



# Integrated Strategic Environmental Assessment in post-earthquake Nepal 2015-2017

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LESSONS LEARNT REPORT

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## *Table of Contents*

Executive Summary.....	6
1. Introduction.....	8
2. Nepal background: the 2015 Gorkha Earthquake.....	10
3. Institutional context for EIAs and ISEAs.....	13
4. ISEA Process and Methodology.....	14
4.1. Stage 1. Baseline data collection stage.....	15
4.2. Stage 2. Synthesis and assessment.....	22
4.3. Stage 3. Implementation.....	27
5. Lessons learnt and way forward.....	28
6. Conclusions and recommendations.....	29
7. References and additional reading.....	31
Annex 1: List of Contributors.....	33
Annex 2: ISEA Process Milestones.....	34
Annex 3: Government of Nepal Environmental Legal Provisions and International Development Agency Environmental Guidelines.....	38
Annex 4: Road construction activities, expected impacts and recommended mitigation actions.....	47

## *Table of Figures*

Figure 1	Situation map of the 14 most earthquake-affected district.....	10
Figure 2	Aftershocks of Gorkha Earthquake 2015 recorded between 25 April 2015 to 24 July 2017.....	11
Figure 3	ISEA stages followed by the Nepal project.....	14
Figure 4	Earthquake-affected districts of Nepal .....	17
Figure 5	Geographic Areas by level of damages to structures in Nepal 2015 .....	17
Figure 6	River System in 14 earthquake districts, Nepal .....	18
Figure 7	National Parks and Protected Areas.....	18
Figure 8	Geohazard Areas in 14 earthquake affected districts.....	19
Figure 9	Earthquake-affected roads for reconstruction and rehabilitation.....	19
Figure 10	PDRF roads requiring EIAs and IEEs in 14 earthquake affected districts.....	20
Figure 11	Multihazard map of 14 earthquake-affected districts.....	20
Figure 12	Multihazard map of Sindhupalchok District.....	21
Figure 13	Consultative workshop and technical working group meeting 11 April 2017.....	22
Figure 14	Conceptual Methodology for the preparation of synthesis map to screen for IEE or SIA options.....	23
Figure 15	Synthesis Map1: PDRF Requiring EIAs and IEEs in Sindhupalchok District.....	24
Figure 16	Synthesis Map 2: PDRF Roads Requiring EIAs and IEEs for 14 earthquake affected districts.....	25
Figure 17	Synthesis Map3: PDRF Roads with landslide susceptibility Index in Sindhupalchok District.....	26

*List of Tables*

Table 1. Initial screening results of the PDRF projects .....	15
Table 2. Screening stages of Integrated Strategic Environmental Assessments of Post-Disaster Recovery Framework projects 2016-2017 .....	36
Table 3. List of approved EIA projects in Nepal through 2017. Source: MOPE, 2017 .....	40
Table 4. Donor Project Screening and Categorization for EIA .....	43
Table 5. Threshold for EIA and IEE under NRA Working Procedure 2016 for EIA and Environment Protection Rule 1997 .....	44
Table 6. Road construction activities, expected impacts and recommended mitigation actions.	47



*List of acronyms*

ADB	Asian Development Bank
CC	Climate Change Adaptation
DEM	Digital Elevation Module
DFID	Department for International Development
DMG	Department of Mines and Geology
DOLIDAR	Department of Land Infrastructure Development and Agriculture
DOR	Department of Road
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Rules
GIS	Geographic Information System
GPS	Geographic Positioning System
HDDS	Hazard Data Distribution System
ICIMOD	International Centre for Integrated Mountain Development
IEEs	Initial Environmental Examinations
ISEA	Integrated Strategic Environmental Assessment
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
MOFALD	Ministry of Federal Affairs and Local Development
MOFSC	Ministry of Forests and Soil Conservation
MOHA	Ministry of Home Affairs
MOPE	Ministry of Population and Environment
NRA	National Reconstruction Authority
PDNA	Post Disaster Needs Assessment
PDRF	Post Disaster Recovery Framework
PPP	Policies, Plans and Programmes
SEA	Strategic Environmental Assessment
TU	Tribhuvan University
USGS	United States Geological Survey
WB	World Bank

## Executive Summary

According to German Watch (2016), Nepal ranked 7<sup>th</sup> among countries most affected by climate risk. Nepal is thus one of the top 20 most hazard-prone and vulnerable countries in the world. It ranks fourth in terms of relative vulnerability to climate change related hazard, 11<sup>th</sup> with regards to earthquake risk and 30<sup>th</sup> prone to flooding among 198 countries, making it difficult to achieve sustainable development goals, manage its disaster risks and promote climate change adaptation. Due to political instability and low government capacities, developing integrated strategies to meet the 2030 development agenda is especially challenging. The 2015 Gorkha earthquake, which killed nearly 9,000 people and incurred damages of USD 7 billion was a considerable setback for the country (MoHA, 2015).

Following this event, UN Environment's Post-Conflict Disaster Management Branch approached the Government of Nepal in 2016 to address sustainable reconstruction efforts. It proposed to enhance government and stakeholder capacities in implementing an Integrated Strategic Environmental Assessment (ISEA) for the earthquake-affected region based on its experience working with the Government of Sri Lanka on sustainable reconstruction following the conflict in the Northern Province, which ended in 2009.

The ISEA is a tool that can be used both as a high level, long-term planning tool and also to fast-track development in a post-conflict and post-disaster situation while integrating conservation of environment and sustainable development with disaster and climate risk reduction. It gives more rapid guidance on which developments can go forward without Environmental Assessments (which can take several years in Nepal). In addition, ISEAs provide a forum for conflict resolution between conservation and

development-oriented actors and enable data collection and sharing. The tool was first developed in post-conflict Northern Sri Lanka to fast-track sustainable development and planning. It is currently being piloted in the 14 post-earthquake affected districts in Nepal, with more detailed study in Sindhupalchok district (one of the most affected) to ensure environmental conservation while promoting development in the recovery process. The project was undertaken in collaboration with the Ministry of Population and Environment (MOPE) and the National Reconstruction Authority (NRA), which was established in 2016 to oversee post-earthquake recovery and reconstruction. (See Annex 1 for a full list of contributors).

This lessons learnt report covers Nepal's experience with ISEAs as an integrated approach to post-disaster/ post-crisis sustainable development planning with a focus on the road sector. It details the multi-stakeholder process undertaken to map environmental baselines, landslide susceptibility with regards to the roads designated for reconstruction under the NRA's "Post Disaster Recovery Framework". The resulting synthesis maps provide policy makers with a more integrated analysis and clear guidelines for "Building Back Better" in a post-disaster situation. ISEAs provide data related to environmental and social issues for determining whether to conduct more in-depth EIAs. The ISEA approach is thus very useful for integrated development planning toward achieving Sustainable Development Goals, disaster risk reduction and climate change adaptation.

## Key recommendations

- In the present scenario of state restructuring and decentralization, ISEA will be one of the most important tools for sustainable, disaster resilient, environment friendly development planning at every level of government. The first recommendation is therefore to promote ISEAs as a key planning tool in the new decentralized governance system of Nepal.
- Promote ISEAs in order to establish solid spatial baseline data for project monitoring during the implementation phase of approved EIA projects and suggested mitigation measures.
- Although ensuring that these ISEA results are fully implemented is challenging, coordination among concerned stakeholders and willingness of the policy makers can make it successful. Hence, it is important for all policy makers at different government levels and at various scales to understand the ISEA process for the sustainable development of Nepal.

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