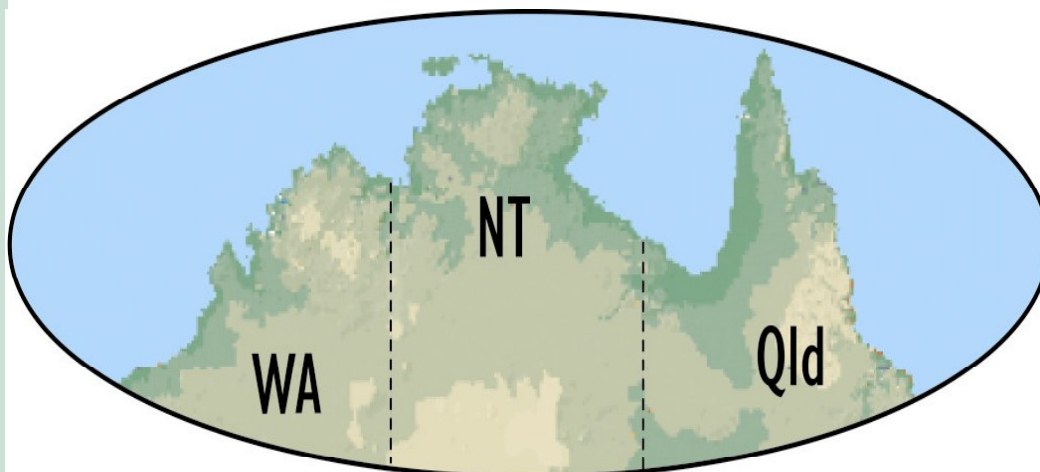


Outback - Outfront

**NORTH AUSTRALIA ECONOMIC
DEVELOPMENT FORUM**



**Report on the 2nd North Australia Economic
Development Forum
28th April 2006, Cairns, Queensland**

**Prepared by Kleinhardt Business Consultants for the
NAEDF Organising Committee**

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NAEDF EXECUTIVE SUMMARY

The North Australia Economic Development Forum, Cairns 2006 was conceived to rejuvenate the process started at the Katherine 2000 North Australia Forum and to create a continuum from then to 2006.

Four key characteristics form the basis of enduring and productive collaboration for effective regional economic development:

- Common interests – recognition of these and adoption in conceptual models
- Shared benefits – or at least the promise of them and recognition of the potential
- Dialogue – a meaningful two-way communication and not merely an exchange of words
- Trust – something that can only be built over time

On reflection these 4 characteristics have been building slowly between 2000 and 2006

North Australia exists in a competitive and global environment and we are in a race to the future. Keynote speakers at Katherine 2000 and Cairns 2006 encapsulated the urgency when they stated: “Success will go to those who get to the future first” (Katherine 2000) and “We are in a global race and the spoils go to the fleet of foot” (Cairns 2006).

The thrust of Cairns 2006 was ‘what do we need to win the race?’

Outcomes NAEDF Cairns 2006

Key outcomes were:

- An acknowledgement of the demonstrated success of collaboration
- Acknowledgement by all industry sectors of the need for ongoing collaboration
- Recognition of the need for continuity – to keep the focus on north Australia and to keep pushing the envelope

In looking at their industry sector, delegates addressed 4 themes:

- Recognition of trends and forces
- Addressing barriers
- Building connectivity
- Fostering and releasing creativity

Industry groups identified common interests and the key points are listed below:

- Tourism: the Savannah Way significance to the north and the need to build the route to be self-sustaining. This prompted an application to the Australian Tourism Development Program, submitted by Gulf Savannah Development, receiving a grant of \$495,000
- Fishing: industry members agreed to a north Australia marketing approach
- Forestry: the Forum brought together plantation and native forest interests and the dialogue is continuing. A need was identified to position the North Australian forestry as Australia’s new innovative forestry frontier
- Tropical Expertise: areas of immediate significance are tropical health and tropical diseases, renewable energy, water technology, renewable energy, new agriculture technology
- Small business: use the Savannah Way concept of collaboration and cooperation between regions as a model and strengthen regional hubs and centres to support remote business interests

- Primary industries: building connectivity between producers and government and facilitating industry clustering were seen as a priorities
- 2020/2050: identified the similarities between the eastern and north/north-western regions of north Australia, their great strengths when collaborating and the strategic significance of the entire region to the nation

The results of collaboration and cooperation were on display in 2006; the Savannah Way is a prime example of what can be achieved when borders are ignored and parochial interests play second fiddle to the development of a dream. Commentary was also made in 2006 to 'hubs' and 'centres of excellence' – creation of which does not preclude collaboration, cooperation and using the assets of each to benefit the whole of north Australia.

