

Outlook of CRS project in China



Shamaila Zia

Shamaila.zia@uni-hohenheim.de



Xinjiang Uyghur Autonomous Region,

- Located in the Northwestern of China
- It is the largest state in China
- Xinjiang has a population of more than 22 Million
- The region has an arid climate and faces several challenges such as water shortages, salinity, and desertification.



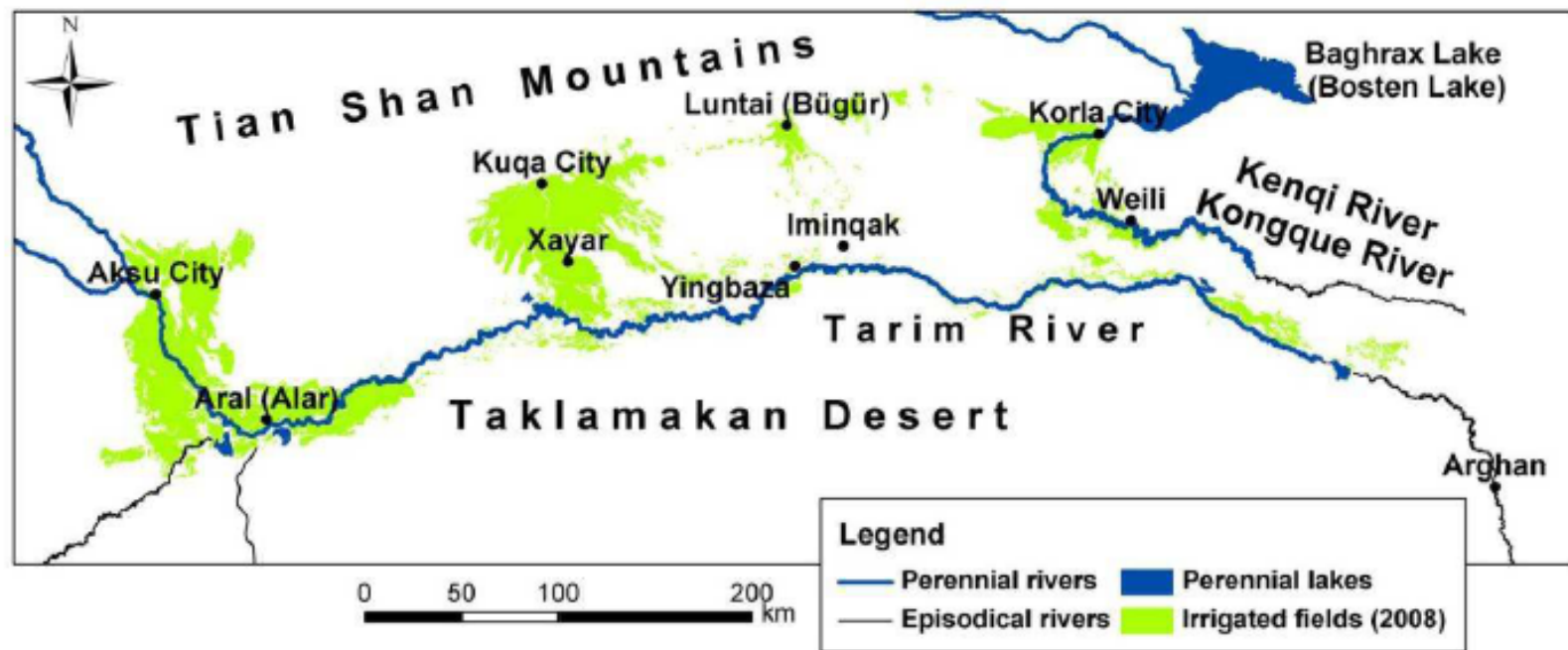




Xinjiang Uyghur Autonomous Region,

- Located in the Northwestern of China
- It is the largest state in China
- Xinjiang has a population of more than 22 Million
- The region has an arid climate and faces several challenges such as water shortages, salinity, and desertification.
- However, the region produces 17.1% of the Chinese cotton and 3.7% of the world's cotton.

