Asia Water Forum 2022
8–11 August 2022 • Online

Focus Area: 1 – Water as a sustainable resource

Session Title: Decision support for efficient water utilization

Schedule: 09 August, 11am - 12:30pm

Natural Capital Investment and Rural Vitalization in the Yangtze and Yellow river basins

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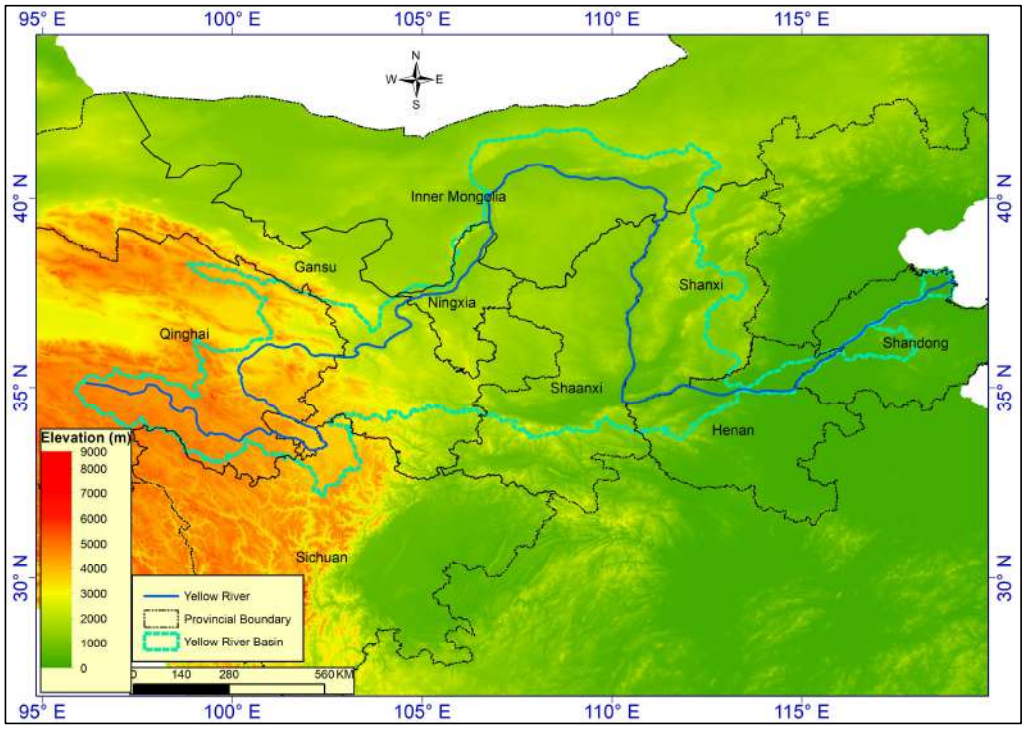
Priorities for ADB's Yellow River Ecological Corridor Program

- **An integrated approach** to natural resources management, environment and ecological conservation, and climate change to support high-quality, green development through institutional and policy reforms, knowledge and innovation, and private sector solutions

- To protect and restore the Yangtze River and **Yellow River basins' respective diverse and fragile aquatic and terrestrial ecological zones and ecosystems** and to enable more equitable and sustainable rural-urban economic development throughout the basins

- Building from the **strategic programmatic approach being implemented** of the Yangtze River Economic Belt initiative **to maximize catalytic and systemic impacts** through targeted and concentrated investments in the Yellow River Ecological Corridor – two significant economic and ecological regions in the PRC

The Yellow River Basin – An Overview



- **2nd longest river in the PRC**: runs through 7 provinces and 2 autonomous regions
- **Key basin:** agriculture and food production, and mining
- **Water scarce basin**: 23% of national average
- **2% of PRC's water resources, yet**: supplies 12% of the population, 15% of the arable land, and 14% of economic activities
- **Flooding:** July 2021 flood killed 398 people - caused RMB 1.22 billion damage in Zhengzhou City, Henan.
- **Severe erosion:** the Loess plateau – highest sediment concentration in the world – the "Yellow" River
- **Unequal water distribution and regional inequalities:** Less developed provinces upstream to the more developed downstream
- **Challenges vary:** (i) upstream needs more ecological conservation, and (ii) downstream needs improved water use efficiency and inclusive, green development.

