

PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA29230

Project Name	CN-Hubei Xiaogan Logistics Infrastructure (P132562)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Urban Transport (87%), Public administration- Transportation (13%)
Theme(s)	City-wide Infrastructure and Service Delivery (100%)
Lending Instrument	Investment Project Financing
Project ID	P132562
Borrower(s)	People's Republic of China
Implementing Agency	Xiaogan Airport Economic Zone Management Committee
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	20-Jan-2016
Date PID Approved/Disclosed	22-Jan-2016
Estimated Date of Appraisal Completion	28-Jan-2016
Estimated Date of Board Approval	31-Mar-2016
Appraisal Review Decision (from Decision Note)	The Decision meeting authorized the team to appraise the project; The proposed PDO is acceptable; The project risk rating would be Substantial.
Other Decision	Adding a social-economic impact study analyzing the logistics benefits of the project as a Technical Assistance in Project Component 3.

I. Project Context

Country Context

China is experiencing a rapid and massive urbanization. Over the past 30 years, urbanization in China has moved about 260 million migrants from agriculture to more productive activities. This trend supported high growth and a rapid transformation of the economy. In 1978, people living in cities accounted for less than 20% of China's population. The share is 53% now. This megatrend will continue in the future: on the basis of the country's per capita income, by 2030 up to 70% of the Chinese population (around one billion) will be living in cities. This unprecedented socioeconomic transformation has resulted in the burgeoning of cities in a short period of time.

The recent economic slowdown signals the structural shift of the Chinese economy from investment to consumption and from export to domestic spending. Economic growth in China has weakened from 10% on average for the past three decades to 7.4% in 2014, and is expected to reach 6.9% by

2017. This trend marks a transition to a slower but more sustainable growth pattern. The Bank forecasts that the share of domestic consumption in Gross Domestic Product (GDP) will continue its gradual increase at the expense of investment. Retail statistics confirm this trend as, despite the effect of the slowdown, retail sales of consumer goods grew by 10.9% in 2014 in real terms, and have consistently grown faster than GDP during 2008-2014.

China's e-commerce sector is capturing an increasingly important share of retail sales. At USD438 billion (RMB 2,792 billion) in 2014, online sales in China represent more than 10% of retail sales of consumer goods, up from 4.3% in 2011. This trend is set to continue and is projected to reach 20% by 2018.

This pattern of urbanization, domestic consumption and e-commerce development is increasing the movement of goods. Total freight ton-kilometers transported in China grew by 8.9% annually over the past two decades, reaching 16.8 trillion ton-km in 2013. Road shipments comprised 75% of the freight transported in 2013. Freight volumes are expected to grow on par with GDP and reach 80-90 billion tons in 2025. The national truck fleet has grown at an annual average rate of 10% since 1978, and at 8% since 2003. In 2014, nearly 38 million express parcels were delivered daily in China, nearly 50% more than in the US, and this is forecast to rise to 139 million by the end of 2020. This growth will be focused on the central region, which includes Hubei Province.

The growth of freight has stimulated the logistics sector, which however remains inefficient. The Chinese logistics sector has grown at an annual rate of 21% between 2004 and 2012 and is now the largest logistics market in the world. Logistics costs in China represent 17% of GDP, compared to 8% of GDP in the US, 9% in Korea and 13% in India. Goods are moved and stored multiple times before reaching customers and there are limited warehousing facilities, especially for the cold chain. In urban areas, traffic congestion hampers efficient deliveries of goods, systematic delivery networks are undeveloped, and warehousing is disorganized with a high reliance on manual labor. Nationwide, more than 40% of trucks run empty for inter-city trips and it takes on average 72 hours to unload and load a truck. Short-haul truckers frequently return home empty and long-haul truckers have to wait an excessive amount of time to get loads, which reduces operational efficiency. In 2014, 15 million trucks handled 33 billion tons of cargo in China compared to 3 million trucks handling 12 billion tons in the US.

