

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

Report No.: PIDA39166

Project Name	Ningbo Sustainable Urbanization Project (P149485)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Public administration- Financial Sector (15%), Urban Transport (45%), General water, sanitation and flood protection sector (40%)
Theme(s)	Pollution management and environmental health (10%), Urban planning and housing policy (25%), Municipal finance (15%), City-wide Infrastructure and Service Delivery (50%)
Lending Instrument	Investment Project Financing
Project ID	P149485
Borrower(s)	People's Republic of China
Implementing Agency	NINGBO PMO
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	20-Mar-2016
Date PID Approved/Disclosed	21-Mar-2016
Estimated Date of Appraisal Completion	18-Mar-2016
Estimated Date of Board Approval	15-Jul-2016
Appraisal Review Decision (from Decision Note)	The team was authorized to appraise pending satisfactory completion of safeguards comments and requirements and ISDS approval by RSS in the portal. The ISDS was approved by RSS on March 2, 2016.

I. Project Context

Country Context

1. More than half of China's population now lives in cities. China's rapid urbanization has been highly successful in supporting high GDP growth, economic transformation, productivity increases, and employment creation. Over the next 20 years, urbanization is projected to reach about 65 to 70 percent, adding another 300 million urban inhabitants. By 2030, about one billion people will be living in China's cities, seeking jobs, housing, infrastructure, and other services.

2. The Government of China has recently launched a "New Urbanization" Strategy to sustain the country's economic growth by promoting further urbanization. The New Urbanization Agenda emphasizes the "quality" of urbanization, equalization of basic urban services provision to all residents, including migrants. It gives higher priority to develop cities and towns at the lower tiers of the urban hierarchy, recognizing their role in linking major cities and rural areas and their

potential to accommodate rural-urban migration. The key features of the policy include: (i) agglomeration of smaller cities and neighborhood towns, which have sufficient specialization and linkages to major urban areas; (ii) mixed-use, transit-oriented and pedestrian friendly urban development to limit low density, fragmented urbanization, encroachment on farmlands and nature reserves, and economic provision of infrastructure and services; and (iii) improved connectivity between and within cities to facilitate access to local, regional, and global markets.

3. Ningbo municipality, which is located in the northeastern part of Zhejiang Province, is facing enormous challenges in addressing economic development disparities within its jurisdiction, accommodating millions of migrant workers and coping with increasing climate change risks. Spatial expansion in Ningbo has been oriented towards motorized traffic, contributing to further fragmenting the urban core and challenging the delivery of quality basic urban services. In 2013, per capita GDP in the main urban area of Ningbo was a little over US\$30,000, but was merely a third in the counties of Xiangshan, Ninghai and Fenghua. These counties, which are located in coastal areas, are vulnerable to flood risks.

4. Ningbo has been selected by the State Council as one of the 62 pilot cities for realizing new urbanization in China. An important goal of Ningbo's new urbanization strategy is to promote inclusive cities for low-income people and migrant workers. The Ningbo Urban Master Plan for 2006-2020 (2015 revision) was approved by the State Council in March 2015.

Sectoral and institutional Context

5. Population and Urbanization. Ningbo and the counties/county-level cities within its jurisdiction are among the fastest urbanizing areas in China: between 1990 and 2010, the urban footprint of core towns grew twenty times. Urbanization rates in Xiangshan, Ninghai and Fenghua counties are lower than the average of Ningbo municipality (68.3 percent) as well as that of Zhejiang province (61.6 percent). Economic prosperity has attracted migrant workers to Ningbo from all over the country.

6. Urban Regeneration. Xiangshan, Ninghai and Fenghua counties experienced fragmented urbanization with new construction occurring in suburban and rural areas. The lack of quality public space and dilapidated urban infrastructure (landscaping, lighting, shelter, resting seats and recreational facilities) in the existing urban centers is one of the factors that has driven urban sprawl. Public space of acceptable quality is segregated from people by car-dominated roads. This contributes to population desiring to move away from degraded and poorly serviced areas. Meanwhile, at the outskirts of the county towns, existing villages have been surrounded by new land development and become part of the urban footprint. Basic infrastructure and services such as drainage, solid waste collection, and street lighting do not fully cover these "urban villages", where most dwellers are migrant workers because of relatively low rental price. The urban villages often have historical buildings that could be turned into cultural asset and tourism destinations. This is particularly true for the waterfront area of Xikou Township in Fenghua County. Evidence shows urban regeneration that aims at improving land use efficiency and quality of built-up environment presents a powerful tool to curb sprawl and provide convenient access for people to various kinds of urban amenities and services. This project was selected to implement some of the key recommendations of China's New Urbanization Plan and the joint World Bank and DRC report on China's urbanization, both emphasized the need to have a people-centered development with a shift towards more compact and mixed-use land development patterns to contain urban sprawl,

maximize resource efficiency, curtail the negative externalities of pollution and congestion, and create more livable and productive cities.

