Will the Biodiversity Targets 2020 be met Globally and by Switzerland?

A mid-term assessment of progress towards the implementation of the Strategic Plan for Biodiversity 2011-2020

Global: Results from Global Biodiversity Outlook 4, GBO-4, published on 6 October 2014
Switzerland: Evaluation by biodiversity experts of SVS/BirdLife Switzerland, Pro Natura and WWF based on Switzerland's 5th National Report.

Zurich and Basle, 15 October 2014

level of confidence (★★★), based on the available evidence. The level of confidence for Switzerland is good (not indicated).

On track to exceed target (we expect to achieve the target before its deadline) | On track to achieve target (if we continue on our current trajectory we expect to achieve the target by 2020) | Progress towards target but at an insufficient rate (unless we increase our efforts the target will not be met by its deadline) | No significant overall progress (overall, we are neither moving towards the target nor away from it) | Moving away from target (things are getting worse rather than better).

						Not evaluated	Total
Global	1	4	33	10	5	3	56
Switzerland	1	4	27	16	1	7	56

Strategic Goal A
Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Global GBO-4

Switzerland Evaluation by NGOs

		TARGET ELEMENTS	STATUS	COMMENT	STATUS	COMMENT
1	TARGET 1	People are aware of the values of biodiversity	★	Limited geographical coverage of indicators. Strong regional differences		The term biodiversity is known by 67% of the population. Biodiversity is primarily perceived as a species focused concept, even though the importance of ecosystem services and the value of biodiversity are acknowledged.
		People are aware of the steps they can take to conserve and sustainably use biodiversity	★	Evidence suggests a growing knowledge of actions available, but limited understanding of which will have positive impacts		In contrast to scientific findings, people increasingly perceive biodiversity to be in a good state. The feeling to be affected by biodiversity loss and the willingness to become personally engaged is decreasing.
2	TARGET 2	Biodiversity values integrated into national and local development and poverty reduction strategies	★★	Differences between regions. Evidence largely based on poverty reduction strategies		Biodiversity is addressed in national and local development strategies, however, rarely in terms of value.
		Biodiversity values integrated into national and local planning processes	★★	The evidence shows regional variation and it is not clear if biodiversity is actually taken into consideration		Biodiversity is addressed in national and local planning processes, however, rarely in terms of value.
		Biodiversity values incorporated into national accounting, as appropriate	★★★	Initiatives such as WAVES show growing trend towards such incorporation		Biodiversity values are not incorporated into national accounting.
		Biodiversity values incorporated into reporting systems	★★★	Improved accounting implies improvement in reporting		A study on final ecosystem goods and services was prepared but an economic valuation of biodiversity and ecosystem services is nearly entirely lacking.
3	TARGET 3	Incentives, including subsidies, harmful to biodiversity, eliminated, phased out or reformed in order to minimize or avoid negative impacts	★★★	No significant overall progress, some advances but some backward movement. Increasing recognition of harmful subsidies but little action		A comprehensive study assessing incentives, including subsidies, harmful to biodiversity is lacking. Some progress in phasing out or reforming incentives harmful to biodiversity was achieved in the agricultural sector, but the effect on biodiversity of many direct payments is still unclear.
		Positive incentives for conservation and sustainable use of biodiversity developed and applied	★★★	Good progress but better targeting needed. Too small and still outweighed by perverse incentives		A process exploring ways and means to develop positive incentives for conservation and sustainable use of biodiversity is missing. Positive incentives are in place for protected areas and for biodiversity in agriculture and are being developped for forestry.
4	TARGET 4	Governments, business and stakeholders at all levels have taken steps to achieve, or have implemented, plans for sustainable production and consumption...	★★★	Many plans for sustainable production and consumption are in place, but they are still limited in scale		Progress has been achieved in sustainable use of cultivated plants, domestic animals as well as the various tree species. A green economy report highlights the need to significantly increase efficiency of the use of resources, particularly regarding raw materials and consumer products.
		... and have kept the impacts of use of natural resources well within safe ecological limits	★★★	All measures show an increase in natural resource use		Switzerland consumes almost three times the amount of environmental services and resources that are available per capita worldwide.

