

# Climate Change Adaptation Research Grants Program

## - Settlements and Infrastructure Projects

### Project title:

Climate Change and the Community Welfare Sector – Risks and Adaptation.

### Principal investigators:

Dr Karl Mallon

### Lead organisation:

Australian Council of Social Service (ACOSS)

### Objectives:

- (a) To test hypothesis 1: ‘We hypothesise that there is a relationship between physical and social infrastructure, an interdependence, and that a significant change in or failure of physical infrastructure (eg water, energy, transport, telecommunications) or settlement services (medical services, food supplies) will adversely impact the capacity of community welfare service organisations to deliver services, thus worsening the underlying vulnerability of dependent peoples.
- (b) To test hypothesis 2: ‘Community welfare service organisations may have inherent or latent capacity to ameliorate or compensate for change in or failure of physical infrastructure, both over time and in response to emergency. There may be ways to promote adaptive capacity, responsiveness and resilience.’
- (c) To research, via the organisations surveyed and consulted in the projects, the sectors in society are most vulnerable and least able to adapt to climate change in urban, regional and remote settlements, the nature of these vulnerabilities especially as they apply to the organisations that provide their care, the underlying causes of welfare organisation vulnerability and resilience, and the adaptive measures which have been taken or can be taken to increase adaptive capacity and mitigate, manage and transfer acute climate change related risks of infrastructure failure.

### Project design and methods:

#### **Project Design:**

The Project has been structured as four parts with accompanying work streams and deliverables. These are broken down into tasks, deliverables and timing here:

#### **1. National ‘Climate Change Risks to the Community Sector Survey’**

- Literature review of existing surveys (national and international).
- Identification of appropriate survey questions to test the hypotheses including vulnerability and resilience indicator in consultation with Scientific Advisory Group, sector stakeholders (including Infrastructure Partnerships Australia, Planning Institute of Australia, and ACOSS convened and NCCARF).
- Development of draft survey.
- Trial of survey with limited focus group.
- National distribution of survey to at least 1,000 member organisations.
- Secondary encouragement communiqués to assist meeting target response level of 750.
- Compilation of results
- Statistical and qualitative analysis
- Analysis of the results to test the two hypotheses and research questions – by looking at organisational vulnerability and resilience indicators included in the survey.
- Survey Report write up.

**Deliverable:** Survey Report

## **2. Community Sector and Climate Change Workshop Training/Consultation Manual and Conceptual Framework**

- Update literature review on current consultation and training tools in the sector.
- Develop frameworks for consultation and training from system and frameworks developed for insurance industry professional, for use in the community sector, including a focus on settlements and infrastructure, where appropriate; identify remaining gaps.
- Develop additional framework and materials to address gaps.
- Trial one-day Climate Risk and Community Workshop and address any identified inadequacies.
- Analyse at least 10 welfare professional workshops
- Iterate development of frameworks and workshop materials throughout project program.
- Write-up final documentation.

**Deliverables:** Publication-ready Training and Consultation Manual, Materials and supporting framework documents.

## **3. Stakeholder Consultations and National Workshop Analysis**

- Analyse 10 individual workshops, during which risks and adaptation options are recorded and prioritised based on consequence and likelihood.
- Include coverage of 20 primary (physical), secondary (regulatory) and tertiary (auto-adaptive) climate change hazards.
- Apply results in terms of systems analysis focussed on common elements of system and common or possible failure modes for different types of groups.
- Ground truth results and frameworks against recent extreme weather events incl. Floods and cyclones.
- Compile qualitative results in themed report
- Compile results in spreadsheets according to states/territories, client group and risk priorities
- Analyse the results qualitatively to identify the key aspects of vulnerability and the common characteristics of resilient organisations.
- Analyse the results to consider the role of resilient organisations in assisting communities affected by major failure of infrastructure and settlement services.
- Undertake consultation with major critical infrastructure providers, developers and peak bodies to consider risk factors and mitigation options with regard to the welfare organisations. This should include organisations such as Infrastructure Partnerships Australia, Institute of Engineers, Telstra, Dept of Main Roads and Transport QLD/ RTA etc, ABI Group, Sydney Water, DCCW (NSW).
- Write-up research results in raw form.

**Deliverable:** Interim Research Report for Workshop Program

## **4. Synthesis and Reporting**

- Synthesise major quantitative and qualitative results from stages 1, 2 and 3.
- Analyse results to identify major hazards, exposures and vulnerabilities, in the form of useful groupings for community organisations, with a prioritisation of risks.
- Analyse the dependency of the community/welfare sector on the resilience and effective adaptation of human settlements and infrastructure. This includes analysis of the consequences of both (i) a failure to adapt; and (ii) the process of adaptation.
- Identify effective adaptation options for the community sector based on the Project findings.
- Identify integrated adaptation options for the Human Settlements and Infrastructure (including key actors) which address risks/needs/vulnerabilities of the community sector.
- Prepare final report.

**Deliverable:** 'Climate Change Risk and Adaptation in the Community Social Welfare Sector: Synthesis and Analysis Report'.