Djillali Benouar, J Forensic Res 2014, 5:6
http://dx.doi.org/10.4172/2157-7145.S1.013

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference on
Forensic Research and Technology
October 06-08, 2014 Hilton San Antonio Airport, USA

Researching causes in 2003 Algiers (Algeria) earthquake disaster: A new multidisciplinary approach to learn lessons from disasters (Forensic Investigations of Disasters (FORIN))

Djillali Benouar
USTHB, Algeria

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 Algeria, the dynamics of such risks and their configurations will be explored using a new approach and methodology, namely Forensic Disaster Investigations (also called FORIN methodology). The FORIN methodology came out of the recognition inspite of the considerable increase in knowledge about disasters; unfortunately losses are not showing any corresponding decrease. Indeed, it seems, the more we have learned, the more we are losing. The FORIN methodology is based on the idea that this situation is due to the fact that much current research is still informed by a focus on surface symptoms of observations and events rather than critical causes and processes of disaster risk construction and accumulation. 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 M6.8 Algiers (Algeria) earthquake disaster of May 21, 2003. On Wednesday 21 May 2003, at 19h 44m 2s (18h 44m 2s UTC), a destructive earthquake occurred in the Boumerdes-Algiers region affecting a rather densely populated and industrialized region of about 3,500,000 people. It is one of the strongest recorded seismic events in North Africa. The depth of the focus was about 10 km. The magnitude of the earthquake was calculated at M=6.8. The main shock, which lasted about 40 sec, and the two largest aftershocks (both reached M 5.8 on 27 and 29 May 2003) caused the loss of 2,278 lives, injuring more than 11,450, making 1,240 missing and 182,000 homeless; they destroyed or seriously damaged at least 200,000 housing units and about 6,000 public buildings in five wilayas (provinces).

Biography

Djillali Benouar has completed his PhD from Imperial College (University of London, UK) and his MSc 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.

dbenouar@gmail.com