



OECD



PAGE 4: B.1) YOUR CASE STORY: TITLE AND DESCRIPTION

**Q1: TITLE OF YOUR CASE STORY**

Manual and database design for geohazard identification and risk assessment for infrastructure and human protection

**Q2: CASE STORY ABSTRACT**

A natural hazard is defined as an event that causes harm to people and the things they value. It is an environmental phenomenon that can be induced by atmospheric, hydrological, geological, and wildfire-related occurrences. Ethiopia is a country of contrasts and as a consequence it experiences a variety of natural hazard events that differ in magnitude, duration, and geographic location. Some of these hazards are known and some of the hazard events can be forecasted while others occur with little or no warning. Depending on their location, citizens of various Ethiopian regions are at risk to a wide range of natural hazards including weather related events, floods, dam failures, earthquakes, volcanic events, slope failures, landslides, rock falls, massive erosion, wildfires, water quality deterioration, and drought.

The rapid expansion of Ethiopian regions, including the development of towns and infrastructure, is confronted with various types of geological hazards. Rapid construction, including a rise in industrial zones, occurs in the regional capitals. The Geological Service of Ethiopia is responsible for providing data about the geology and all types of geological hazards. It serves especially to prepare and plan promotional activities of investors and to realize their projects by minimizing the danger of a failed investment.

The outputs of this project consist of a manual and a database geohazards. The manual is structured in five sections and the data entered into the database are defined at the end of each section. The structure of the database and the instructions for data entry are described in a separate document in electronic form, which enables its modification based on the requirements of the database user.

## PRIVATE SECTOR CASE STORY TEMPLATE

### Q3: LONG DESCRIPTION OF THE CASE STORY

The Geological Service of Ethiopia (GSE) has identified the following shortcomings in the current system:

- GSE has no integrated manual or guide for studying geological hazards
- There is no complex database of geological hazards or risks
- There is a lack of experience with floods, seismicity and volcanic hazards
- No training has been provided on the identification and evaluation of possible risks
- Detailed and specific information about risks is not handed over to the relevant planning institutions and to the public

The objective of the project is to introduce new approaches to the work of GSE, which are required by the Government and for which the institute has undergone restructuring over the past few years. These can be defined in two basic points:

1. Increase specialized qualifications of employees in the field of identification of possible sources of hazards and reviewing of geological risks for the population and infrastructure.
2. Create and hand over material useful for projects evaluating geological risks and for increasing the level of protection of the population and infrastructure, which would then lead to the protection of economic activities and governmental and private institutions, particularly by the regionalization of hazards their expression on a maps of different scales from 2 000 000 to 1:250 000.

Based on the missing parts of the system of identification and evaluation of geological hazards and the stated objective of the project the work was focused on creating the following:

1. Manual for identifying geological and other hazards and evaluating risks to infrastructure and the population, which will be based on existing well-organized manuals for studying landslides and slope deformations
2. Creation and testing of a general database for geological and other risks, especially focused on risks associated with:
  - Floods and other water related hazards
  - Seismicity hazards
  - Volcanic hazards
  - Combined hazards posed by geological and natural events
  - Erosion and accumulation hazards
  - Mass wasting hazard (only in database)

The data assembled by GSE on particular geological hazards will be stored in the database and will be used as a ready-to-test data set. The contents and structure of the data and information about geological and similar risks have been created in the environment of Microsoft Access. The test data set is stored in the database, and training in storing database data is carried out in the form of a workshop.

