

1A:
Shortcomings in
knowledge of risk
and risk
components

64%

"Lack of knowledge for the links between multiple hazards or chain hazards."

Respondent 206, Engineer, Greece

**"Data, their precision, their location in time and space and their completeness.
Hypothesis made behind the method of hazard assessment.
Limit of validity and uncertainty."**

Respondent 105, Engineer, France

1B:
Deficiencies of
hazard and risk
reduction
approaches

37%

"Nowcasting and forecasting natural hazards in data scarce regions."

Respondent 131, Senior Lecturer, United Kingdom

"Better prediction models, understanding uncertainties."

Respondent 165, Independent Consultant, Norway

1C:
Influence of
global change,
especially
climate change

35%

"A poor understanding regarding the concepts of global warming, climate change and extreme events."

Respondent 82, Professor, Portugal

"The compound impacts of climate change on natural hazards."

Respondent 205, Lecturer, United Kingdom

1D:
Integration
of
social factors

18%

"Understanding the interaction and feedback between physical and social processes of natural hazards is essential."

Respondent 238, Research Fellow, USA

"Societal changes and community behaviour must be understood and incorporated as essential part of socio-natural hazards (never only natural)."

Respondent 258, PhD Candidate, Germany

1E:
Inadequate
translation of
science to
policy and
practice

17%

"The major challenge is that no matter how researchers show the risk, policy makers seem not to pay much attention. This is a serious problem."

Respondent 34, Professor, Ecuador

"Turning science into better planning and design; much science seems dislodged from this part of the process."

Respondent 246, Associate Professor, USA

1F:
Lack of
interdisciplinary
approaches

6%

"Natural hazards are by nature multi-disciplinary (mathematics, ocean, atmosphere, geology, social sciences, etc.). Making these different communities speak the same language and work together is a top scientific challenge."

Respondent 345, Research Associate, Croatia