2006 demonstrated that emphasis on tropical expertise is gaining momentum at an industry level. The commercial value of tropical 'know-how' is recognised by governments – NT and Qld and WA signing the Cooperative Framework on Tropical Science, Knowledge and Innovation in 2004; Queensland Government under its Smart State strategy looking at opportunities in tropical science and technology.

The 2006 Forum highlighted the fact that the geographical location of Northern Australia offered unique opportunities – being a first world economy to straddle the tropics creates competitive advantages in a wide array of areas based on sophisticated technology, design and scientific expertise not available in other tropical nations. North Australia is in the box seat.

Post Forum 2006

Since April 2006, two issues which have captivated public, government and scientific attention are climate change and water and it would be expected that any future northern Australia Forum include coverage of these issues. In January 2007, the Prime Minister established the taskforce to investigate water and agriculture development in the north as part of the \$10 billion national water plan. This will generate much lively debate. Additionally, the growing body of knowledge and debate on climate change will undoubtedly influence consideration of all aspects of tropical expertise and its application.

Another initiative since April 2006 is the creation of the Global Eco Design Organisation (GEDO) involving academia, industry and community and dedicated to development of tropical north Queensland. GEDO promotes innovation to meet economic needs whilst conserving natural assets and is the presenter of the Global Eco-Source Design Award, bringing together designers, industry, primary industries, community and government to encourage research and development in this area. GEDO intends bringing the Eco Products Expo (Tokyo) to Cairns in 2007/08.

Continuity from 2006

The Northern Territory Government (Innovation and Knowledge Economy NT) is proposing to host the next North Australia Economic Development Forum in Darwin in 2008.

This will provide much needed continuity for the exposure of the assets and national significance of north Australia industries and their importance to the national economy.

ACKNOWLEDGEMENTS

The North Australia Economic Development Forum, Cairns, 2006 was made possible with the generous sponsorship of the Australian Government (Department of Transport and Regional Services) and the Queensland Government (Department of State Development).

CAIRNS 2006 PURPOSE

A process has been gathering momentum at least since the Katherine 2000 Forum. It has been slowly building competitive concepts, alliances and projects across “Northern Australia”. Some of these have more or less directly flowed from the 2000 Forum, others loosely aligned and some in parallel. All have the common thread of bringing together like interests and complementary assets to realise the potential of Northern Australia.

This paper has been prepared to draw together those threads as an information tool for those stakeholders seeking to contribute to furthering the process. It covers history, but in doing so, seeks to look forward.

It does not purport to cover all the initiatives under consideration or development, nor is it a comprehensive economic analysis.

It simply seeks to bring together key information sets as an aid to generally informing, and more particularly, accelerating the process of optimising business and industry outcomes for Northern Australia.

As the keynote speaker to the Katherine 2000 conference observed: “Success will go to those who get to the future first”.¹

That implies a race - and it is. Australia is no longer an isolated island.

¹ Ellyard, P, 2000, *The Journey to Sustainable Prosperity in Northern Australia*

FOUNDATIONS

Northern Australia has, since white settlement, been a “frontier” or “outpost”. It is in ‘the rest’ of Australia where the majority of Australians live, where the major cities are situated and where political influence and financial institutions are clustered. More often than not the opportunities of the region have been identified with mining and primary production – that is, the commodities. It is thought of in ‘Southern Australia’ as remote.

However before and ever since white settlement the northern part of the Australian continent has had strong ties with East Asia, Melanesia and Pacific Island nations. It has been a cultural exchange point for perhaps thousands of years. There are business, family, cultural, environmental and life style ties that are more and more marked the further north one travels. Japan, China, PNG, Indonesia and other northern neighbours are part of the environment in a way that is difficult to understand for those who do not live there. Environment shapes attitudes. As time passes the tropical climate and environmental factors that drive day to day needs create differentiating features compared to the Mediterranean and more European climates of the south. Differentiation is a key factor in competitive advantage.