### Q4: Please add here web links to project/programme materials.

Intranet of The Geological Service of Ethiopia (GSE)

## PAGE 5: C.1) ABOUT THE CASE STORY

### Q5: YOUR CONTACT DETAILS

Name:	Jiri Sima
Company or association	AQUATEST
Country:	Czech Republic
Email Address:	sima@aquatest.cz; nol@aquatest.cz

### Q6: FUNCTION

Private sector

PRIVATE SECTOR CASE STORY TEMPLATE

PAGE 6: C.2) ABOUT THE CASE STORY

<b>Q7: FUNDING SOURCES FOR PROJECT/PROGRAMME</b> Tick the appropriate box(es)	Other (please specify) Ministry of Industry and Trade of the Czech Republic
<b>Q8: Additional information</b>	<i>Respondent skipped this question</i>
<b>Q9: START DATE OF PROJECT/PROGRAMME</b>	April 2014
<b>Q10: STATUS OF PROJECT/PROGRAMME</b>	Fully implemented
<b>Q11: DURATION OR, IF ON-GOING, EXPECTED DURATION OF PROJECT/PROGRAMME</b>	Less than 12 months
<b>Q12: COST OF PROJECT/PROGRAMME</b>	Less than US\$50,000
<b>Q13: Additional information</b>	<i>Respondent skipped this question</i>
<b>Q14: TYPE OF FUNDING FOR PROJECT/PROGRAMME</b>	Grant

PAGE 7: C.3) ABOUT THE CASE STORY

<b>Q15: PROJECT/PROGRAMME TYPE</b>	Single country / customs territory
------------------------------------	------------------------------------

PAGE 8: C.3) ABOUT THE CASE STORY

<b>Q16: SINGLE COUNTRY/CUSTOMS TERRITORY</b>	ETHIOPIA
----------------------------------------------	----------

PAGE 9: C.3) ABOUT THE CASE STORY

<b>Q17: REGION</b> (If the region does not appear in the drop down menu, please enter manually)	East Africa
-------------------------------------------------------------------------------------------------	-------------

PAGE 10: C.3) ABOUT THE CASE STORY

## PRIVATE SECTOR CASE STORY TEMPLATE

**Q18: MULTI-COUNTRY**(Enter all countries or customs territories)

*Respondent skipped this question*

### PAGE 11: C.4) ABOUT THE CASE STORY

**Q19: CASE STORY FOCUS**Tick the appropriate box(es)

Upgrading transport infrastructure,  
REDUCING TRADE COSTS FOR SERVICES,  
Improving skills levels in service sectors

### PAGE 12: C.5) ABOUT THE CASE STORY

**Q20: HOW SUCCESSFUL WAS THE PROJECT/PROGRAMME** Tick the appropriate box

Very successful

### PAGE 13: C.6) ABOUT THE CASE STORY

**Q21: WHAT WERE THE OUTPUTS OF THE PROJECT/PROGRAMME** Tick the appropriate box(es)

Officials trained, Laboratory testing facilities,  
New conformity assessment procedures or processes

**Q22: Additional information**(maximum 300 words)

*Respondent skipped this question*

### PAGE 14: C.7) ABOUT THE CASE STORY

**Q23: WHAT WERE THE OUTCOMES OF YOUR PROJECT/PROGRAMME**Tick the appropriate box(es)

Other (please specify)  
reduction of geohazard risks

**Q24: Additional information**(maximum 300 words)

*Respondent skipped this question*

### PAGE 15: C.8) ABOUT THE CASE STORY

**Q25: WHAT WERE THE IMPACTS OF THE PROJECT/PROGRAMME**Tick the appropriate box(es)

Other (please specify)  
minimizing the danger of a failed investment

## PRIVATE SECTOR CASE STORY TEMPLATE

**Q26: Additional information(maximum 300 words)**

*Respondent skipped this question*

### PAGE 16: C.9) ABOUT THE CASE STORY

**Q27: LESSONS LEARNT Tick the appropriate box(es)**

Importance of attention to long-term sustainability

**Q28: Additional information(maximum 300 words)**

*Respondent skipped this question*

**Q29: PROJECT OR PROGRAMME MONITORING AND EVALUATION FRAMEWORK Tick the appropriate box(es)**

M&E framework used

### PAGE 17: C.9) ABOUT THE CASE STORY

**Q30: How did you receive this case story exercise and the electronic link?Please indicate the organization that sent to you the information:**

Other (please specify)  
Ministry of Industry and Trade of the Czech Republic