

## Coordinated Water-Food-Ecosystem Nexus and Sustainable Development Strategies in the Typical Arid and Semi-arid Regions

Section 1: General Information	
Summary	Choosing the Hetao Irrigation Area in the Yellow River Basin of China and the Nile Delta Irrigation Area in Egypt as the research area, Nanjing Hydraulic Research Institute will collaborate with Egyptian organizations for research of water-food-ecosystem synergistic security in ecologically fragile regions under global change.
Proponent Name(s)	Proponent Name: Nanjing Hydraulic Research Institute, China. Partners: National Water Research Center, Egypt. Soil, Water and Environment Research Institute, Egypt
Proponent Type	International Organizations and Civil Society Organizations
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Section 2: Commitment	
Linkages to SDG 6	Increase Water-Use Efficiency and Ensure Freshwater Supplies; Implement Integrated Water Resources Management; Protect and Restore Water-Related Ecosystems;
Target	To provide scientific backing for addressing diverse challenges of ecological environment evolution and sustainable development under global change.
Linkages to other SDG	No Poverty; Zero Hunger; Sustainable Cities And Communities; Climate Action; Partnerships For The Goals.

Section 3: Actions and Outcomes to Achieve Targets		
Relevant Sub-Theme	Water Security and Prosperity; Water for Humans and Nature; Disaster Risk Reduction and Management; Governance, Cooperation and Hydro-diplomacy; Knowledge and Innovation.	
Actions and Outcomes	To research in (1) Dynamic monitoring of water-food-ecosystem elements; (2) Security indicators and synergistic relationship between water-food-ecosystem under the SDGs framework; (3) Simulation model of water-food-ecosystem correlation; (4) Critical security thresholds of water-food-ecosystem; (5) Strategic approaches for sustainable human development under global partnerships.	
Implementation Period	Start Date	January, 1, 2024
	End Date	December, 31, 2026
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