



## Past economic losses from flooding not due to climate change

**Economic losses from flooding** disasters can be the result of both social and climate factors. A recent investigation into floods in Europe from 1970 to 2006 revealed that an observed trend in economic losses was mostly driven by societal factors, such as increases in population and wealth, rather than climate factors.

**Flooding and the accompanying** economic losses are a major concern. However, it is important to know exactly how much of this is related to climate change and how much is caused by other factors, particularly societal influences. Adapting to climate change is a major European policy concern and forms part of the Second European Climate Change programme (ECCP II)<sup>1</sup>. In 2008, a green paper was adopted that outlined options for adaptation<sup>2</sup>. In order to develop effective adaptation policy, it is necessary to understand the impacts of climate change as far as possible.

Economic losses from floods have shown a positive upward trend over the years, which may suggest that climate change has an influence. However, studies do not tend to take into account socio-economic factors, such as changes in population or the wealth of a country. This study, led by the European Commission's Joint Research Centre (JRC), assessed flood damage in 31 European countries taking these factors into account.

The study adjusted the data on economic flood losses over the years according to inflation, population and GDP per capita for that year and for the country in which the flood occurred. The 'Purchasing Power Parity' factor was used to account for differences in price levels between countries. The 27 largest floods in Europe were considered.

When the influence of socio-economic factors on floods was filtered out, the data suggest there is no significant increase in economic losses between 1970 and 2006. This indicates that socio-economic factors were in fact the main contributors to the original upward trend. During this time, Europeans have experienced increases in the standard of living and wealth, and the population has grown. As a consequence, there may be greater exposure of people and assets in flood-prone areas.

The study appears to show no link to climate change but does point out that there is no simple link between flood-disaster losses and anthropogenic climate change. Furthermore, it stresses that the monitoring of losses from floods and other weather-driven disasters should become a priority over the coming years.

<sup>1</sup> See [http://ec.europa.eu/environment/climat/eccp\\_impacts.htm](http://ec.europa.eu/environment/climat/eccp_impacts.htm)

<sup>2</sup> See <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0354:FIN:EN:PDF>

For further information on climate change adaptation, see: [http://ec.europa.eu/environment/climat/adaptation/index\\_en.htm](http://ec.europa.eu/environment/climat/adaptation/index_en.htm)

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