Yellow River Basin's Diverse Challenges

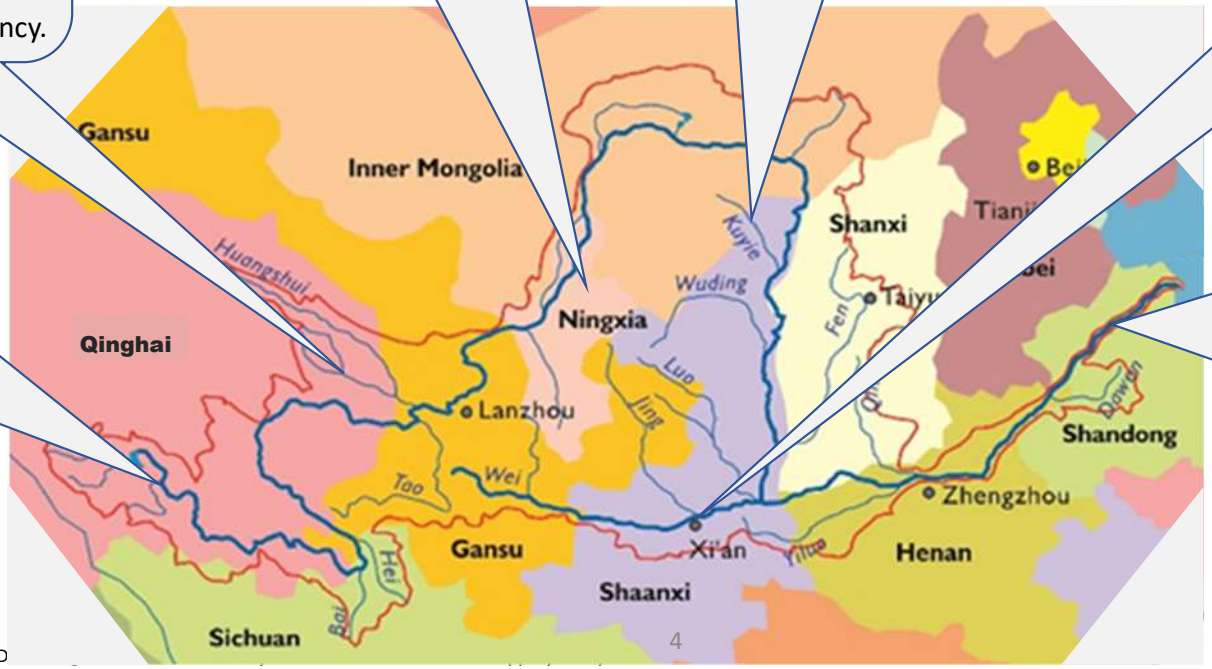
Ningxia-Inner Mongolia irrigation area: Arid region with desertification affecting important agricultural development areas, especially grain production.

Middle Reaches of Loess Plateau: Less developed, but important energy production area with poor water and soil conservation, and low water use efficiency in agriculture and energy sectors.

Fen and Wei river area: Most developed area of basin, focused on coal and grain production; 51% of basin population, 46% of GDP contribution and 38% of irrigated area, impacted by water scarcity, low environmental flows, and overexploited groundwater.

Lanzhou-Xining Economic Zone: Key urban and economic development area in NW China but constrained by water availability; future development requires improved water use efficiency.

Upstream Water Source: Sparsely populated and economically less developed region with degraded ecosystems in need of ecological protection.



Lower Reaches and Delta: High population density, grain/cotton production and oil industries; suffers from high sediment loads, very low river flows, and shrinking wetlands due to water diversions.

Ecological Corridor as Basis of the YREC

- An Ecological Corridor is a space that is governed and managed over the long-term to maintain or restore ecological connectivity and ecosystem integrity.
- River basins if well-managed, are vital natural ecological corridors.
- Healthy ecological corridors generate positive impacts for the environment, economic growth, social well being, and climate change goals in the PRC and elsewhere – they:
  - maintain biodiversity
  - ensure watershed, river and wetland health to mitigate water related disasters and improve water quality
  - provide economic and ecosystem services to benefit humans and aquatic and terrestrial environments and biota
  - provide a healthy and safe environment where people can thrive
  - create resilience to and mitigate climate change impacts