Frontiers have historically been places with abundant opportunities for development and wealth creation. However in the 21st century globalised, networked world, places not connected by mindset and links can be left behind to become backwaters of unrealised potential.

The mining, oil and gas industries are already highly globalised and operate in their own particular environment and economic model. They are also providing infrastructure and community flow on effects as foundations for more diversified development in some parts of Northern Australia

Assets no longer determine competitive advantage, if ever they did. It is now more a matter of how key assets, core competencies and other factor conditions are assembled to produce novel, new products and services, integrated with industry demand chains. This is in a climate of ever increasing competition, shorter product life cycles and slimmer sources of really sustainable competitive advantage.

The point is how to realise the full potential of Northern Australia in this environment? How can its resources and attributes be harnessed to add to its already significant contribution to wealth and stability for the Australian nation?

These questions have been central to the latest iteration of a “Northern Development” focus that has evolved from the “Regional Australia” conference held in Canberra in 1999. This led to a ‘North Australia Forum’ event in Katherine in 2000, organised by the Australian Department of Transport and Regional Services, under the then Minister Senator Ian MacDonald.

For the purposes of that Forum the definition of “Northern Australia” was set as consisting of all of Queensland north of the Tropic of Capricorn, including the Torres Strait; all the Northern Territory; the Kimberley, Pilbara and Gascoyne regions in Western Australia and the Indian Ocean Territories of Christmas Island and the Cocos (Keeling) Islands.

The following map outlines the area.

However for the purpose of economic development, lines on a map are only useful to the extent they assist in identifying common interests, opportunities and barriers faced, together with potential for shared benefits.



A map provides the framework for thought about the possibilities.

Common interests and the promise of shared benefits are two elements that better define a region and require more than identification. They must also be adopted by key stakeholders as part of their view of the world.

And this requires dialogue – not ‘discussion’, not ‘networking’- although they may involve dialogue. Dialogue is described as meaningful two way communication, not just an exchange of words.

Map 1: Northern Australia Forum 2000 regions

Dialogue will include elements of learning.

The fourth element required is trust. Without trust there is unlikely to be much meaningful action or real progress. Trust is built slowly and may be at varying levels, but must be present.

When the process from Katherine in 2000 to Cairns 2006 is reflected upon, these four elements have been at the heart of it all. They underpin enduring and useful collaboration:

- **Common Interests** - recognition and adoption in conceptual models
- **Shared benefits** - at least the promise of them
- **Dialogue** - two way, meaningful communications
- **Trust** - built slowly over time

“Northern Australia” is only useful as a concept to the extent that it facilitates the process founded on these four elements. These will be driven by the perception of sustainable competitive advantage being achieved.

KATHERINE 2000

The keynote address for the Katherine conference suggested a key insight into the basis for a shared vision for “Northern Australia”.

Northern Australia is the only section of a developed country in the tropics, apart from southern Florida. By the year 2020 Northern Australia could be, and in my view should be, an exemplar of sustainable living and sustainable prosperity in the tropics.

More than 40% of the Earth's peoples live in the true tropics, tropical savannah, tropical arid and the sub tropics. This is a huge market of people who could be your future customers. They will want access to the know-how required to achieve first world prosperity in the tropics and doing it without creating collateral damage to their tropical environment and without reducing the capacity of future generations to maintain and grow this prosperity. This is an opportunity for Northern Australia²

The paper went on to emphasise that without a shared, agreed vision, clear strategy adopted by stakeholders and leadership, Northern Australia was unlikely to achieve its potential. The paper referred to a ‘preferred vision future’ of a leader, not a ‘probable future vision’ of a manager. The following observations were made on the difference:

*The manager asks the question – What **will be** the future? This is the probable future question. The manager assumes the future will be the present with some marginal / incremental changes or changes initiated by others rather than oneself.. The leader on the other hand asks the question – What **should be** the future? – the preferred future question. The leader can envision a future which is very different from the present.*

