ISSUES PAPER

Building our adaptive capacity to climate change: Empowering future leaders

On 22 April 2021, Future Earth Australia hosted the *Empowering Future Leaders in Adaptation*, with the support of 3M. This day of workshops and seminars followed the *Reimagining Climate Adaptation Summit* from 19-21 April 2021.

Emerging leaders working across research and practice in climate change adaptation and other climate-affected fields across the Nation gathered to identify:

1. The skills, knowledge and capacity currently being demanded for climate adaptation (both specifically and in allied fields),
2. The areas we should prioritise for most effectively building Australia's adaptive capacity, and
3. Which institutions, actors and sectors are best equipped to build capacity in particular areas of need.

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CURRENT STATE OF ADAPTATION CAREERS

FINDINGS:

- **The uncertainty around opportunities to identify employment and a career pathway in sustainability science, climate adaptation and climate resilience fields is seen as a significant barrier to students and early professionals.**
- **Entities need to invest in building adaptation skillsets and expertise to enable these fields to have viable and diverse career pathways, as there is demand among early careers for such career opportunities.**
- **It would be useful to have access to tools and fora in which adaptation professionals could meet others working in this space to do professional development, find opportunities and innovate.**

Attendees set the scene by asserting that while climate adaptation entails a particular specialist knowledge set in academia and practice, the majority of people working in adaptation are not doing so as a specialist. Given that the consequences of climate change will affect every community and sector, people across government, business and industry, finance community, services and much more will be engaged in adaptive planning and actions. Given that there will be a range of people learning by doing, this can be significantly bolstered by the support of specialists in adaptation who know the kinds of issues being faced on the ground, the complexity around how they occur and behave and useful frameworks and tools for adapting.

In this context, current careers and jobs for adaptation specialists are not well-defined or easy to find for people at the earlier stages of their careers. Attendees were not sure whether this is because there are few jobs, or because they are difficult to find, or a combination of both. This is particularly difficult for those who have not had the opportunity to build social and professional networks which can give guidance on where to find opportunities, and this has been made more difficult in the era of COVID-19 in which there are barriers to making new acquaintances.

There was also a view that employers seeking adaptation expertise do not necessarily know the critical needs and skills that they should be advertising for to address them. For example, a government body or company may advertise for an 'Environmental Policy Officer,' but the capabilities listed may not match the challenge or be unclear. In academia and research, there are few career opportunities. In the community and non-profit sector, there is a persistent lack of resources and much work is done voluntarily. As this work is often not budgeted or accounted for – particularly where it involves caring roles – it is difficult to account for the labour need.

"We're working in the old world and old structures but creating a new world and system, while figuring out how to pay rent and feed ourselves."

AREAS FOR IMPROVING OUR ADAPTIVE CAPACITY

FINDINGS:

- **Bridging, facilitating, communicating and caring roles will all be essential for building adaptive capacity, along with roles in science and technology which will bolster our capacity to plan on future trajectories (as opposed to past patterns).**

- **Breaking down counter-productive competition manifested in disciplinary and sectoral silos, and the false dichotomy between professional and community expertise, will greatly accelerate building our adaptive capacity.**

Mitigation of emissions is fundamental to stemming the damage of climate change. While we look to moving to a green economy, the world has already locked in the effects of at least 1.5 degrees of warming which already bring effects which must be addressed comprehensively. Key to improving our adaptive capacity is acknowledging that modeling our response on the patterns of a pre-warmed climate will result in failure. Adaptative capacity in this respect requires a cognitive shift to expecting uncertainly, acknowledging that unexpected events and phenomena will occur, that we won't be capable of saving everything. An entirely risk-based approach, then, is believed to be inadequate. While preventing damage is one part of the equation, all adaptive capacity should be built with capacity for ongoing, iterative learning which is predicated on future trends.

Adapting to climate change requires policy and financial coordination across scales. However, much support for adapting to climate change is associated with on-the-ground work with people and places in the physical world. In this respect, local governments are seen to be important institutions in the climate adaptation space. Adaptive capacity must be built on the premise that adaption is most effective where it is driven by bottom-up priorities, values, planning, work and inclusion. Skills required to support this are varied, but importantly include bridging capabilities like process facilitation, conflict negotiation, communication expertise, consensus building, and people specialized in understanding patterns across sectors and communities. Caring and maintaining community and social cohesion, which is often unpaid and unbudgeted, are critical capabilities to be included in planning for adaptive capacity. Given that climate change will affect the vulnerable most, social safety nets will be more important than ever.

Other skills needed pertain to the fact that adaptation is based on future forecasting, as opposed to patterns from the past. Science and rigorously designed evidence has been degraded over the course of the Climate Wars which, in combination with declining financial support and pathways for scientists post-training, has deterred people from pursing these pathways. These will be important, for example, in areas like forecasting and modeling extreme weather events and the cumulative effects of climate change.

One suggestion was that future training and capacity could be undertaken on the basis of teams, as opposed to training disparate individuals.

DIVISION OF CAPACITY BUILDING ACROSS THE ECONOMY AND SOCIETY

FINDINGS:

- **Development of national policy and funding frameworks to replace the current piecemeal approach can provide significant acceleration of building adaptive capacity through:**
  - **Providing clarity across sectors on adaptation needs and priorities (establishing clearer information about demand for adaptation expertise),**
  - **Coordination and guidelines for other levels of government for their policy processes,**
  - **Clear direction for the private and community sectors to invest in adaptation at greater scale.**

Adapting to climate change will be everyone's business and will be an ongoing process. In this respect, there are a range of priorities. Key is moving from ad-hoc activities.

One of the most important foundations for building adaptive capacity is the development of a national vision and framework for a warmer future. This will enable confidence across state and local governments, businesses and communities to engage with the challenge in a coordinated and directed manner. Further, the lack of a national policy framework to provide coordination and clarity on adaptation priorities, and guidelines for building professional capacity, means labour needs are unclear at aggregate level.

The lack of coordination also manifests in financing of adaptation. Some grants are available, but there is no systematic funding mechanism to provide stability, ease of access to available funds and clear information. A framework would assist in providing this clarity. Elected and political leaders are responsible for leading and should develop an inclusive process which accounts for the priorities, needs and knowledge of people across the country.

There are considerable opportunities to build adaptive capacity through a local planning and action. Resourcing of schemes based locally and coordinated both horizontally (between Councils) and vertically (between levels of government) could deliver major advances. Community-based work should also be recognised and supported as a critical part of locally led approaches.

FUTURE EARTH AUSTRALIA HAS DEVELOPED THIS BRIEF IN COLLABORATION WITH A NUMBER OF EMERGING LEADERS AND ESTABLISHED EXPERTS IN CLIMATE CHANGE ADAPTATION ACROSS FIELDS AND SECTORS.

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