakeholders. A detailed Ecosystem Profile is prepared as a basis for investment strategies. In each region, CEPF appoints a Regional Implementation Team to provide grants to civil society in line with the Ecosystem Profile. Results include the creation of network of protected areas, green jobs, sustainable agriculture, provision of (other) vital eco-system services, networks to share information and solidifying conservation communities and mainstreaming conservation of biodiversity in development decisions. Since it was set up in 2000, CEPF invested some USD 178 million. CEPF is unique: it is the only global initiative for biodiversity and ecosystems that focuses directly on civil society. CEPF shows what cooperation between donors can achieve. The other donors are France, Japan, the World Bank, the Global Environmental Fund, Conservation International, the MacArthur Foundation and the Margaret Cargill Foundation & Mava Foundation.

In 2016, the Commission will take over the facilitation of the **Congo Basin Forest Partnership**[112] (CBFP). The Congo Basin Forest Partnership (CBFP) brings together some 70 partners, including African countries, donor agencies and governments, international organizations, NGOs, scientific institutions and the private sector, working to coordinate efforts to protect and sustainably manage forest resources in Central Africa. The partnership aims to enhance natural resource management and improve the standard of living in the Congo Basin. CBFP works in close relationship with the Central African Forests Commission (COMIFAC), the regional body in charge of forest and environmental policy, coordination and harmonisation. Launched at the 2002 World Summit on Sustainable Development in Johannesburg, the CBFP was successively facilitated by the U.S., France, Germany, Canada, US again and now European Commission in 2016. Members of the partnership meet biannually to coordinate priority activities, to propose action on emerging

[109] http://www.teebweb.org/countryprofile/nordic-countries/
[110] https://helda.helsinki.fi/bitstream/handle/10138/152815/FE_1_2015.pdf?sequence=1
[111] http://www.teebweb.org/countryprofile/portugal/
[112] http://pfbc-cbfp.org/home.html

issues and to share information with partners and networks active in the region. CBFP Activities include training for capacity- building, workshops, working committees, consultation groups and information sharing. The State of the Congo Basin Forest Report,[113], coordinated by the EU-funded Observatory for Central African Forests, present the latest research data on the Congo Basin region's biodiversity, resources and development issues.

The need for setting up a partnership among the **EU overseas entities**, which represent a unique and critical part of Europe's natural heritage, was conveyed at a high-level conference on "The European Union and its Overseas Entities: Strategies to counter Climate Change and Biodiversity Loss" under the French Presidency of the European Union in the "Message from Reunion Island". The initiative on Biodiversity and Ecosystem Services in the EU's outermost regions and Territories - BEST - is a follow-up of that meeting's outcomes. The objective of the EU's BEST Initiative[114] is to promote conservation and sustainable use of biodiversity and ecosystem services including ecosystem-based approaches to climate change adaptation and mitigation in European Outermost Regions and European Overseas Countries and Territories.

The European Parliament's BEST Preparatory Action provided seed money of a total of € 6 million for the initiative. The first two years were implemented through 2 open calls for proposals BEST-2011 and BEST-2012 and allowed the funding of 16 projects in in the regions of the South Pacific, Indian Ocean, Caribbean Region, French Guyana, Greenland, Antarctic and Macaronesia, addressing issues such as activities for designation and management of terrestrial and marine protected areas; activities for combatting invasive alien species, synergies using ecosystem services for climate change adaptation and mitigation; valuation of ecosystem services; increasing knowledge; networking, education, capacity building and outreach activities and involving organisations in the Outermost Regions, in the Overseas Countries Territories, in Member States, NGOs, regional organisations and International Organisations. A first partnership with the French Development Aid Agency (AfD) provided an additional support of € 800 000 supporting 2 reserve list proposals and supporting the work towards a sustainable scheme. The third and last year of the BEST Preparatory Action is being implemented through BEST III which shall create the critical mass to achieve the transition towards a sustainable partnership, which will allow swift and easy access for funding activities to achieve the BEST objectives. The BEST III central team and the 7 regional knowledge hubs are developing regional ecosystem profiles using CEPF methodology and BEST strategies which shall inform regional investment strategies, attract financing and trigger implementation.

In 2014 the Message from Guadeloupe called for a sustainable partnership dedicated to biodiversity building on the BEST Preparatory Action. A group should be convened utilising the support of the political leaders of

[113] http://observatoire-comifac.net/edf.php?l=en
[114] http://ec.europa.eu/best

the ORs and OCTs with the mandate to set up this voluntary partnership, including representatives of ORs, OCTS, Member States, the European Commission, European Parliament, European investment and development banks and civil society.

In the meantime and from 2015 onwards the BEST 2.0 Programme (total budget 8 million €), which is part of the EU Biodiversity for Life (B4Life) flagship, will provide capacity building and funding for small-scale and medium-scale field actions in EU Overseas Countries and Territories (OCTs). It aims supporting the BEST preparatory action objectives as well as the priority areas of actions set out in the Overseas Association Decision (OAD), particularly its Article 16.

Building on the biodiversity knowledge

Since 2010, much effort has been made at international, EU and Member States' level to improve the knowledge and evidence base for biodiversity policy. The **EU 2010 Biodiversity Baseline** is providing a reference against which the changes resulting from the implementation of the EU 2010 Biodiversity Strategy are being measured. The 2015 State of the Environment and Outlook Report and supporting assessments of the River Basin Management Plans (2012), Air Quality (2014), State of Nature (2015) and State of the Seas (2015) are built on robust factual information from Member States, and also support knowledge of ecosystems and their services in the EU in the framework of the initiative on **Mapping and Assessment of Ecosystems and their Services (MAES)**. MAES is growing into a powerful, reliable and integrated tool to assist and inform policy and decision making to fully capture ecosystem wealth and the provision of ecosystem services in support of sustaining the EU's natural capital and associated socio-economic benefits. MAES is now recognised as the most advanced regional assessment scheme under the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) and together with the Horizon 2020 Support and Coordination Action – ESMERALDA - will ensure a strong contribution from EU and its Member States to the regional assessment for Europe and Central Asia to be delivered by 2018 in this context.