Poor logistics infrastructure is a key reason for the inefficiency of freight operations. China lacks a well-developed logistics network. While the country has expanded its transport infrastructure considerably, connectivity and integration between various transport modes has been lagging. Moreover, good warehousing is in short supply. The disparity in the availability and quality of warehousing between coastal areas and inland China creates barriers for manufacturers who are considering relocation to inland areas. The lack of warehousing is also an issue for Third Party Logistics (3PL) providers. The low level of sophistication of IT technology applications is another contributing factor: most logistics operators in China are small and medium-sized private enterprises, and only a small fraction has integrated IT technology into operations.

The last mile of logistics operations is generally the most inefficient. The last leg in supply chains introduces cost, time and reliability challenges and can represent up to 75% of total logistics costs. With the booming of e-commerce in Chinese cities, deliveries are becoming more frequent and more fragmented, which increases the complexity and importance of the last step in the supply chain. Too many trucks are circulating with low or empty loads, causing congestion and air

pollution. The key factor, however, is often at origin as a proper logistics infrastructure (technology, software, warehouses, vehicles, systems and processes) is essential to optimize last mile connectivity.

Sectoral and institutional Context

The Government of China (GoC) has emphasized logistics development and the strategic transition of Central China. The State Council issued the 'Logistics Industry Restructuring and Revitalization Plan' in 2009 and a series of development plans were introduced in 2010, targeting specific market segments (including modern grain logistics, commercial logistics, and cold chain logistics of agricultural products). The '2014-2020 Mid to Long-Term Plan for Logistics Development', released by the State Council, encourages the use of energy efficiency technologies, reducing empty trips and developing green warehousing infrastructure. In October 2015 the State Council outlined further policies supportive of express parcel and last mile deliveries, including the promotion of Initial Public Offerings (IPOs), industry consolidation, and clarifications over policies on electric tricycles. At a provincial and municipal level, the logistics sector is seen as one of the key industries in Hubei, and key projects include logistics parks, city delivery initiatives, and professional 3PLs.

Xiaogan has a large low-income population but has been growing at a fast pace. The municipality, located 60 km northwest of the provincial capital Wuhan, has a population of 5.3 million with a 51% urbanization rate. It has jurisdiction over seven counties, two of which are listed as national poverty counties. In 2012 around 50% of Xiaogan's population had incomes below the bottom 40% of the population in China. Nonetheless, the city has been developing rapidly in recent times, with a 12.4% annual growth rate from 2010 to 2014.

The rapid urbanization and development of Wuhan and Xiaogan have led to increased domestic consumption and thus to strong freight demand. Retail sales of consumer goods in Wuhan and Xiaogan are expected to grow from an estimated volume of 43 million tons in 2013 to 52 million tons in 2020. This requires a modern logistics infrastructure to be in place for storage, packaging and delivery.

The Xiaogan Airport Economic Zone (AEZ) is in an ideal position to respond to this growing demand for logistics in the area. The AEZ is located in the center of China within a cradle of three national highways: G4 Highway (Beijing-Hong Kong-Macau), G70 Highway (Fuzhou to Yinchuan), and G42 Highway (Shanghai to Chongqing). It is currently 13 km from the largest railway freight marshalling yard in Asia, 36 km from the Yangluo inland deep-water port and 25.7 km from the Wuhan-Tianhe Airport. It is located 30 km from the Xiaogan city center and 16 km from the Wuhan Metropolitan Area via a network of highways, arterial roads and ring roads. These connections are poised to improve with the construction of the planned road network over the next five years (including roads funded by the proposed project) and will enhance links to freight hubs and urban areas. Land available to develop AEZ is around 39 km², including 3.3 km² for logistics purposes (with possibilities of expansion in the future).

The Xiaogan Logistics Park's (LP) key functions are a Regional Distribution Center (RDC) and city logistics/last mile connectivity. A DHL Study identified two core functions for the park: (i) RDC; and (ii) city logistics and last-mile connectivity. A RDC is the core of supply chain management. Its scope includes basic logistics operations: warehousing, inventory management, routing optimization, and value added services (co-packing, labelling, and e-fulfillment). AEZ is a

favorable location to set up a RDC because of its: (i) connectivity to the transport network (road, rail, and waterways); and (ii) low land and labor costs. City logistics is seen as an important function because: (i) Wuhan's air pollution and traffic congestion can be partially resolved with a more consolidated delivery model which reduces individual truck trips; (ii) AEZ is planned to host an urban residential area, which creates demand for city deliveries and facilitates the adoption of a new city delivery model.

