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Northern Australia Taskforce
Department of Prime Minister and Cabinet
PO Box 6500
CANBERRA ACT 2600 AUSTRALIA

Note on AUSTRALIAN GOVERNMENT GREEN PAPER ON NORTHERN AUSTRALIA

There has now been an opportunity for me to peruse the Green Paper on Developing Northern Australia. This is to provide a brief response.

As background, I refer to our analysis “Australia’s Tropical North – Initial Challenges, Historical Development, Current Progress and Future Prospects” that has been forwarded separately.

At the outset, I would like to say that I support the general thrust of the paper and appreciate the time and effort that has gone into its preparation.

The following comments are offered in a spirit of seeking to develop a better understanding of tropical Australia’s past development and its prospects.

A Conjunction of World Trends
The observation in the early part of the Executive Summary, that Northern Australia sits at the intersection of the two great regions of global economic and population growth – the Asian region and the tropical region is an extremely powerful encapsulation of tropical Australia’s situation. However I found it disappointing that the theme of development now taking place in the tropics around the globe, the reasons for this and its implications for tropical Australia was not fully developed in the paper.

At the heart of the relative failure to develop tropical Australia was a wider global historical lag in development of technology specifically suited to tropical environments.

The Northern Australian experience was but a variation. Although the settlers moving into the area came from a society with the most advanced technological capability at the time, much of it was not well adapted to the tropics. They faced a further major hurdle in the Australian “Common Market” of a high wage cost country. They had to pioneer new technology to reduce wage cost penalties.

What is important to recognise is that these technological barriers that so impeded early development are being progressively overcome.

They are barriers that to some degree, also historically affected the development of sub tropical areas. The last 50 years have seen the “sunbelt” phenomenon transforming the economies of the United States South, Southern China, sub tropical Brazil and Northern New South Wales / Southern Queensland. This global phenomenon is increasingly moving into the tropical zone.
The technology involved is across a broad spectrum – anything that relates to the environment. Obviously it includes plants and animals for farming, mechanization and farming systems, but also housing and building, gardening, clothing, medicine and health, weather forecasting.

What needs to be portrayed is that over the past 50 years, major advances have been made that have been progressively changing prospects in tropical Australia along with other parts of the tropical world.

**Notable Technological Advances in Tropical Australia**

The once protected sugar industry is now world competitive following the mechanization of cane harvesting. The cattle industry has been transformed by the introduction of Brahman cattle of Indian origin.

The northern tourist industry has led the world in adaptation of technology to coral reef viewing and rainforest presentation.

Improved detergents, insecticides, mould resistant paints, jet sprays, refrigeration, cheap ceiling fans and air-conditioning have transformed everyday living conditions during the summer wet season.

Satellites have vastly improved weather warning systems. New building standards and techniques have reduced cyclone damage.

Old scourges of malaria have been eradicated and dengue brought under control. If you take out the impact of lower life expectancy figures Australia wide among indigenous people and their higher proportion in the North’s population, life expectancies are much the same in the north as in the south.

Against this background, Australia’s northern regions have been growing at a far stronger rate than southern Australia. There is no need for a ‘black armband’ view of Northern Australia at this point in its history, or for that matter, the world’s tropical zone in general.

The historical lag is clearly on its way out. I think this theme could be better sustained throughout the paper.

**Dangers of a Eurocentric / Southern Australian Perspective**

The comment that the North has harsh and extreme and often unpredictable weather is partly a view that is coloured by technology. The same could be said of northern Europe before suitable technology to see through harsh winters was developed.

What is important to recognize is that technology development has been reducing the negative aspects and exposing the positives. From being regarded as hardship postings, the northern cities are being increasingly seen as desired places to live.

In relation to tropical Australia’s position as a supplier of technology to other parts of the tropics, there is a potential trap in believing that we are superior in everything and in a position to teach the rest of the tropical world how to do all things.
In fact, the areas in which we have superior technology are relatively narrow and shaped by our fairly untypical high wage cost conditions. What is important is that tropical Australia play a key role in the development of a better interflow of tropical related technological knowledge around the tropical zone.

**Governance**

The comment in the summary under the heading “Governance” of “capable and sustainable local institutions” should be replaced by “Devolving more decision making powers to local institutions in the North”. Instead of the paper implying that governance problems in the North are internal due to smaller populations, it needs to recognise the real governance problems are external. There are many capable local institutions in the North. The problem is the removal of decision making from those institutions to remote unbalanced decision making in the south that panders to sectional interests in southern Australia.