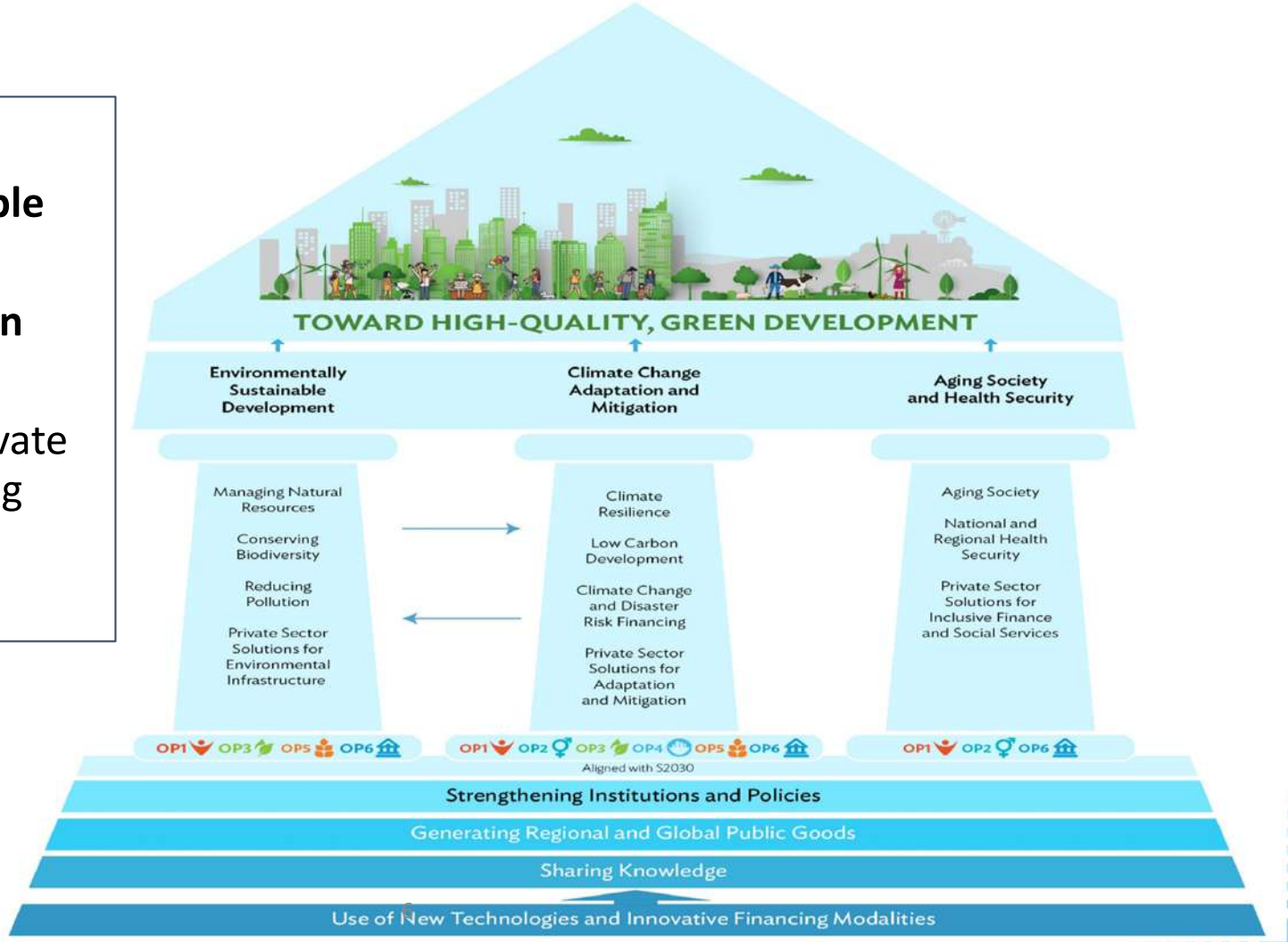
Alignment with the ADB-PRC Country Partnership Strategy (CPS), 2021-2025

The program will focus on:

- **Environmentally Sustainable Development** (Pillar1); and

- **Climate Change Adaptation and Mitigation** (Pillar2)

Emphasis on developing private sector solutions, co-financing and innovative financing opportunities.



