6 February 2025

Joint Select Committee on Northern Australia
PO Box 6100
Parliament House
Canberra ACT 2600
Email: northernaustralia.joint@aph.gov.au

Dear Committee Secretary,

Inquiry into energy, food and water security

The National Rural Health Alliance (the Alliance) is pleased to provide a submission to the Joint Select Committee on Northern Australia inquiry into energy, food and water security (the Inquiry).

The Alliance is the peak body for regional, rural and remote (hereafter rural) health in Australia, comprising 52 member organisations, which include healthcare professionals, service providers, health and medical educators, researchers, medical and health practitioner students and the Aboriginal and Torres Strait Islander health sector.

Our vision is for healthy and sustainable rural communities, which make up the over 7 million people residing outside our major cities, or approximately 30% of the Australian population. It is of note that close to 60% of Australia's First Nations people – representing the world's longest continuous living culture of over 50,000 years – live in rural Australia.

We are focused on advancing rural health reform to achieve equitable health funding to that of urban per capita spending and equitable health outcomes for rural communities.

The Alliance's submission focuses on aspects of the Inquiry's terms of reference (ToR) that have an impact on healthcare access and equity in rural areas, specifically:
(a) the context and extent of energy, food and water security in Northern Australia
(b) the challenges and potential actions to improving energy, food and water security
(c) the impact this has on communities, particularly remote communities
(d) relevant Closing the Gap targets.

I would be pleased to provide further information on any of the information contained in this submission if required.

Yours sincerely,

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National Rural Health Alliance

Submission to the Joint Select Committee on Northern Australia Inquiry into energy, food and water security

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… healthy and
sustainable rural,
regional and remote
communities

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National Rural Health Alliance submission to the Joint Select Committee on Northern Australia Inquiry into energy, food and water security

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Economic contribution of rural Australia

Rural Australia, which includes Northern Australia, makes a marked contribution to the economic wellbeing of the entire country, providing many of the basics of Australian life – food, clean water, energy, building materials, and places for recreation. Resources and rural industries alone make up around 70% of Australia's exports which come from rural, and this does not consider the extra contribution of rural services and manufacturing.[1]

Rural people, which make up 30% of the Australian population, produce 90 % of Australia's food (98% of which is fresh fruit and vegetables).[2] In 2022-23, the collective value of exports for agriculture, forestry, fishery and commodities (resources and energy) was $500 billion.[3] The Mareeba Shire, with which the Alliance has engaged on primary care and health workforce issues, reported that agriculture, forestry and fishing are their most productive industries, generating $201 million in 2021-22.[4]

Furthermore, rural Australia is essential to the renewable energy transformation, with continuing investments in large-scale renewable generation projects, and record investments in storage in 2023.

Rural Australia makes significant economic contributions to the national economy and is key to sustaining international trade, stimulating economic growth and facilitating employment. However, the Alliance seeks to highlight that, on average, Australians living in rural areas have shorter lives compared to people in the cities. They also have higher levels of disease and injury and poorer access to and use of health services, and, have to deal with unpredictable devastating climatic impact like floods, droughts and fires. Further actions to address the inequities, including the impacts of energy, food and water insecurity, would improve both social justice and economic prosperity for the whole of Australia.

As stated in *Our North, Our Future: White Paper on Developing Northern Australia*, a strong north means a strong nation. The Alliance supports the focus of the Northern Australia Action Plan 2024-2029 (the Action Plan) to position regional Australia, including the north, to power our future prosperity and economic security.[5] Specifically in relation to energy and water in the Action Plan, it is of note that the Australian Industry Group identified 'inadequate energy and water supply infrastructure' as a 'significant impediment that impacts on economic growth'.[5]

Energy security

Energy and health are inextricably linked. Access to clean, sustainable and affordable energy plays a crucial role in advancing health. Energy is also critical for achieving almost all other global goals, including eradication of poverty, opportunities for quality education, access to clean water, jobs security and economic growth, and for addressing the impacts of climate unpredictability and disasters.[6]

The links between energy and health are particularly evident in homes and healthcare facilities. Access to clean and sustainable energy in homes is essential to protect people's health from household air pollution due to the use of polluting stoves and fuels such as coal and biomass.[6] Further, the impacts of increased heat and rising temperatures have impacts on individual's health and energy security is critical to ensure the capacity for a person or a population's ability to control indoor temperatures and reduce exposure to hazardous temperatures. As noted by the World Health Organization:

> *Extended periods of high day and nighttime temperature conditions create cumulative stress on the human body, increasing the risk of illness and death from heat exposure. Heatwaves can acutely impact large populations for short periods of time, often trigger public health emergencies, and result in excess mortality and cascading socioeconomic impacts (for*

example, lost work capacity and labour productivity). They can also cause loss of health service delivery capacity, when power shortages accompany heatwaves and disrupt health facilities, transport and water infrastructure.[7]