The proposed project will help plug the missing connectivity links for the LP, which would in turn have positive externality effects on the entire network. The current road link to Xiaogan City and to the G4 Highway passes through residential areas planned along Xiaohan Avenue. Vertical Road No. 1 and Horizontal Road No. 8, which will be financed by the proposed project, will divert freight traffic from these residential areas. This will help segregate freight and residential traffic and will have positive implications in terms of congestion and safety for the network as a whole. Since much of AEZ is still farmland, there is a good opportunity to develop a rational road network to cater for freight in a safe and sustainable manner, while also improving connectivity for local communities.

Asia's and China's leading logistics companies have already settled in the LP. These include Shen Tong Express (STO, which focus is e-commerce), Global Logistics Properties (GLP, Singapore's premier logistics firm), Fengshu (Mapletree), Yunda Express, Daily Express, China Mobile and Baowen Logistics. They have committed to invest a total of USD447 million to build their logistics facilities. GLP alone has already invested RMB180 million and has committed to invest at least RMB650 million in total. This investment in a labor-intensive sector will create substantial employment opportunities and will benefit the local economy in and around Xiaogan. These companies cite the following as their primary reasons for investing in the LP: preferential AEZ policies to attract business, availability of land for large warehouses, and favorable labor costs. According to the DHL study, the AEZ's land cost is 70% lower than in Wuhan, and the labor cost is 30-50% lower than in Wuhan. With two thirds of the park yet to be occupied, the proposed project will help to attract additional investors to the park.

The project will consolidate freight bound for Wuhan and Xiaogan, resulting in improved last-mile connectivity for companies settling in the logistics park. As detailed in a recent Bank paper, there are many benefits to agglomeration in logistics operations. When freight generators are located close to each other, they can share capacity, increase the frequency of shipping, balance inbound and outbound flows, and consolidate less-than-truckload (LTL) operations to reduce the cost of last-mile logistics. The proposed project enables such agglomeration through internal and external road connections, as well as by providing technology, software and systems which will enable cooperation and capacity-sharing among logistics players. The LP is expected to capture 80% of delivery demand for AEZ, 20% for Xiaogan and 5% for Wuhan. As such, the LP is in an ideal position to improve last-mile connectivity for the companies it will host. Besides, road is projected to be the overwhelming freight transport mode. The DHL study estimates that the park will handle 4.5 million tons by 2020, of which 52,000 tons would come from air cargo. A survey of the companies settling in the LP has confirmed that road freight will be largely predominant: 100% for China Mobile, 95% for Yunda Express, 90% for Baowen Logistics, 86% for Daily Express, 70-80% for Mapletree.

The Xiaogan LP is being developed through a mix of public and private investments. Private investors will finance and operate the core logistics facilities and equipment (warehouses and

vehicles), while road infrastructure, utilities and systems will be publicly financed. Public funding of roads and utility connections (water, drainage, power, gas and telecom) is necessary to attract logistics companies and ensure that the park layout is well-planned and includes a hierarchical road design. Public funding for centralized technology will help ensure that information is shared amongst all logistics providers, large and small, link demand with idle capacity, and improve the efficiency of the entire logistics system.

II. Proposed Development Objectives

To enhance the connectivity and efficiency of the logistics operations of the Xiaogan Logistics Park in Hubei Province.

III. Project Description

Component Name

Component 1: Connected Logistics

Comments (optional)

Component Name

Component 2: Efficient Logistics

Comments (optional)

Component Name

Component 3: Institutional Strengthening

Comments (optional)

IV. Financing (*in USD Million*)

Total Project Cost:	151.02	Total Bank Financing:	100.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			51.02
International Bank for Reconstruction and Development			100.00
Total			151.02

V. Implementation

A. Institutional and Implementation Arrangements

Xiaogan LP Project Leading Group (PLG). The PLG will be the coordination platform for this project. It was formally established on January 10, 2014 following discussions with the World Bank, the Provincial DRC and the Provincial Finance Bureau. The PLG is chaired by the executive vice mayor of the Xiaogan Municipal Government. The deputy general secretary of the Municipal Government and key leaders from the Municipal DRC, the Municipal Finance Bureau, the Xiaogan Urban Construction Investment Company (XUCIC) and the AEZ Management Committee are acting as vice-chairmen of the PLG. The PLG comprises the following agencies: the Municipal

DRC, the AEZ Management Committee, the Municipal Finance Bureau, the Transportation Bureau, the Land Use Bureau, the Urban and Rural Planning Bureau and the XUCIC.

