Seas, Oceans & Public Health in Europe
Linking oceans and health research

The Ocean gives us essential nutrition

WILDSEA EUROPE

A source of food and jobs

Seafood is a great supplier of essential compounds for the human body (proteins, vitamins, fatty acids, essential amino-acids and minerals), a **basic pillar in a healthy diet.** It is also a **fundamental source of protein** for many people around the world (acting as the primary fount for **over 1 billion people worldwide**). Its consumption has been linked to a **reduced risk of coronary heart disease and stroke.**

Seafood also constitutes the **main economic activity for many people** all over the world, with seafood's total exportation value reaching almost €134 billion per year, 54% of which comes from developing countries. **Seafood is a crucial economic activity worldwide.**

However... fisheries are collapsing

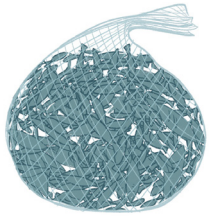
Most fish stocks around the world are being overexploited: we are taking too many resources too quickly, not allowing them to recover. More than **33% of the world's marine fish populations** are already **overexploited,** and almost **60% are about to reach that level (only 7% of the exploited populations are currently sustainable).** The reasons for the current situation are:

Human population growth: as the human population continues to grow, so does its food and economic needs.

Technological developments allow humans to fish further and deeper, maintaining or increasing capture rates, even with collapsing fishing stocks.

Enormous industrial fishing vessels, which can capture and process large amounts of fish on board without having to return to land. They are giant floating factories.

Non-selective fishing gear that incidentally capture large numbers of non-target species (bycatch), which are not used. **More than 40% of the global fish-catch is unused or unmanaged!** ...an incredible waste of resources that comes at great cost to humanity.



Commercial fishing has had a **severe ecological impact on the Ocean:**

- It focuses on specific species or trophic groups (especially predators, whose sexual maturity occurs later), unbalancing marine ecosystems. The lack of predators causes a ***trophic cascade,*** as lower trophic levels have no population control and overpopulate.
- It also affects the **size of target species' individuals:** larger individuals are more valued than smaller ones and get fished. Thus, only the small specimens of the species are left to reproduce, and species tend to be smaller.

BOTTOM-TRAWLING IS **NON-SELECTIVE FISHING GEAR:** THE FISHING NET IS TRAWLED ALONG THE SEABED FOR HOURS, CAPTURING **ALL SPECIES** IN THE WAY AND DESTROYING IMPORTANT UNDERWATER HABITATS IN THE PROCESS, SUCH AS SEAWEED OR CORAL REEFS.

Learn more at **www.teamupwithsophie.eu** and **sophie2020.eu**

SOPHIE is funded by the European Union's Horizon 2020 research and innovation programme, grant agreement N° 774567.This outputs reflects the views only pf the author(s), and the Europeam Union cannot be held responsible for any use wich may be made of the information contained here.

