

# **Climate Change and Urban Flood Management**

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At the time of writing this paper the world is being overwhelmed by increasingly disastrous manifestations of the disturbances and disruptions of Nature's processes. Record disasters such as earthquakes, hurricanes (or tornados), tsunamis, widespread flooding, droughts, extremes of snowfalls and temperature, all of which are associated with devastating losses and suffering, occur almost daily. However, the majority of these events, although commonly referred to as natural disasters, are not in fact the result of nature related processes alone. They are to an ever increasing extent directly attributable to the actions of human beings. These actions are the result of human thinking and decisions, which in turn are based on understandings, attitudes, needs and values. Thus the roots of many of our problems nowadays lie in the human mind as much as in technology, or economy. This paper is concerned with floods and flood-related disasters and it argues that a part of the solution is not in discovering any new knowledge as the basic wisdom already exists. What is needed is to move beyond the materialist and technocratic mindset and to add another dimension to our approaches of flood risk mitigation that can give us the will to achieve viable states of social justice.

The current 'flood management' practice has undergone a significant transformation over the last thirty years. Inspired by the realisation that the risk can hardly ever be completely eliminated the traditional 'flood defence' culture has been replaced with the culture of learning how to live with flood risk and how to be better prepared to respond to its negative impacts. It is now widely recognised that, to achieve sustainable policies for flood risk mitigation, traditional measures also need to be supported by a number of nontraditional elements of a kind that, although they have been realised to a certain extent in some applications, have so far been insufficiently analysed and have consequently been even less understood within the present context. Thus, the flood risk mitigation framework is nowadays concerned not so much with protecting from floods but rather with understanding flood risk, preparing for flood risk and living with flood risk.

Keywords: flood risk, climate change, urbanisation, social justice.