



China, People's Republic of: Yichang-Wanzhou Railway Project

Project Name	Yichang-Wanzhou Railway Project				
Project Number	35339-013				
Country	China, People's Republic of				
Project Status	Closed				
Project Type / Modality of Assistance	Loan				
Source of Funding / Amount	<table border="1"> <tr> <td colspan="2">Loan 2051-PRC: Yichang-Wanzhou Railway Project</td> </tr> <tr> <td>Ordinary capital resources</td> <td>US\$ 500.00 million</td> </tr> </table>	Loan 2051-PRC: Yichang-Wanzhou Railway Project		Ordinary capital resources	US\$ 500.00 million
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Ordinary capital resources	US\$ 500.00 million				
Strategic Agendas	Inclusive economic growth				
Drivers of Change	Governance and capacity development				
Sector / Subsector	Transport - Rail transport (non-urban)				
Gender Equity and Mainstreaming	Some gender elements				
Description	<p>The Project is a new 377-kilometer (km) railway linking Yichang (Hubei Province) and Wanzhou (Chongqing Municipality). As part of the national railway system, the Yichang-Wanzhou Railway (YWR) will shorten the rail travel time and distance between eastern and western PRC and will provide affordable transportation in a poor area. The Project traverses eight counties/districts, five of which are poor counties eligible to receive national poverty reduction funds. About 75% of the total length of the project railway is in the five poor counties. The project area is 88% rural and poverty is widespread. Poverty incidence is 38.4% compared with 8.5% in the PRC as a whole. The per capita net income of the rural population of the project area is CNY1,384, which is 59% of the national average.</p>				
Project Rationale and Linkage to Country/Regional Strategy	<p>The Project meets the railway sector operational strategy of the Asian Development Bank (ADB) for the PRC to reduce network bottlenecks and to promote pro-poor economic growth in poor areas not served by railways. The Project is also in line with the Government's western development strategy to provide less developed western regions with infrastructure that will give the poor greater access to economic growth.</p> <p>The poor interior regions in the PRC did not benefit as much from economic growth and reforms as did the east coast, and the gap in economic and social development has increased. Transport constraints and high logistics costs create regional economic disparities and prevent the western region from capitalizing on its comparative advantages, and abundant natural and human resources.</p> <p>The YWR will have a positive impact on the entire rail network. The Project will reduce transport constraints and will promote equitable growth in two ways: (i) a less expensive, reliable, and safe transport between the economic centers in the east coastal region and the heart of the western region through the isolated project area will promote economic development along the corridor; and (ii) a shorter east-west route and increased transportation capacity in central PRC will facilitate nationwide exchange of goods and people.</p> <p>The PRC railway system needs both reforms and network expansion. The Project will advance ADB's involvement in railway sector reform by strengthening MOR's internal thrust to change the railway enterprises from a cost center in a planned economy to a profit center in the fast-moving transport market. The components are formulated in line with MOR's 2003 draft railway development plan.</p> <p>The Project will help reduce endemic poverty in the project area, by inducing associated infrastructure development and economic activities and providing direct employment during construction and operation of the project railway.</p> <p>The Project was listed in the People's Republic of China: Country Strategy and Program (2004-2006), which was circulated to the Board on 14 October 2003.</p>				
Impact	Improved transport system in the region that promotes pro-poor economic growth.				

Project Outcome

Description of Outcome	A railway system that reduces transport bottlenecks on the national network, increases transportation capacity of the corridor, and lowers transport costs.
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Progress Toward Outcome	The project has achieved its main objectives of removing transport barriers, reducing transport and logistics costs, and promoting pro-poor economic and social development in the poverty-stricken regions. The construction and operation of YWR has significantly contributed to regional socioeconomic development.
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Implementation Progress