7. Urban Transport. Despite gradual growth in urban population, the county towns have invested considerably in expanding its urban area and building new transport infrastructure, while there are still missing links for the existing urban road network. Wide roads with multiple lanes have favored motorized traffic and further fragmented the city. In Xiangshan for example, while 69 percent of the daily trips by local resident is still made by bike or foot and only 20.3 percent of the trips are by car, as income raises, motorization is taking place rapidly, at an annual rate of 30 percent in recent years. Meanwhile, the number of accidents increased substantially - around 45 percent from 2010 to 2014. Interventions need to be developed to stop the tendency, gain greater safety and overall to improve urban mobility. To reduce the decline in non-motorized trips and increasing motorization, it is critical that the county towns reinvests in the existing downtown area and improves the quality of transport infrastructure and safety of pedestrians, bikes and electric bikes, and provides a more efficient and accessible public transport system for the longer journeys. Xiangshan's public transport has made some progress but service quality remains unsatisfactory due to poorly maintained bus stops/station, low frequency, ineffective schedule information sharing and an aging fleet. Traffic management and Intelligent Transport System are at their initial stage, and the traffic efficiency and safety need to be improved. The mode share for public transport has been declining and was 3.69 percent in 2014 currently with annual public transport passengers in Xiangshan at 14.5 million in 2013. The public transport satisfaction survey carried out during preparation highlights that only 28 percent of passengers were fully satisfied with the bus service, and 33 percent expressed dissatisfaction. The county aims at increasing public transit modal share to 10 percent by 2020, which requires enormous new investments in infrastructure and substantial improvement in service quality. Likewise, in Ninghai County, it was reported that bus services ends too early--only four lines out of 19 are in operation after 7:30pm. In addition, no bus service is available to connect the city center to the industrial park, where most migrant workers find their jobs. Elderly, children and lower income families would especially benefit from improved access by walking, biking and public transport to jobs, education services and health facilities. In accordance with China's urban transport development strategy, this project aims at enhancing sustainable transport system through improvements on the road network connectivity, public transit services, intelligent transport system, and non-motorized mobility in the participating counties.

8. Flood Risk Management. Zhejiang province typically experiences the heaviest economic losses from tropical cyclones in China. The total economic losses from tropical cyclones amount to around 0.38 percent of the country's GDP. Of the top ten costliest tropical cyclones in the period of 1983-2006, six hit the province. Urbanization in Ningbo has been expanding to lower land with higher risk of flooding. The average elevation of urban area in Ningbo used to be 7.99 meters in 1990, but it dropped to 6.11 meters in 2000 and 4.82 meters in 2010 as new development mostly occurred on lower flood plains. Moreover, in recent years, Xiangshan and its neighboring counties started to reclaim coastal areas to make room for urbanization and this further exacerbates the cities' exposure to flood risks. Urban flooding has significant impacts on urban transport infrastructure, utility supply and the overall livability of cities. This is a particular urgent issue in counties such as Xiangshan as it is hit every year by typhoons and storms, with impact on slowed traffic, blocked access and increased accidents. The latest national FYP calls for a reduction in vulnerability of cities and towns to natural disasters, such as floods and typhoons in the coastal region. Integrated flood risk management strategies that involve good water management, protection of green space and roadway drainage design solutions can reduce the volume and slow

down the rate at which rain water runs off roads and other paved surfaces, reducing the damage caused by floods.

9. **Climate Change Adaptation and Mitigation.** Growing evidences suggest that China's climate is indeed changing, especially at the regional level. Along with rising temperatures and changing precipitation regimes, the distribution of extreme weather events has also shifted. According to the government's estimate, direct economic losses from extreme weather events amount to 1-3 percent of China's annual GDP. New construction is often taking place on risk-prone areas. Rapidly growing automobile ownership is gradually changing China's urban landscape, exacerbating the already acute air pollution in many parts of urban China, while adding to global environmental concerns. The project investment and design have taken climate change as a key consideration. On the adaptation front, a suite of flood management and road construction measures has been adopted to reduce runoffs to low-laying floodplains in Xiangshan. On the mitigation front, the project interventions include retrofitting the public transport system with a new fleet of cleaner more fuel-efficient buses; promoting non-motorized transport in center urban areas through urban regeneration investments, etc.

