

STATEMENT OF THE
6TH INTERNATIONAL CONFERENCE ON FLOOD MANAGEMENT (ICFM6)
“FLOODS IN A CHANGING ENVIRONMENT”
16-18 SEPTEMBER 2014, SAO PAULO, BRAZIL

From September 16th to 18th 2014, the 6th International Conference on Flood Management (ICFM6) was held in Sao Paulo with more than 250 participants gathered from over 30 different nations across the continents. The participants were grateful to the local organisers for their efforts to ensure a successful conference and were pleased to have the opportunity to learn of the flood risk challenges faced by Brazil.

Following three days of extensive and intensive debate of the challenges faced by individuals, communities, local authorities, businesses, nations and regions in terms of flood risk, the participants of ICFM6 agreed the following declaration as their own commitment and their appeal to the public, professionals, managers and decision makers in this crucial task to carry out actions for the security of life, social welfare, and enhancement of land- and water-related environmental management:

Acknowledging:

1. Increasing flood risk due to urbanisation, economic growth, population growth, migration and climate variability.
2. Impacts ranging from local to national and even to international in an increasingly interconnected global society and economy.
3. The increasing levels of uncertainty over climate, economics and demographics affecting decisions on flood risk management.
4. Large capital investments may be necessary to improve flood risk management in a context of an uncertain future.

Declaring:

5. Flood risk cannot be eliminated, but a co-ordinated, system-wide response can dramatically reduce the impact of flooding.

6. In view of the last point, a flood resilience approach of “living with floods” is now essential. Whilst continuing to allow for improved resistance to flood threats this also entails planning and preparation for quicker and more complete recovery from any floods suffered.
7. This resilience approach of accepting floods and learning to live with the risk includes a requirement for sustainable features. In the context of future uncertainty over the rate of climate and socio-economic developments, this approach also means that an adaptive approach with flexible measures is advocated. More research and case studies are required to give decision-makers the confidence to apply this concept routinely.
8. Preparation by individuals, communities, businesses, local authorities, nations and regions is essential in reducing impacts. This covers information provision (early warning systems, risk mapping, vulnerability indices, vulnerability atlases), large-scale defences (embankments, retention structures, etc.), property-level defences, land use planning, insurance and emergency response.
9. Understanding the preparation by individuals requires research on attitudes to risk and the balance people expect between their own responsibility and that of their government. Thus flood risk management requires a range of disciplines including engineering, environmental science, information science, psychology, social science, economics, law, governance and cultural studies.
10. Multiple sources of flood risk must be considered together. The separate sources of coastal, river, rainfall and groundwater flooding often occur together and the combined impact can be greater than the sum of each alone.
11. Each source of flooding has different frequencies and so the consideration of risk as “Probability x Consequence” is useful. However, this must include the need to focus on low-probability, high-consequence extreme events that may destroy the ability of a particular society to recover i.e. an existential risk.
12. Flood response features often have benefits beyond flood risk; i.e., environmental and societal benefits. We must ensure that these are taken into account in any cost-benefit analysis.
13. The wider economic impacts of flooding, sometimes beyond the geographical area where they occur, should be taken into account in any cost-benefit analysis.

Agreeing:

14. Actions stemming from the Hyogo Action Plan have reduced flood risk and this declaration supports their continuation. Policies and measures being developed for the period after

2015 beyond the MDGs must enhance resilience to natural hazards globally, in particular in relation to flooding.

15. Whilst each flood and flood risk area has its own characteristics, sharing of experiences brings benefits to all in responding to future floods.

Inviting:

16. In order to continue the benefits of sharing experiences and approaches, the Ad Hoc Committee is invited to convene the ICFM7 in 2017 in Leeds, UK, to further develop flood risk management research and practice at individual, community, business, local authority, national and regional levels under the title "***Resilience to Global Changes – Expecting the Unexpected***".