



# Building resilience - lessons from mother nature

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To adapt to a world that is constantly changing, businesses, communities and governments alike need to adopt principles for resilience.

The Royal Commission into National Natural Disaster Arrangements has provided a comprehensive critique of the major issues facing Australia as the effects of climate change influenced natural hazards increase in intensity and frequency across the nation. The Commission's final report essentially bookends most of the significant issues facing not only governments, but all sectors of society as we collectively continue to experience the devastating consequences of these hazards.

Key themes emerging from the inquiry findings include the need for a clearer role for the Australian Government, more clearly defined roles for the Australian Defence Force, and improved decision making and coordination capacity between, and across, all sectors of society. The importance of essential services and the critical infrastructure that supports them is of particular focus as is the need for improved emergency information and warnings, evacuation planning, and public and private land management. Public health, air quality, wildlife and heritage, and indigenous land management along with improved relief and recovery services, coordination and financial assistance were also given significant focus. The need for improved assurance and accountability concomitant with research and emerging technology was also given attention. And finally, the need for improvements in data, information, intelligence and knowledge underpins almost every aspect of the report's recommendations and is foundational to positioning the nation in preparation for future disasters that, in all likelihood, will be even more intense.

# The call to action

The Australian Government's response to the commission's 80 recommendations was swift and comprehensive. Priority has been given to the ability to declare a national emergency to ensure decisive action in response to severe to catastrophic circumstances. Equally important is the government's recognition of the critical need for resilience into the future, this has resulted in the creation of a new Resilience, Relief and Recovery Agency as well as a strategic uplift of the existing Emergency Management Australia. Finally, in recognition of the underpinning need for foundational knowledge, a Climate and Disaster Risk Information Services entity to be known as Resilience Services will be established to create and bolster the underpinning data, information, intelligence and knowledge requirements to support decision making across all levels of government and beyond.

The Commission also made several powerful statements that are worth further reflection. They noted that:

“Unprecedented is not a reason to be unprepared. We need to be prepared for the future” (p.7) and that “Implementing our recommendations calls for a cohesive and unified national effort. National natural disaster arrangements are a shared responsibility. Failure by governments to act on our recommendations will shift risk to others” (p.33).

Finally, they also observed that:

“The national natural disaster arrangements Australians deserve require unity, not just of commitment or purpose, but of action. Only then can Australians have confidence that the arrangements are the best they can be. The time to act to improve arrangements is now” (p.7).

The Commission's Terms of Reference were limited to the responsibilities of governments, however the implications of their observations, findings and recommendations are clearly intended for a whole of society call to action. In this context corporates and the business community can make a substantial contribution, both in the interests of their own sustainability, and as a significant contribution towards the interests of others in which they interact directly or indirectly.

The challenges posed by climate change influenced natural hazards alone would be enough to highlight that the world was becoming increasingly complex, ambiguous and uncertain, but our most recent lived experience has shown us that this is happening in more ways than we could possibly imagine. COVID-19 and rising geopolitical tensions are two more examples of further acute shocks and chronic stresses that have impacted upon our economies and societies.

These global crises are an example of several unprecedented challenges facing Australia that have directly related to the health, safety and wellbeing of our nation. Challenges such as these will continue to test our governments, industries, corporations and communities well into the future. They also demand that we turn our focus to a long-term sustainable commitment in becoming a genuinely resilient nation capable of navigating these crises with competence, confidence, courage, and most importantly, compassion.



# Unprecedented challenges

Australia is facing several unprecedented challenges when it comes to climate change that will demand significant public and private cooperation to successfully navigate both the positive and negative consequences of their effects.

More than ever before our essential services such as health care, telecommunications, energy, water and sanitation, transport, and banking and finance are more interconnected, as is our reliance upon them for our sense of safety, security, and wellbeing.

While COVID-19 has had an impact on population growth through migration during 2020, Australia is still forecast to experience large population increases<sup>1</sup> that will require infrastructure to be built. At the same time, some rural and regional populations are likely to decrease, further intensifying the populations of our major cities. This will necessarily expose more people to the effects of natural hazard impacts by, for example, expanding the rural urban interface or developing land subject to coastal inundation.

Disasters are becoming more complex, and disasters and disaster seasons are lasting longer. For example, in New South Wales, fire seasons are now extending up to nine months, and nationally we are now overlapping with the disaster seasons

of the northern hemisphere, severely restricting our ability to draw in international resources to aid in a natural hazard response.

The Australian Business Roundtable for Disaster Resilience and Safer Communities reports that direct disaster costs are on the increase, likely to exceed \$39 billion per annum by 2050, not considering indirect costs, which will likely more than double these costs.

Finally, climate change is now viewed by Australia's Council of Financial Regulators as a material risk that must be considered in all investment decisions.

Left unchecked, Australia's capacity to be resilient to such challenges and their effects will rapidly decline if we do not refocus our efforts to reduce our vulnerability and increase our adaptive capacity. Key to our collective success is the recognition that institutions, both public and private, along with certain sectors of the community, play a significant role in the creation of our societies. Where and how we place ourselves upon the Australian landscape and what is contained within our societies matters. These institutions herefore control many of the levers that can either increase or decrease our collective vulnerability and adaptive capacity to manage disaster risks that have, and will continue to be, experienced by ourselves and others.