Global GBO-4

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Strategic Goal B

Reduce the direct pressures on biodiversity and promote sustainable use

	Global GBO-4		Switzerland Evaluation by NGOs	
TARGET 5	The rate of loss of forests is at least halved and where feasible brought close to zero	Deforestation significantly slowed in some tropical areas, although still great regional variation		Switzerland's total forest area has been growing for many years. However, forest biodiversity remains under pressure in densely populated parts of Switzerland.
	The loss of all habitats is at least halved and where feasible brought close to zero	Varies among habitat types, data scarce for some biomes		Valuable habitats declined sharply and continue to do so.
	Degradation and fragmentation are significantly reduced	Habitats of all types, including forests, grasslands, wetlands and river systems, continue to be fragmented and degraded.		The growth of areas used for settlement and transport has slowed in recent years and in some places, connectivity has been restored. However, habitats are still under pressure due to the continuous deterioration of their quality, landscape fragmentation, climate change and invasive species.
TARGET 6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches	Great regional variation, positive for some countries but data limited for many developing countries		93 % of the fish and seafood consumed in Switzerland come from abroad, which is why Switzerland bears a great deal of responsibility in the conservation of global fish stocks. Efforts to make this consumption biodiversity friendly are not yet sufficient.
	Recovery plans and measures are in place for all depleted species	Variable, progress in some regions		A recovery plan for some migrating fish species is in preparation.
	Fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems	Some progress e.g. on long-lining used in tuna fisheries, but practices still impacting vulnerable ecosystems		Fisheries are used as an argument to take measures against fish eating species even if no significant negative effects of these species on fisheries are observed.
	The impacts of fisheries on stocks, species and ecosystems are within safe ecological limits, i.e. overfishing avoided	Overexploitation remains an issue globally, but with regional variation		The market share of fish certified according to the provisions of the Marine Stewardship Council (MSC) increased from approximately 8 percent (2010-2011) to 12.6 percent (2012-2013).
TARGET 7	Areas under agriculture are managed sustainably, ensuring conservation of biodiversity	Increasing area under sustainable management, based on organic certification and conservation agriculture. Nutrient use flattening globally. No-till techniques expanding		Even if measures for biodiversity are increasingly supported, the present efforts do not ensure the conservation of biodiversity in the areas under agriculture and the pressure is high even to weaken the present measures.
	Areas under aquaculture are managed sustainably, ensuring conservation of biodiversity	Progress with sustainability standards being introduced, but in the context of very rapid expansion. Questions about sustainability of expansion of freshwater aquaculture	*Not evaluated*	Switzerland has no significant aquaculture.
	Areas under forestry are managed sustainably, ensuring conservation of biodiversity	Increasing forest certification and criterion indicators. Certified forestry mostly in northern countries, much slower in tropical countries		Forests are managed sustainably, but measures ensuring biodiversity conservation are not yet sufficient. Approximately 53% of Switzerland's forest area is currently certified. However, the certified area is declining, due to renounced recertification.
TARGET 8	Pollutants (of all types) have been brought to levels that are not detrimental to ecosystem function and biodiversity	*No clear evaluation* Highly variable between pollutants		Remedial effects have been achieved through the limitation of emissions of airborne pollution. However, chemical contamination of open soil with heavy metals, pesticides including neonicotinoids and micropollutants are detrimental to biodiversity and ecosystem functioning.
	Pollution from excess nutrients has been brought to levels that are not detrimental to ecosystem function and biodiversity	Nutrient use leveling off in some regions, e.g. Europe and North America, but at levels that are still detrimental to biodiversity. Still rising in other regions. Very high regional variation		Whereas phosphorous excess have successfully been limited, nitrogen pollution impacts nearly all ecosystems.
TARGET 9	Invasive alien species identified and prioritized	Measures taken in many countries to develop lists of invasive alien species		Invasive alien species are identified. Priorities have been defined for plant species by the scientific community as well as for selected animal taxa by the federal authorities.
	Pathways identified and prioritized	Major pathways are identified, but not efficiently controlled at a global scale		Some pathways are identified, however, a systematic assessment of pathways and their importance is lacking.
	Priority species controlled or eradicated	Some control and eradication, but data limited		Activities to control or eradicate invasive alien species are limited to few species, e.g. crayfish or ambrosia.
	Introduction and establishment of IAS prevented	Some measures in place, but not sufficient to prevent continuing large increase in IAS		Legal measures are taken, but activities are almost limited to phytosanitary measures, according to the principles and norms of the International Plant Protection Convention (IPPC).

