

Official Statement

SiDRR, Silk-road Disaster Risk Reduction, is an international research program for the regional actions on disaster risk reduction and sustainable development. It is the key international program of Chinese Academy of Sciences, and the Flagship Project of IRDR (Integrated Research on Disaster Risk). SiDRR, integrated with the complex natural and social context in Silk Road areas, *Sendai Framework* for DRR (Disaster Risk Reduction) and the *Sustainable Development Goals 2030*, aims at promoting disaster risk reduction and sustainable development improving Science and Technology involvement in the policy making process, and enhancing international cooperation and knowledge sharing in national resilience to disaster risk.

To achieve the goals of our project, four major challenges, which however bring with them many opportunities, have to be faced:

- 1) *Challenge*: a major gap is represented by the lack of a common geological and meteorological background on natural hazards along the Belt and Road with few shared information and an unclear coordination mechanism. New monitoring instruments need to be deployed at critical areas for data collection.

Opportunity: Scientists have to work together to gather and share strategic information about past disasters, their characteristics and distribution. A systematic and large-scale database needs to be implemented in order to effectively collect and exchange/share data which will constitute the foundation of this project.

- 2) *Challenge*: Under climate change, natural hazards show new characteristics in terms of formation, triggering criteria and mobility which are yet not well understood. The dynamic evolution of natural hazards and the future trend need to be studied.

Opportunity: With the active involvement of national meteorological services, long-term data sharing on climate can be possible so recognizing the trend of climate change over the past centuries. This can help in more accurate prediction of the expected climate changes and their effect on the environment and associated hazards.

- 3) *Challenge*: Less hazard and risk assessments have been conducted along the Belt and Road. As different countries have different social and economic status, it is a challenge to justify the acceptable risk baseline for different countries.

Opportunity: Hazard and risk assessment can be conducted at both regional and local level of BRCs where no systematic assessments have been done before. The associated experiences and knowledge transfer among involved countries could

largely benefit in the improvement of the resilience of the communities at risk. Unresolved issues such as trans-boundary disaster could be coped by the involvement of an international scientific community as well as policy-makers.

- 4) *Challenge:* Design codes, procedure, technologies and practices for hazard assessment and mitigation in different countries largely varies. Mechanisms to deal with the trans-boundary disasters are some of the major challenges that have to be faced.

Opportunity: Hazard mitigation has been carried out in the past decade in BRCs in many different forms. However, code of practice in hazard mitigation is neither well developed nor standardized. This project gives the opportunity to act as a starting point to review and systemize the works already done. Key technologies, good design practices and affordable solutions shall be developed and disseminate to less developed countries and regions.

Besides all the challenges and opportunities, this project can bridge the gap to the Sendai Framework priority actions by sharing some of the framework's goals albeit at a smaller scale and shorter timeframe, such as:

- (a) Substantially reduce damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;
- (b) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;
- (c) Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030.