Description of Project Outputs	Railway Operational. Institutional capacity upgraded. Environmental protection facilities developed.
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<p>Status of Implementation Progress (Outputs, Activities, and Issues)</p>	<p>Project Implementation The project has been implemented over seven years starting in late 2003. Civil works of the project consisted of 25 international competitive bidding (ICB) packages (W1-W25, including track laying), 17 national competitive bidding packages. ADB approved advance procurement action on 12 May 2003 to expedite civil works. Contracts for civil works were awarded in four batches during the period from September to December 2004 and construction commenced subsequently. By end 2007, subgrades and most bridges, tunnels, and culverts were completed. The overall progress was prolonged by the construction of Qiyueshan Tunnel (10.5km), which is at one of the most difficult topographies along YWR. By December 2009, this tunnel was through, causing delays of the overall construction schedule by one year. The track laying started from the Yichang end in June 2008, and from the Wanzou end in November 2008 and completed in August 2010. Buildings and ancillary facilities were implemented simultaneously to match the implementation schedule of subgrade works. Buildings construction, electrification, signaling, and telecommunication works were completed in October 2010. Provisional acceptance was issued by MOR on 25 November 2010. Trial operation started on 22 December 2010. The final acceptance of the project facilities is expected in end 2011.</p> <p>Materials ADB financed two packages in amount of \$88.52 million for materials, including concrete girder/beams, sleepers, steal bearings, fastenings, and turnouts. These packages were procured following ICB and awarded during April 2006 to June 2007.</p> <p>Track Maintenance Equipment ADB financed a package of equipments for mechanized track maintenance, containing ballast tamping machines (8 sets), track stabilizer cars (5 sets), fixed track welding machines (1 set), ballast regulating machine (2 Sets) and on-track undercutting ballast cleaning machines (3 Sets). This package, in amount of \$27.01 million, was procured following ICB and awarded in January 2005.</p> <p>Consulting Services ADB financed the consulting services to develop the Guidelines for the Appraisal of Railway Investment Projects. The guidelines introduced international best practices in economic and financial appraisal methodologies and applied them in the context of Chinese Railway investment approval process. Training was also provided for MOR staff and staff from railway administrations on application of the guidelines. This component improved MOR's capacity to use quantitative methods in project appraisal and decision making.</p> <p>Trial Operation Trial Operation of YWR started in 22 December 2010 after MOR completed the preliminary check on construction quality, and transportation safety assessment. The 5 pairs of freight trains and 14 pairs of passenger trains are being operated on YWR for the initial state. YWR had carried 1.55 million of passengers during the period from 23 December 2010 to 30 March 2011. Equipment installed for telecommunication, signal, electrification, and traffic control system were found in good condition. The design speeds of 160km/h and 120km/h are all achieved. No accident had happened since the start of trial operation.</p> <p>Environment Management The YWRCH confirmed that the environmental management plan (EMP) and monitoring program have been implemented in terms of the environment impact assessment (EIA) during construction and adverse environmental impacts have been mitigated effectively. YWRCH established effective institutions to implement the EMP and the soil erosion protection plan (SEPP) during construction. Beijing OASIS was engaged to oversee the overall project environment monitoring. Local environment monitoring stations were engaged to undertake onsite monitoring of surface water quality, air and noise. The Soil and Water Conservation Monitoring Station of the Yangtze River Commission was contracted to monitor the soil erosion as per the SEPP. The FSDI was engaged to supervise the EMP and SEPP implementation. This is the first case in the railway development to engage a qualified entity to supervise EMP implementation.</p> <p>Land Acquisition and Resettlement Land acquisition and resettlement activities began in late 2003 and were largely completed by end 2005. In total, 15,498 mu of land were permanently acquired, which was 5% less than the estimation in the resettlement plan. A total of 628,748 m2 of buildings were demolished, which was 40% more than the estimation in the resettlement plan. The number of displaced persons was 12,336, which was 31% less than estimation. In addition, a total of 10,264 mu lands were temporarily borrowed during YWR construction. A total of CNY649.44 million of land acquisition and resettlement costs were disbursed, which increased 93% than CNY336.63 million estimated in the resettlement plan.</p> <p>Social Development and Poverty Reduction Impact Construction of YWR has significantly contributed to regional socioeconomic development. A total of CNY 27.6 billion project investment in the project area within six years has strongly stimulated local industrial development, particularly in construction materials, energy, as well as services sector. The statistical data shows that socioeconomic conditions in the project area have improved rapidly in recent years. From 2003 to 2009, the GDP growth in project areas ranged from 108% to 299%. With the project area's rapid socioeconomic growth and the increased fiscal revenue of the local governments, the standard of livelihood and incomes of local people have been significantly improved. That is particular the case for the poor.</p> <p>Preliminary Overall Assessement The project has achieved its main objectives of removing transport barriers, reducing transport and logistics costs, and promoting pro-poor economic and social development in the poverty-stricken regions. The construction and operation of YWR has significantly contributed to regional socioeconomic development. The project provided the railway infrastructure in the un-served region composing the east part of Hubei, and the east part of Sichuan and Chongqing. It established an important missing link in the railway network and released the transport bottlenecks on the east-west corridor and provides a new access of transport for the western region. It significantly reduces the cost of transport and provides economic opportunities for those less developed areas in Hubei, Sichuan provinces, and Chongqing Municipality. Significant traffic diversion is taking place from road, waterway, and airlines to YWR for its economic, safe and reliable transportation.</p>
<p>Geographical Location</p>	<p>Hubei Province and Chongqing Municipality</p>

