

# INTEGRATED SAFEGUARDS DATA SHEET

## CONCEPT STAGE

**Report No.:** ISDSC12639

**Date ISDS Prepared/Updated:** 30-Jun-2015

**Date ISDS Approved/Disclosed:** 09-Jul-2015

### I. BASIC INFORMATION

#### A. Basic Project Data

<b>Country:</b>	China	<b>Project ID:</b>	P153548
<b>Project Name:</b>	Lushan Earthquake Reconstruction and Risk Reduction Project (P153548)		
<b>Task Team Leader(s):</b>	Madhu Raghunath		
<b>Estimated Appraisal Date:</b>	14-Oct-2015	<b>Estimated Board Date:</b>	10-Mar-2016
<b>Managing Unit:</b>	GSU08	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Other social services (20%), General education sector (20%), Rural and Inter-Urban Roads and Highways (20%), Sanitation (20%), Water supply (20%)		
<b>Theme(s):</b>	Natural disaster management (60%), City-wide Infrastructure and Service Delivery (20%), Rural services and infrastructure (10%), Other environment and natural resources management (10%)		
<b>Financing (In USD Million)</b>			
<b>Total Project Cost:</b>	277.50	<b>Total Bank Financing:</b>	250.00
<b>Financing Gap:</b>	0.00		
<b>Financing Source</b>			<b>Amount</b>
Borrower			27.50
International Bank for Reconstruction and Development			250.00
Total			277.50
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

#### B. Project Objectives

The proposed objective is to build disaster resilient infrastructure and strengthen risk reduction and emergency preparedness.

#### C. Project Description

a. Overview

On April 20, 2013, almost five years after the 2008 Great Wenchuan Earthquake, the magnitude 7.0 Lushan earthquake struck Sichuan province, with its epicenter in the Lushan County, Ya'an City. While the scale was smaller, the Lushan earthquake caused similar type of damage, disruptions to infrastructure and impact on the province's population as the Wenchuan earthquake. However, efforts to rescue people from collapsed buildings in the affected region were hindered as more remote communities in the mountains were cut off due to blocked roads, collapsed bridges, fallen boulders and landslides. Similar to the Wenchuan earthquake, there were many landslides and rockslides in the Longmen Mountains, where Qionglai and Ya'an are located. During the emergency and relief period, traffic had to be regulated by restricting most roads to one-way traffic which resulted in long round-trips for emergency responders and rescue workers, delaying provision of emergency help. It was reported that parts of Baoxing County, Ya'an, were isolated by landslides and rescue teams were delayed for 33 hours. Water service, electrical power, and telecommunications were interrupted by the Lushan earthquake. More than one month after the disaster, their restoration was still in progress. The underground water system was severely damaged and temporary above-ground pipes had to be laid to provide emergency water service. This vulnerability demonstrates the need for the infrastructure investments under this project to be designed in consideration of the prevalent hazards to which the project localities are exposed to.

The proposed project targets Qionglai City (Chengdu Municipality) and Ya'an Municipality. These areas are exposed not only to earthquake hazard but also other geological hazards such as landslide and slope instability, as well as flooding. Located 15km from the epicenter of the Lushan earthquake, Qionglai City has a population of 660,000. Qionglai City covers an area of 1,384 sq. km with jurisdiction of 24 towns, 6 of which were severely affected by the earthquake. According to the project description provided by the city, the road network in Qionglai's western regions suffered serious damage (350 km of rural roads), resulting in economic losses of CNY 300 million (or approximately US\$48.4 million). Landslides crippled traffic and severely hampered the emergency response after the disaster. The Ya'an Municipality is a prefecture-level city in the western part of Sichuan province, with an area of 15,300 sq. km. and population of 1.57 million (1.52 million of whom were affected by the Lushan earthquake). There were 176 fatalities and 12,136 injured. Urban and rural infrastructure was significantly damaged by the Lushan earthquake

b. Proposed Components

The proposed project components are as follows:

Component 1. Upgrading and risk reduction for urban and rural roads.

Component 2. Upgrading of prioritized urban infrastructure and urban flood risk mitigation.

Component 3. Establishment of emergency management facilities/evacuation areas.

Component 4. Multi-hazard vulnerability assessment of lifeline infrastructure and risk mapping.

Component 5. Project management and capacity building.

