

**PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: AB6689

<b>Project Name</b>	China: Yan'an Water Supply Project
<b>Region</b>	EAST ASIA AND PACIFIC
<b>Sector</b>	Water supply (80%); Sub-national government administration (20%)
<b>Project ID</b>	P125458
<b>Borrower(s)</b>	PEOPLE REPUBLIC OF CHINA
<b>Implementing Agency</b>	Yan'an Water Investment Ltd Company
<b>Environment Category</b>	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	July 31, 2011
<b>Estimated Date of Appraisal Authorization</b>	November 28, 2011
<b>Estimated Date of Board Approval</b>	May 29, 2012

### 1. Key development issues and rationale for Bank involvement

During the last ten years Government of China (GoC) has made significant efforts to address the disparity between the relatively developed coastal region and the lagging region of western China through implementation of a Western Regional Development Program. The country's manufacturing industries is increasingly moving from coastal cities towards the western parts of the country.

In the 12th Five Year Plan (FYP), the GoC further upgraded the Western Regional Development Program as a top priority in the national territorial development strategy. While implementation of the western development initiative to date has largely focused on promoting the development of big cities (such as Chengdu, Chongqing, and Xi'an), the focus under the 12th FYP has shifted to five areas with rich oil and coal resources. Most of these areas still suffer from significant poverty, reflecting the inter-regional disparity in the country. The central government is making efforts to accelerate the process of industrialization, urbanization and urban-rural integration in these areas with a particular emphasis on the central cities and selected towns of sizable scales.

The project city of Yan'an is a medium-size city in northern part of Shaanxi Province, rich in oil and coal resources and of national strategic importance as an energy production base. It is also a historical site, rapidly growing prefecture-level city located on the Loess Plateau, administering twelve counties and one urban district. Although Yan'an is rich in natural resources i.e. coal, oil etc and has a GDP per capita which higher than most areas in Shaanxi Province, 75% of the labor force is in agriculture and income levels are relatively low compared to other parts of China. The average net income in most rural areas of Yan'an Municipality was about Y5,173/capita/yr (US\$795.8) in 2010 which is equivalent to about US\$2.2 per capita per day.

Yan'an is located in the Loess Plateau of the Northern of Shaanxi Province. The rainfall is about 480-510 mm. The water resources and planning was done for the three counties and Yan'an City

which is also the seat of the municipal government. The population of the whole municipality is about 2.2 million people. The population of the project area is about 1.0 million people.

**The lack of water is one of the main constraining factors for domestic, industrial and service sector development.** The existing water sources (Wangyao and Hongzhuang reservoirs) can no longer supply reliable water in sufficient quantities to Yan'an city. Thus, the project intends to increase the water supply to the city and support its growth. Water will be transferred from the Yellow River and there would be associated works which are described below.

The strategy of the government of Yan'an city for addressing the above challenges include: (a) adopting integrated water resources management principles and consolidating institutions responsible for water services; (b) promoting water conservation measures; (c) stepping up efforts to control water pollution and increase treatment of wastewater; and (d) investing in additional water supply works together with optimizing operations and management of different water supply sources. The proposed project is intended to help the government implement its strategy and enhance urban water supply security.

The proposed Project is consistent with the 2006-10 Country Partnership Strategy (CPS, approved by the Board on May 23, 2006), which seeks among other objectives, to improve the competitiveness of the various regions of China and the overall investment climate, and to address the needs of disadvantaged groups and underdeveloped areas by financing key infrastructure for socio-economic services. The project supports two of the five pillars defined in the CPS: (a) managing resource scarcity and environmental challenges; and (b) improving public and market institutions.

## **2. Proposed objective(s)**

The development objective of the proposed project is to increase the water supply for Yan'an city in a sustainable manner, and improve management of the city's water systems.

## **3. Preliminary description**

Water supply in the Yan'an Municipality is at present based on two water sources, the Xichuan River and the Yan River. Water is abstracted from the Wangyao and Hongzhuang reservoirs on the Yan River, and from the Yan River directly. The project will enhance water supply by abstracting Yellow River water and building the associated works (pipes, tunnels, water treatment plants, and reservoirs) to transfer water to Yan'an city. Further, the project will provide institutional support for the implementation of an integrated water management system. In additional technical assistance would be provided for project implementation support. Details are presented below.

The Bank supported project will have three interrelated components supporting the project development objective: (i) Water Diversion pipeline and pumping station and Treatment Facilities; (ii) Institutional Development and Water Supply Operation Improvement; and (iii) Project Management and Implementation Support. Brief preliminary description of the components is as follows.

**Component 1: Water Diversion Works and Treatment Facilities (Approx. US\$147 million of which Bank loan of US\$55 million).** This component includes construction of: (a) water conveyance works from Gaojiawan RWTP in Yanchuan County to Dongchuan WTP in Yan'an City, conveying 13 Mm<sup>3</sup>/year of water; (b) three online pumping stations (PS) located at Gaojiawan, Xuejiagou and Gaojiageda with capacities of 1.25 m<sup>3</sup>/sec; (c) two water treatment plants – one pretreatment plant at Gaojiawan and one full treatment plant at Dongchuan; (d) a regulating reservoir at Kangjiagou; and (e) installation of a supervisory control and data acquisition system (SCADA) for the water transfer scheme operation.

**Component 2: Institutional Development and Water Supply Operational Improvements (Approx. US\$5 million of which Bank loan of US\$2 million).** The objective of this component is to provide support for: (a) the implementation of an integrated water management system in Yan'an municipality, including institutional measures to integrate related water services including bulk water transfer, water supply, and wastewater treatment; (b) the development of a decision-support system (DSS) for the operations of the water supply system; (c) a water demand management program (water pricing, water conservation, reduction of unaccounted-for water, wastewater reuse and other efficiency improvements).

**Component 3: Project Management and Implementation Support (Approx. US\$3 million fully funded by the Bank loan).** This component includes: (a) project management (including M&E); (b) consultancy services for engineering design review and construction supervision, and supervision of the implementation of environmental management and resettlement action plans.

#### 4. Safeguard policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
<a href="#">Environmental Assessment (OP/BP 4.01)</a>	X		
Natural Habitats ( <a href="#">OP/BP 4.04</a> )			X
Pest Management ( <a href="#">OP 4.09</a> )		X	
Physical Cultural Resources (OP/BP 4.11)		X	
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	X		
Indigenous Peoples ( <a href="#">OP/BP 4.10</a> )		X	
Forests ( <a href="#">OP/BP 4.36</a> )		X	
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	X		
Projects in Disputed Areas ( <a href="#">OP/BP 7.60</a> )*		X	
Projects on International Waterways ( <a href="#">OP/BP 7.50</a> )		X	

#### 5. Tentative financing

Source:		(\$m.)
Borrower		95
International Bank for Reconstruction and Development		60
	Total	155

\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

**6. Contact point**

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