

## Signing of Japanese ODA Loan with Nepal: Support to reconstruct earthquake-damaged schools and houses for a speedy recovery

On December 21, the Japan International Cooperation Agency (JICA) signed two loan agreements with the Government of the Federal Democratic Republic of Nepal in the capital city, Kathmandu, to provide Japanese ODA loans of up to a total of 26 billion yen for two projects. The two ODA loans will support the reconstruction of schools and housing damaged in the 2015 Nepal earthquake with earthquake-resistant construction.

On April 25, 2015, an earthquake with a magnitude of 7.8 (according to the US Geological Survey) struck Gorkha District, about 80 kilometers northwest of Kathmandu. Including an aftershock on May 12 with a magnitude of 7.3, the main earthquake and aftershocks caused widespread devastation, killing 8,702 people, wounding 22,303 others, demolishing 498,852 houses and damaging 256,697 others (Post-Disaster Needs Assessment).

According to the Post-Disaster Needs Assessment (PDNA) carried out by the Government of Nepal with assistance from the World Bank, EU, United Nations Development Programme, JICA and others, the total amount of damages equaled 706.5 billion Nepalese rupees (approximately 868.9 billion yen) and the total cost required for reconstruction and restoration is 669.5 billion Nepalese rupees (approximately 823.5 billion yen). The country's economy has also been affected, according to a report by the Asian Development Bank (ADB), lowering the estimated real GDP for the 2014-2015 fiscal year (from July 2014 to July 2015) by 0.8 percent to 3.8 percent.



Signing ceremony

The Government of Japan's policy, based on the Build Back Better (BBB) concept, adopted at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan, in March 2015, for the 2015 Nepal earthquake is not only to restore conditions prior to the earthquake, but to support reconstruction with structures that are more resilient to natural disasters. Operating under this policy, the current two projects will support BBB efforts for housing in the regions hit hardest, and for schools which play an important role in people's lives as community centers.

The characteristics of the projects funded by the Japanese ODA loans are described below.

### (1) Rapid school reconstruction – assistance to rebuild earthquake-resistant schools

With more than 31,000 classrooms demolished or heavily damaged and another 16,700 classrooms suffering damages in the earthquake, nearly one million students have lost their place of learning due to delays in classroom repairs and reconstruction even though many schools reopened a month after the earthquake struck. To this day, there are many schools that must resort to tents and other temporary classroom structures for teaching facilities. In addition, rapid restoration of the damaged educational environment is needed. Because the earthquake struck in the daytime on a Saturday, injuries to students and the school staff were limited at schools. Nevertheless, building school environments as safe shelters against future earthquakes is a priority for the safeguard of children.

Given these circumstances, the Emergency School Reconstruction Project will reconstruct, retrofit and repair earthquake-resistant schools and related facilities in 14 districts that suffered particularly severe damage. The education environment will be improved with earthquake-resistant schools, thereby contributing to sustainable socioeconomic development in the region through the BBB concept.

This project is co-financed with the ADB.

### (2) Rapid reconstruction of housing that suffered widespread damage – support for housing reconstruction with earthquake resistance

About half of the total losses caused by the earthquake were houses, which sustained heavy damage particularly in outlying regions. In the regions where the earthquake struck, most of the houses were built with traditional methods using bricks or stones and mud without consideration to seismic resilience. Given such methods, constructing houses with earthquake-proofing in mind is a challenge. To employ the BBB concept in these circumstances, the Emergency Housing Reconstruction Project will reconstruct houses with earthquake-resistant measures for homeowners affected by the earthquake. Through the project, JICA will contribute to restoring and improving the living environment for people affected by the disaster, and will contribute to sustainable socioeconomic growth in the damaged districts through the BBB concept.

This project is co-financed with the World Bank.

### Reference

Terms and Amounts of Loans

Project title	Amount (million yen)	Annual interest rate (%)		Repayment period (years)	Grace period (years)	Procurement
		Project	Consulting services			
Emergency School Reconstruction Project	14,000	0.01	0.01	40	10	General untied
Emergency Housing Reconstruction Project	12,000	0.01	0.01	40	10	General untied

### (1) Emergency School Reconstruction Project

#### (a) Background and Necessity

According to the PDNA mentioned above, the total amount of damage to the education sector was 31.3 billion Nepalese rupees (38.4 billion yen) and the total amount required for reconstruction is 39.7 billion Nepalese rupees (48.8 billion yen), the second highest reconstruction need after housing. The number of classrooms damaged by the earthquake exceeds 47,700, and two-thirds of those were completely demolished. In addition, the catastrophic damage included the destruction of lavatories, cafeteria facilities, furniture and other facilities. Because the earthquake struck in the daytime on a Saturday when school was not in session, it is generally believed that injuries to students and staff members were minimized. However schools are conventionally considered as a safe shelter where residents evacuate to in times of disaster.

In reconstructing these schools, the Government of Nepal is promoting efforts with earthquake-resilient in mind based on the BBB policy, and quickly restoring schools in the wake of this earthquake is a priority.

#### (b) Objective and Summary

This project will use earthquake-resistant measures to reconstruct, retrofit and repair school facilities damaged in the earthquake in 14 districts that suffered particularly high damages in the Nepal earthquake, improving the education environment and making target schools earthquake-resilient, thereby contributing to sustainable socioeconomic development in the region through the BBB concept.

The loan funds will be allocated to the reconstruction and strengthening of earthquake resistance in school facilities and the like, and to consulting services.

#### (c) Executing Agency

Reconstruction Authority (provisional)

#### (d) Planned Implementation Schedule

(i) Completion of project: October 2019 – with completion of school facility construction

(ii) Issuing of letters of invitation for consulting services (including detailed design work): December 2015

(iii) Tender announcement of initial procurement package for international competitive bidding on project construction:

Procurement package title: To be determined

Release date: To be determined

## (2) Emergency Housing Reconstruction Project

### (a) Background and Necessity

According to the PDNA, the total amount of damages to the housing sector was 350.3 billion Nepalese rupees (430.5 billion yen) and the total amount for reconstruction is 327.7 billion rupees (402.7 billion yen), together accounting for 49 percent of the total damages and reconstruction amounts. A large percentage of the houses damaged in the earthquake are of brick or stone and mud mortar construction, a traditional way to build houses in outlying provinces. Of those, 95.0 percent were demolished and 67.7 percent were partially damaged. Primary reasons for such widespread damage to such brick and stone structures include the weak bonding force resulting when using different materials and the weak nature of the building materials.

In reconstructing these houses, the Government of Nepal is promoting the reconstruction of houses with earthquake-proofing in mind, based on the BBB policy, and swiftly reconstructing housing in the wake of this earthquake is a priority.

### (b) Objective and Summary

This project will provide funds for the reconstruction of houses that are resilient to disaster and meet established earthquake standards in northern districts that were affected by the Nepal earthquake, contributing to the speedy restoration of the lives of earthquake victims with the aim of sustainable socioeconomic growth in the region.

The loan will be provided for the funding required for housing reconstruction, consulting services and the like.

### (c) Executing Agency

Reconstruction Authority (provisional)

### (d) Planned Implementation Schedule

(i) Completion of project: December 2020 – with disbursement of the housing reconstruction funds

(ii) Issuing of letters of invitation for consulting services (including detailed design work): December 2015

(iii) Tender announcement of initial procurement package for international competitive bidding on project construction: None