

Project title

Assessing the ecological health of the Karun river, Iran

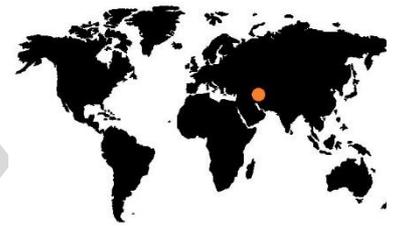
Foto: Daniel Pittet

Thematic focus

Anthropogenic impacts on freshwater ecosystem services

Year

2019/2020



Project location

Karun river system, Western Iran

Swiss Institution

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Partner Institutions

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Description

Iran is facing intense population growth and competition for the use of freshwater between urban, agricultural, aquacultural and industrial development. These activities result in severe pressures on freshwater ecosystems and their organisms due to pollution, water abstraction, damming, etc. This project aims at understanding the impacts of these pressures on freshwater organism groups based on an intense sampling campaign in the Karun river system. Invertebrate, fish and microbial communities as well as abiotic parameters are monitored during all four seasons for one year. The resulting dataset will allow developing biotic indices to quantify consequences of impacts, and identifying species that are sensitive and threatened.

The three Iranian PhD-students Pejman Fathi, Mojgan Zare, and Alireza Esmaeili running the project participate in a two-way mobility program between Iran and Switzerland, as do also involved researchers.

Development relevance (Agenda 2030)

This project focuses on international and intercultural collaboration in environmental research and management. Thereby it provides a unique learning occasion for all partners involved based on a substantial and relevant case study.

Additionally, the project addresses the millennium development goal 7 (MDG 7: *Ensure Environmental Sustainability*).

In particular, the project aids in understanding the ecological consequences of current urban, agricultural, aquacultural and industrial development on river ecosystems. This is crucial in order to reverse loss of environmental resources (i.e. freshwater; Target 7.A), reduce biodiversity loss (Target 7.B), and facilitate access to safe drinking water (Target 7.C).



Livelihoods

This proud farmer near the village of Lo'lo' (Khuzestan province) depends on healthy river ecosystems that provide safe freshwater resources for his fields and for the wellbeing of his family.



International cooperation

Members of the international research team sampling invertebrates and abiotic parameters in a tributary to the Karun, near the village of Katak (Kohgiluyeh and Boyer-Ahmad province).