The Project Management Office (PMO). The PMO will be set up under the authority of the PLG and located within the AEZ management committee. The PMO will be responsible for the supervision and organization of the project, coordination with Xiaogan municipality and other agencies, and will act as the implementing unit of all project contracts. As such, it will be responsible for procurement and FM work, including detailed design, bidding documents, organization of the bidding process, contract signing and management, selection of supervision agencies, construction management, payment to contractors, preparation of withdrawal applications, completion acceptance, preparation of project progress reports, financial accounting, editing annual and semi-annual financial reports and coordination with the audit department.

The Vice Secretary of Municipal Government will be the PMO leader and the leader of the AEZ Management Committee will be the PMO deputy vice leader. The PMO will incorporate staff from XUCIC, the local financing vehicle which has been involved in project preparation. Other members of the PMO will include two staff for engineering and technology management, two accountants, one procurement manager, two staff for overall management and two translators.

The PMO will hire an international consulting firm under the project management contract to provide a wide range of services, including: project management, review of reports and safety protocols. The firm will also support the AEZ to review designs and bidding documents and provide help in construction management, payment process, financial management and report filing.

B. Results Monitoring and Evaluation

The PMO will be responsible for data collection on the Results Framework. It will furnish progress reports to the Bank every six months documenting progress of project activities and progress towards achievement of the PDO, using the indicators in the results framework. The progress reports will also include an external monitoring report on the implementation of the Environmental Management Plan (EMP) and the Resettlement Action Plan (RAP).

The Monitoring and Evaluation Framework has been designed to evaluate the outcomes and outputs of this project but also to maximize the replicability of lessons learnt and experience gained in other projects. The PDO indicators are easily measured and easily transferred to other similar projects. They could form an element of benchmarking for the logistics sector in China.

C. Sustainability

Social and environmental sustainability. Green logistics has been at the core of project design and is a main theme across all components. The design of the planned roads was modified to improve segregation between motorized and non-motorized traffic. In addition, roads will be audited for road safety pre- and post-opening. The logistics information management building will comply with China's highest environmental standard (i.e., Three-Star standard). The public information platform and ITS will contribute to environmental and social sustainability by improving logistics efficiency, alleviating congestion, reducing fuel use, and improving road safety. In addition, women's concerns were identified and addressed during preparation: mechanisms will be in place to guarantee gender equality in resettlement compensation and support will be provided to help

women access employment opportunities.

ESMAP Grant. The Energy Sector Management Assistance Program (ESMAP) has approved a USD100,000 grant for the benefit of the project. The grant aims at supporting the implementation of best practices for an efficient and green LP in Xiaogan. It will finance the following activities: (i) Study tour: organization of visits to 3-4 highly performing logistics parks in order to give key staff working on the Xiaogan logistics park exposure to best practices in green and efficient logistics. The staff will engage in workshops with parks; management and city officials; (ii) Knowledge production: recruitment of a consultant to develop a guide on green logistics measures adapted for the context of Chinese municipalities. The guide will provide different measures that can be implemented at municipality level in order to reduce emissions from logistics activities. Xiaogan will serve as a case study for the guide; and (iii) Capacity building: training sessions for key staff working on the Xiaogan park to build capacity on efficient management of logistics parks.

Financial sustainability. The Xiaogan AEZ management committee will be responsible for managing the operation and maintenance (O&M) of all project subcomponents. The information platform, which will be free, may generate revenues but these are uncertain at this stage and are not taken into consideration. The Xiaogan municipality will cover O&M costs, estimated at USD4.1 million per year during 2021-2040.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

VII. Contact point

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