In line with the 7th Environmental Action Programme, steps are taken at EU level to further strengthen and improve the **science-policy interface and citizen engagement**, such as through the appointment of Chief Scientific Advisors, as already done by some Member States and recently by the Commission with the setting up of a new system for scientific advice to the Commission, and by making better use of institutions or bodies specialising in adapting scientific knowledge for public policy, such as the European Environment Agency and its European Environment Information and Observation Network (EIONET), and the European Parliamentary Research Service[115]. Science-policy support mechanisms should be enhanced in the EU with the publication under Horizon 2020 of a call for "An EU support mechanism for evidence-based policy on

[115] See http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/554175/EPRS_IDA(2015)554175_EN.pdf

biodiversity and ecosystems services" under the overall topic: "SC5-10-2015: Coordinating and supporting research and innovation for the management of natural resources" in 2015.

The accessibility and transparency of data and information used for decision-making is another important issue. The **Biodiversity Information System for Europe (BISE)** has been set up as single entry point for published data and information supporting the implementation and monitoring of the EU 2020 Biodiversity Strategy. Bringing together data on biodiversity and ecosystem services, it links to related policies, environmental data centres, assessments and research findings from various sources. Further developments also include the contribution of stakeholders and citizen science to strengthen the knowledge base and to support decision-making on biodiversity. BISE has integrated within its structure the European Biodiversity Clearing House Mechanism in support of the Convention on Biological Diversity. BISE is a partnership between the European Commission and the European Environment Agency.

To further support efforts associated to the global issues addressed by Target 6 of the EU 2020 Biodiversity strategy, the Joint Research Centre (JRC) of the European Commission developed the **Digital Observatory for Protected Areas (DOPA[116])**. This web based biodiversity information system is designed to assess, monitor and forecast biodiversity in protected areas globally. DOPA has been recognized by the CBD as a reference information system to assess progress towards Aichi Target 11[117] and contributed to key statistics of the 2014 Protected Planet Report[118].

The provision of sound and updated biodiversity information to decision-makers is also the objective of regional observatories promoted by EU-funded projects, such as BIOPAMA, OFAC or BID. The BIOPAMA project, run by the JRC and IUCN, is setting up four regional observatories[119] of biodiversity and protected areas in ACP countries (West/Central Africa, East/Southern Africa, Caribbean, Pacific). The observatories, hosted by regional organisations such as SPREP in Pacific, combine and analyse information coming from DOPA and local providers in order help national and local decision-makers to better invest and manage protected areas. The Observatory for Central African Forests (OFAC)[120] has the same role in Central Africa, but with a broader thematic scope, including the Congo Basin forests under production. The Biodiversity Information for sustainable Development (BID)[121] project coordinated by the GBIF secretariat (Global Biodiversity Information Facility) aims at improving the quality and the use of scientific information related to biodiversity for decision-making by repatriation of existing information into structured and usable

[116] See http://dopa.jrc.ec.europa.eu/
[117] CBD notification SCBD/SAM/DC/SBG/LJ/84384 of 9 March 2015
[118] Juffe-Bignoli, D., et al.. (2014). Protected Planet Report 2014. UNEP-WCMC: Cambridge, UK
[119] http://biopama.org/observatories/
[120] http://observatoire-comifac.net/
[121] http://www.gbif.org/bid

databases, capacity-building of information providers and decision-makers and creation of national platforms dedicated to biodiversity information

Further implementation of the principle of 'produce once, use often' and the common approaches and standards on acquisition and collation of spatial information under the **INSPIRE Directive**[122] and the **Copernicus programme**[123] will help avoid duplication of effort and eliminate unnecessary administrative burdens on public authorities, as will efforts to streamline reporting obligations under different pieces of legislation. Member States gather information to assess environmental impacts of plans, programmes and projects (e.g. through environmental or strategic impact assessments) and should make this information more accessible to the public. The INSPIRE Directive is an important tool to enable the sharing of environmental spatial information among public sector organisations. It will also facilitate public access to environmental spatial information across Europe thus contributing to the implementation of the Aarhus Convention[124].

The **Science for Environment Policy service**[125] from the European Commission is providing weekly News Alert, which summarises scientific studies in easy-to-read language with policy implications clearly highlighted - the studies are carefully selected for quality and European policy relevance. They include Thematic Issues, which take an in-depth look at a key area of environmental research with policy relevance, providing a guide to the latest research in the field; and In-depth Reports, which take a comprehensive look at the latest science for key policy topics.

The **Horizon 2020 programme** provides opportunities to focus on research efforts and to deploy Europe's innovation potential by bringing together resources and knowledge across different fields and disciplines within the EU and internationally. It is supporting relevant research and innovation, notably on innovative nature-based solutions. Work is under way on assessing the contribution technical standards and innovation could make to 'growing the market' of green infrastructure solutions, and on cost-benefit analysis for opportunities in promoting EU-scale projects through a trans-European network green infrastructure initiative. Under Horizon 2020, actions will be launched to support earth observation and GEOSS (Global Earth Observation System of Systems), in particular (including filling data gaps for ecosystems, oceans and developing further citizens' observatories, etc.). It is also worth noting the significant number of ongoing research projects financed under the 7th Framework Programme for Research 2007-13 focusing specifically on biodiversity as ecosystem services, and now at different stages in their implementation (e.g. BESAFE, BIOFRESH, BIOMOT, EU BON, FUNDIVEUROPE, GENESIS, GLOBAQUA, KNEU, KNOWSEAS, LIBERATION, MARS, MIDAS, NEWFOREX, OpenNESS, OPERAs, Policymix, QUESSA, ROBIN,

[122] Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).
[123] Copernicus is the European earth observation programme.
[124] http://www.unece.org/env/pp/treatytext.html
[125] See http://ec.europa.eu/environment/integration/research/newsalert/index_en.htm

SCALES, SPIRAL, STEP, TURAS, VOLANTE).[126] BiodivERsA[127] is a network of 31 national research-funding organisations across 18 European countries, supporting and promoting excellence in pan-European research that offers innovative opportunities for the conservation and sustainable management of biodiversity. It was initially funded under FP7 ERA-NET scheme and from 2015 under HORIZON 2020 ERA-Net COFUND scheme. The projects cover a wide range of issues. For more details on relevant research projects supporting the implementation of the strategy, see list in annex.

However, there are still significant **gaps in knowledge**, some of them relevant to the priority objectives of the 7th EAP. Investing in further data collection and research to fill those gaps is therefore essential to ensure that public authorities and businesses have a sound basis for taking decisions which fully reflect true social, economic and environmental benefits and costs. Some gaps merit particular attention.

There is a **major knowledge gap in the marine environment**: the status of most marine habitats and species is classified as "unknown". The status of fish stocks, as well as the knowledge base itself vary considerably between regional seas. Significant efforts are still needed to enhance coordination of marine biodiversity information across all regions of the EU in order to improve the knowledge base and to strengthen the analytical capacity at the EU level. An improvement of the knowledge base is a key issue for the Commission in the context of Ocean Governance.

Investment is needed to fill the research and knowledge gaps concerning in particular the **status of species and habitats,** the **contribution of the Natura 2000 network to conservation status**, the **assessment of the health and condition of ecosystems**, as well as the **links to ecosystem services**, and the **role of biodiversity as key component for resilient ecosystems, human well-being and health**. The integration and open access of biodiversity monitoring and reporting data into relevant EU legislation (including related to agriculture, fisheries, and regional policy) also needs to be further improved. This should be a priority for all knowledge partners for the remainder of the implementation period

Much is still unknown when it comes to the **status and trends of Europe's overseas biodiversity** and its relationship to the functioning of ecosystems and the long-term delivery of ecosystem services. In 2008, the 'Message' from the conference at Reunion Island underlined the critical need for establishing "long-term

[126] http://www.besafe-project.net/, http://www.freshwaterbiodiversity.eu/, http://www.biomotivation.eu/, http://www.eubon.eu/, http://www.fundiveurope.eu/, http://www.bioforsk.no/ikbViewer/page/prosjekt/hovedtema?p_dimension_id=16858&p_menu_id=16904&p_sub_id=16859&p_dim2=16860 http://www.globaqua-project.eu/ , http://www.biodiversityknowledge.eu/, http://www.knowseas.com/, http://www.fp7liberation.eu/Participants, http://www.mars-project.eu/, http://www.eu-midas.net/, http://www.newforex.org/, http://www.openness-project.eu/, http://operas-project.eu/, http://policymix.nina.no/, http://www.quessa.eu/, http://robinproject.info/home/, http://www.scales-project.net/, http://www.spiral-project.eu/, http://www.steproject.eu/, http://www.turas-cities.org/, http://www.volante-project.eu/

[127] http://www.biodiversa.org/

monitoring programmes as well as biological and socio-economic indicators adapted to the constraints specific to the outermost regions and overseas countries and territories". The current situation shows how it is difficult to analyse to what extent conservation action is sufficient to protect EU overseas biodiversity and the impact of EU policies and funds in this regard. A dedicated common set of indicators to monitor status and trends of EU overseas natural capital will be important to ensure sustainable development. Such an effort should build on ongoing activities and initiatives and should contribute to improve the effectiveness of the European policies and programmes.

Finally, the EU needs to adopt a systematic and integrated approach to risk management, particularly in relation to the evaluation and management of **new and emerging policy areas and related risks** as well as the adequacy and coherence of regulatory responses.

Horizon 2020 is contributing to meeting identified knowledge needs and supporting policy development and transition to an inclusive green economy and the interplay between socioeconomic and environmental factors. Improving our understanding of sustainable consumption and production patterns, how the costs and benefits of action and the costs of inaction can be considered more accurately, how changes in individual and societal behaviour contribute to environmental outcomes and how Europe's environment is affected by global megatrends can help to better target policy initiatives towards improving resource efficiency and relieving pressure on the environment.

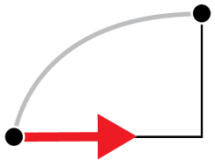
Annex I: 'Dashboard' – a summary of progress towards the targets and actions of the EU Biodiversity Strategy to 2020

The table below provides an assessment of progress made towards individual components of each of the EU biodiversity targets and actions, based on the available evidence. It aims to provide summary information on whether or not we are on track.

Progress towards targets:

On track to achieve target (if we continue on our current trajectory we expect to achieve the target by 2020)

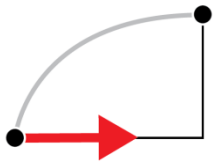
Progress towards the target but at an insufficient rate (increased efforts are needed to meet the target by its deadline)



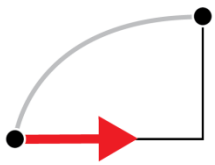
No significant overall progress (much stronger efforts are needed to meet the target by its deadline)

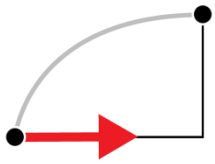
Progress on implementing actions:

☺	Fully implemented
😐+	Significant progress on implementation
😐-	Implementation lagging behind
☹	No implementation

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Headline Target To halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.	 No significant overall progress (much stronger efforts are needed to meet the target by its deadline)
Target 1 – Fully implement the Birds and Habitats Directives To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.	 Progress towards the target but at an insufficient rate (increased efforts are needed to meet the target by its deadline)

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Action 1a) Member States and the Commission will ensure that the phase to establish Natura 2000, including in the marine environment, is largely complete by 2012.	😐+
Action 1b) Member States and the Commission will further integrate species and habitats protection and management requirements into key land and water use policies, both within and beyond Natura 2000 areas.	😐-
Action 1c) Member States will ensure that management plans or equivalent instruments which set out conservation and restoration measures are developed and implemented in a timely manner for all Natura 2000 sites.	😐-
Action 1d) The Commission, together with Member States, will establish by 2012 a process to promote the sharing of experience, good practice and cross-border collaboration on the management of Natura 2000, within the biogeographical frameworks set out in the Habitats Directive.	☺
Action 2) The Commission and Member States will provide the necessary funds and incentives for Natura 2000, including through EU funding instruments, under the next multiannual financial framework. The Commission will set out its views in 2011 on how Natura 2000 will be financed under the next multi-annual financial framework	😐 +
Action 3a) The Commission, together with Member States, will develop and launch a major communication campaign on Natura 2000 by 2013.	☺
Action 3b) The Commission and Member states will improve cooperation with key sectors and continue to develop guidance documents to improve their understanding of the requirements of EU nature legislation and its value in promoting economic development.	☺
Action 3c) The Commission and Member States will facilitate enforcement of the nature directives by providing specific training programmes on Natura 2000 for judges and public prosecutors, and by developing better compliance promotion capacities	😐+
Action 4a) The Commission, together with Member States, will develop by 2012 a new EU bird reporting system, further develop the reporting system under Article 17 of the Habitats Directive and improve the flow, accessibility and relevance of Natura 2000 data	☺
Action 4b) The Commission will create a dedicated ICT tool as part of the Biodiversity Information System for Europe to improve the availability and use of data by 2012	😐+

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Target 2 - Maintain and restore ecosystems and their services By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15 % of degraded ecosystems.	 Progress towards the target but at an insufficient rate (increased efforts are needed to meet the target by its deadline)
Action 5) Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.	😐+
Action 6 a) By 2014, MS, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level.	😐-
Action 6b) The Commission will develop a GI Strategy by 2012 to promote the deployment of green infrastructure in the EU in urban and rural areas, including through incentives to encourage up-front investments in GI projects and maintenance of ecosystem services, for examples through better targeted use of EU funding streams and Public Private Partnerships.	☺
Action 7a) In collaboration with the MS, the Commission will develop a methodology for assessing the impact of EU funded projects, plans and programmes on biodiversity by 2014.	😐+
Action 7b) The Commission will carry out further work with a view to proposing by 2015 an initiative to ensure there is no net loss of ecosystems and their services (e.g. through compensation or offsetting schemes).	😐-
Target 3 - Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity **3A) Agriculture**: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.	 No significant overall progress (much stronger efforts are needed to meet the target by its deadline)

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
(*) Improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under target 2	
Action 8a) The Commission will propose that CAP direct payments will reward the delivery of environmental public goods that go beyond cross-compliance (e.g. permanent pasture, green cover, crop rotation, ecological set-aside, Natura 2000).	😐+
Action 8b) The Commission will propose to improve and simplify the GAEC (Good Agricultural and Environmental Conditions) cross-compliance standards and consider including the Water Framework Directive within the scope of cross-compliance once the Directive has been implemented and the operational obligations for farmers have been identified in order to improve the state of aquatic ecosystems in rural areas.	😐+
Action 9a) The Commission and Member States will integrate quantified biodiversity targets into Rural Development strategies and programmes, tailoring action to regional and local needs.	😐-
Action 9b) The Commission and Member States will establish mechanisms to facilitate collaboration among farmers and foresters to achieve continuity of landscape features, protection of genetic resources and other cooperation mechanisms to protect biodiversity.	😐-
Action 10) The Commission and Member States will encourage the uptake of agri-environmental measures to support genetic diversity in agriculture and explore the scope for developing a strategy for the conservation of genetic diversity.	😐+
3B) Forests: By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM), are in place for all forests that are publicly owned and for forest holdings above a certain size** (to be defined by the Member States or regions and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement(*) in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline. (*) Improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU importance in Target 1 and the restoration of degraded ecosystems under target 2. (**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of Management Plans or equivalent instruments that are in line with SFM	 No significant overall progress (much stronger efforts are needed to meet the target by its deadline)

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Action 11a) Member States and the Commission will encourage the adoption of Management Plans, *inter alia* through use of rural development measures and the LIFE+ programme.	😐-
Action 11b) Member States and the Commission will foster innovative mechanisms (e.g. Payments for Ecosystem Services) to finance the maintenance and restoration of ecosystem services provided by multifunctional forests.	😐-
Action 12) Member States will ensure that forest management plans or equivalent instruments include as many of the following measures as possible: – maintain optimal levels of deadwood, taking into account regional variations such as fire risk or potential insect outbreaks; – preserve wilderness areas; – ecosystem-based measures to increase the resilience of forests against fires as part of forest fire prevention schemes, in line with activities carried out in the European Forest Fire Information System (EFFIS); – specific measures developed for Natura 2000 forest sites; – ensuring that afforestation is carried out in accordance with the Pan-European Operational Level Guidelines for SFM, in particular as regards the diversity of species, and climate change adaptation needs.	😐-
Target 4 - Ensure the sustainable use of fisheries resources and achieve GES Achieve Maximum Sustainable Yield (MSY) by 2015*. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive. * *The reformed Common Fisheries Policy (CFP) which entered into force in 2014 aims to ensure MSY exploitation rates for all stocks by 2015 where possible, and at the latest by 2020.*	 Progress towards the target but at an insufficient rate (increased efforts are needed to meet the target by its deadline)
Action 13a) The Commission and Member States will maintain and restore fish stocks to levels that can produce MSY in all areas in which EU fish fleets operate, including areas regulated by Regional Fisheries Management Organisations, and the waters of third countries with which the EU has concluded Fisheries Partnership Agreements.	😐+ (NE Atlantic, Baltic) 😐- (Black Sea, Mediterranean)
Action 13b) The Commission and Member States will develop and implement under the CFP long-term management plans by fixing	😐+

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
fishing opportunities such as quotas in line with scientific advice with harvest control rules based on the MSY approach. These plans should be designed to respond to specific time-related targets and be based on scientific advice and sustainability principles.	
Action 13c) The Commission and Member States will significantly step up their work to collect data to support implementation of MSY. Once this objective is attained, scientific advice will be sought to incorporate ecological considerations in the definition of MSY by 2020.	😐+ (NE Atlantic, Baltic) 😐- (Black Sea, Mediterranean)
Action 14a) The EU will design measures to gradually eliminate discards, to avoid the by-catch of unwanted species and to preserve vulnerable marine resources and marine ecosystems in accordance with EU legislation and international obligations.	😐+
Action 14b) The Commission and Member States will support the implementation of the Marine Strategy Framework Directive, including through providing financial incentives through the European Maritime and Fisheries Fund Regulation (EU) N° 508/2014 for marine protected areas (including Natura 2000 areas and those established by international or regional agreements). This could include restoring marine ecosystems, adapting fishing activities and promoting the involvement of the sector in alternative activities, such as eco-tourism, monitoring and managing marine biodiversity, and combating marine litter.	😐+
Target 5 - Help combat Invasive Alien Species By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.	 On track to achieve target (if we continue on our current trajectory we expect to achieve the target by 2020)
Action 15) The Commission will integrate additional biodiversity concerns into the Plant and Animal Health regimes by 2012.	☺ (Plant) 😐+ (Animal)
Target 16) The Commission will fill policy gaps in combating IAS by developing a dedicated legislative instrument by 2012.	☺

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Target 6 – Help avert global biodiversity loss By 2020, the EU has stepped up its contribution to averting global biodiversity loss	 Progress towards the target but at an insufficient rate (increased efforts are needed to meet the target by its deadline)
Action 17a) Under the EU flagship initiative on resource efficiency, the EU will take measures (which may include demand and/or supply side measures) to reduce the biodiversity impacts of EU consumption patterns, particularly for resources that have significant negative effects on biodiversity.	😐+
Action 17b) The Commission will enhance the contribution of trade policy to conserving biodiversity and address potential negative impacts by systematically including it as part of trade negotiations and dialogues with third countries, by identifying and evaluating potential impacts on biodiversity resulting from the liberalisation of trade and investment through ex-ante Trade Sustainability Impact Assessments and ex-post evaluations, and seek to include in all new trade agreements a chapter on sustainable development providing for substantial environmental provisions of importance in the trade context including on biodiversity goals.	😐+
Action 17c) The Commission will work with Member States and key stakeholders to provide the right market signals for biodiversity conservation, including work to reform, phase out and eliminate harmful subsidies at both EU and Member State level, and to provide positive incentives for biodiversity conservation and sustainable use.	😐+
Action 18a) The Commission and Member States will contribute their fair share to international efforts to significantly increase resources for global biodiversity as part of the international process aimed at estimating biodiversity funding needs and adopting resource mobilisation targets for biodiversity at CBD CoP11 in 2012 (as set out in CoP10 Decision X/3).	☺
Action 18b) The Commission will improve the effectiveness of EU funding for global biodiversity inter alia by supporting natural capital assessments in recipient countries and the development and/or updating of National Biodiversity Strategies and Action Plans, and by improving coordination within the EU and with key non-EU donors in implementing biodiversity assistance/projects.	☺

EU Biodiversity Strategy to 2020: Targets and Actions	Progress
Action 19) The Commission will continue to systematically screen its development cooperation action to minimise any negative impact on biodiversity, and undertake Strategic Environmental Assessments and/or Environmental Impact Assessments for actions likely to have significant effects on biodiversity.	😐+
Action 20) The Commission will propose legislation to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the European Union so that the EU can ratify the Protocol as soon as possible and by 2015 at the latest, as required by the global target.	☺

Annex II: Indicative list of research projects focusing specifically on biodiversity and ecosystem services funded under EU's seventh Framework Programme for Research (FP7) and EU research programme Horizon 2020, as well as projects from former EU Research Framework programmes FP5 and FP6

BIOTA Cluster[128]

Biodiversity rests on a vastly complex nexus of social, economic, cultural, and ecological dimensions that embrace huge scales in terms of space and time. The threat to biodiversity's richness is global but many of its pressures and drivers are local, which means that potential solutions often require detailed local or regional knowledge.

This scientific and intellectual challenge is borne out by the wide range of research projects in the Commission's last two Framework Programmes. Together FP5 and FP6 have devoted € 170 million to research regarding biodiversity and ecosystems.

Research carried out within the BIOTA cluster is the **European scientific response to the Convention on Biological Diversity and the EU 2020 Biodiversity Strategy**, and aims to determine and promote strategic approaches to the conservation of biodiversity and the management of ecosystem services in Europe.

Projects in the BIOTA Cluster:

- Assess and predict the impact of major drivers of biodiversity
- Are developing tools, such as biodiversity indicators, to promote the conservation and sustainable use of biodiversity
- Seek to identify and resolve conflicts between society, economy and biodiversity
- Support the conservation of biodiversity by creating databases on the taxonomy, biology and ecology of Europe's plants and animals.
- Strengthen scientific and technological excellence on biodiversity research through the durable integration of research capacities across Europe

All projects are co-funded by the European Community, most of them under the FP7 Biodiversity values, sustainable use and livelihoods, FP6 Global Change and Ecosystems and under the FP5 Global Change, Climate and Biodiversity Key Action of the Energy, Environment and Sustainable Development Programme.

For links to the projects see BIOTA https://wiki.ceh.ac.uk/display/biota/Home

[128] http://ec.europa.eu/research/environment/newsanddoc/article_3906_en.htm

ERA-nets seek better structuring and promoting collaboration

- BiodivERsA http://www.biodiversa.org/ is a network of national funding organisations promoting pan-European research that offers innovative opportunities for the conservation and sustainable management of biodiversity. It was initially funded under FP7 ERA-NET scheme and from 2015 under HORIZON 2020 ERA-Net COFUND scheme.
- NETBIOME http://www.netbiome.org/ and NETBIOME-CSA is a project funded by the EU FP7 CSA Scheme. NetBiome-CSA will extend and strengthen research partnerships and cooperation for smart and sustainable management of tropical and subtropical biodiversity in outermost regions (ORs) and overseas countries and territories (OCTs).

List of projects under 7th Framework Programme for Research 2007-13 relevant for biodiversity[129]:

- BESAFE (Biodiversity and Ecosystem Services: Arguments for our Future Environment) http://www.besafe-project.net/
- BIOFRESH (The network for global freshwater biodiversity) http://www.freshwaterbiodiversity.eu/
- BIOMOT (Motivational strength of ecosystem services and alternative ways to express the value of biodiversity) http://www.biomotivation.eu/
- EU BON (Building the European Biodiversity Observation Network) http://www.eubon.eu/
- FUNDIVEUROPE (Functional significance of forest biodiversity) http://www.fundiveurope.eu/
- GLOBAQUA (Managing the effects of multiple stressors on aquatic ecosystems under water scarcity) http://www.globaqua-project.eu/
- KNEU (Developing a Knowledge Network for EUropean expertise on biodiversity and ecosystem services) http://www.biodiversityknowledge.eu/
- KNOWSEAS (Knowledge-based sustainable Management for Europe's seas) http://www.knowseas.com/
- LIBERATION (Linking farmland Biodiversity to Ecosystem services for effective ecological intensification) http://www.fp7liberation.eu/Participants
- MARS (Managing Aquatic ecosystems and water resources under multiple stress) http://www.mars-project.eu/

[129] not yet included in the BIOTA cluster

- MIDAS (Managing Impacts of Deep seA reSource exploitation)
  http://www.eu-midas.net/
- NEWFOREX (New Ways to Value and Market Forest Externalities)
  http://www.newforex.org/
- OpenNESS (Operationalisation of Natural Capital and Ecosystem Services)
  http://www.openness-project.eu/
- OPERAs (Operational Potential of Ecosystem Research Applications)
  http://operas-project.eu/
- Policymix (Assessing the role of economic instruments in policy mixes for biodiversity conservation and ecosystem services provision)
  http://policymix.nina.no/
- QUESSA (Quantification of ecological services for sustainable agriculture)
  http://www.quessa.eu/
- ROBIN (Role of Biodiversity in Climate Change Mitigation)
  http://robinproject.info/home/
- SCALES (Securing the Conservation of biodiversity across Administrative Levels and spatial, temporal and Ecological Scales)
  http://www.scales-project.net/,
- SPIRAL (Interfacing Biodiversity and Policy)
  http://www.spiral-project.eu/
- TURAS (Transitioning towards Urban Resilience and Sustainability)
  http://www.turas-cities.org/
- VOLANTE (Visions of Land Use Transitions in Europa)
  http://www.volante-project.eu/
- LAGOONS (Integrated water resources and coastal zone management in European lagoons in the context of climate change)
  http://lagoons.biologiaatua.net/
- HERCULES (Sustainable Futures for Europe's Heritage in Cultural landscapes)
  http://www.hercules-landscapes.eu
- STAR-FLOOD (Towards more resilient flood risk governance)
  http://www.starflood.eu/
- MedSeA project on Mediterranean Sea Acidification in a changing climate
  http://medsea-project.eu

Outlook on HORIZON 2020 research programme 2014-2020

Under Horizon 2020, actions will be launched to support earth observation and GEOSS (Global Earth Observation System of Systems), in particular (including filling data gaps for ecosystems, oceans and developing further citizens' observatories, etc.).

- EU Horizon 2020 Coordination and support action ESMERALDA – Enhancing ecosystem sERvices mApping for poLicy and Decision mAking http://www.esmeralda-project.eu/showpage.php?storyid=11754
- "An EU support mechanism for evidence-based policy on biodiversity and ecosystem services" under the overall topic: "SC5-10-2015: Coordinating and supporting research and innovation for the management of natural resources" published in 2015

List of BIOTA cluster projects

OPERAs

OPERAs (Operational Potential of Ecosystems Research Applications) aims to improve understanding of how applying ES/NC concepts in managing ecosystems contributes to human well-being in different social-ecological systems in inland and coastal zones, in rural and urban areas, related to different ecosystems including forests and fresh water resources.

PERSEUS

Policy-orientated marine Environmental Research for the Southern European Seas (PERSEUS) is a research project that assesses the dual impact of human activity and natural pressures on the Mediterranean and Black Seas. PERSEUS merges natural and socio-economic sciences to predict the long-term effects of these pressures on marine ecosystems. The project aims to design an effective and innovative research governance framework, which will provide the basis for policymakers to turn back the tide on

VECTORS

VECTORS aims to improve our understanding of how environmental and man-made factors are impacting marine ecosystems now and how they will do so in the future. The project will also examine how these changes will affect the range of goods and services provided by the oceans, the ensuing socio-economic impacts and some of the measures that could be developed to mitigate or adapt to these changes.

SPIRAL

The overall aim of SPIRAL is to enhance the connectivity between biodiversity research and policy making in order to improve the conservation and sustainable use of biodiversity.

ALTER-Net

ALTER-Net's main objective is to achieve lasting integration amongst its 24 partner institutes, and others, all of whom are involved in biodiversity research, monitoring and/or communication. By the end of the project, ALTER-Net should have brought about sufficient change to the way these organisations work, so that they operate in a far more integrated fashion than before the start of the project.

ROBIN

ROBIN is an EU-funded project running for four years from November 2011. It will provide information for policy, together with resource use options, under scenarios of socio-economic and climate change.

CASCADE

CASCADE: (CAtastrophic Shifts in drylands: how CAn we prevent ecosystem DEgradation?) project will investigate and analyze a range of dryland ecosystems in southern Europe to obtain a better understanding of sudden shifts in drylands that may lead to major losses in biodiversity and concomitant ecosystem services.

BIOMOT

Can economic methods to assess the value of biodiversity be improved such that they reach out to what really motivates action? Can alternative approaches be developed that lie closer to what connects people to nature and can appeal to their actions instead of only to their feelings?

STEP

The project Status and Trends in European Pollinators (STEP) will document the nature and extent of these declines, examine functional traits associated with particular risk, develop a Red List of some European pollinator groups, in particular bees and lay the groundwork for future pollinator monitoring programmes.

SCALES

SCALES will seek ways to build the issue of scale into policy and decision-making and biodiversity management. It will advance our knowledge of how anthropogenic and natural processes interact across scales and affect biodiversity.

PALMS

The general scientific objectives of PALMS, supported by the European Commission under FP7 Use of natural resources: the impact on biodiversity, ecosystem, goods and services, are to study the effect of extraction and trade of palms on forest in the western Amazon, the Andes and the Pacific lowlands.

HighArcs

HighARCS has completed a detailed multidisciplinary situation analysis of highland aquatic resources, focused on values, livelihoods, conservation issues and wise-use options at five sites in Asia.

REFRESH

REFRESH is concerned with the development of a system that will enable water managers to design cost-effective restoration programmes for freshwater ecosystems at the local and catchment scales that account for the expected future impacts of climate change and land-use change in the context of the WFD and Habitats Directive.

HERMIONE

From the polar waters of the Arctic to the warm seas of the Mediterranean, Europe has almost 90,000 km of coastline. Underneath the waves our seas are home to some of the most spectacular ecosystems on Earth. Ecosystems such as cold-water coral reefs and hydrothermal vents support a huge diversity of life that is both beautiful and alien, but also vulnerable to the impacts of climate change and human activities. The HERMIONE project is focused on investigating these and other ecosystems.

CoralFISH

CoralFISH is assessing the interaction between corals, fish and fisheries, in order to develop monitoring and predictive modelling tools for ecosystem based management in the deep waters of Europe and beyond.

ConGRESS

ConGRESS (Conservation Genetic Resources for Effective Species Survival) is an EU consortium dedicated to transferring current knowledge in conservation genetics and in the analysis of genetic variation data to management professionals and policy makers.

BioFresh

A major challenge is to complement the existing databases on freshwater biodiversity and distribution patterns, along with strict quality controls, to consent the continuous integration of new data. Within BioFresh, these data will be linked with geographical and socio-economic information. By developing just such a universally accessible information platform, BioFresh will foster our understanding of present freshwater biodiversity and changes expected for the future.

BiodivERsA2

The loss of biodiversity and the degradation of ecosystems are major scientific and societal challenges. Addressing them and providing scientific support to policy requires a coherent research framework, with coordinated strategies and programmes at the regional and international levels, which are the relevant scales for many biodiversity issues.

BioScore

BioScore offers you a European biodiversity impact assessment tool. The tool contains indicator values on the ecological preferences of more than 1000 species of birds, mammals, amphibians, reptiles, fish, butterflies, dragonflies, aquatic macro-invertebrates and vascular plants. These values are linked to policy-related pressures and environmental variables.

BioScene

For centuries agriculture has played a multifunctional role in sustaining mountain biodiversity in Europe through the management of habitats, species and landscapes. With significant agricultural adjustment and contraction now in prospect, there is potential for major impacts on mountain biodiversity.

BioPlatform

BioPlatform is a network of scientists and policy makers that aims at improving the effectiveness and relevance of European biodiversity research, fulfilling functions that provide significant components of a European Research Area.

