Aggregating loss databases for 14 African nations for natural perils: a lesson in what we do and don’t know about past events

Oscar Ishizawa (1), Joaquin Munoz-Diaz (1), James Daniell (1,2), Timea Barta (1), Jan Becker (1), Andreas Schaefer (1,2), Antonios Pomonis (1), and Rashmin Gunasekera (1)

(1) Social, Urban, Rural and Resilience Global Practice, World Bank, Washington D.C., USA (oishizawa@worldbank.org), (2) Center for Disaster Management and Risk Reduction Technology, Karlsruhe Institute of Technology, Karlsruhe, Germany.

A number of different disaster databases exist with limited data for African countries such as EM-DAT, MunichRe NATCATservice, SwissRe SIGMA, Dartmouth Flood Observatory or for a few countries, Desinventar, in terms of disaster losses.

The dynamic nature of the African country with regard to border changes, population movement, disasters and political changes, means that depending on the country different difficulties are faced with regard to disaster loss data.

In certain locations of Africa, much effort has been made in past years to collect and document disaster loss data (such as in Cabo Verde or Senegal (Desinventar)), however some countries such as Chad or Lesotho have limited data recorded formally with regard to the socioeconomic losses after disasters.

In this study, a concerted effort has been (and continues to be) made to record data from many different sources for 14 African countries (Cabo Verde, Senegal, Mauritania, Togo, Burkina Faso, Chad, Cote d’Ivoire, Kenya, Malawi, Uganda, Lesotho, Sao Tome and Principe, Rwanda and Eswatini) where data could be sourced in order to capture large and small scale events for natural perils such as drought, flood, landslide, earthquake, volcanoes and storms. It was found that the record has been significantly increased, yet still many holes in the historic dataset exist for which research opportunities are still needed such as cross-border correlation and reanalysis of hazard footprints.

The database is currently being updated and implemented in a Desinventar compatible data structure for continuation post-project.