Since 2008, strong earthquakes in Sichuan have diminished the stability of slopes throughout the Longmen Mountains, which increases the province's exposure to secondary geological disasters like landslides. Similarly, the integrity of infrastructure that was not visibly damaged during the Wenchuan and Lushan earthquakes may have been compromised by the strong ground motions associated with these events. The municipalities' exposure to flood hazard also needs to be considered in the technical design of the proposed investments.

In order to improve the resilience of critical urban and rural infrastructure and design risk reduction

measures, it is crucial to conduct a comprehensive, multi-hazard assessment of the risk to infrastructure in the project areas. This is proposed as a project component, which is pending confirmation by the Sichuan authorities. Developing a risk reduction investment plan and feasibility studies for the selected sectors and facilities, this component would also serve to inform and prioritize future risk reduction investments in the project municipalities.

c. Selection Criteria

These proposed investments will be finalized according to the following selection criteria, as discussed and agreed with Sichuan authorities: i) all proposed investments should form an integral part of the Lushan Earthquake Reconstruction Master Plan, the Project of Overall Planning and Implementation Covering Reconstruction after Lushan Earthquake (Sichuan Development and Reform Commission Investment No. 315), and relevant sectoral plans; ii) all infrastructure investments should enhance urban infrastructure service quality and comply with relevant local urban development plans; iii) investments should address both reconstruction needs (“building back better”) and long-term socio-economic development, and iv) investments should contribute to risk reduction in the project municipalities as well as build local capacity for long-term disaster risk management.

**D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The project areas are located in western Sichuan Province, with the urban infrastructure component to be implemented in 6 counties/districts of the Ya’an Municipality, and the rural road component to be implemented in Qionglai City (Chengdu Municipality) and two counties (Tianquan and Yingjing) of Ya’an. Qionglai City is located in the west of Chengdu Plain and borders Ya’an to the southwest. While Qionglai’s topography transitions from plain to mountains from east to west, Ya’an is mostly mountainous.

The specific investments currently proposed by the project municipalities are:

- i) Qionglai City, Chengdu Municipality: 1) the 14-km Daozuo-Huojing Rural Road Reconstruction Project, and 2) the 10.5-km Nanbaoshan Youyu Road-Dayi Huashuiwan Rural Road Reconstruction Project.
- ii) Ya’an Municipality: Lushan County, Baoxing County, Tianquan County, Yingjing County, Yucheng District, and Mingshan District. The proposed infrastructure investments comprise 39.5km of urban roads, 1.1km of embankment, 3.3km of floodway, 1 water supply plant, and 8 emergency shelters.

The project area experiences strong monsoonal influences, with rainfall heavily concentrated in the summer, classified as a humid subtropical climate with long, hot, humid summers and short, mild to cool, dry and cloudy winters. Water resources are abundant. Annual average temperatures range from 14.1~17.9 degrees Celsius, while annual average precipitation is about 1,800mm.

The project area has a long history of human development, with agricultural production as the predominant economic activity. The population is concentrated in small towns that are mostly located in valleys or small plains in the mountainous area. Given its natural conditions, the project areas are in good ecological condition, with extensive and robust surface vegetation. For example, Ya’an has a surface vegetation of 63%. However, the project localities are exposed not only to earthquake hazard, but also other geological hazards such as landslide and slope instability, as well as flooding.

### E. Borrowers Institutional Capacity for Safeguard Policies

A provincial-municipal-county/district project management hierarchy is in place. At the provincial level, there are two Project Management Offices (PMOs). The rural road component will be managed by the Sichuan Provincial Highway Administration Bureau (SPHAB). SPHAB has no World Bank project experience but has been implementing a large ADB-financed road project to rehabilitate and reconstruct 368 high-priority earthquake damaged roads in the nineteen worst-affected counties of Sichuan Province after the 2008 Wenchuan earthquake (Emergency Assistance for Wenchuan Earthquake Reconstruction Project). The project was classified as Environmental Category B. For the urban infrastructure components, Sichuan Urban PMO has extensive experience and is currently managing two World Bank projects, including the Wenchuan Earthquake Reconstruction Project.

At country/district level, capacity for implementing safeguards policies is limited. Two counties have prior World Bank project experience from having been involved in the Wenchuan Earthquake Reconstruction Project implementation since 2009. The Sichuan Urban PMO provided safeguards training in March 2015 to county/district staff, and worked together with the PMO on project safeguards screening tables, demonstrating progress on safeguards capacity-building efforts.