Rural Vitalization Strategy and ADB's Priority Areas of Interventions

PRC's Rural Vitalization Strategy
中国乡村振兴战略

Production Systems
- Improving productivity, sustainability, and resilience

Value Chain Development
- Adding value, market connectivity, and ICT technologies

The Rural Environment
- Waste and pollution management
- Environmental protection and rehabilitation

Integrated Rural Development
- Improving the quality of life and economic well-being of people living in rural areas
- Climate change adaptation and resilience

MOU between ADB and the Agricultural Development Bank of China

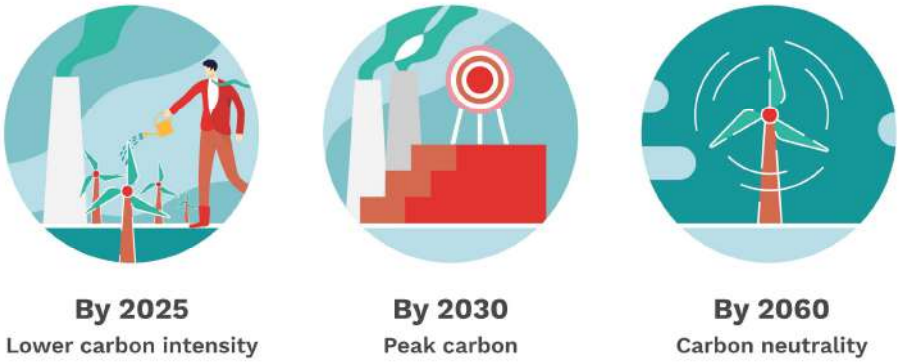
Signed	26 August 2021
Form of intervention	Rural infrastructure, environmental improvement and agribusiness value chains development
Preferred interventions	Knowledge solutions and co-financing of high-quality, innovative green agricultural and rural vitalization projects

MOU between ADB and NDRC/MOF to support PRC's Rural Vitalization Strategy

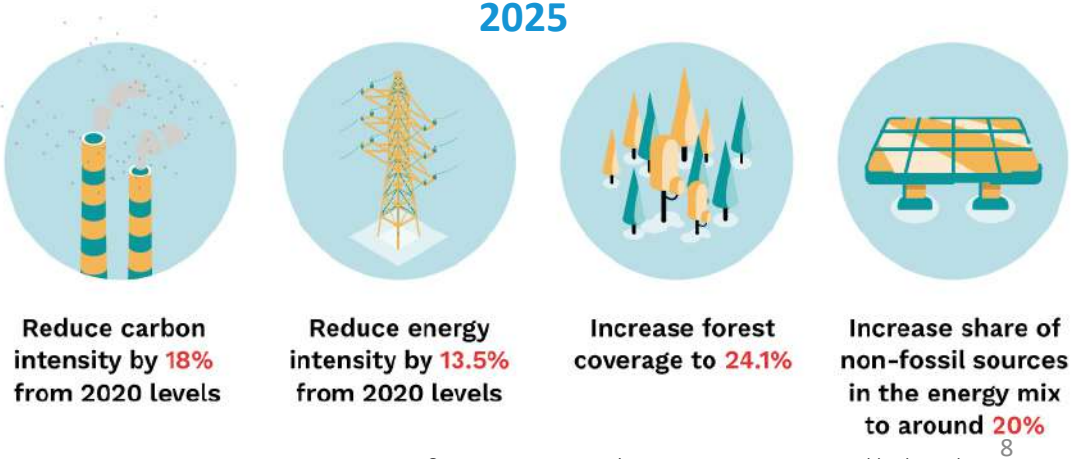
Signed	29 August 2018
Indicative budget	$6.0 billion from ADB, PRC and development partners
Form of intervention	Financial assistance and knowledge contribution
Preferred interventions	Catalytic, innovative, and adoption of high-level technologies

