Geophysical Research Abstracts
Vol. 14, EGU2012-1152, 2012
EGU General Assembly 2012

Flood trends and population dynamics

G. Di Baldassarre
UNESCO-IHE Institute for Water Education, Delft, Netherlands (g.dibaldassarre@unesco-ihe.org)

Since the earliest recorded civilizations, such as those in Mesopotamia and Egypt that developed in the fertile floodplains of the Tigris and Euphrates and Nile rivers, humans tend to settle in flood prone areas as they offer favorable conditions for economic development. However, floodplains are also exposed to flood disasters that might cause severe socio-economic and environmental damages not to mention losses of human lives. A flood event turns to be a disaster when it coincides with a vulnerable environment exceeding society's capacity to manage the adverse consequences. This presentation discusses the link between hydrological risk and population change by referring to the outcomes of scientific works recently carried out in Africa and Europe. More specifically, it is shown that the severity of flood disasters, currently affecting more than 100 million people a year, might be seriously exacerbated because of population change. In fact, flood exposure and/or vulnerability might increase because of rapid population growth (and its spatial and temporal dynamics, e.g. urbanization) in the African continent and because of population ageing in many European countries. Lastly, timely and economically sustainable actions to mitigate this increasing hydrological risk are critically evaluated.