# Principles for resilience

Irrespective of what hazards, threats, or perils that we face, the following statement of principles for resilience applies to any aspect of a community, society, business sector, or marketplace, whether it be seeking to achieve social, cultural, economic, or environmental resilience:

Vulnerability

Adaptive capacity

Resilience

Inclusivity

## Vulnerability

Vulnerability is the propensity or predisposition to be adversely affected that includes a sensitivity or susceptibility to be harmed and a lack of capacity to cope and adapt. Vulnerability is also one of three critical elements that define risk: the other two being the potential for a hazard to exist and the potential for exposure to that hazard. However, while minimising potential hazards or exposures are important actions to minimise the potential for risk, the most effective means of risk (harm) reduction is to minimise vulnerability.

Essentially, if something that we consider valuable such as a person, an asset, a system, or a place (as examples) is not vulnerable then there is no risk of harm even though there may still be the existence of a hazard or an exposure to a hazard. However, if we only minimise a hazard or an exposure without addressing the ability to cope and adapt, it still leaves the potential for those things we consider valuable to be harmed by hazards and/or exposures that we cannot adequately control or foresee. Therefore, adaptive capacity is also critical.

## Adaptive capacity

Adaptive capacity is the ability of a person, an asset, a system, or a place (as examples) to anticipate potential futures (by thought or by design) that may be either helpful or harmful, along with the ability to learn from them to inform our actions. It is also the ability to be flexible and adaptable in adjusting to those circumstances while possessing the capacity to innovate to minimise the possibility of experiencing any harm arising from those potential futures or other futures that are unforeseeable.

Investing adequate commitments of time, funding, resources and influence to minimise vulnerability while simultaneously increasing the ability to cope and adapt to these effects are the predicates for successful resilience. These commitments must necessarily fall predominantly to governments, industry sectors, and the corporate marketplace as well as to individuals and communities where appropriate. Without them, the potential for the uncontrolled experience of harmfulness and the inability to cope with that harm severely hampers our individual and collective ability to be resilient.



## Resilience

Resilience is the ability of an entity (person, asset, system, place, as examples) to persist, adapt, or transform from the effects (impacts and consequences) of acute shocks and chronic stresses while maintaining a reasonable level of functioning throughout and beyond the experience, with a view to achieving greater success into the future.

Persistence allows a resilient entity to continue without major disruption or the need for systemic change or change in its desired trajectory. Adaptation allows the resilient entity to adjust its responses to the emerging circumstances within the stable domain of its existing eco-system (such as the marketplace or the natural environment). It also allows the entity to continue along the direction of its desired trajectory. Transformation allows for the creation of new stable system domains while crossing into a new trajectory motivated by new possibilities for success.

The extent to which an entity decides (by thought or by design) to persist, adapt, or transform is contingent upon the context of the emerging circumstances, the wisdom to discern the best course of action, the opportunity to exercise agency (an entity's ability to act in their best interests and those people, assets, and places that are important to them), and sufficient access to knowledge, power, wealth and resources to give effect to those decisions. In addition, to optimise these decisions, we need to be inclusive.

## Inclusivity

Inclusivity is the need to ensure that governance frameworks are put in place that allow for collective negotiation and engagement in responsibility-sharing with diverse stakeholders (including citizens) and institutions, both public and private. Their aim, through democratically participative processes, is to define:

- What is collectively valuable to a community, society, business sector and/or marketplace.
- Prioritise those things deemed valuable.
- Develop strategies to protect those things by reducing their vulnerability through risk reduction, adaptive capacity, and other like mechanisms.
- Develop strategies for resilience that address persistence, adaptation and transformation.
- Ensure that sufficient equities of power, wealth and resources are made available to give full effect to these strategies.

**This principled approach to resilience opens up genuine possibilities for ensuring that entities are well positioned to sustain a resilience posture within a world of increasing ambiguity, complexity, and uncertainty.**

“Reducing vulnerability and increasing adaptive capacity is the key to resilience that in turn needs to be negotiated through democratic processes of inclusivity”.

“Successful resilience starts by realising that without exception, we all share to greater or lesser degrees in our capacity to be vulnerable to the effects of hazards, threats and perils. It is this shared vulnerability and our desire to reduce our susceptibility to harm while increasing our individual and collective ability to cope and adapt that binds us to a unifying purpose, for no reasonable person ever genuinely wishes suffering upon oneself or another. Therefore, we must bring to bear all of our collective knowledge, power, wealth and resources to create the circumstances for each of us individually and collectively to successfully navigate the complexities of disasters and emerge as wiser, more complete human beings that desire brighter futures for all.”

**Mark Croweller AFSM**

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1. <https://mccrindle.com.au/insights/blog/how-covid-19-is-likely-to-affect-australias-population-forecast/#:~:text=Well%20before%20COVID%2D19%2C%20the,31.2%20million%20by%20June%202031.&text=This%20is%20based%20on%20fertility,been%20affected%20by%20COVID%2D19.>

We are delighted to provide you with our KPMG resilience self-assessment tool, introducing the breadth of resilience considerations to our clients and comparing anonymously across sectors.

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