PRC Climate Change Goals and ADB Support

PRC Carbon Neutrality by 2060



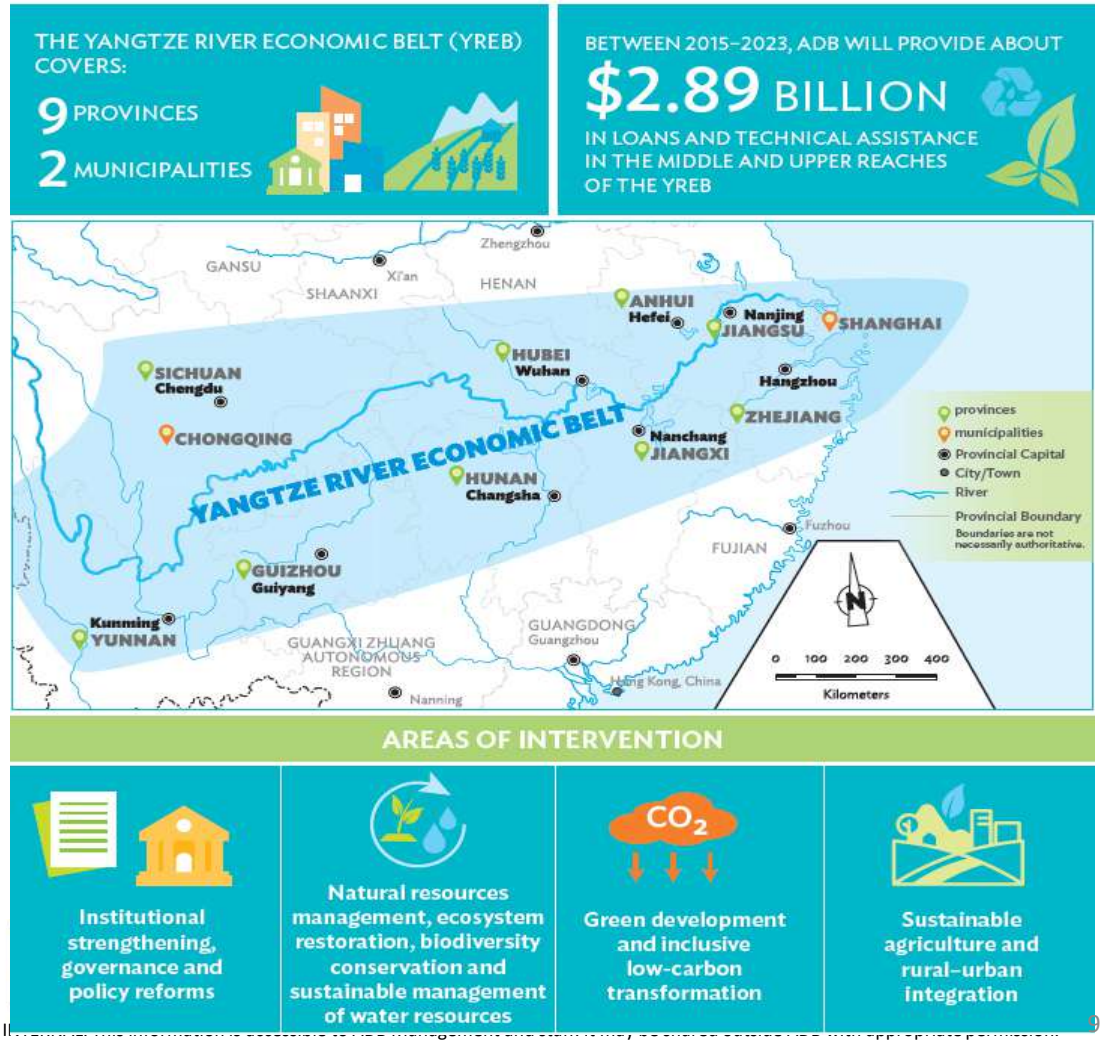
The 14th Five-Year Plan's climate-related targets for 2025



The National Strategy on Climate Change Adaptation 2035 (NSCA 2035 - ADB supported)

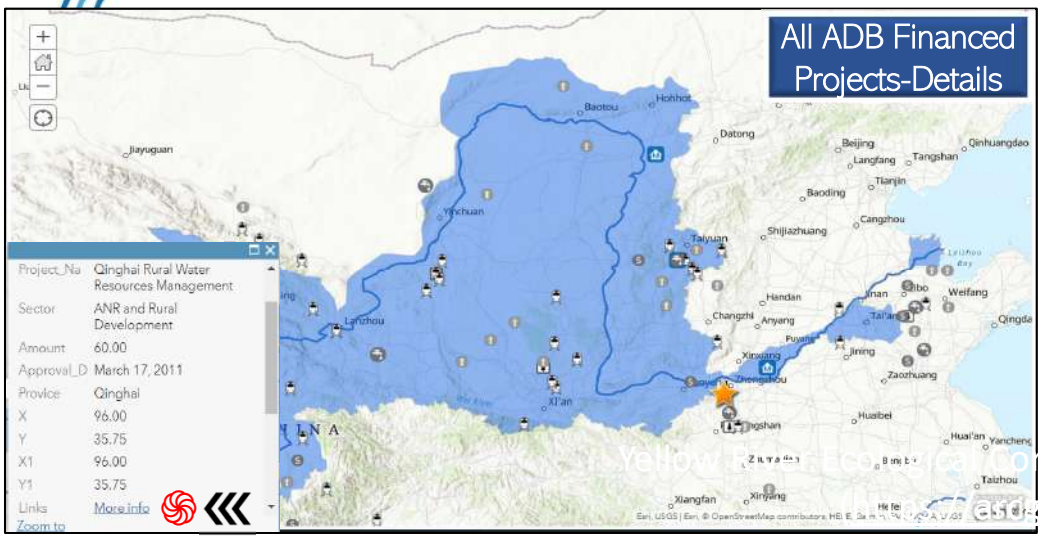
- Strengthen climate change monitoring, early warning, and risk management; Improve the climate adaptability of natural systems; Improve climate adaptability of economic and social systems; Construct regional structures adaptive to climate change
- Promote the use of nature-based solutions for integrated flood risk management and other adaptive solutions
- Support implementation of the Strategy 2035 – TA subproject focusing on developing a YREC climate change action plan
- ADB projects mainstream NSCA 2035 through design, institutions and implementation