Energy security must be assured in our rural and remote communities to enable them to cool their homes, public places and businesses. Most heat-related morbidity and mortality should be preventable with improved preparedness and avoidance of exposure.[8]

The Northern Queensland Primary Health Network (PHN) notes the following safety advice in times of heatwave:

- Severe heatwaves can be dangerous for many people, especially older people, babies, children, pregnant and breastfeeding women, people with medical conditions and people who are unwell.
- Seek a place to keep cool, such as your home, a library, community centre, or shopping centre.
- Close your windows and draw blinds, curtains, or awnings early in the day to keep the heat out of your home.
- If available, use fans or air-conditioners to keep cool.[9]

This information is provided as part of public health planning which recognises heatwaves as a natural disaster which requires preparation, planning, mitigation of risk and appropriate response. Little preparation or mitigation can occur if energy security is not ensured.

Access to clean and reliable energy in healthcare facilities is important to ensure the delivery of essential healthcare services for disease prevention and treatment. For example, energy is needed to power critical and life-saving medical devices as well as the most basic services such as lighting, communications and clean water supply.[10] Hospitals and other healthcare facilities cannot operate without secure energy supply and efficient cold chains for storing vaccines and other temperature-sensitive medicines. Energy, therefore, is crucial for improving health, with outcomes such as safe childbirth, vaccination, diagnostic capacity and emergency response.

The Alliance notes that the energy access challenge for healthcare facilities is greater in rural and remote areas. Indeed, there is a sharp urban–rural divide: urban healthcare facilities often report more access to electricity and more reliable electricity than rural and remote facilities which are particularly dependent on energy supply and encounter destructive impacts from unpredictable climate.[6] An unstable, inadequate energy supply can endanger the stability of the health infrastructure and, in the worst case, trigger cascade effects such as epidemics and hygiene crises. [11]

Furthermore, the Alliance has received feedback that admissions into intensive care units for patients with heart disease, other health issues and ageing populations experience greater stress during summer, with deterioration often linked to a power card issue and inability to run the air conditioner and refrigerators.

Energy security is vital for maintenance of cold chain storage of vaccines which are critical for disease prevention and public health initiatives. Lower reliability of refrigerated storage means more vaccine and medication inventory is stored in public hospitals than in places with more reliable energy security and supply chain, and with a much higher likelihood of temperature excursions occurring in transit.

Given that most medications in Australia require storage below 25C or 30C in order to maintain potency right up to their labelled expiry date, the effect of excess ambient heat on the quality of medicines in Northern Australia is also a risk directly linked to energy security and the ability to control ambient indoor temperatures.[12]

The Alliance seeks to emphasise that equitable distribution of energy resources is a prerequisite for most recognised social rights, as established in Articles 9-12 of the United Nations International Covenant on Economic, Social and Cultural Rights (ICESCR). These include, for example, the right to an adequate standard of living and, not least, the right to health.[11]

To highlight this point, the Alliance notes research indicating that residents of remote Indigenous communities who prepay for access to electricity experienced unrelenting energy insecurity during the height of the COVID-19 pandemic. While most Australians were protected from disconnection during the pandemic, these protections largely overlooked or were ineffective for more than 10,000 households in remote or regional communities that elect or are mandated to use the prepay system. Those most disadvantaged during COVID-19 were in many cases the same households who were already experiencing energy insecurity prior to the pandemic.[13] The Alliance has also received feedback that power cards are charged at exorbitant fees, which makes it inaccessible.

There is therefore a need to pay closer attention to the rationales of energy policy exceptionalism if we are to mitigate energy insecurity among specific groups, such as Indigenous Australian prepay customers, including during times of crisis. Equity concerns must be front and centre in the energy transition, especially as First Nations are among those who are most impacted by climate change.[13]

As Northern Australia is characterised by vast and remote areas that are often not connected to the main power grid, supplying electricity to these regions using traditional methods is challenging and expensive. The development of localised and sustainable energy sources is therefore crucial to meeting the energy needs of the population, industries, and communities in the area.[14]

In addition, the different levels of decision-making need to be better integrated so that the health sector can be supported by a secure, stable and clean energy supply.[11]

Food security

Food security includes such dimensions as food availability, access, utilization, stability over time, as well as agency and sustainability.[15] Without food security, people are vulnerable to chronic diseases and developmental delays, struggle to learn and have difficulty working.[16]