10. **Institutional Setting.** The Planning Bureau and the Bureau of Housing and Urban-rural Construction are responsible for developing urban regeneration plans in the urban cores of counties adjusting land use zoning as needed, coming up with financing arrangements and issuing permits for civil works. Urban regeneration is often included as a special section in the county master plan and near-term construction plan. The Transport Bureau is in charge of developing investment plans for the construction of urban transport facilities and the traffic police plays an important role in traffic management. A state-owned company that receives subsidies from the county normally provides public transit service. The Water Conservancy Bureau leads the development of long-term flood management plans and yearly construction plans of the counties. At the township level these responsibilities are assigned to designated local government officials, subject to supervision from the county level Bureaus. Capacity for project management is relatively weak.

II. Proposed Development Objectives

The objective of the project is to improve the use of urban public space, improve urban mobility and reduce flood risk in selected counties in Ningbo municipality.

III. Project Description

Component Name

Component 1: Urban Regeneration

Comments (optional)

The objective of this component is to create a vibrant and safe urban environment by improving the quality of public space following people-centered design strategies and expanding the coverage and upgrading the service level of urban utilities .

Component Name

Component 2: Urban Transport

Comments (optional)

The objective of this component is to strengthen urban mobility by completing urban road network and improving the capacity, reliability, and service quality of the bus system .

Component Name

Component 3: Flood Risk Management

Comments (optional)

The objective of this component is to reduce the vulnerability of the counties to the risks of floods.

Component Name

Component 4: Technical Assistance and Capacity Building

Comments (optional)

This objective of this component is to create more livable local communities by supporting local governments in finding cost-effective solutions based on sound financing plans.

IV. Financing (in USD Million)

Total Project Cost:	317.50	Total Bank Financing:	150.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			167.50
International Bank for Reconstruction and Development			150.00
Total			317.50

V. Implementation

A. Institutional and Implementation Arrangements

11. Ningbo Municipal Project Management Office (NPMO) will coordinate and manage the preparation and implementation of the project. County-level PIUs have already been established in Xiangshan (XPIU), Ninghai (NPIU) and Fenghua (NPIU) for project execution and for coordination among different relevant county government agencies. Project Leading Groups (PGLs) have been established at both Ningbo Municipal level and the county level of Xiangshan, Ninghai and Fenghua with the purpose of ensuring strategic guidance.

12. The Feasibility Study Reports (FSRs) of about half of the investments have been appraised; pre-feasibility studies are in place for the remaining investments. Consultants have been hired to support the PIUs with the preparation of FSRs, the Social and Environmental Assessment of the project, and the preparation of the Project Implementation Plan. A Project Implementation Plan (PIP) is in place and details institutional arrangements, key workflow procedures, and a time-bounded schedule covering the entire project cycle, including all key activities (such as resettlement, design and construction). The PIUs will prepare annual work plans, which would include the procurement plan for the coming year and assurance of counterpart funds availability.

B. Results Monitoring and Evaluation

13. The Results Framework (RF) describes the PDO-level outcome indicators and the component-specific intermediate indicators, including core sector indicators, and respective baselines and targets. Monitoring and Evaluation (M&E) arrangements and responsibilities are described in detail in the Project Implementation Plan. Project M&E will be the responsibility of the Ningbo PMO and the County/District PIUs. A designated M&E officer will be appointed in the PMO for compiling M&E data for consolidation into the semi-annual project progress report.

During the Mid Term Review (MTR) all target values of all indicators will be reviewed and adjusted as required.

C. Sustainability

14. As Ningbo is one of the pilot cities for implementing China's new urbanization strategy, the overall sustainability of this project is ensured by the national policy as well as the commitment of Ningbo and the local governments to improve the quality of life, urban environment, resilience and economic development in the participating counties.

15. **Physical Sustainability.** The selection of project activities is demand-driven and districts and sectors that are in urgent need of infrastructure and service quality improvements have been prioritized. Urban regeneration activities are based on county master plans and zoning regulations. Rezoning and urban design for targeted areas is either underway or planned to support project implementation. The project introduces best practices of physical improvements for NMT and public transport, traffic management measures and ITS; these interventions are concentrated on selected corridor to maximize demonstration effects. The flood management component combines "low-regret" engineering solutions and improvement in the drainage system; these investments would address future uncertainties caused by climate change and rapid urbanization.

16. **Institutional Sustainability.** The technical assistance component will contribute to improving capacity and developing plans to integrate planning and financing of new and existing urban infrastructure to optimize resources and to effectively manage socio-economic activities of the city towards sectoral integration. Proper operation and maintenance of project assets requires sustained, adequate human resources. The PMO will allocate sufficient staff and to provide them necessary training to maintain infrastructure developed under the project. The projects will be housed under the local Bureaus responsible for each sector, so as to create ownership and to integrate these investments in the asset portfolio of each county town.

17. **Financial Sustainability.** The fiscal analysis confirms that the county towns have the fiscal capacity to sustain the project. Counterpart funds to cover the costs of capital investments and maintenance will be included in each county's yearly budget.

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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