This was followed by a variety of insightful thoughts on the future and how a ‘preferred future’ might be attained. The conclusion of the address listed what amounted to a recommended action plan; still very relevant:

The people of the North need to collaborate to build a mission towards a sustainable prosperity in Northern Australia. Among the elements which should be included in this mission are:

- *A shared vision of a sustainably prosperous Northern Australia in the year 2020. We cannot work to create a shared future if we do not first imagine it together.*
- *A common strategy to realize it, with the responsibility shared between governments (all levels), the private sector and community organisations and humanitarian NGOs. The strategy should ensure that an appropriate balance is achieved between the four forms of prosperity.*
- *A sharing of knowledge and experience between communities of successes and failures so far in terms of the realization of this vision and strategy.*
- *A program for the creation and gathering of knowledge relating to successful and sustainable living in tropical climates, including the tropical savannah and the tropical arid. There should be universal accessibility to this core knowledge and there should be widespread dissemination of this knowledge throughout Northern Australia.*
- *An integrated program to encourage enterprise formation and development in 21st century industries and the innovation of ways for the creation of a sustainable prosperity in Northern Australia.*
- *The acceptance of responsibility by the current industrial base, such as cattle, agriculture, mining, media, transport and telecommunications and the public sector, for the reinvention and restructuring of itself towards a future of sustainable prosperity within the same time frame.*

² Ellyard, *Ibid.*

- *An integrated approach to ensure that exports from Northern Australia are based on northern collaboration, not competition between different parts of Northern Australia. Together we can lead the world, divided we will waste our efforts.*
- *The development of towns and communities which are sustainable in their design and function and appropriate for the tropical environment.*
- *A recognition that sustainable prosperity will require excellence in the four generic technologies: cyber technology (IT < KT and WT)**, biotechnology, new materials technology and nanotechnology.*

An Australian Centre for Sustainable Prosperity in the Tropics (ACSPIT) should be established in Northern Australia. It could be multi-campus and university based and build on existing strengths, including at James Cook University, Edith Cowan University and Central Queensland University. The centre should also promote enterprise and business development.

It could have many programs such as architecture, urban planning for warm environments, renewable energy conservation, cyclone protection, crop production in tropical environments, tropical health and wellbeing' indigenous / immigrant relations, intercultural studies and mediation. Each part of the program should report its work regularly and there should be regular reporting of the program as a whole.

- ** (The speech developed the theme that technology had evolved from 'Information Technology', to managing that information through 'Knowledge Technology' and the next wave would be 'Wisdom Technology', involving deriving advanced applications for the knowledge base through technologies that can analyse, manipulate and leverage the knowledge).

The forum went on to conduct six workshops, which developed six key themes and arrived at the following priorities:

- Raising awareness of Northern Australia's significant **potential as an investment location**;
- Identifying **key projects** to enhance Northern Australia's long term sustainable future;
- Identifying customers and **developing products to meet demand**, particularly for the Asia economy;
- Developing a **better understanding** of Northern Australia by Federal and State agencies to lead to a better application of policies and programs;
- Improving Federal / State / Territory / Local Government / private sector collaboration and **establishing partnerships**;
- Establishing a more **integrated approach** to development across Northern Australia;
- Calls for ongoing mechanisms to **promote and advise on the future of the north**, and;
- **Reviewing zone allowances** and tax incentives.

The themes developed by delegates in the workshops were reported a "Forum Communiqué".

POST KATHERINE

REPORTING

Following the Katherine Forum, the Commonwealth Government reported back to the regions their responses. However as is often the case with conferences, the delegates did not necessarily do so. The insights, vision and knowledge gained were not widely shared, except to the extent that the particular networks of the delegates received feedback.

The need for a widely shared vision is a key need, as noted earlier and this has not as yet been achieved. There is not a widely held, common, vision across Northern Australia for the future. However there have been very useful flow on and ripple effects that may or may not be traced back to Katherine, but are headed in similar directions, towards industry specific and wider visions that are producing collaborative actions. Informally, the ideas seem to have been slowly permeating across the North.

In human affairs, ideas once germinated spread like seeds in the wind. Who knows where they originated and who knows how far they will spread or the final consequences of taking root in distant times and places.