BIOMAN

The BIOMAN project looked at how biodiversity in shallow lakes, a habitat threatened throughout Europe, is affected by environmental conditions and human impacts. We wanted to develop an index that could track how biodiversity and nature value of shallow lakes respond to management.

BioHab

The key achievement of the BioHab project is the development of a standardised field recording system for Europe, involving about 100 habitat categories, that transcends the need for specialist knowledge. It will be able to provide valid, statistical estimates of habitats and link these with other habitat classifications and biodiversity.

BIOFORUM

The purpose of the BIOFORUM project is to reduce the conflict between the conservation of biodiversity and economic development

BIOECON

The main focus of BIOECON was to promote research that (a) furthers our understanding of the anthropocentric causes of biodiversity depletion and b) provides policy prescriptions on how the conservation of biodiversity can be reconciled with economic development. In particular the project was directed to the better understanding of the interface between human societies and biological resources, and how this interface might be better managed and directed to the purpose of conserving biological di

BioCASE

The Biological Collection Access Service for Europe, BioCASE, is a transnational network of biological collections of all kinds. BioCASE enables widespread unified access to distributed and heterogeneous European collection and observational databases using open-source, system-independent software and open data standards and protocols.

BioAssess

The main purpose of BioAssess- the Biodiversity Assessment Tools Project- was to develop biodiversity indicators- or "biodiversity assessment tools" - that could be used to rapidly assess biodiversity. In addition, the BioAssess project aimed to measure the impacts on biodiversity of major land use changes in eight European countries.

MIDTAL

The purpose of MIDTAL is to support the common fisheries policy to aid the national monitoring agencies by providing new rapid tools for the identification of toxic algae and their toxins so that they can comply

with ECC directive 91/1491/CEE that can be converted to cell numbers and reduce the need for the mouse bioassay.

SALSEA-Merge

SALSEA-Merge will deliver innovation in the areas of: genetic stock identification techniques; new genetic marker development; fine scale estimates of growth on a weekly and monthly basis; the use of novel high seas pelagic trawling technology; individual stock-linked estimates of food and feeding patterns; and novel stock specific migration and distribution models.

BABE

A major first objective of the BABE project will be to make a genetic inventory of the European honeybees to identify native honeybee populations by their differences in DNA. This will show the regional variation that exists in European bees. This base line data will help beekeepers to focus on and improve their native subspecies rather than rely on the importation of mated queen bees from other areas, since this would hinder improvement of native bees.

ALARM

ALARM provides coherent scenarios of socio-economic, climate, land-use and other biodiversity-relevant trends, exploring the framework conditions for biodiversity pressures. An innovative element of the ALARM project is the combination of long term trend and short term shock scenarios, allowing a sensitivity analysis of currently predominating trend projections.

SESAME

The general scientific objectives of SESAME IP, supported by the European Commission, are to assess and predict changes in the Mediterranean and Black Sea ecosystems as well as changes in the ability of these ecosystems to provide goods and services.

SOILSERVICE

The general scientific objectives of SOILSERVICE, supported by the European Commission under FP7 Contribution of biodiversity to ecosystem services, are to value soil biodiversity through the impact on ecosystem services and propose how these values can be granted through payments.

LiveDiverse

The general scientific objectives of LiveDiverse, supported by the European Commission under FP7 Biodiversity values, sustainable use and livelihoods, are to develop new knowledge on the interactions between human livelihoods and biodiversity in riparian and aquatic contexts in four developing countries (Vietnam, India, South Africa and Costa Rica).

EBONE

The key challenge of EBONE, supported by the European Commission under FP7 Contribution to a global biodiversity observation system, is to is to develop a biodiversity observation system that is transmissible, cost effective and provides added value to the currently independent data sources of in situ data and EO.

HUNT

The general scientific objectives of HUNT, supported by the European Commission under FP7 Biodiversity values, sustainable use and livelihoods, are to use hunting as a lens through which to examine the wider issue of how people interact with biodiversity.

EcoChange

The final goal is to provide data, scenarios and associated confidence limits so that policy makers and land managers can use them for anticipating societal problems and for designing sustainable conservation strategies by accounting the most likely global change effects on biodiversity and ecosystems.

Annex III: Indicative list of development cooperation projects focusing specifically on biodiversity and ecosystem services, funded under the European Development Fund and the Global Public Good and Challenges thematic programme of the Development Cooperation Instrument, as well as the former Environment and Natural Resources Thematic Programmes of the DCI.

The EU has long supported biodiversity conservation and recognised the links between conserving biodiversity and promoting human development. Starting from the mid-1980s, the EU has helped developing countries manage biological resources in a sustainable way. It has provided long-standing support to biodiversity conservation in national parks and protected areas, especially in Africa, by increasing the capacity of local authorities and NGOs in management and finance, monitoring and evaluation, and in promoting income-generating activities compatible with conservation.

The following list displays some of the most significant biodiversity programmes which EuropeAid has supported.

- **BIOPAMA:** The Biodiversity and Protected Areas Management Programme (BIOPAMA) addresses threats to biodiversity in African, Caribbean and Pacific (ACP) countries. Specifically, the programme enhances existing institutions and networks by making the best available science and knowledge available for building capacity to improve policies and better decision-making on biodiversity conservation, protected areas management and access and benefit sharing. BIOPAMA is a four year-initiative (2012-2016) funded by resources from the intra-ACP envelope of the 10th European Development Fund (EDF).

- **BMP:** The Biodiversity Management Program in the Horn of Africa Region is a four year program implemented by IGAD (Inter-Governmental Authority for Development) at the regional level, and through grants to three Implementing Partners. The programme aims to contribute to reduction of poverty through capacity building in sustainable management of biodiversity resources and by promoting regional integration in the environment sector through harmonisation of IGAD Member States' activities in sustainable management of biodiversity resources.

- **PACSBIO:** The EU is funding in Bolivia a Sector Budget Support Program (18 M EUR) to support the enforcement of the National System of Protected Areas and through it, the preservation of the natural and cultural patrimony, Sustainable economic development, Social participation in PAs management and improvement of PAs management capacities. In this context, the Joint Research Centre of the EC has been asked to develop a Digital Observatory for Bolivian protected Areas (BOPA). PACSBio includes a specific training and capacity building component on Protected Areas Management.