**Misuse of the Word “Resources”**

The term “resources” should not be used as a substitute for “mining” or “minerals”. It is misleading and confusing. Resource based industries are those based on a variety of resources and not just minerals. The North’s natural resource based industries include those based on plant growth potential, minerals and energy, and marine resources. Importantly, although a service industry, most tourism in the North is based on natural resources / attractions.

**Cost Benefit Analysis**

There is a potential for severe deficiencies in conventional benefit cost analysis in relation to the North.

Much conventional benefit cost analysis is heavily oriented to comparative assessment of projects in urban situations in southern Australia. Benefit cost analyses commonly have “project” periods of 20-40 years. Those carrying them out are often poorly equipped to assess the type of developments likely to occur in the North’s situation over this type of time scale.

It is unlikely that a conventional benefit cost analysis would have predicted the extent of the return to the economy of the upgrading of Cairns airport in 1984 to take wide bodied jets direct from overseas. The sealing of roads into the Cooktown district has switched on a major expansion of agriculture in the area as well as tourism expansion. The question is, who was qualified to predict what would happen on a 20-40 year horizon?

**Urban Growth in the North**

Although it does not appear in the Green Paper, there have been suggestions made that urban growth would be best promoted by concentrating in building up one or two urban centres to become metropolitan centres.

Appended is a note that sets out:

- How urban growth rates in the North are outstripping those of the metropolitan areas of the south
- The realities of areas and distances that leads to the current five regional capital cities;
- The importance of developing dispersed urban service centres in the process of northern development.
There is a need in the North’s situation to turn the “growth centre” theory as an instrument of economic policy on its head. Urban service centres need to be located to facilitate dispersed, mainly resourced based development, across the North’s regions.

**Agriculture**

Further to the earlier comments, there seems to be a lack of appreciation of the very real advances that have been made in pastoral and agricultural technology in the North over recent decades.

The extent of the underlying potential compared with southern Australia could be better presented.

Rainfall variability aspects tend to be over stressed, importance of irrigation and there tends to be a fixation with the Ord and its previous problems.

There seems to be limited analysis of the practical importance in the expansion of agriculture of availability and costs of inputs, including from supporting service towns and of infrastructure including roads, power, ports, and direct shipping services.

**Impacts of High Indigenous Population on Statistics**

It is well known there is a differential between indigenous and non-indigenous population in a range of social statistics including health, life expectancy, education levels and attendance, use of internet, etc. These differences are throughout Australia and not just in the North. However there is a much higher proportion of indigenous population in the North.

Figures that just give simple comparisons of the North with southern Australia that don’t recognize this factor can be highly misleading and a ‘belittling’ of the North’s capabilities and achievements.

**Infrastructure**

There is a lack of statistical portrayal of comparative underdevelopment of rail and road infrastructure, water storages and grid supply of electricity in the North, especially in the Far North, compared with southern Australia.

**Technology and Innovation**

The section on technology and innovation misses the theme of improving technology specifically related to the tropics.

**Interface with the Near North**

While border protection and biosecurity issues are discussed, there seems to be little attention to the special economic interface between the Far Northern regions and adjacent areas in Papua New Guinea, the Pacific and Eastern Indonesia and:

- The role of the Northern Gateway cities in supplying goods and services into this area;
- The special role the Northern Gateway cities play in Australia’s relationships with these areas.
Policies
The following from “Australia’s Tropical North Analysis” sets out seven major fields in which policies are needed to assist the North reach its potential.

1. **Technology** - There is a major need for governments to provide a framework in which further technological breakthroughs related specifically to the tropics can occur and be adopted, to overcome the technological lag that has so affected the development of tropical Australia and the tropics generally around the globe.

2. **Governance** – Past governance structures relating to an underdeveloped tropical Australia have been proving a major hindrance as progress accelerates. There is an urgent need to remodel and adapt government structures to meet the needs of a growing North.

3. **Infrastructure** – There are major inadequacies in the North’s infrastructure that must be addressed if the potential new dimensions for the Australian economy are to be realised.

4. **Concepts and Images** – There is a need for a better understanding of Northern Australia in Southern Australia, to correct a whole range of poor economic thinking and concepts and to help remove some of the old outdated images of the North and the tropics still prevalent in Southern Australia.

5. **Indigenous Progress** – With indigenous population representing from 15% to 30% of total population in the major regions across the Far North and responsible for large areas of land, it is absolutely vital to the North’s future that real progress is made in bringing indigenous people through to full economic and social empowerment and economic participation.