A central question is whether this process is occurring fast enough in a highly competitive globalised world.

INVESTMENT POTENTIAL

Several initiatives were sponsored by the Department of Transport and Regional Services following Katherine 2000 to lift awareness of the potential of Northern Australia to attract interest in investment.

The first was research and development of a paper entitled *Investing in Northern Australia*,³ which was the basis for a series of seminars in all Australian Capital cities organised by CEDA (Committee for Economic for Australia). The paper was subsequently circulated widely, published on the DOTARS website and distributed to international Austrade offices.

The paper further considered the sources of competitive advantage for Northern Australia in the context of the contemporary global environment. Key factors in that environment were discussed in the business paper prepared as a briefing input for the Katherine 2000 Forum. Key global trends were identified as:

- The declining value of primary products and raw materials
- New production technologies and changing skill requirements
- A rise in service sector activity
- Advances in information technology
- Growth in Elaborately transformed manufacture

The “Investment Paper”, further developed these under five headings styled as “Shapers and Drivers”:

Systems Integration

³ Kleinhardt Pty Ltd, 2001a *Investing in Northern Australia*

- *Greater integration of production, trading and financial systems;*
- *Concentration of higher order financial and business services, stock exchanges and multi-media services into the CBD's of major cities;*
- *Centralisation of R&D, design and high tech jobs around global cities and regions;*
- *Development of networked businesses to cope with shorter product cycles, high cost of specialist operations and price competition. This logically leads to the concept of "learning regions", with key linkages between industry, higher education institutions and R&D to form clusters based on core competencies;*
- *Mega-mergers of global entities that concentrate power and restrict start up access;*

Market Shifts

- *Lowering of trade barriers, deregulation in transport and financial systems, together with advances in communications and information technology are all leading to more open markets and increased global trade. (World Bank figures indicate the volume of world trade has doubled over the last decade alone);*
- *Lower and lower commodity prices;*
- *The spread of a global culture, global products and brands and the emergence of a global middle class;*
- *A counter "tribalism" as cultures seek to preserve identity and differences, together with a rising global interest in different cultures.*

Industry Shifts

- *Dispersal of labour intensive manufacturing and assembly jobs to low wage countries;*
- *Rapid growth in service industries and the service component within traditional industries, with the majority of new jobs expected in these industries;*
- *A shift to knowledge based jobs, industries and economies;*
- *Rapid advances in biotechnology, creating new products and services but also creating public unease with ethical issues;*

Social Trends

- *Social disruption and community stress in regions that have lost competitiveness;*
- *Creation of asset rich, time poor societies under stress from the rate of change;*
- *Migration of talent to larger centres – a cumulative effect that sees young people leave country areas, to scientists and entertainers leaving Australia for global cities;*
- *Migration from large urban centres to "life style" regions, to retire, or establish businesses. These are often in tourism, but may also be to take up emerging regional opportunities, or as a result of opportunities to "telecommute" their employment or business activities. In OECD countries, home-based employment is growing at about 20% per annum.*

Consequential Effects

- *Ever faster rates of new product development, particularly in IT, transport and communication systems;*
- *Smaller governments with less ability to provide social security to aging populations or to fund major infrastructure and a tendency to contract services to the private sector;*
- *Recognition of a vested interest in eliminating poverty, not only for humanitarian reasons, but also to reduce world conflict and create bigger markets for goods as purchasing power improves;*
- *Faster spread of human and animal diseases, food safety concerns and increased health awareness, leading to more discerning consumers;*
- *Increased awareness of the interconnection between earth systems and growing concern for the environment.*

That paper also discussed sources of competitive advantage that could be drawn on for development of sustainable advantages underpinning businesses, projects and industries for Northern Australia. These were summarised as follows:

<p>Competitive Advantage</p>
<p>Markets:</p> <ul style="list-style-type: none"> • Proximity to Asian markets. • Close cultural & business ties with Asia. • Same time zone to Asia (in common with all Australia). • Niche opportunities in global market segmentations, using tropical skills/products. • Critical mass of local domestic market. (In some Northern centres)
<p>Product Marketing Features:</p> <ul style="list-style-type: none"> • Clean, green and tropical. • