Prof Jim Hall

Given your expertise in climate and environmental risks, how can we restructure our economic and social systems to build resilience against future shocks?

There are many ways in which we can enhance the resilience of our systems, and I will mention a few of them in a moment, but ultimately resilience is about making choices; choices about how much attention, organisational capability, and human and other resources that we devote to preparing for an uncertain future.

One of the lessons that we have learnt from covid-19 and we seem to often learn when disaster strikes, is that we've been running emergency services, healthcare systems and supply chains with margins that are too narrow to cope with the unexpected.

Resilience entails improving our capacity to anticipate shocks, resist disturbance, cope, recover and learn. There are low-regrets options for enhancing societies' resilience, for example through social safety nets and building fiscal resilience through the wider use of disaster risk finance and insurance.

Our infrastructure systems and supply chains can be made more resilient by diversifying and building in interconnectivity. That can cost resources, but as we learnt in the Texas power blackout, prudent thinking ahead about the need for backup capacity and interconnection can help to prevent catastrophic economic and human losses.

A very practical way in which organisations can build resilience is through regular stress tests and exercises before disaster strikes. Stress tests are widely used in the banking and insurance sectors. A UK government exercise to prepare for pandemic flu, called operation Cygnus, was held in the UK in 2016, from which several recommendations were made, though not all of themwere fully implemented, including the need for ventilators. So not only do we need stress tests and exercises, but we also need to heed the lessons learnt.

It would be a mistake to become paralysed by caution in the wake of covid-19, but we definitely need to carefully reflect upon the balance between efficiency – getting the most out of systems for the least cost – and resilience, which enables us to cope better in an uncertain future.