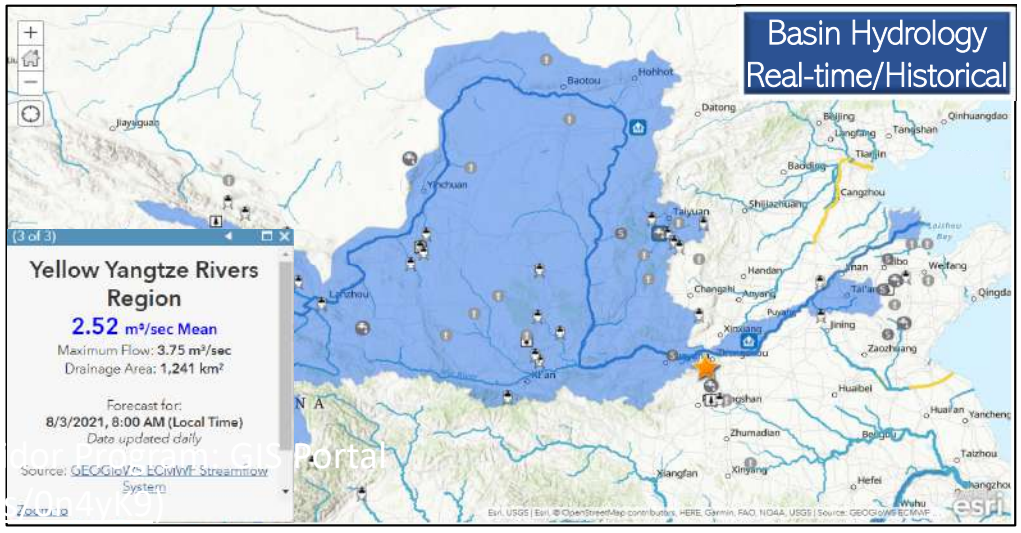
From Yangtze River to Yellow River – Enhancing an Integrated Approach