Tarim river basin





Sustainable Management of River Oases along the Tarim River (SuMaRiO)



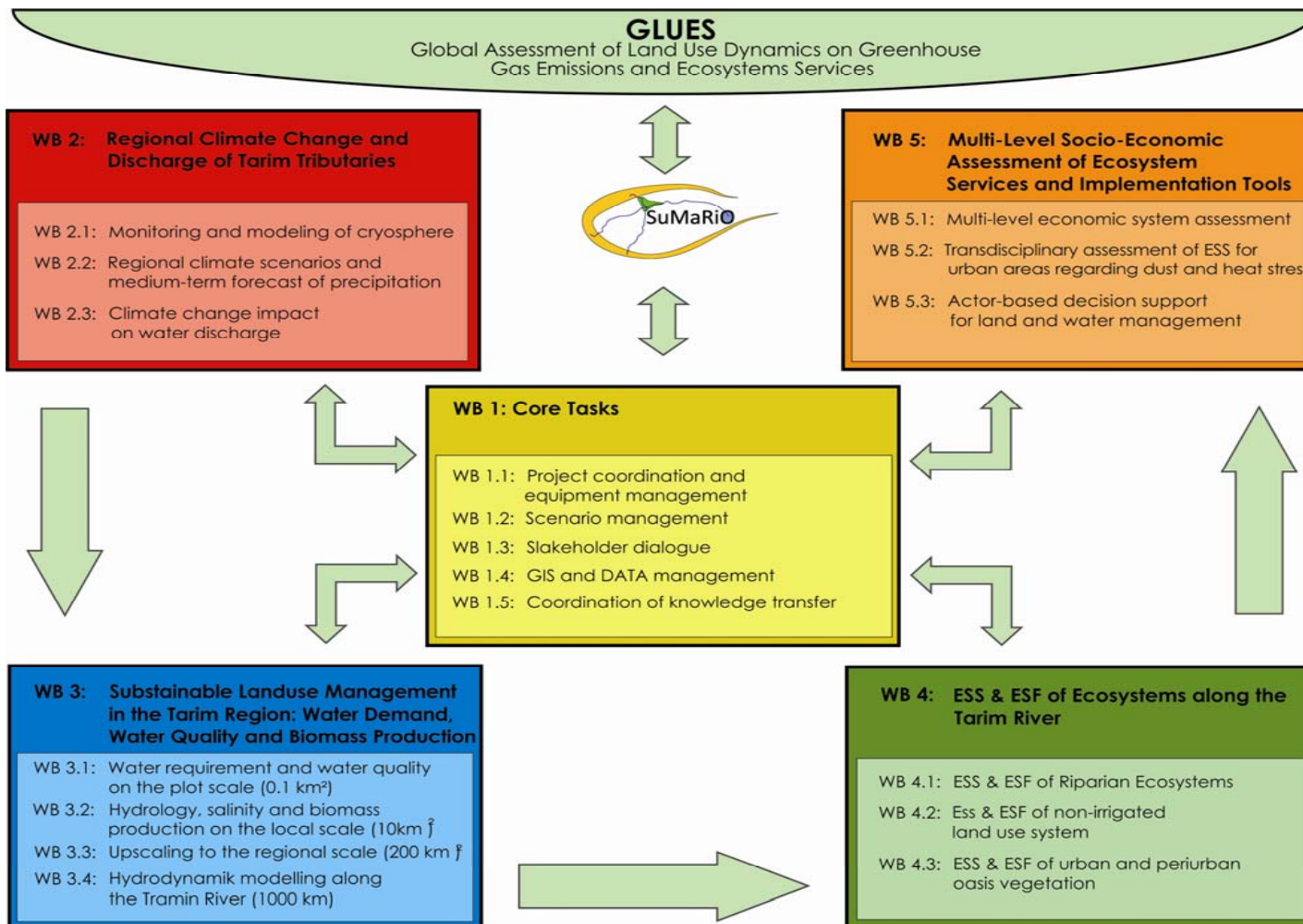


SuMaRiO

The main objectives of SuMaRiO

- Estimation of the impact of climate change on water availability
- Determination of interactions of floodplain biodiversity and their ecosystem services
- Interlinkages between runoff characteristics / water quality / oasis management / ecosystem services
- Evaluation of traditional, high-input and alternative land use systems (ecosystem services / economic and social aspects)
- Transdisciplinary research by stakeholder participation
- Installation of various internet-based tools for supporting sustainable land management by quantifying system variables and ecosystem services

Project Structure





Work Block 3 - Structure

WB 3: Sustainable Landuse Management in the Tarim Region: Water Demand, Water Quality and Biomass Production