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TARGET 10

Multiple anthropogenic pressures on coral reefs are minimized, so as to maintain their integrity and functioning	★★★ T 1	Pressures such as land-based pollution, uncontrolled tourism still increasing, although new marine protected areas may ease overfishing in some reef regions	*Not evaluated*	Switzerland has no coral reefs, however, has an impact on their conservation through international trade, ghg emissions, tourism etc. (see also ecological footprint).
Multiple anthropogenic pressures on other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning	*Not evaluated*	Insufficient information was available to evaluate the target for other vulnerable ecosystems including seagrass habitats, mangroves and mountains	T 3	In Switzerland almost all ecosystems are affected by climate change and anthropogenic pressures. The strategy „Adaptation to climate change in Switzerland“ provides the basis for future action.

Strategic Goal C

To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

TARGET 11

At least 17 per cent of terrestrial and inland water areas are conserved	★★★ T 4	Extrapolations show good progress and the target will be achieved if existing commitments on designating protected areas are implemented. Inland water protection has distinct issues.	T 2	In 2013, Switzerland had 257'018 ha of on national level protected areas which corresponds to 6.2% of the country's expanse.
At least 10 per cent of coastal and marine areas are conserved	★★★ T 3	Marine protected areas are accelerating but extrapolations suggest we are not on track to meet the target. With existing commitments, the target would be met for territorial waters but not for exclusive economic zones or high seas	*Not evaluated*	Switzerland has no coastal and marine area.
Areas of particular importance for biodiversity and ecosystem services conserved	BIODIVERSITY ★★★ ECOSYSTEM SERVICES ★☆☆ T 3	Progress for protected Key Biodiversity Areas, but still important gaps. No separate measure for ecosystem services	T 3	Most of the particularly important areas of alluvial zones, raised bogs, fenlands, amphibian spawning areas, dry grasslands are conserved. Special efforts are needed to conserve other areas of particular importance, e.g. Important Bird and Biodiversity Areas (IBA).
Conserved areas are ecologically representative	TERRESTRIAL AND MARINE ★★★ INLAND WATERS ★☆☆ T 3	Progress, and possible to meet this target for terrestrial ecosystems if additional protected areas are representative. Progress with marine and freshwater areas, but much further to go	T 3	Protected areas are designated based on the Red Lists of endangered species predominantly, and not according to the representativeness of habitats.
Conserved areas are effectively and equitably managed	★☆☆ T 3	Reasonable evidence of improved effectiveness, but small sample size. Increasing trend towards community involvement in protection. Very dependent on region and location	T 3	Assessments revealed major deficits regarding the management of conserved areas of national and international importance.
Conserved areas are well connected and integrated into the wider landscape and seascape	★☆☆ T 3	Initiatives exist to develop corridors and transboundary parks, but there is still not sufficient connection. Freshwater protected areas remain very disconnected	T 2	Fragmentation is still increasing, and over the last years protected areas are becoming less integrated into the wider landscape.