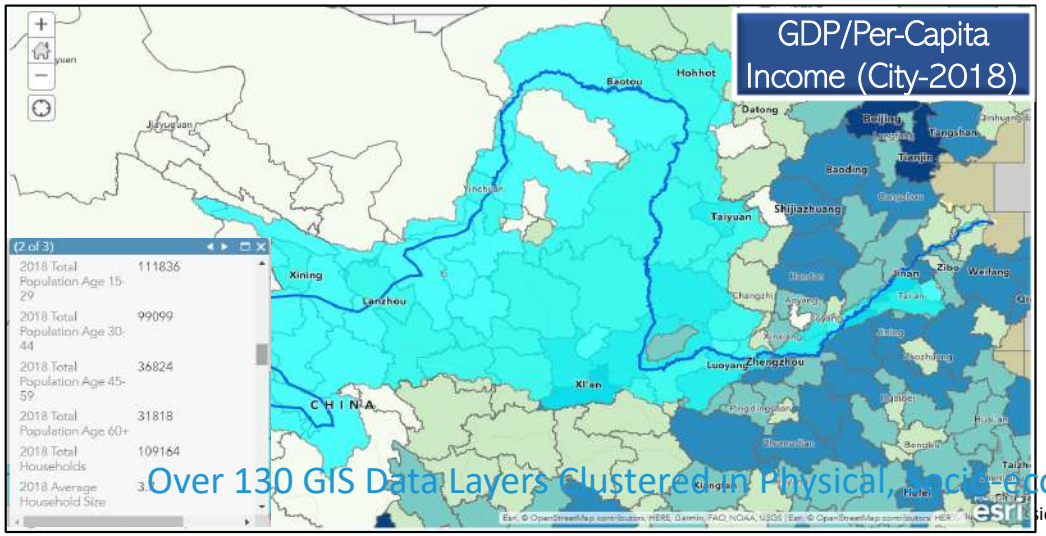


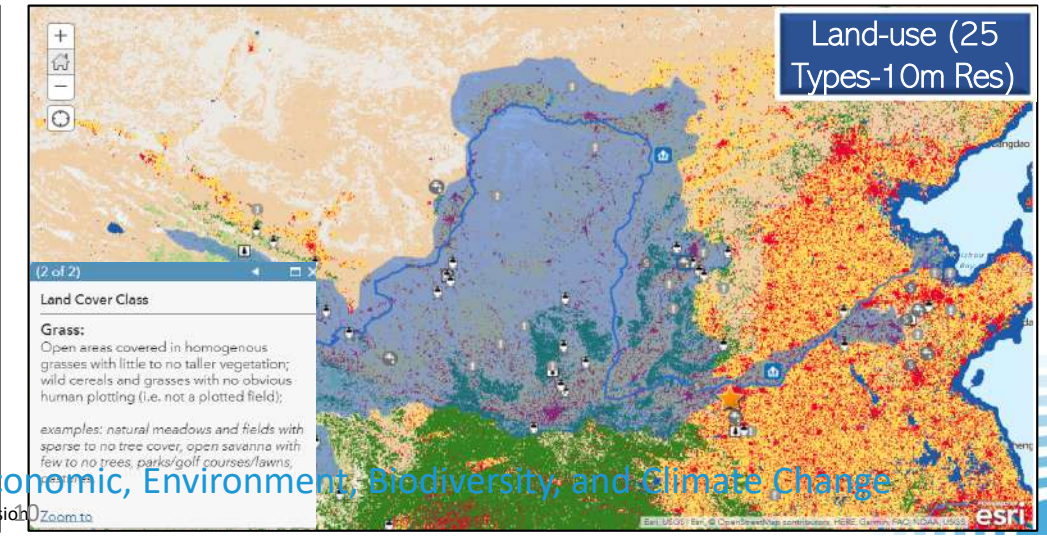
- Supporting the YREB Development Plan goals through institutional coordination and strengthening to achieve green development outcomes
- ADB support to the YREB Development Plan through lending and non-lending assistance
- Planning tools and integrated approaches to balance national and provincial priorities with private sector involvement
- More upstream work for policy and institutional reforms and strategic investment planning
- More enhanced knowledge base and strategic work to leverage investment program
- More refined and targeted thematic foci for improved synergy and development impact

Yellow River Ecological Corridor Program: GIS Portal – 130+ Data Layers









Over 130 GIS Data Layers Clustered in Physical, Socio-economic, Environment, Biodiversity, and Climate Change

Four YREC Thematic Areas for ADB Engagement – Aligned with CPS and Strategy 2030

Water and natural resources management, biodiversity conservation, and nature-based solutions

- Wetlands and forest restoration and conservation
- Supporting ecological protection and enhancing basin biodiversity
- Comprehensive water resources management to improve quality, quantity and allocation

Resilient climate-smart agriculture and value chains

- Enhancing efficiency and productivity of agricultural water use
- Piloting circular and climate-smart agricultural best practices
- Agricultural non-point source pollution control
- Application of ICT to enhance market connectivity

Four YREC Thematic Areas for ADB Engagement – Aligned with CPS and Strategy 2030

Climate change mitigation and adaptation

- Strengthening climate resilience and risk management frameworks and policy
- Integrated approaches for basin-level flood and disaster risk management
- Use of nature-based solutions
- Use a landscape approach to integrate natural, social and economic considerations to achieve climate change goals

Integrated urban-rural green development and circular economy

- Improved wastewater and solid waste management
- Rural vitalization and integrated economic development and pollution mitigation (air, water, soil, marine)
- Focus on the 3 Rs and transforming waste to a resource

Four Key Principles Supporting the YREC Program

Institutional Strengthening

- Improved governance and institutions
- Policy reforms and incentive mechanisms
- Cooperation frameworks and enabling environments
- Multi-stakeholder engagement platforms