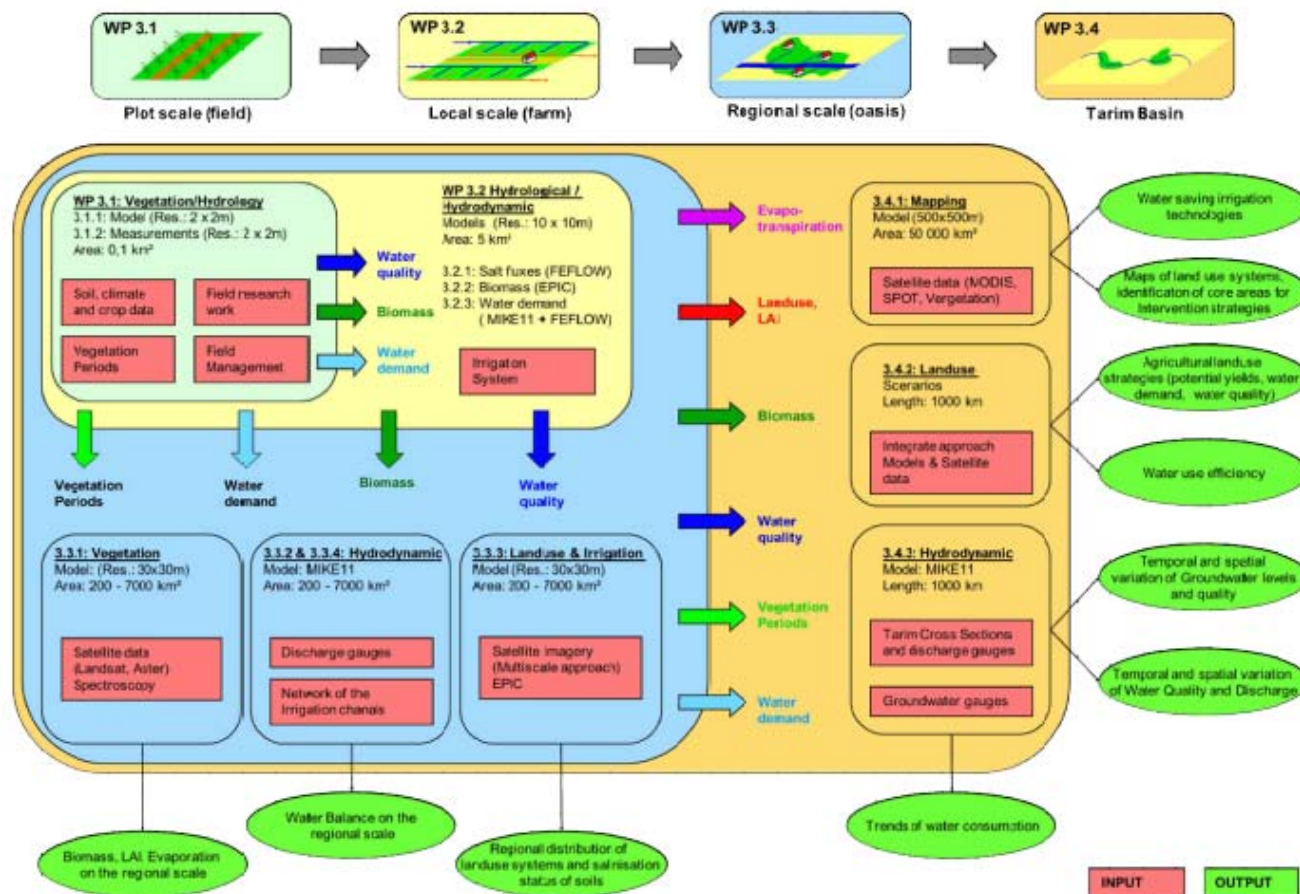
WB 3.1: Water requirement and water quality
on the plot scale (0.1 km²)

WB 3.2: Hydrology, salinity and biomass
production on the local scale (10km²)

WB 3.3: Upscaling to the regional scale (200 km²)

