Perception of hazards

How we perceive a hazard is determined by the effect that it may have on our lives. This increases if people have direct experience of a particular hazard and also how long term the impact of this experience has been.

It is only by the presence of people that a natural event becomes a hazard. The pressure of an increasing population and subsequent demand for land has resulted in building in areas that are at increased risk. Population expansion itself can increase the threat of a hazard, for example, increasing population at the peripheries of large urban areas may increase the risk of wildfires (see 5.16).

The advantages of living with the threat of hazards sometimes outweigh the risk. Making use of fertile soils on flood plains or in the vicinity of a volcano can be considered a risk worth taking and living with the threat is accepted as a part of everyday life (Figure **2**).

Figure 2 *Flooded agricultural land, Thailand*

A natural disaster can have catastrophic effects on an economy, not just in the countries that are directly affected, but also globally. In HICs these effects tend to do little long-term damage to the economy – there is enough wealth and potential for redevelopment to be able to rebuild infrastructure and support those that are directly affected. LICs are much more reliant on support and aid, both in the immediate aftermath of an event and also in the long term as they try to repair the damage physically, socially and economically.

Despite living in what we perceive as an obviously hazardous area, many still underestimate the risk of hazards.
In 1971, Robert Kates found that of those people who had experiences of storm damage to their property on the east coast of USA, most of them did not expect such damage to occur again. Age, social status and religious beliefs can be determining factors when it comes to leaving behind in an evacuation all that has been worked for in a lifetime.

Human responses

The natural human response to a hazard is to reduce risk to life and equity. At a local level this involves saving possessions and safeguarding property; globally this means coordinating rescue and humanitarian aid. The intensity and magnitude of the event as well as the original state of the infrastructure (and how badly it has been damaged) affects the speed of the international response (see 5.15).

Response times have been reduced by the development of the Automatic Disaster Analysis and Mapping system (ADAM), a database that pools information from the US Geological Survey, World Bank and World Food Programme. This allows almost immediate access to such information as the scale of the disaster, what supplies are available locally and local infrastructure. Previously a manual search of several databases took hours, rather than minutes.

Fatalism

Doing nothing can be seen as a defeatist attitude to take but it is an acceptance that hazards are natural events that we can do little to control and losses have to be accepted. In fact, interference with the natural processes can have a detrimental effect on ecosystems.

'Command-and-control attitudes towards fire have become pervasive, to the detriment of ecological communities.'
(School of Ecosystem and Forest Sciences, University of Melbourne)

The point being made here is that while fires can be hazardous to human activity, they are also a natural regenerative process within forest ecosystems and should be allowed – in certain circumstances – to take their course.