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# Summary: Sind wir der Hecht im Karpfenteich? – SDG 14 and how we treat life below water

Fisheries and aquaculture concern at least nine of the 17 SDGs, said Metzner, it's about everyone: fish workers, families, communities, consumers and society in general.





Fish are a good bulk parameter, reminded Waidbacher, water quality must be suitable for eggs, larvae, small fishes and big ones.

## FISH MAKES THE WORLD GO ROUND

While we ate 9 kg of fish per capita in 1961, each of us consumed 20 kg of fish in 2016. The demand for fish grows quicker than the human population.

Aquaculture continues to grow faster than any other agricultural sector. In 2016, aquaculture accounted for 47 % of the volume of fish production, and for 64 % of the value of first sales.

The Global South holds a major share in the world-wide fish business: of all fish and fish products traded, 59 % of the total quantity, and 54 % of the total value come from developing countries.

One in ten people world-wide rely on fish for their livelihoods, 14 % of these are women. If the post-harvest sector is included, this number rises to more than 50 %. (Source: FAO, 2018)

Fish is an important source of protein and a basis for the livelihoods of many people all over the world; but most natural habitats are under pressure from human influence and climate change, many stocks are overfished. How can we continue to use fish for our nutrition, keep water bodies healthy and sustain the resources for future generations to come?

With Ökosoziales Forum and IUFE, the Institute for Environment, Peace and Development, we invited **Rebecca Metzner** (FAO, Fisheries & Aquaculture Department, Head of Policy, Economics & Institutions Branch), **Marc Mößmer** (ARGE Biofisch), **Herwig Waidbacher** (Institute of Hydrology and Aquatic Ecosystem Management), **Almut Knaller** (Tourism board Weissensee) and **Laura Hundscheid** (Master student SUSFISH+ project of CDR head Andreas Melcher) to discuss with us. **Maiada Hadaia** (Coordinator "Welt im Ohr", Education and Research for Development, OEAD) led through the evening.

### **GLOBAL FISH CONSUMPTION ON THE RISE**

The world-wide consumption of fish is rising, said Rebecca Metzner in her talk, consumption growth even outpaces human population growth. Fish is an important source of livelihoods for one in ten people and we need to recognize the social and economic role of the sector, argued Metzner. While fish is a global player when it comes to ecology and economy, we need to meet local agendas, she said. To "leave no one behind" as requested by the SDGs, we need to focus on action, cooperation and on development opportunities.

#### THE DIVERSITY OF FRESHWATER FISH AS A BIOINDICATOR

Half of all vertebrates are fishes, said Herwig Waidbacher. While 70 % of the Earth's surface is covered by oceans, it harbours only 40 % of the known fish species; the majority of 60 % of different species live in freshwater where nutrient provision is better, Waidbacher continued. Fish biodiversity is much higher in the tropics than in temperate climates, said Waidbacher. The different developmental stages and corresponding requirements, and their biodiversity make fish excellent indicators for the quality of water bodies.

#### **AQUACULTURE - A SOLUTION TO OVERFISHING?**

Burkina's fish stocks are heavily overfished, around 80 % of the country's demand are now covered by imports from China, Taiwan or neighbouring countries, warned Laura Hundscheid. There is a need to develop sustainable

fisheries. With a large number of water reservoirs constructed to confront water shortage in the dry season, the country seems in a position to establish aquacultures. However, the challenge of building and maintaining the respective infrastructure remains, as well as the question of access to feed and fish seedlings. Robust species are to be preferred, Marc Mößmer and Waidbacher added, as fish are sensitive. Several critical points hamper the expansion of aquaculture in Africa. First, systems that have been developed for temperate climates need to be adapted to the tropics before they can be put in place. Stable energy provision to maintain cold chains is just one aspect; systems that allow harvesting of smaller volumes in a continuous way, are another one. Second, aquaculture needs by far larger investments than most other agricultural businesses; these are too important for micro-financing schemes, but too small for conventional bank institutes, said Waidbacher.

#### CONSCIOUS CONSUMPTION: TRY THE "OLD-FASHIONED"

In Austria, few – mostly imported – fish species dominate the market; many indigeneous ones are less known. Almut Knaller illustrated this with examples from her gastronomic experience in a lake region where guests often choose foreign fish and seafood, maybe because of lack of knowledge. Domestic consumers are very interested in sustainably produced fish of high quality, added Mößmer, but often people are reluctant to buy traditional species that have almost been forgotten. For many local fishes, the knowledge how to prepare them has been lost. Mößmer tries to address this lack of knowledge with cooking courses and a free online data-base of recipes that is coupled to his sales portal.

#### STRENGTHENING FISHERIES, STRENGHTENING WOMEN

Traditionally, the fishing sector is viewed as male-dominated all over the world. Drawing on her experiences in Burkina Faso, Hundscheid highlighted the decisive role of women for post-harvest processing and trading. The global situation is similar: as for fishing alone, 14 % of those who depend on it for their livelihoods are women; if we include the post-harvest sector, more than half are female, confirmed Metzner.

Metzner further stressed the role of peer-learning among farmers, and highlighted challenges, when governance is poor. Most managers and policy makers do not come from regions where fishing is vital for livelihoods, she said, so we also need to facilitate self-enforcement and self governance. One of the central questions is how to empower local fishermen to not want to overfish.

Further reading and interesting links:

- \* ARGE Biofisch: www.biofisch.at
- \* Austrian Federal Ministry for Sustainability and Tourism (BMNT) (2018) https://www.bmnt.gv.at/land/produktion-maerkte/tierische-produktion/fischzucht-oe/aquakultur.html (last updated on 24.01.2018)
- \* FAO (2018) The State of World Fisheries and Aquaculture 2018 Meeting the Sustainable Development Goals. Rome



In development, we need longlasting collaborations, not short term projects that finish after two or three years, said Hundscheid.



There is no such thing as a good technology or a bad technology, said Johannes Schmidt, technologies always have impacts. It is critical how a technology is implemented.



Fish is a luxury good, strained Knaller, we should consume it responsibly, ask where it comes from, how it has been produced.

#### **AUSTRIANS AND FISH**

Austrians eat 7.5 kg fish per capita per year. That makes 63 000 tons of fish, of which only 6 % stem from domestic production. Among the most eaten species are trouts, carp, whitefish, zander, pike, tench, eel, char and catfish. (Source: BMNT, 2018)





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