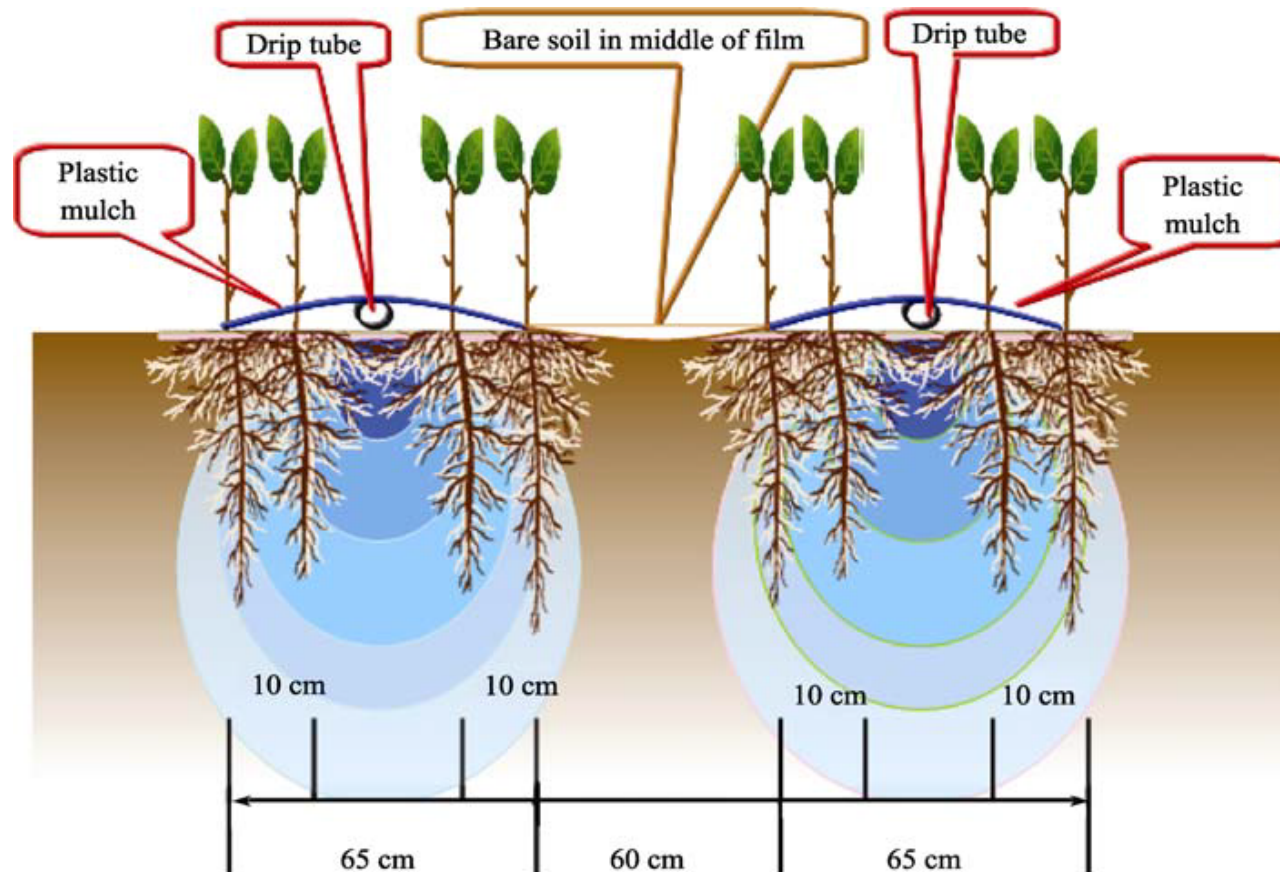
WB 3.4: Hydrodynamik modelling along
the Tramin River (1000 km)

UNIVERSITÄT HOHENHEIM
INSTITUTE OF AGRICULTURAL ENGINEERING
Tropics and Subtropics Group





Irrigation system



Irrigation system

UNIVERSITÄT HOHENHEIM
INSTITUTE OF AGRICULTURAL ENGINEERING
Tropics and Subtropics Group





Cosmic-ray Neutron Probe

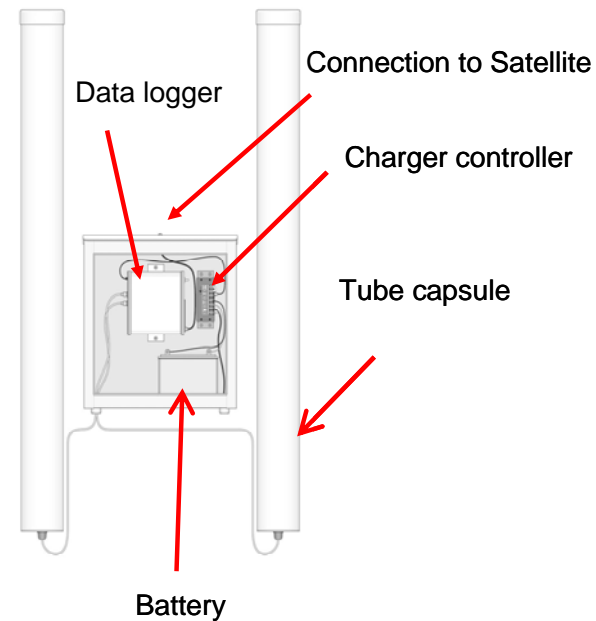


Satellite Antenna

Solar panel

122.5 cm

Instrument box



Data logger

Connection to Satellite

Charger controller

Tube capsule

Battery



**Danke für Ihre
Aufmerksamkeit**