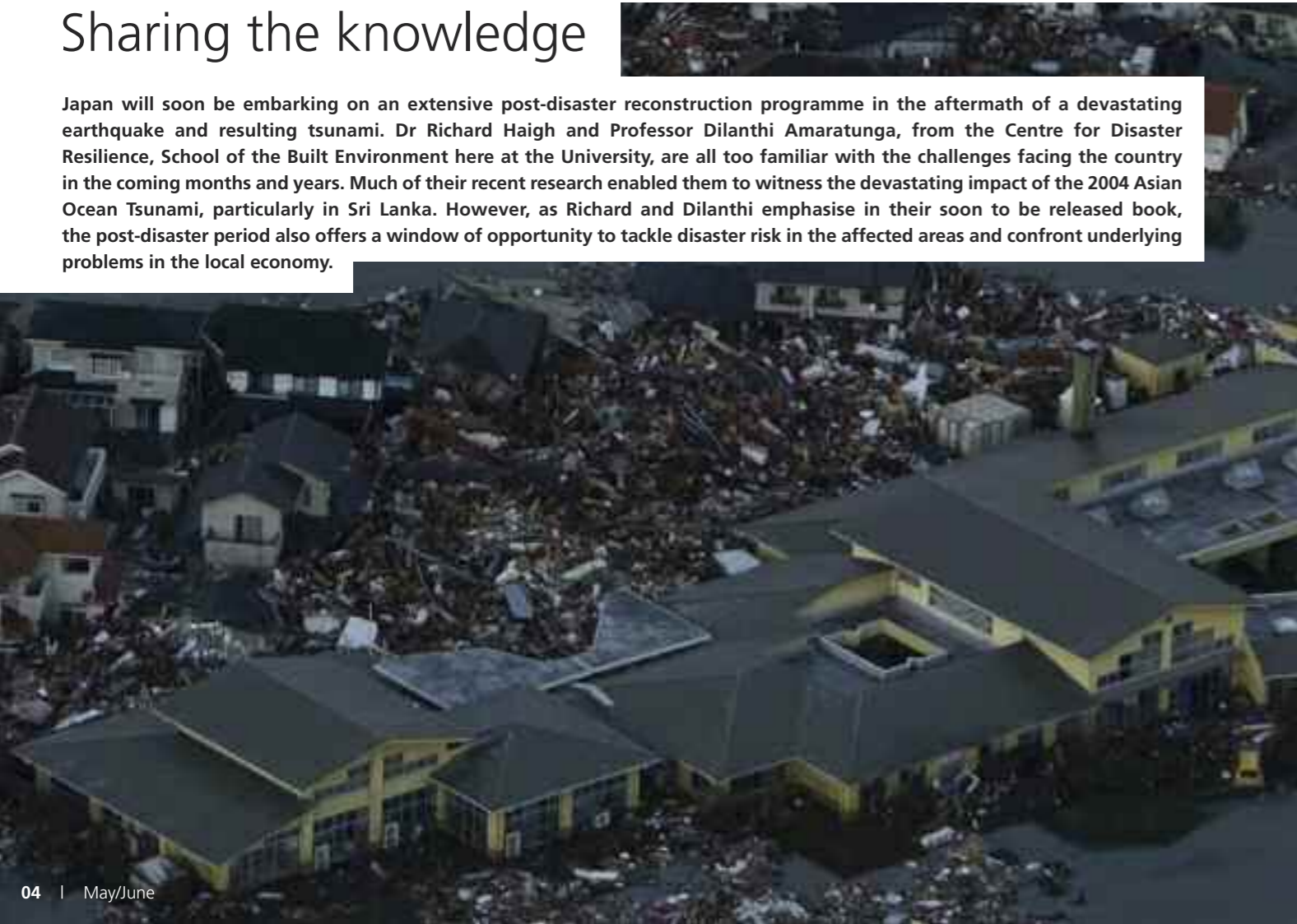




Stronger, safer, wiser – Sharing the knowledge

Japan will soon be embarking on an extensive post-disaster reconstruction programme in the aftermath of a devastating earthquake and resulting tsunami. Dr Richard Haigh and Professor Dilanthi Amaratunga, from the Centre for Disaster Resilience, School of the Built Environment here at the University, are all too familiar with the challenges facing the country in the coming months and years. Much of their recent research enabled them to witness the devastating impact of the 2004 Asian Ocean Tsunami, particularly in Sri Lanka. However, as Richard and Dilanthi emphasise in their soon to be released book, the post-disaster period also offers a window of opportunity to tackle disaster risk in the affected areas and confront underlying problems in the local economy.



Over the past few weeks, much media attention has been focused on Japan, as it deals with the impact of the earthquake. The affected areas are clearly in need of both emergency relief and long-term rebuilding, Richard said: “so far, the emphasis has been on an emergency response and humanitarian relief, including rescue, shelter, food, and medicine. Unfortunately, much of this relief work has been delayed by the on-going radiation threat from the Fukushima nuclear plant. However, as the situation stabilises, we can expect the priorities to move toward re-establishing some type of social and economic order, which relies on a complex network of infrastructure lifeline systems, including roads, water supply, sewers, power grids, telecommunications, schools, hospitals and civic buildings. The damaged transport infrastructure will be placed under strain due to the need to remove debris and deliver large volumes of materials and humanitarian supplies. At the same time, the damage in Japan has disrupted production of automobiles, computer chips and a range of other goods, and could force prolonged shutdowns in key areas of the country’s economy.

Restoring the affected communities’ lifeline systems to an operational state will be at the heart of restoring social and economic organisation in the communities. Although the coming weeks will focus upon reinstating and installing base-level infrastructure to quickly put affected communities back on track, it will be vital that reconstruction plans are not seen as a simple restoration of buildings and infrastructure to their conditions prior to the incident. Recovery can and should involve rebuilding beyond the previous condition to a superior standard that is more resilient against future disasters. This may include efforts such as improving materials and construction methods to increase the strength of buildings and infrastructure, establishing redundancies in the infrastructure network, and improving the common links between transportation modes and communities”.

Japan has a significant advantage in the recovery process over countries in developing economies as it has a highly capable construction sector with a reputation for integrated teams of subcontractors, high levels of prefabrication and a military approach to logistical planning. Japan also has the benefit of considerable post-disaster reconstruction experience e.g. following the end of hostilities in August 1945 and such as the rebuilding effort post Kobe in 1995. The areas affected by the Tsunami in March this year were already in long term decline, and although the region now finds itself in a tragic situation perversely, it is also an ideal opportunity for the government to generously fund reconstruction and reinvigorate economic development of the north-east coast.

Richard continued: “These are some of the issues that Dilanthi and I are guiding on through our role as Academic Advisors to the UNISDR Making Cities Resilient Campaign, which is helping cities and local governments to get ready, reduce the risks and become resilient to disasters. The frequency, scale and distribution of disasters in recent years is evidence, if any is needed, that hazards, of both natural and man-made origins, are a global problem, threatening to disrupt communities in developed, newly industrialised and developing countries. Recent events are a timely reminder that the developed world cannot afford to be complacent”.

In May, Dilanthi and Richard will be attending the UN led Global Platform in Geneva, a biennial forum for information exchange, discussion of latest development and knowledge and partnership building across sectors, with the goal to improve implementation of disaster risk reduction through better communication and coordination amongst stakeholders. Recent events will most certainly focus the minds of those attending.

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