Both provincial level PMOs have assigned dedicated safeguards staff for project preparation. Similarly, each county/district has assigned dedicated safeguards staff. Qualified Environmental Assessment and RAP consultants will be engaged to prepare safeguards instruments in accordance with the World Bank's policies and domestic regulations.

### F. Environmental and Social Safeguards Specialists on the Team

Meixiang Zhou (GSURR)

Ning Yang (GENDR)

## II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The project is anticipated to have environmental and social impacts mainly during construction. Based on the initial screening and scoping, the potential environmental and social impacts are of limited scale and intensity, and can be effectively controlled through proper design and construction management. Thus, the project is classified as Environmental Category B.</p> <p>Environmental screening: The rural road component will include improvement of 4 low-volume roads with total length of 48.5km (two county roads and two village roads). The existing road widths (3.5-5.5m) will be expanded by 1-3m. These roads serve as critical and, in some cases, are the only access roads for remote villages. Based on the information provided by the counterparts as well as field observations, the main environmental issues are</p>

		<p>associated with construction activities, including clearing of vegetation and soil erosion associated with excavation and filling operations, temporary traffic blockage, and pollution to small rivers and creeks. Although the number of households along the roads that were visited does not appear to be high, at certain sections, construction activities may cause disturbance to the population, such as noise, dust and safety issues to nearby households if not well controlled. Road alignments should be carefully planned to minimize cutting, filling and disposal of material. In addition, adequate drainage is critical to minimize environmental impact and flooding during road operation, and warrants particular attention during design and construction.</p> <p>The urban infrastructure component will be implemented in built-up or suburban areas of several towns in 6 counties/districts in the Ya'an Municipality, including 39.5km of road, 1.1km of embankment, 3.3km of runoff channel, 1 water supply plant, and 8 emergency shelters. Specific activities may include: 1) urban roads including subsurface water supply, drainage and wastewater networks; 2) subsurface networks under existing roads that do not currently have such networks; 3) flood/drainage channel improvement and rehabilitation; 4) emergency evacuation areas with emergency facilities; and 5) a new 4000 t/d water treatment plant (WTP) in the Baoxing county. Based on field observations, the proposed activities are of limited scale; the main environmental issues may include social disturbance to nearby communities, such as noise, dust, traffic blockage, and safety issues; water pollution, management of construction wastes and sediments as result of earth works and flood/drainage channel rehabilitation. In comparison, the new WTP in Baoxing may have more significant impacts. The task team was informed that the WTP's raw water will come from creeks and springs in the mountainous area, where such water resources are abundant. The trunk mains from the WTP to distribution networks is included in the project. No major facilities, such as dams, will be needed.</p> <p>Overall, the project environmental impacts and risks are rated as moderate. The recommended</p>
--	--	--

		<p>Environmental Assessment (EA) instruments include an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP). For each specific type of activity, the EMP should be organized to include specific environmental codes of practices to be followed by contractors during construction. In addition, subproject selection criteria and design shall take environmental considerations into account. These may include environmental sensitivity of proposed activities, proper determination of scale (to minimize land taking and ecological footprints to the extent possible), good environmental design such as robust road drainage in hilly areas and minimization of material borrowing and spoil disposal. The Social Assessment (SA) will be a separate report prepared by social assessment consultant; and its key findings and recommendations will be incorporated into the EIA.</p> <p>Information disclosure and public consultation will be carried out during EA preparation, through questionnaire survey, group meetings and interviews. Public opinions should be incorporated into project technical design and EA. The full draft EA should be disclosed locally prior to project appraisal.</p>
Natural Habitats OP/BP 4.04	TBD	<p>Based on the initial screening, there are no critical habitats or environmentally sensitive areas such as natural reserves or forest parks that will be affected by the project. Most activities will take place in built-up or suburban areas. Construction of rural roads will result in a limited amount of vegetation clearing. A small scale water treatment plant will use surface water or springs as raw water sources, which are abundant in the hilly areas and will not impact water ecology substantially. Overall the project is not anticipated to result in significant loss, conversion or degradation of natural habitats. Further survey and assessment will be conducted during project preparation to determine whether the policy will be triggered. EIA will closely look into the potential natural habitat issues, and as needed, carry out alternative analysis, develop avoid/mitigate/offset hierarchy to mitigate any impacts on natural habitats.</p>
Forests OP/BP 4.36	No	<p>The project will not affect any forests. The policy is not triggered.</p>
Pest Management OP 4.09	No	<p>The project will not result in use or procurement of pesticides. The policy is not triggered.</p>