The Foodbank Hunger Report 2024 found that nearly 2 million Australian households (19%) have continued to experience severe food insecurity in the past 12 months. Groups that are at greater risk of food insecurity than the general population include low-income households (below $30,000 per annum), those in regional areas, women and single-parent households (69% experiencing food insecurity, 41% severe). Conservative estimates suggest approximately 31% of First Nations people living in remote communities are food insecure and these estimates can increase to over 80% of First Nations people in some very remote communities (compared to between 4% and 13% of the general Australian population).[17]

Food insecurity has adverse health and social effects across the whole of life – from infancy through to old age, and is felt most significantly in rural and remote communities. It results in lower levels of educational achievement and poorer health, both of which negatively influence productivity and growth in rural and remote communities.[18]

Furthermore, the poorer health associated with food insecurity may worsen other health inequalities that are apparent in disadvantaged groups such as a higher mortality rate, and higher rates of coronary heart disease, type-2 diabetes and some cancers.[19] Five of the seven leading risk factors contributing to the health gap between Aboriginal and Torres Strait Islander and non-Indigenous Australians - obesity, high blood cholesterol, alcohol, high blood pressure, and low fruit and vegetable intake - relate to poor diet. Combined dietary factors contribute the greatest proportion (27.4%) of all risk factors assessed.[20]

In terms of affordability of food as a barrier to food security, on average, the income of families in rural and remote areas is some 15-20% lower than that of families in the major cities. Families with particularly low incomes may sometimes be unable to afford to eat healthily. This situation is compounded by cost-of-living pressures and the fact that ultra processed foods are cheaper but nutrition-poor, resulting in higher rates of chronic disease, poorer oral health and lower wellbeing. In Aboriginal and Torres Strait Islander communities, depending on location, it has been estimated that at least 34 - 80% of the family income is needed to purchase healthy diets.

In terms of inadequate supply of food, logistical challenges become greater with greater distances and sparser populations. Supplying the food needs of communities in remote Australia places significant pressure on supply chains. Many remote communities are located significant distances from the usual freight corridors and roads may be cut off for several months of the year, in addition to facing disasters increasing the lack of access. Not only are the distances vast, but perishable items need to be correctly stored for lengthy periods while in transit.[21]

The combination of logistical challenges and small populations (and therefore lower level of demand) means that fresh food is sometimes in short supply or simply not available in more remote areas. For example, food supply in remote Northern Territory (NT) communities is often limited to a 'general store' that is not always open, and is often extremely expensive, with a higher price mark-up for a 'basket of food' when compared with a Darwin supermarket.[22] The corollary of this is that the food that is available in these areas is of poorer quality and less varied in terms of brands, size, type and quality.[21]

To highlight this point, the Alliance has received the following feedback from a remote GP working in a MMM7 location:

> *"… the price of some things are quite expensive and it is cheaper for me to feed my children chocolate and lollies than strawberries, bananas, or other fruits for example. I honestly feel this is the elephant in the room when it comes to rural and remote people's health. The cost and choice for fresh vegetables and fruit is really really hard, and no wonder we have high rates of obesity and type 2 diabetes."*

It is imperative to embed food security and nutrition outcomes into nationally relevant health and social policies that are current and have strong governance and accountability mechanisms, such as the current National Aboriginal and Torres Strait Islander health plan (NATSIHP) and Implementation plan.

Other barriers to food security specific to remote contexts include absent or irregular commercial markets, complex access to land and waters, fragile supply chains, inadequate housing and storage, lack of community input to develop place based solutions, lack of consistent funding targeting food insecurity, long transport distances and related costs, lower incomes, higher expenses, seasonal isolation, unreliable access to water and electricity, and prohibitive repair and maintenance costs.[11]

The paradox is that often the food that is produced in rural, remote and regional Australia is sent to cities, and then returns at twice the cost. Addressing the structural barriers to food security requires coordinated action across multiple sectors. Some of the measures to improve food security could include, but are not limited to:

- Rural communities locally advocating being involved in the development of policies that may improve food security in their geographical area, including improved transport to food outlets
- Collaboration between government, retailers, producers and transport companies to ensure that remote retailers have the buying power to stock affordable healthy produce in the first place
- Targeting communities with vulnerable groups to improve health literacy (including knowledge of nutritional standards), and health promotion and prevention.

The Alliance recommends that locally-based solutions should be the result of co-design and supported by communities, drawing on the available infrastructure, food, transport and health workforce in response to specific community circumstances and needs.

Climate impact on food security

The impacts of unpredictable climate on food security include the destruction of crops, livestock, and fisheries, as well as disruptions in food distribution, drought, flooding, and precipitation variability and extremes. Vulnerable populations include communities that are on lower income, lower physical access to nutritious food, social discrimination or other factors[15] in a setting where access to health care is already underfunded compared to urban settings.