TARGET 12

Extinction of known threatened species has been prevented	★☆☆ T 2	Further extinctions likely by 2020, e.g. for amphibians and fish. For bird and mammal species some evidence measures have prevented extinctions	T 2	Multiple pressures on species from land-use change and habitat fragmentation, climate change and invasive alien species are high and levels of threat are expected to remain, if not increase.
The conservation status of those species most in decline has been improved and sustained	★★★ T 1	Red List Index still declining, no sign overall of reduced risk of extinction across groups of species. Very large regional differences	T 2	Multiple pressures on species from land-use change and habitat fragmentation, climate change and invasive alien species are high and levels of threat are expected to remain, if not increase.

TARGET 13

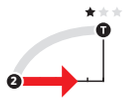
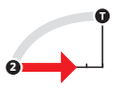
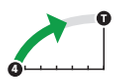
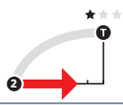
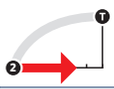
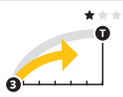
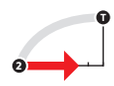
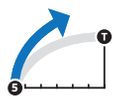
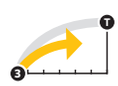
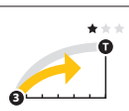
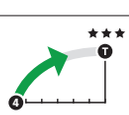
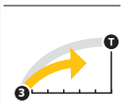
The genetic diversity of cultivated plants is maintained	★★★ T 3	*Ex situ* collections of plant genetic resources continue to improve, albeit with some gaps. There is limited support to ensure long term conservation of local varieties of crops in the face of changes in agricultural practices and market preferences	T 4	Important efforts are being conducted to inventory the plant genetic diversity resources in agriculture, and activities for the conservation of these genetic resources are planned and being implemented. Switzerland has therewith established a sound baseline for the future conservation of plant genetic resources in agriculture.
The genetic diversity of farmed and domesticated animals is maintained	★★★ T 3	There are increasing activities to conserve breeds in their production environment and in gene banks, including through *in-vitro* conservation, but to date, these are insufficient	T 4	Important efforts are being conducted to inventory the animal genetic diversity resources in agriculture, and activities for the conservation of these genetic resources are planned and being implemented. Switzerland has therewith established a sound baseline for the future conservation of animal genetic resources in agriculture.
The genetic diversity of wild relatives is maintained	★★☆ T 2	Gradual increase in the conservation of wild relatives of crop plants in *ex situ* facilities but their conservation in the wild remains largely insecure, with few protected area management plans addressing wild relatives	T 3	Crop wild relatives have been identified, further efforts are needed to conserve them.
The genetic diversity of socio-economically as well as culturally valuable species is maintained	*Not evaluated*	Insufficient data to evaluate this element of the target	*Not evaluated*	Insufficient data to evaluate this element of the target.
Strategies have been developed and implemented for minimizing genetic erosion and safeguarding genetic diversity	★★★ T 3	The FAO Global Plans of Action for plant and animal genetic resources provide frameworks for the development of national and international strategies and action plans	T 3	Such strategies have been developed for cultivated plants and domestic animals but there is limited knowledge about genetic diversity of wild plants and animals.

Strategic Goal D

Enhance the benefits to all from biodiversity and ecosystem services

Strategic Goal E

Enhance implementation through participatory planning, knowledge management and capacity-building