Physical Cultural Resources OP/BP 4.11	TBD	Initial survey shows that there are no significant cultural relics or other types of PCRs in the project area of influence. Further survey and assessment will be conducted during project preparation. The EIA will closely look into the physical cultural relics issue through survey and consultation following the policy requirements during the project preparation, which will provide rationale for the policy triggering.
Indigenous Peoples OP/BP 4.10	No	The social screening suggests that there is no indigenous community or people within the proposed project sites. Most of the project activities and works are in urban areas. Even the rural roads selected for this project are existing roads identified for improvement or expansion by 1-3 meters. They do not pass any ethnic community according to information available. The Social Assessment (SA) will be conducted to determine in more detail the social aspects of the project to adequately address social impacts and risks in relation to poverty, gender, citizen engagement as well as involuntary resettlement. The policy is not triggered.
Involuntary Resettlement OP/ BP 4.12	Yes	The proposed project will support the construction of civil works under the first three components. Land acquisition and involuntary resettlement is likely to take place in activities such as 1) urban roads including subsurface water supply, drainage and wastewater networks; 2) subsurface networks under existing roads that do not currently have such networks; 3) flood/drainage channel improvement and rehabilitation; 4) emergency evacuation areas with emergency facilities; and 5) a new 4000 t/d water treatment plant in the Baoxing county. The proposed activities are of limited scale and demands for land acquisition and resettlement will also be limited and manageable. The infrastructure to be supported under this project consist of 39.5km of roads which include expansion of existing roads, 1.1km of embankment, 3.3km of floodway, 1 water supply plant, and 8 emergency shelters which may amount to several hundreds of thousands of square meters. Based on initial estimation and screening, these works will need to acquire over 600 mu of land and resettle several hundreds of thousands of square meters of ground structures. It is estimated that more than 100 households will need to be resettled. The final figures of the above land demands will be further confirmed during project preparation. In the

		<p>meantime, the project will also maximize the positive social impacts in poverty reduction, risk reduction and inclusive development.</p> <p>Suggested social safeguards instruments include a Social Assessment (SA) and a Resettlement Action Plan (RAP) for each project locality. An overall SA report for all the project counties/cities and a consolidated RAP combining all the county RAPs will be developed. These instruments will be prepared by the PMOs, through experienced professional consulting team to address adequate land acquisition, compensation and livelihood restoration for project-affected people and communities.</p> <p>Furthermore, subproject selection criteria and design shall take social impacts and risks into consideration to avoid or minimize negative social impacts of the project. These may include (i) land demands and readiness; (ii) risk-informed future development needs and trends of local social economic development, such as tourism development; and (iii) providing inclusive development opportunities for the bottom 40% of income groups (poor areas and population, including men and women) by targeting project works and services to poor areas and communities, engaging local citizens, where possible and applicable.</p> <p>The provincial PMOs will need to build the capacity of county or city PIUs in in order to finalize the list of subprojects, identify needs for land for civil works, optimize the location and scale of project works, and address social impacts.</p>
Safety of Dams OP/BP 4.37	No	The project will not involve dams. The policy is not triggered.
Projects on International Waterways OP/BP 7.50	No	The project is location does not involve any international waterways. The policy is not triggered.
Projects in Disputed Areas OP/BP 7.60	No	The project is located in the central region of the country and does not involve any disputed areas. The policy is not triggered.

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS: 01-Oct-2015**

**B. Time frame for launching and completing the safeguard-related studies that may be needed.**

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.



**The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

Safeguard Preparation Plan > Target date November 1, 2015

**IV. APPROVALS**

Task Team Leader(s):	Name: Madhu Raghunath	
<b><i>Approved By:</i></b>		
Safeguards Advisor:	Name: Peter Leonard (SA)	Date: 09-Jul-2015
Practice Manager/ Manager:	Name: Abhas Kumar Jha (PMGR)	Date: 09-Jul-2015

Public Disclosure Copy

Public Disclosure Copy