- **ECOFAC-V:** The best-known action of this kind is the Conservation and Rational Use of Forest Ecosystems in Central Africa Programme (ECOFAC), which protects the habitats of elephants, great

apes and other emblematic species and ecosystems. The EU has invested nearly EUR 140 million in ECOFAC since 1992, supporting 16 major protected areas in eight Central African countries, covering an area of more than 13 million hectares. The program has initiated large-scale conservation activities in Central Africa and promoted the good governance of ecosystems by national and regional institutions, in particular the Réseau des Aires Protégées d'Afrique Centrale (RAPAC)

- **PAPE:** Projet d'Appui aux Parcs de l'Entente. The project aims at improving the management of the WAP complex of national parks (complex formed by the parks of W, Arly and Pendjari at the borders of Burkina Faso, Niger and Benin) and their animal and plant resources, by a more coordinated and efficient network of three national institutions.

- **OFAC:** the Observatory for Central African Forests. (The overall objective of the Observatory is in the context of the implementation of the COMIFAC Convergence Plan for better contribution of natural resources to the fight against poverty of local populations. The State of the Congo Basin Forest Report,[130], coordinated by OFAC, present the latest research data on the Congo Basin region's biodiversity, resources and development issues.

- Support to **National Parks of Democratic Republic of Congo**. Four key national parks (Virunga, Salonga, Garamba, Yangambi and Upemba) are supported in the national programme of the EDF (120 million EUR), with a focus on local development activities around protected areas (agriculture, energy), conservation of the core area, capacity-building at graduate level and land-use planning.

- Support to **National Parks of Chad**. This program supports the Zakouma National Park since 1987 and will extend the activities to Ennédi National Park for a total amount of 53 Million EUR for the period 2014-2020.

- **CEPF**: As already mentioned in Chapter I – Horizontal Measures/Partnerships for Biodiversity – the EU joined the Critical Ecosystem Partnership Fund (CEPF) as co-donor in 2012. CEPF is currently the biggest multi-donor fund for biodiversity that specifically aims at strengthening and empowering civil society organisations in nearly all biodiversity hot spots worldwide, showing a growing influence power and fund-leveraging capacity.

- **CAWHFI** (Central Africa World Heritage Forest Initiative): The management of the vast landscape around forested World Heritage sites (Odzala, Minkébé, Dja) is coordinated by UNESCO with key partners (World Wide Fund, Wildlife Conservation Society, African Parks Network with a particular focus on the territorial planning involving local communities, national authorities and economic stakeholders (mining, logging, agro-industry).

[130] http://observatoire-comifac.net/edf.php?l=en

- **BID** (Biodiversity Information for Sustainable Development). This project coordinated by the GBIF secretariat (Global Biodiversity Information Facility) aims at improving the quality and the use of scientific information related to biodiversity for decision-making by repatriation of existing information into structured and usable databases, capacity-building of information providers and decision-makers and creation of national platforms dedicated to biodiversity information.

- **Biodiversity Conservation and Protected Area Management in ASEAN**: The Objective of this project is to contribute to global sustainability by ensuring ASEAN's rich biological diversity is conserved and sustainably managed toward enhancing social, economic, and environmental well-being. The project includes field-level interventions in selected ASEAN Heritage Parks and capacity-building of national institutions in charge of wildlife management.

- **SUPA** (Sustainable Use of Peatland and Haze Mitigation in ASEAN). The objective of the project is to promote the sustainable management of peatlands in the ASEAN region through collective actions and to enhance cooperation to support and sustain local livelihoods, reduce the risk of fire and associated haze and contribute to global environmental management.

- **WaTER** Programme **(**Kenya's Water Tower Protection and Climate Change Mitigation and Adaptation**).** The WaTER programme targets the adverse effects of climate change, and seeks to address the root causes of depletion of water towers. It has for objective to improve the quality and quantity of ecosystem services provided by Kenya's water towers through increased forest cover, improved landscape and natural resource management, and waste management systems leading to increased benefits to rural communities from forest, agriculture and agro-forestry land use systems

- **PARAMOS** – biodiversity and water reserve in the Northern Andes. The páramo is the ecosystem of the regions above the continuous forest line, in the northern Andes of South America. It is of upmost importance in water regulation in downstream watershed. This project seeks to address the threats to the hydrological regulation capacity and biodiversity of páramo ecosystems in selected key areas in Colombia, Ecuador and Peru. The project will support institutions to: define and apply conservation and sustainable management strategies; develop financial instruments to support maintenance of ecosystem services, in particular hydrological regulation and strengthen capacities of indigenous and farmers organizations to develop sustainable activities. At regional level, a knowledge exchange network will be consolidated to develop a set of resources for the management and monitoring of páramos at the Andean level.

- **AMAZON VISION**: this project, coordinated by FAO, aims at strengthening national protected areas systems in the Amazon basin countries and enhancing their regional integration. It adopts a unique regional approach at the level of the Amazon biome and involves a diversity of key regional and national stakeholders, including local communities, local and public authorities, civil society organisations and

international organisations. The project pursues four key areas of action: (1) identify priority conservation areas from a regional point of view, particularly considering climate change vulnerability and connectivity in the biome; (2) enhanced participation of indigenous and local communities in order to improve the management and governance in and around protected areas; (3) develop and implement methodologies to improve management effectiveness of protected areas; (4) financial sustainability of protected areas in the Amazon biome with practical solutions and financing strategies.

- **Conservation of Iona National Park**. The project will support the establishment of the 'Department of Conservation Areas' will focus on developing and implementing a rehabilitation programme in the largest national park in Angola, Iona National Park (15,150km2) which has a great number of unique habitats and endemic species and forms a contiguous link with the extensive coastal conservation areas of Namibia. The Project is designed as the first phase of a more comprehensive national program to rehabilitate, strengthen and expand Angola's system of protected areas.

MIKES – Minimizing the Illegal Killing of Endangered Species: This EUR 12-million project builds on the highly successful MIKE Programme (Monitoring the Illegal Killing of Elephants), which has been implemented in African elephant range states by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) with the support of the European Commission from 2001 until the present. The MIKE Programme was designed to generate reliable and impartial data on the status and trends in African elephant populations, illegal killing and the illegal trade in ivory, as a basis for international and range state decision‑making and action concerning elephant conservation, according to the mandate established by the CITES Conference of the Parties. Following a recent evaluation of MIKE Phase II, this new project initiative evaluation of – has been developed to build on the lessons learnt from implementing MIKE in Africa and Asia, and specifically to respond to the growing threat to Africa and specifically to respond to the gr the escalating international illegal trade in their ivory, as well as similar threats faced by other CITES ‑listed flagship species.