	Global GBO-4		Switzerland Evaluation by NGOs	
TARGET 14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded ...		High variation across ecosystems and services. Ecosystems particularly important for services, e.g. wetlands and coral reefs, still in decline		Essential ecosystem services have been identified to some extent. The quality, quantity and interconnection of many habitats are insufficient to safeguard biodiversity and ecosystem services in the long term. Restoration activities are almost limited to inland water ecosystems.
	... taking into account the needs of women, indigenous and local communities, and the poor and vulnerable		Poor communities and women especially impacted by continuing loss of ecosystem services		Public participation is a principale of Switzerland's decision-making process at all levels.
TARGET 15	Ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced through conservation and restoration		Despite restoration and conservation efforts, there is still a net loss of forests, a major global carbon stock		Little knowledge is available regarding genetic diversity of wild species which is the very base of ecosystem resilience. In terms of carbon stocks, many types of land and soil use result in carbon emissions.
	At least 15 per cent of degraded ecosystems are restored, contributing to climate change mitigation and adaptation, and to combating desertification		Many restoration activities under way, but hard to assess whether they will restore 15% of degraded areas		Degrading of ecosystems continues especially in mires and raised bogs and restoration activities are almost limited to inland water ecosystems.
TARGET 16	The Nagoya Protocol is in force		The Nagoya Protocol will enter into force on 12 October 2014, ahead of the deadline set.		Switzerland has ratified the Nagoya Protocol.
	The Nagoya Protocol is operational, consistent with national legislation		Given progress that has been made, it is likely that the Nagoya Protocol will be operational by 2015 in those countries that have ratified it		Switzerland has established the legal basis necessary for the implementation of the Nagoya Protocol but still has a few gaps concerning the implementation.
TARGET 17	Submission of NBSAPs to Secretariat by (end of) 2015		For those Parties for which information is available, about 40% are expected to have completed their NBSAP by October 2014 and about 90% by the end of 2015		The strategic orientation of the Swiss biodiversity policy has been defined within the Swiss Biodiversity Strategy (SBS) which was adopted by the Federal Council. The SBS has been submitted to the CBD Secretariat. An action plan detailing activities and measures to achieve the strategic objectives is in preparation.
	NBSAPs adopted as effective policy instrument		The adequacy of available updated NBSAPs in terms of following COP guidance is variable		An action plan detailing activities and measures to achieve the strategic objectives of the SBS is in preparation.
	NBSAPs are being implemented		The degree of implementation of updated NBSAPs is variable		An action plan detailing activities and measures to achieve the strategic objectives of the SBS is in preparation.
TARGET 18	Traditional knowledge, innovations and practices of indigenous and local communities are respected		Processes are under way internationally and in a number of countries to strengthen respect for, recognition and promotion of, traditional knowledge and customary sustainable use	*Not evaluated*	Switzerland has no indigenous and local communities.
	Traditional knowledge, innovations and practices are fully integrated and reflected in implementation of the Convention ...		Traditional knowledge and customary sustainable use need to be further integrated across all relevant actions under the Convention	*Not evaluated*	Switzerland has no indigenous and local communities.
	... with the full and effective participation of indigenous and local communities		Efforts continue to enhance the capacities of indigenous and local communities to participate meaningfully in relevant processes locally, nationally and internationally but limited funding and capacity remain obstacles	*Not evaluated*	Switzerland has no indigenous and local communities.
TARGET 19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved		Significant effort on delivery of information and knowledge relevant to decision makers is being made, and relevant processes and institutions are in place		High quality information on Switzerland's biodiversity is available. However, proposals for important research programmes were not adopted and significant efforts will be needed to secure the availability of such information in future and to further develop the knowledge base, e.g. by addressing biodiversity values, and to effectively communicate biodiversity knowledge to promote action to achieve the Aichi targets.
	Biodiversity knowledge, the science base and technologies are widely shared and transferred and applied		Improvements in analysis and interpretation of data gathered from disparate collecting and monitoring systems. However, coordination to guarantee models and technologies that can integrate this knowledge into functional applied systems needs to be improved		The major shortcoming for the generation of biodiversity knowledge in the future is the creeping loss of knowledge in systematics in general due to the abolishment of many professorships. Important efforts are needed to transfer biodiversity knowledge to a broad public (see target 1).
TARGET 20	Mobilization of financial resources implementing the Strategic Plan for Biodiversity 2011–2020 from all sources has increased substantially from 2010 levels		Limited information on many funding sources, including domestic funding, innovative financial mechanisms, and the private sector. General increase in bilateral ODA against 2006–2010 baseline.		Switzerland has committed itself to double international financial flows dedicated for the conservation and sustainable use of biodiversity by 2020 (and not by 2015). At the national level, significant financial resources need to be secured to achieve the strategic objectives of the Swiss Biodiversity Strategy.