



# Development of the sustainable water and sanitation systems in CAREC region

## China National report

## Main achievement

- Between 2000 and 2015, the share of China's population using at least basic drinking water services rose from 78% to 96%.
- The urban-rural divergences were basically eliminated (UNICEF/WHO, 2017). In 2017, 87.8% of the citizenry had access to improved drinking water.
- China has made progress on water, environmental sanitation and personal hygiene matters. It has achieved the water-related MDG targets 6 years ahead of and its sanitation goals on schedule.

## Major challenge

- China started to accelerate the development of sanitation infrastructure construction from 2015. The proportion of the rural population who have access to basic sanitation facilities is only 61% .

*Data Source:*

[1] UNICEF, WHO, *Progress on drinking water, sanitation and hygiene: 2017 update and Sustainable Development Goal baselines*

[2] UNICEF, *UNICEF in China and beyond*

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# National review of WASH policies and institutions



- Since 2006, the Chinese government has implemented **3 five-year plans** to carry out rural drinking water safety (RDWS) projects.
- The RDWS is directly linked with the **anti-poverty campaign** since 2015.
- The government has issued a series of rules and regulations mainly on the accountability specification and assessment of RDWS.
- The Administrative Measures for the Construction and Management of RDWS Projects issued by NDRC and other concerned ministries specify the regulatory mechanisms for responsibility distribution, project implementation, funding management, and post-construction management

*Data Source:*

*[1] NDRC, MWR, MoH, etc., 13th Five-Year Rural Drinking Water Consolidation and Improvement Plan, 2016*

*[2] NDRC/MWR/Health and Family Planning Commission/Ministry of Environmental Protection/Ministry of Finance (2013), Administrative Measures for the Construction and Management of RDWS Projects*

# National review of WASH policies and institutions



- **The Evaluation Criteria** for RDWS Projects stipulate standards for ensuring water safety in four aspects: water quantity, water quality, water supply assurance rate and water accessibility.
- In terms of **sanitation**, Toilet Revolution has galvanized the government into action since 2018. Access to appropriate WASH services were increased by policy formulation, such as the Healthy Village Standards and Healthy Township Standards .
- Sanitation facilities are administered by the Ministry of Agriculture and Rural Affairs, Ministry of Ecology and Environment, and Ministry of Housing and Urban-Rural Development.

*Data Source:*

*[1] UNICEF, UNICEF in China and beyond*

*[2] China Institute of Water Resources and Hydropower Research, Report on Research and Demonstration of Integrated Technology of Rural Safety Water Supply, 2012*

# Innovative financial mechanism for WASH sector



## Financial Mechanism of Project Construction

- Since 2005, when China rolled out the construction of large-scale RDWS, sanitation and hygiene projects, centralized and local financing have been the largest investment sources, followed by self-financing, with social funds accounting for a rather limited share.
- Between 2016 and 2019, gross investments has reached 25.57 bln USD , including 3.85 billion USD allocated by the national government.
- China has been undertaking efforts to mould a rural infrastructure investment system based on clear-cut and consistent powers and responsibilities, central government support, overall provincial planning, and county-level responsibility.
- RDWS, sanitation and hygiene construction projects have been serving as a medium for tapping into financial credit funds and attracting non-state capital.

## Financial Mechanism of Project Management

- The national government financing has allowed additional subsidies for maintaining rural water supply projects in poverty-stricken areas.
- County-level governments are requested to set up project maintenance funds.
- China has been stepping up the process of forging a reasonable water tariff system. The revenue generated from water fees can cover project maintenance costs. The financial subsidies on behalf of the central government predominantly go for engineering maintenance in backward areas.

# Community-based WASH schemes



- China' government is demonstrating political will to focus more on community-based schemes. Currently, five **community water supply management modes** are operating across the nation – by professional companies, by professional institutions, based on responsibility delegation, by water supply association, and by contractors, respectively.
- MWR has issued the **Measures for Supervision and Management** of Rural Water Supply Projects and the **Guidelins on Promoting Standardized Construction** of RDWS Projects, which both contain provisions on the construction and management of village community water supply projects.
- China has established a sound **water utilization technical system** for community-based water supply engineering , including technologies for groundwater collection, rainwater harvesting, and water purification and disinfection in reservoirs, etc.
- A three-level community water supply management system has been established in some regions of China. In this mode, decisions should be based on feedback from villagers via village committees.



# Knowledge, technology, and experience sharing



- China has made continued efforts to **improve scientific research and technology innovations** in water supply, with achievements and good practices in water access for water-deficient areas.
- To improve **resilience to climate and natural disasters**, technical progress and innovations were made include development of rapid assessment methods, emergency standards for water supply, rapid and efficient water quality testing techniques and repair technology for water supply facilities, as well as antifreeze devices for water supply pipes adopted in low-temperature and alpine regions.

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- Under the Belt and Road Initiative, China has engaged in China-ASEAN 10+1, Lancang-Mekong Cooperation and other **multilateral cooperation frameworks**. Adhering to the principles of extensive consultation, joint construction and sharing, the country has been striving to share its WASH experiences.
- Relevant technologies, equipment, management models, investment and financing schemes **were introduced to** the Lancang-Mekong River Basin countries and South Asia supplemented with **local-level demonstrations**.

# Main recommendations



## National policies and institutions

Strengthen Industry Supervision: standardize supervision and inspection of water and sanitation engineering.

## Implementation finance

Expand country-level (central) and local financial discounting for WASH projects; expand the scope of discounted loans, simplify and streamline application procedures, and extend repayment cycle.

## Community-based water schemes

Enhance technical support for community water supply and sanitation projects by training on technology standards, and raise awareness of rural populations on water, sanitation and hygiene to bridge urban-rural gaps and regional development disparities.

## Knowledge, technology, and experience sharing

Strengthen information sharing and technical cooperation with Central Asian countries in RDWS and sanitation to improve technical systems tailored and adaptable to various water sources and water shortage conditions.





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Thank you!