Safeguard Categories

Environment	A
Involuntary Resettlement	A
Indigenous Peoples	B

Summary of Environmental and Social Aspects

Environmental Aspects	<p>The EIA for the Project was prepared by the Fourth Survey and Design Institute (FSDI). State Environmental Protection administration (SEPA) and the Hubei and Chongqing environmental protection bureaus approved the EIA on 31 October 2003. The summary EIA (SEIA), including the summary resettlement plan, was circulated to the Board on 17 June 2003. Major potential environmental impacts include (i) disturbance to breeding grounds of Chinese sturgeon and other sensitive species in the Yangtze due to bridge construction; (ii) wastewater discharge into the Yangtze, particularly at Yichang; (iii) possible clearing of old growth trees; (iv) management of excavated rock and soil wastes; and (v) impacts due to secondary tourism and industrial development. Environmental monitoring will be done by an external monitoring agency, which conducted similar work for previous railway projects. Institutional arrangements for environmental mitigation, monitoring, reporting, and oversight are summarized in the SEIA. An independent panel of experts will be established and funded by the TA to carry out periodic reviews of the implementation of specific mitigating measures identified in the EIA. The EIA concluded that the potential adverse environmental impacts can be successfully mitigated. The environmental management plan of the EIA will be incorporated into the detailed engineering design and PPMS to ensure implementation in accordance with ADB guidelines and the Government regulations and procedures. MOR will adopt the independent environmental supervision scheme.</p>
Involuntary Resettlement	<p>The Project will require the acquisition of 1,087 hectares (ha) for the railway rights-of-way and stations. An additional 200 ha will be used temporarily during construction. Of the permanently acquired land, 39% is agricultural, which affects the livelihoods of 7,420 people. About 450,000 square meters (m²) buildings will be removed, which affects 17,750 people. Since many people lose both land and housing, the total number of affected people is 20,140. Land acquisition and resettlement impacts were minimized by selecting the railway alignment to avoid, to the extent possible, areas with high population densities. FSDI has completed a survey to refine the alignment and further modifications were considered to reduce the number of affected people. Special investigations of the resettlement impacts for the three largest stations in Enshi Prefecture were carried out. MOR and the local governments will ensure that any people losing land, housing, other assets, or other means of production will be assisted in restoring their incomes and living standards. Either lost assets will be replaced or the owners will be compensated at replacement cost. Additional support will be given to the ethnic minorities, the poor, women, and other vulnerable groups (e.g., the elderly, children, and the disabled). Village rehabilitation plans have been formulated for the three largest stations based on inputs from local officials and affected people. Consultations will continue during detailed design phase and project implementation. A resettlement information booklet was distributed to affected villages in July 2003. In September 2003, the full RP in Chinese was distributed to each RCSO at the township level along the railway line. After MOR approves the preliminary design report, a detailed measurement survey of the alignment and station areas will start to determine the precise amount of land, housing, and assets affected.</p>
Indigenous Peoples	<p>Ethnic minorities live in certain parts of the project area. Enshi Prefecture is a Tujia and Miao Autonomous Prefecture. Five of eight counties along the alignment are minority counties, with the minority population ranging from 36% to 54% of the total county population. The largest ethnic minorities are the Tujia (92.4%), followed by the Miao (4.8%), and the Dong (1.3%). This region is the traditional homeland of Tujia. An ethnic minority analysis conducted during the PPTA concluded that the Tujia people have largely assimilated into the majority and the ethnic minorities enjoy the same economic status as the majority Han.⁴⁰ Analysis of the impact on minorities found that the Project would not affect them adversely in a disproportionate manner. Therefore, the Project does not need a separate ethnic minority development plan. The adverse impacts from land acquisition have been addressed in the RP. Special measures have been identified to ensure that ethnic minority people are resettled with due consideration for their traditional values.</p> <p>The Project will have positive impacts on poverty reduction. Of the poor population, 39% will be raised above the poverty line by 2008. Poverty incidence in the project area is expected to decline from 38.4% to 15% after project completion. As economic development takes place, poverty will be substantially reduced in the project area between 2018 and 2020.</p>