6. **National Economic and Industry Policy Settings** – National economic policy as it affects wages, taxation, interest rates, exchange rates and industry support can have a substantial impact on the North’s progress. If the North’s potential is to be realised, the setting of these policies needs to take the importance of the North’s future progress into account.

7. **International Engagement** – With the North’s regions sharing international boundaries and growing economic and social links with Asia Pacific areas to its immediate north, with expanding direct economic links with a developing Asia and in the future playing a special role in relation to the globe’s tropical areas, there is a special need for stronger direct Commonwealth engagement with the North’s regions and its major gateway cities.

W S (Bill) Cummings
06-08-2014
There have been suggestions recently that population growth in Northern Australia would be best promoted by concentrating on building up one city as a ‘metropolitan’ centre with Darwin, Townsville (or Cairns) being canvassed. This suggestion is unrealistic.

**Ignores geographically realities**

The suggestion fails to recognise that Northern Australia covers an area almost equivalent to that of southern Australia. Realities of areas and distances in southern Australia leads to six states and five metropolitan centres.

Although populations in Northern Australia are much smaller, realities of areas and distances leads to six clearly defined regions served by five regional cities of Darwin, Cairns, Townsville, Mackay and Rockhampton.

The regions these cities service are state sized in dimension. The Cairns / Far North region is as deep from north to south as the State of New South Wales. The regions based on Cairns, Townsville and Rockhampton, each cover an area as large or larger than Victoria (see Map 1). The Mackay region covers an area the size of Tasmania.

Ratios of population in the regional cities compared with hinterland and total regional populations are fairly typical of capital city relationships, ie. accounting for about half or more of total regional population. Typical of worldwide trends, the cities have been accounting for an increasing proportion of population in each of the regions.

**Table #1: Historical Population Relationship between the North’s Regional Capitals and their Service Areas (estimated residential population)**

<table>
<thead>
<tr>
<th></th>
<th>1976</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>% Capital of region</td>
</tr>
<tr>
<td>Darwin</td>
<td>46,655</td>
<td>46%</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>101,400</td>
<td></td>
</tr>
<tr>
<td>Cairns SSD</td>
<td>48,753</td>
<td>39%</td>
</tr>
<tr>
<td>Far North Queensland SD</td>
<td>125,210</td>
<td></td>
</tr>
<tr>
<td>Townsville SSD</td>
<td>88,400</td>
<td>47%</td>
</tr>
<tr>
<td>North &amp; North West SDs</td>
<td>180,560</td>
<td></td>
</tr>
<tr>
<td>Mackay SSD</td>
<td>39,500</td>
<td>44%</td>
</tr>
<tr>
<td>Mackay SD</td>
<td>89,300</td>
<td></td>
</tr>
<tr>
<td>Rockhampton/Gladstone SSDs(^1)</td>
<td>72,900</td>
<td>51%</td>
</tr>
<tr>
<td>Fitzroy &amp; Central West SDs</td>
<td>144,050</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) **Note:** Rockhampton’s port is about 100km away at Gladstone. The other cities are co-located with their port.

**Source:** Cummings Economics from Australian Bureau of Statistics (ABS) Cat 3218.0 and previous.
Map 1 – Area of Northern Queensland Compared with New South Wales, Victoria and Tasmania
The northern cities already outpacing the southern metropolitan centres

The suggestion ignores that the North’s regional capitals have been growing strongly as part of an increasingly successful North.

Table #2: Long Term Growth, Northern Australia’s Major Regional Capitals, 1976 to 2011 (Est Res Pop’n)

<table>
<thead>
<tr>
<th>Northern Australia</th>
<th>1976</th>
<th>2011</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Darwin</td>
<td>46,655</td>
<td>129,062</td>
<td>82,407 +177%</td>
</tr>
<tr>
<td>Cairns</td>
<td>48,753</td>
<td>146,477</td>
<td>97,724 +200%</td>
</tr>
<tr>
<td>Townsville</td>
<td>88,401</td>
<td>167,626</td>
<td>79,225 +90%</td>
</tr>
<tr>
<td>Mackay</td>
<td>39,500</td>
<td>83,350</td>
<td>43,850 +111%</td>
</tr>
<tr>
<td>Rockhampton / Gladstone</td>
<td>72,900</td>
<td>126,155</td>
<td>53,255 +73%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>296,209</td>
<td>652,670</td>
<td>356,461 +120%</td>
</tr>
</tbody>
</table>

Source: Cummings Economics from ABS Cat 3218.0 and previous.