Innovative Approaches

- High-level Technology – big data, digital platforms, mobile applications
- Integrated solutions - vertically and horizontally – sector and administratively
- Integration and application of TA/knowledge program to operational program
- Project pilots applying innovative solutions
- Catalyze change at scale
- Gender mainstreaming

Four Key Principles Supporting the YREC Program

Knowledge Management

- High-quality knowledge generation and dissemination
- Capacity building
- Regional cooperation
- Strategic partnerships
- Focus on south-to-south knowledge exchange

Enhancing Private Sector Solutions and Innovative Financing

- Improving regulatory frameworks to incentivize private sector engagement
- Catalyzing investment in funds/FIs to accelerate investment and SME access to credit and sustainable and resilient private sector solutions
- Close collaboration with PSOD on project development and implementation

YREC ADB Non-lending Value Addition

Large Knowledge **Program to Leverage Lending**

1. **Policy reforms and institutional strengthening**
2. **Innovative technologies and integrated approaches**
3. **Knowledge, partnerships, and private sector engagement**

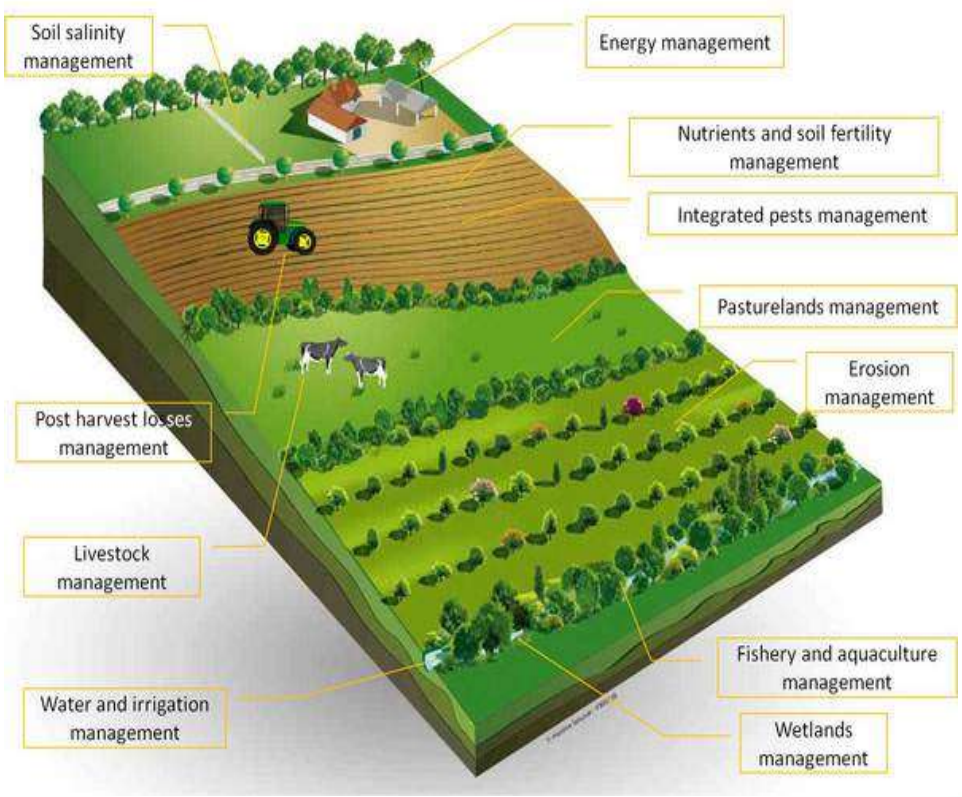
- 13 subprojects in key thematic areas of the YREC Program
- $ 3.8 million
- December 2020 to November 2024

Knowledge, institutional and capacity development

- Water sector assessment, Yellow river master plan, basin law and eco-compensation
- Ecological restoration, biodiversity conservation plan and sustainable grassland management
- Climate change adaptation basin plan, valuation tools and ESG standards

YREC Project Example
Green Farmland Demonstration and High-Quality Agricultural Development Program (2022)

- **Modality:** Sector-based project approach for flexible implementation
- **Sites**: 24 counties in seven provinces 7 provinces within the Yellow River basin
- **Impact**: Resilient ecological protection and security in the Yellow River basin achieved
- **Outcome**: Sustainability of green agricultural production systems improved
- The project shifts focus of ADB financing from agriculture infrastructure to a production system, and value chain approach balancing the importance of agriculture, value addition and the environment complemented by institutional strengthening.



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Thank you