

Recommendations matrix

Major outcome: The Forum concluded that by comparison with other countries, Australia is well-placed to offer assistance in many areas of expertise, due to our local knowledge of servicing and supporting tropical and remote community conditions. Australia can provide a leadership role in assisting with capacity building and education within the broader Region and ensure that reconstruction activities contribute to a sustainable future for the local regions affected by disaster. These recommendations have the potential to minimise the risks and possible toll from natural disasters and accelerate the recovery phase.

Seven recommendations for a universal way forward	Supported by social science, humanities, science, engineering and technology
<p>United strategic regional disaster management: For an effective, strategic and unified approach to Regional disaster management Australia needs to establish and formalise multidisciplinary, multisectoral teams that are supported by a national framework, networks and a 'common' language – and underpinned by Whole-of-Government support.</p>	<ul style="list-style-type: none"> • Facilitate through mechanisms such as funding strategies and network development, a transdisciplinary approach to include the humanities, social sciences, science and technology underpinning disaster preparedness, response, recovery and rehabilitation • Develop supporting curriculum material and exchange programmes • Develop and implement documentation procedures and follow-up with analysis and debriefs of outcomes • Investigate 'Systems' domain for 'common language' adaptations • Incorporate and develop methodology/technology for understanding various community responses (local and Australian) • Develop 'Codes of Conduct' as appropriate • Incorporate into National Research Priorities • Build on existing SES/Defence networks to create a 'flying squad' for fast (24 hr), effective disaster response; or a 'Disaster Defence Force' designed to rescue and rehabilitate
<p>National regional database: Supported by a Whole-of-Government input, develop a National Regional Database to support expedient access to knowledge of capacity, both Australian and Regional (this would have a multitude of other national benefits) – including a National Shorelines geospatial framework.</p>	<ul style="list-style-type: none"> • Establish a distributed database system with nodes in neighbouring Regional countries, and an internet based 'one-stop' portal • Undertake a national and international exercise to populate the database with sources of knowledge, expertise, and information and data (eg. on capacity, local culture, demographics, immunisations, etc.) – including a 'Health Profile' of our neighbours • Develop methodologies to ensure standardisation of cross-country data, including 'codes' where appropriate (eg. sensitive information) • Ensure interoperability of civilian infrastructure and equipment (eg. medical, plumbing, etc) via database of specifications by country • Develop technology for data/information/language support for on-ground teams in recovery/rehabilitation phase of disaster (eg. technological language translators, micro database/GIS access) • Develop GIS based framework and supporting data (eg. bathymetry, vegetation, geomorphology, reef elevations) for a 'National Shoreline' initiative for Regional countries – this can also be used to support Risk Assessments
<p>Regional continuity of knowledge: To facilitate 'Continuity of Knowledge' Australia should make Communication and Education a key priority for all aspects of disaster preparedness, recovery and rehabilitation – particularly to support remote communities and effect evidence-based policy development; this may require the supply of sustainable technology.</p>	<ul style="list-style-type: none"> • Develop appropriate education programmes (eg. signs of tsunami) and communication strategies, supported by material and networks • Develop appropriate in-country media and capacity • Identify and implement sustainable ICT equipment (eg. radio powered by low-maintenance solar) to remote regions, supported by education material on use and maintenance

	<p>maintenance</p> <ul style="list-style-type: none"> • Incorporate expertise and capacity from across disciplines to implement and develop methodologies/tools to facilitate/support attitudinal/behavioural change • Develop methodologies and technologies to rebuild local knowledge and capacity after a disaster
<p>High-level Indian Ocean governance: Establish a high-level Indian Ocean Regional Forum with Australian role (ie. similar to that which exists for Asia Pacific) that considers Disaster Warning and Preparedness as part of charter.</p>	<ul style="list-style-type: none"> • Enable a 'systems' approach to disaster governance and related programme implementation • Broker and leverage partnerships and funding arrangements • Identify priorities and capacity/technology needs • Evaluate Australia's role in the region • Develop or contribute to Strategic Plans for oceanic/earthquake monitoring equipment in Indian Ocean, eg. tide gauges, buoys, etc. – including sustainable maintenance aspects (note, Australia is the only country running an earthquake warning system in the Region) and consider link to global monitoring capability associated with the 1996 Comprehensive Nuclear Test Ban Treaty (yet to enter into force) • Facilitate Integrated Coastal Zone Management in Region • Support instigation/maintenance of long-term ecological research (LTER)
<p>Culture of collaboration: Create a 'Culture of Collaboration' through developing partnership Centres of Excellence and stronger links between Australian and Regional research agencies - including in-country training of professionals.</p>	<ul style="list-style-type: none"> • Develop strategies and support for in-country training of professionals (including social and technological, eg. language skills, remote video links) • Promote institutional exchange programmes – student and professional • Develop diagnostic capability and tools for non-experts
<p>Strengthen Australia's regional knowledge/skills base: Australia must consider Regional cultural imperatives in all assistance and partnering activities, therefore we urgently need to strengthen our Regional Knowledge and Skills Bases - particularly in languages, history, cultural and religious studies, and political science – through appropriate education, training and career structures supported by Government resourcing.</p>	<ul style="list-style-type: none"> • Critical gaps exist in Asian languages, including Indonesian (Javanese and Bahasa), and in regional historical, cultural and political knowledge and expertise – these can be addressed through the planning and policy settings of the Australian tertiary education system but also require essential support from Australian in-country experience and research • Develop ability to access and share health data, and cultural and language information while Australians on-ground in recovery and rehabilitation phase of disaster • Develop appropriate Technology to support computer modelling and rapid exchange of information to underpin capabilities in all areas (eg. GIS, database search engines) • Undertake assessment of skills needs for Regional Disaster management as part of the National Skills Audit
<p>Risk management as AID: Australia should consider Risk Management an essential component of a broader approach to Aid and Development to support sustainable Regional futures (ie. RM is not just a response mechanism).</p>	<ul style="list-style-type: none"> • Develop a strategic framework for Disaster Risk Assessments across the broader Region as part of AID governance • Undertake Risk Assessments prior to potential disaster and develop associated Action Plans (including Quality of Life issues) • Develop computer modelling and GIS capability to support Risk Assessments • Compile data and information necessary to support Risk Assessments – will require partner country involvement • Develop partner protocols/input mechanisms for Risk Assessment practices