Percentage growth rates of the combined northern cities at 120% has outstripped that of all the southern metropolitan centres.

Table #3: Percentage Growth Combined Northern Cities Compared with Southern Metropolitan Centres, 1976-2011

<table>
<thead>
<tr>
<th>City</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney</td>
<td>+47%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>+49%</td>
</tr>
<tr>
<td>Brisbane</td>
<td>+103%</td>
</tr>
<tr>
<td>Adelaide</td>
<td>+34%</td>
</tr>
<tr>
<td>Perth</td>
<td>+117%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>+60%</td>
</tr>
<tr>
<td><strong>cf Northern Regional Capitals</strong></td>
<td>+120%</td>
</tr>
</tbody>
</table>

Source: Cummings Economics from ABS Cat 3218.0 and previous.

As following Table #4 illustrates, the combined population growth 1976-2011 in the northern regional cities exceeded in absolute terms that of Adelaide (the smallest of the southern metropolitan centres). On a continuation of 1976-2011 trajectories, their combined total will be close to Adelaide in size by 2046.

Table #4: Growth in Population, Northern Regional Capitals and Greater Adelaide Metropolitan Area Compared, 1976-2011

<table>
<thead>
<tr>
<th>Population</th>
<th>Regional Cities</th>
<th>Greater Adelaide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northern Australia</td>
<td>1976</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Growth</td>
<td></td>
<td>356,461</td>
</tr>
<tr>
<td><strong>Projected 2046</strong></td>
<td></td>
<td>1,435,874</td>
</tr>
</tbody>
</table>

Source: Cummings Economics from ABS Cat 3218.0 and previous.
**Ignores economic realities**

Like the metropolitan centres in southern Australia, the comparative growth of the regional cities of the North is very much governed by a combination of the inherent natural resource endowment in their service regions, strategic location, market, and economic forces.

An examination of **Table #2** indicates that the two largest cities in 1976, Townsville and Rockhampton / Gladstone (the old pastoral port capitals of Northern and Central Queensland), have been the slowest growing.

Fastest growing have been the two Far Northern cities of Cairns and Darwin servicing regions deeper into the tropics and previously less developed. These cities are also closest to Asia.

Mackay located like Cairns in a higher rainfall coastal belt, has already passed Rockhampton (without Gladstone) in population.

Cairns has been drawing up on Townsville and its regional population is now larger than the Townsville region.

Townsville, despite a great deal of ‘pump’ priming as a ‘growth centre’ in the past, including major defence bases, university, research and government offices, has failed to respond commensurately.

Townsville has been successful as a capital of its immediate north and north west regions and increased its percentage of population in this area. However its percentage of population in a wider northern Queensland region from Sarina north has hardly increased, ie. from 22% in 1976 to 24% in 2011. This is hardly a capital city relationship to this wider area.

Similarly Rockhampton has failed to develop a capital city relationship with a wider Central Queensland region.

**The right policies for urban development in the North**

The North has five well established urban growth centres (including Rockhampton / Gladstone as one growth centre), that by and large, have been outgrowing in percentage terms the metropolitan centres of the south and by a long way most regional cities in the south. They each service state sized regions and there is need for Government services to be delivered through each; not just one of two.

As **Table #5** illustrates, on a repeat of the growth trajectories of the 35 years, 1976 to 2011, population in the Northern capitals could be expected to be up to 1.4 million by 2046.
Table #5: Forward Projection of Population at Same Rate as 35 Years, 1976-2011

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth 1976-2011</th>
<th>2011</th>
<th>2046</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darwin</td>
<td>+177%</td>
<td>129,062</td>
<td>357,000</td>
</tr>
<tr>
<td>Cairns</td>
<td>+200%</td>
<td>146,477</td>
<td>439,000</td>
</tr>
<tr>
<td>Townsville</td>
<td>+90%</td>
<td>167,626</td>
<td>318,000</td>
</tr>
<tr>
<td>Mackay</td>
<td>+111%</td>
<td>83,350</td>
<td>176,000</td>
</tr>
<tr>
<td>Rockhampton / Gladstone</td>
<td>+73%</td>
<td>126,155</td>
<td>218,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>+120%</strong></td>
<td><strong>652,670</strong></td>
<td><strong>1,435,874</strong></td>
</tr>
</tbody>
</table>

Source: Cummings Economics from ABS Cat 3218.0 and previous.

It is important to recognize in the North however, that much growth will come from dispersed resource based development and that there will be a need for growth of urban service centres outside of the northern capitals where needed to support development in fields like agriculture, fisheries, mining and tourism.