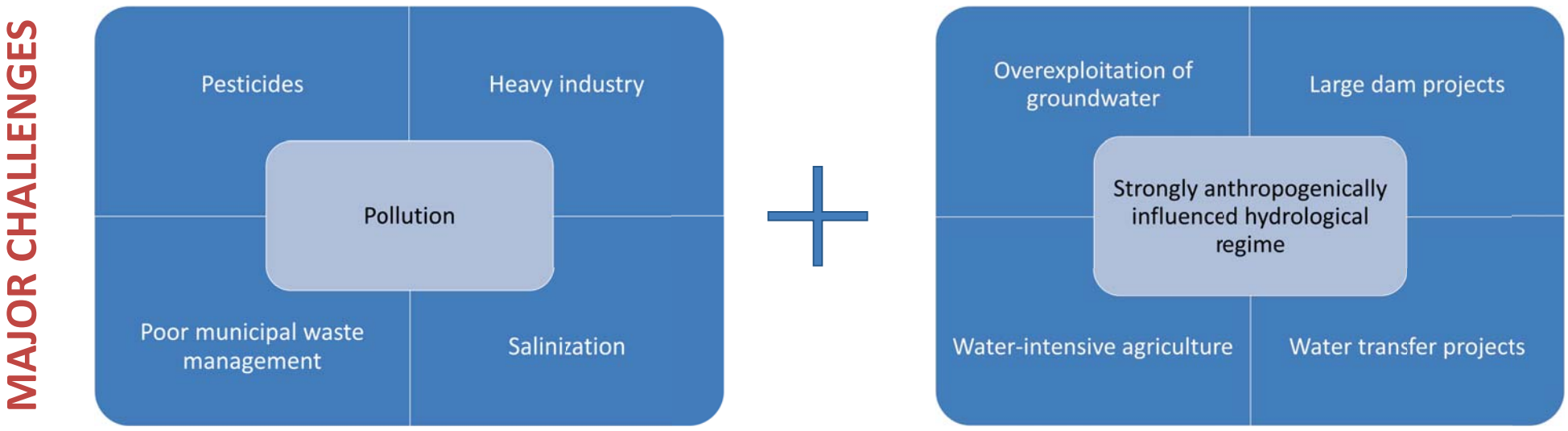
Water management and conflicts in south-west Iran

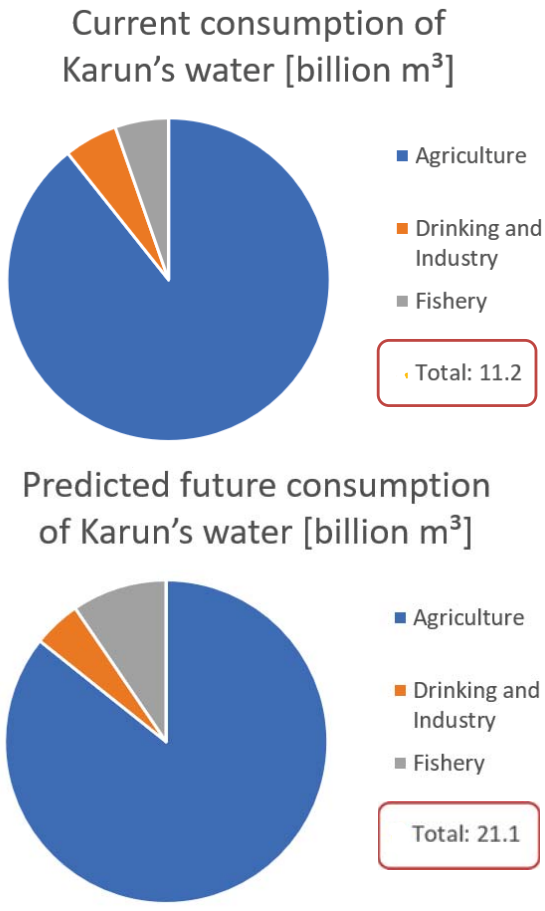
B.Sc. Geoökologie Josephin Diether Advisor: M.Sc. Anne Müller

Present Situation

Iran is suffering from a serious water crisis, manifested by rising water demand and shortage, falling groundwater tables, reduced water quality and a large degree of ecosystem losses (as Iran and Iraq's date palm plantations, the Gavkhouni marsh). Since water supply of Millions of people, especially in the south-wester region of Iran is at stake, urgent action in the current water management is required (Ghadiri 2014, Golabi et al. 2009, Madani et al. 2008, Madani 2014).



What changes are necessary to oppose the crisis?



Ghadiris (2018) proposed river management plan

- Greater water release from the dams in summer
- Lowering of groundwater tables to decline salt load from irrigation and leaching accessions
- Evaporation basins to dispose salt
- Consultations between Iran, Iraq and Turkey (=countries responsible for the regulation of dams affecting the water supply in Khuzestan area) to recover natural discharge values

Further investigation on risks coming with the advices is necessary (e.g. dams not filling up leading to endangerment of power generation, negative impact on ecosystems through lowered groundwater tables).

The development of a model which contains information about water availability, salinity and other key parameters for water quality in the area would be an adequate step to predict potential impacts of applications.

Pol-e Chādschu, landmark of Isfahan, leading over the dried out Zayandeh Rud river bed (own photo, 2015)

References

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diether@uni-potsdam.de, Universität Potsdam, 25.09.2019