Stakeholder Communication, Participation, and Consultation

During Project Design	<p>Public consultations involved people living in the project area. Social assessment investigations began in 2001. Meetings with local people and a survey of 200 respondents for environmental issues were conducted in September 2001. FSDI held meetings with local officials and interviewed 774 randomly selected households of potentially affected people in March 2002. Under the project preparatory technical assistance (PPTA), the consultants carried out further consultations and surveys of 250 households and 33 villages along the alignment between June and September 2002. They found that the local people could benefit from low-cost, safe, and reliable transport services. From January to March 2003, further participatory investigations were undertaken to study the resettlement concerns of the most severely affected villages in the proposed station areas, particularly the concerns of vulnerable groups, such as the poor, households with female heads and ethnic minority groups.</p>
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During Project Implementation	Public consultation has been continuously conducted during implementation through interviews by ADB's review missions and through the external monitoring activities on resettlement, social and poverty reduction impact, as well as on environment protection.
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Business Opportunities

Consulting Services	The ADB loan will finance 34 person-months of international consulting services. The recruitment of consultants under the loan will be undertaken in accordance with ADB's Guidelines on the Use of Consultants, using Quality and Cost-Based Selection Method. The engagement of domestic consultants will be conducted in accordance with Government procedures acceptable to ADB.
Procurement	Civil works and goods, and equipment to be financed by ADB will be procured following international competitive bidding or international shopping, or direct purchase procedures, in accordance with ADB's Guidelines for Procurement, and using ADB's standard bidding documents. ADB-financed civil works contracts and specialized materials such as rails, sleepers, and bridge beams. Prequalified contractors with adequate technical and financial capacities will be allowed to bid for several packages and, if successful, may be awarded more than one contract based on the least-cost combination of contracts. Advance action for procurement of civil works was approved by ADB.

Responsible Staff

Responsible ADB Officer	Wang, Fang
Responsible ADB Department	East Asia Department
Responsible ADB Division	PRC Resident Mission
Executing Agencies	<i>China Railway Corporation (Formerly Ministry of Railways) Mr. Liu Junfu Beijing, China</i>

Timetable

Concept Clearance	19 Jun 2001
Fact Finding	23 Nov 2002 to 06 Dec 2002
MRM	12 May 2003
Approval	15 Dec 2003
Last Review Mission	-
PDS Creation Date	24 Nov 2006
Last PDS Update	09 Dec 2011

Loan 2051-PRC

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
15 Dec 2003	27 May 2004	26 Jul 2004	30 Jun 2010	31 Dec 2011	23 Dec 2011

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	2,363.00	Cumulative Contract Awards			
ADB	500.00	15 Dec 2003	497.50	0.00	100%
Counterpart	1,863.00	Cumulative Disbursements			
Cofinancing	0.00	15 Dec 2003	500.00	0.00	100%

Project Page	https://www.adb.org/projects/35339-013/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=35339-013
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