Nexus economic optimization

Infrastructure investment plans and policies

Agriculture production
- Farming zones
- Crop choice
- Irrigation
- Yield function

Crop markets
- Transport and trade
- Demand and supply
- Food security

Water for agriculture
- Hydrology
- Reservoir operations
- Demand and supply
- Environmental flow requirements

Water management

Energy production
- Hydropower plants
- Thermal and renewable power
- Capacity expansion

Crops

Energy markets
- Transmission and trade
- Demand and supply
- CO₂ emissions

Water for agriculture

Water for energy

Nexus economic optimization

Economic impacts, synergies, trade-offs, and risks

Uncertainties in future climate and socio-economic development