## Tasks after having worked on T 2

 You have already learned about some threats in the tasks for T2. Now, look at the materials you have already worked on and your notes to find out which causes are responsible for the population decline of the species you have studied.

> Create an overview by assigning the causes known to you from the materials to the individual species. You can decide which language (German, English or any other language) you use.

- 2. In a language of your choice, summarize how the GBO (Global Diversity Outlook) report on species loss
  - a) assesses the current situation.
  - b) what demands are made.

(Global biodiversity outlook)

"The international community had set itself the goal of greatly decelrating the decline of biodiversity by 2010. Since this was not achieved, the follow-up targets for the decade from 2010 to 2020 were formulated in 2010 at the conference in Aichi (Japan) (Aichi Targets). (Institute for Biodiversity - Network e.V. 2020).

In 2020, it was evident that most of the 20 Aichi targets were missed (<u>Secretariat of the Convention on Biological Diversity 2020</u>).

Only goals 9 (control of invasive species), 11 (establishment of protected areas), 16 (access to genetic resources), and 17 (establishment of a national biodiversity strategy) were partially achieved.

On the contrary, anthropogenic pressures on vulnerable ecosystems have not been reduced (Goal 10); in fact, coral reefs show an immense increase in extinction risks.

Species in mountainous and polar regions are suffering particularly from climate change.

Despite actions taken (Goal 12), approximately 1 million of the known animal species are threatened with extinction.

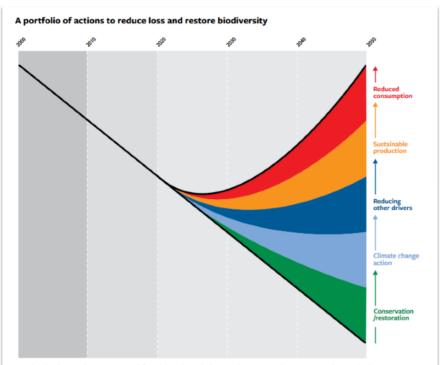
Target 13 (conservation of genetic diversity in farm animals and plants as well as in wild species) was also not achieved, with species being at even greater risk of extinction than in 2010.

That is why the GBO report calls for a transformation pathway by 2050 to halt the decline in biodiversity:

- Increased effort in designating protected areas and enhancing degraded habitats in both agricultural and urban areas.
- Limitation of climate change to 1.5°C if possible, maximum 2°C, whereby the restoration of ecosystems can play a major role.
- Take energetic steps to curb species invasion, pollution, and unsustainable exploitation of ecosystems.
- Conversion of food production, avoidance of negative impacts on agricultural areas and development of gentle methods.
- Switching to healthier diets, avoiding waste of food, drinking water and other goods.



# Procedure after working with T 2, part 2



Trends in biodiversity (various metrics, left axis) have been declining and are projected to continue to do so under business as usual scenarios (trend line). Various areas of action could reduce the rate of biodiversity decline, and the full portfolio of actions, in combination, could halt and reverse the decline (bend the curve), potentially leading to net biodiversity gains after 2030. These are, from bottom to top: (1) Enhanced conservation and restoration of ecosystems; (2) climate change mitigation; (3) action on pollution, invasive alien species and overexploitation; (4) more sustainable production of goods and services, especially food; and (5) reduced consumption and waste. However, none of the areas of action alone, nor in partial combinations, can bend the curve of biodiversity loss. Moreover, the effectiveness of each area of action is enhanced by the other areas (see Part III of the full report for discussion).

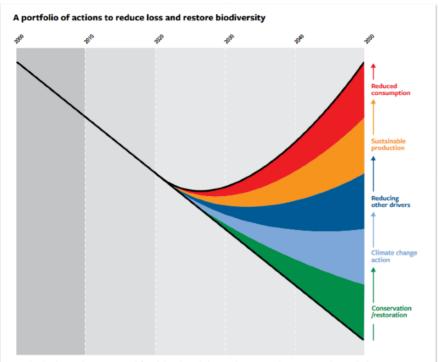
Fig.: (Secretariat of the Convention on Biological Diversity 2020: 13).

#### Task 1 Individual table

Task 2a)		
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Task 2 b		



## Procedure after working with T 2, part 2



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Fig.: (Secretariat of the Convention on Biological Diversity 2020: 13).

### Task 1 Individual table

#### Task 2a)

- None of the goals formulated in 2010 were fully achieved; progress was made on only four goals
- The development in coral reefs is strongly negative
- One million animal species are threatened by extinction
- Genetic impoverishment continues to progress.

#### Task 2b)

- Fundamental system change (transformation) necessary
- Preserve and restore natural landscapes
- Limiting climate change
- Control of invasive species
- Reduction of pollution and exploitation of ecosystems
- Conversion in the agricultural sector, change in nutrition



# T 3 without prior working with T 2

- 1. Read one of the two introductory texts.
- 2. Look at the video and figures 1 and 2 on species extinction. Summarize the statements of the <u>video</u> and the illustrations in German or English.

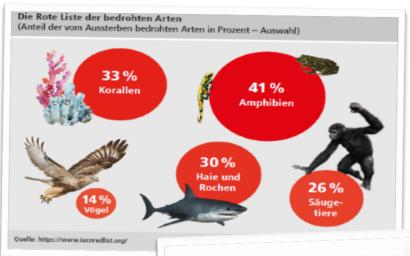


Fig. 1, Martens 2021: 11



Fig. 2 Florian Menzel, a.a.O.

- 3. State in the other of the two languages how according to the Deutsche Welle text in the Global Biodiversity Outlook (GBO) on the species inventory (next page)
- a) the current situation is assessed
- b) which causes are listed and
- c) what demands are made.

https://www.cbd.int/gbo/ (Global biodiversity outlook)





# T 3 without prior working with T 2

Situation of biodiversity	
<u>Causes</u> of biodiversity loss	
Demands/Possible solutions	M





# T 3 without prior working of T 2

### **Situation** of biodiversity

None of the targets set in 2010 have been fully achieved, the development of coral reefs is negative. The targets set by the countries themselves have been achieved in one third of the countries, but these are not very far-reaching. Pesticides and plastics are still being used far too much and harmful subsidies are still being granted, and the threats to coral reefs continue.

Deforestation continues globally and more species are becoming extinct, even though successes have been achieved elsewhere.

#### **Causes** of biodiversity loss

Subsidies that damage ecosystems, climate change, overfishing and overexploitation, pollution, (industrial) agriculture, food wastage.

#### **Demands/Possible solutions**

All levels of society must take responsibility for biodiversity, fundamental system change needed, preserve and restore natural landscapes, change diet to essentially plant-based.

