Forensic Research-2013

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Forensic Research & Technology

October 7-9, 2013 Las Vegas, USA

Forensic disaster investigations (FORIN), a new approach to learn lessons from disasters: A case study of the 2001 Algiers (Algeria) flood and debris flow

Djillali Benouar
USTHB, Algeria

Abstract

Disasters are increasingly being understood as 'processes' and not discreet 'events'. Moreover, the causes of disasters are driven by complex engineering, socio-economic, socio-cultural, and various geophysical factors. Such interacting driving factors, occurring across a range of temporal and spatial scales, combine in numerous ways to configure disaster risks. Using some selected disasters in Africa, the dynamics of such risks and their configurations will be explored using a new approach and methodology, namely Forensic Disaster Investigations (also called FORIN studies). Forensic task is perhaps similar to solving a picture of a disaster puzzle. Initially, there are dozens or even hundreds of apparently disorganized pieces piled when examined individually, each piece may not provide much information. Methodically, the various pieces are sorted and patiently fitted together in a logical context taking into account all the parameters. Slowly, an overall picture of the disaster emerges. When a significant portion of the disaster puzzle has been solved, it then becomes easier to see where the remaining pieces fit. The Integrated Research on Disaster Risk programme is proposing new methodologies to examine the root issues surrounding the increase in disaster cost both human and economic. This paper attempts, as a case study, to investigate the Algiers (Algeria) floods and debris flows of 10 November 2001 which caused the loss of more than 714 human lives, injured more than 312, made missing 116 and about 10 000 were homeless, damaging more than 1500 housing units and scores of schools, bridges and public works. The objective is to dig more deeply into the causes of disasters in an integrated, comprehensive, transparent, and investigative or forensic style.

Biography

Djillali Benouar has completed his Ph.D. from Imperial College (University of London, UK) and his M.Sc. from Stanford University (CA, USA) and postdoctoral studies from University of Tokyo (Japan). He is a professor of earthquake engineering and Disaster Risk Management at the Faculty of Civil Engineering at the University of Science and technology Houari Boumediene (USTHB) in Algeria and is the director of the Built Environment Research laboratory (LBE) at USTHB. He has published more than 25 papers in reputed journals and has been serving as an editorial board member.