People living in rural and remote areas are particularly vulnerable to food insecurity arising from climate disruption and disasters. The Alliance has noted concerning data over the years in relation to the impact of extreme weather events on reduced fruit, vegetable, crops and livestock, as well as rural populations. An example is the La Niña weather cycle during 2021–22, particularly in the eastern states which caused floods and destructive hailstorms, exacerbating health issues and other repercussions for communities and the nation at large. Rural communities face heightened risks of infections as a result.

More recently, the flooding in Northern Queensland has submerged agricultural land and forced residents to evacuate, causing physical damage and triggering a rise in waterborne diseases, mental health issues, and respiratory conditions. Rural communities face heightened risks of infections as a result. In addition, the fires in the Grampians Victoria and Tasmania have placed further challenges on rural populations.

It is important to rethink strategies to address the ongoing issues with extreme weather patterns, acknowledging the contribution of rural areas to Australia's economy through exports and the supply of food to the Australian population. Research indicates that taking early adaptation actions can help significantly lower the severity of risks of climate change to food security.[15]

The Alliance also advocates that Governments prioritise and support research to assist rural, regional and remote communities to recover and mitigate the direct and indirect effects of climate change on health, including the impact of extreme weather events, risks to agriculture and food security. In addition, the potential threat of vector-borne diseases, such as Japanese encephalitis virus, dengue virus and Ross River virus, increases significantly in wet and warm weather, and is exacerbated by flooding.

Water security

Water is critical to the growth of key northern industries, including agriculture, aquaculture, mining, energy and tourism. The delivery of safe drinking water plays a critical role in the wellbeing, viability, self-determination and sustainability of First Nations and remote communities. Security in drinking water in terms of supply and quality is a priority to ensure health, social and economic outcomes for rural and remote communities.[23]

The Alliance notes from the Northern Australia Action Plan 2024-2029 that there are still many remote communities that have limited and sometimes no access to safe and reliable drinking water. Indeed, research has identified 408 regional and remote locations, with a combined population of 627,736 people, which failed to measure up to the Australian Drinking Water Guidelines' aesthetic determinants of good water quality across safety, taste and physical characteristics. Furthermore, 40% of all locations with reported health-based non-compliances were remote Indigenous communities.[24] As with food insecurity, poor water security, both quality and supply, in remote communities negatively impacts health and wellbeing.[5]

In relation to healthcare service delivery, the combination of poor water supply and poor climate control support means that hospitals and other healthcare facilities in rural and remote areas are at increased risk of renal failure epidemic.

Access to potable, clean and continuous water is also essential to support healthy dietary choices. Bottled water in many remote communities is very expensive and many reports recommend access to free water dispensers in communities and subsidised bottled water.[21]

The Alliance commends the recently announced Australian Government partnership with the Norther Territory (NT) Government to enhance water security and infrastructure across 10 remote NT communities, which will improve water supply and quality, and support growth and development in these communities.

The Alliance also notes the work being undertaken by the Australian Government in collaboration with states and territories to renew the 2004 National Water Initiative through the development of a new National Water Agreement. The Alliance supports the Agreement's focus areas to strengthen water planning to better account for the impacts of climate change and competing demands, and drive water security for towns, cities, rural, remote and regional communities and the environment.

In addition, Australian Government investment to improve water infrastructure for First Nations communities that currently do not have access to clean drinking water will help progress the National Agreement on Closing the Gap Outcome. It can also support economic growth and create opportunities for local employment, education and training, along with cultural tourism and opportunities for improved healthcare services.[5]

The Alliance recommends strengthening of the collaboration between the Australian Government, states and territories and local governments to ensure there is adequate water planning and infrastructure to support industries, First Nations people, community and environmental sustainability objectives, as outlined in the Action Plan.

Conclusion

In conclusion, the Alliance urges Governments and other support agencies to determine how best to ensure those members of society already disadvantaged by inequitable funding and action access to healthcare. This needs to be implemented especially for Australians living in rural and remote areas, so that they are not further disadvantaged by the impacts of energy, food and water insecurity.

In regard to the impact of climate change on health more broadly, the Alliance advocates for funding of the National Health and Climate Strategy to mitigate climate impacts on rural populations. Governments will need to address the implications of climate change in their healthcare and insurance planning in terms of prevention, early intervention, primary care, secondary care, tertiary care, crisis and trauma management, mental health service provision, and health care workforce education and training.

This planning will also need to incorporate the additional costs to healthcare from both direct and indirect effects of climate disasters, to do otherwise sends a clear message to rural populations, that we do not care that there is an inequity.

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