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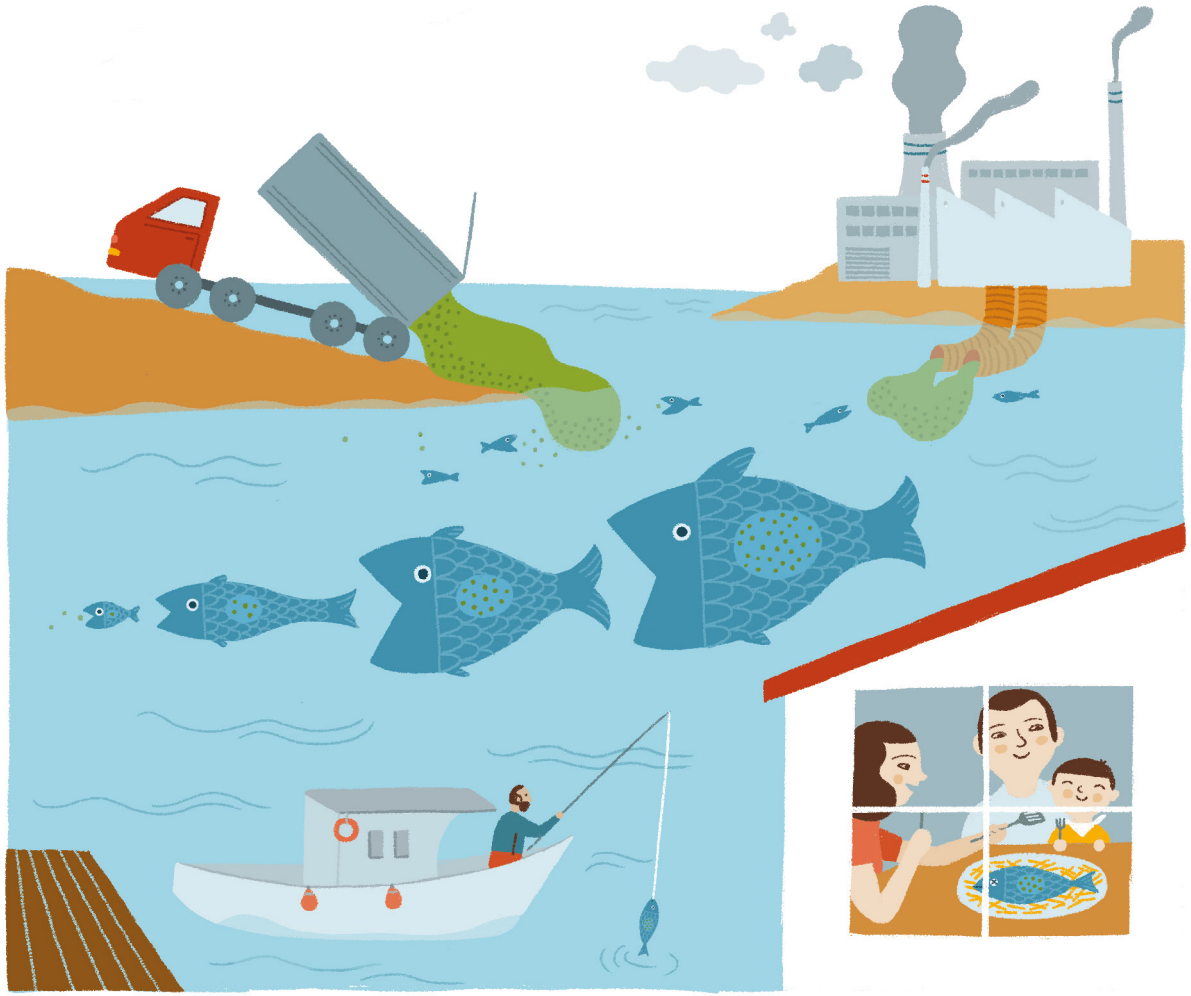

...and consumption of seafood is slowly becoming a threat

Toxic chemicals (PCBs, heavy metals, etc.), **solid waste** (plastic, lost fishing gear, etc.), **increased nutrient or sediment inputs** (due to agriculture and sewage) and **radioactivity and oil spills** are contaminating the Ocean. **All types of contamination have a shared origin: humans.**

Certain pollutants can accumulate in living organisms **(bioaccumulation)** and are **especially harmful.** Some pollutants even increase their concentration in animals throughout the food chain, since large fish eat small fish **(biomagnification)**, and larger predators accumulate more pollutants: shark, tuna, swordfish, dolphins, etc. **Heavy metals** (especially **lead and mercury**) **both bioaccumulate** in the organisms **and biomagnificate** throughout the trophic chain, leading to severe reproductive and neurological problems in animals.

Heavy metals also affect human beings through seafood consumption. Humans traditionally prefer to eat fish from the top trophic levels, and also have the "capacity" to bioaccumulate toxins. For this reason, some fish species (such as tuna, swordfish or shark) are currently not recommended for pregnant or breast-feeding women (because toxic chemicals accumulate in the mother's adipose tissue and can be transmitted to the child).

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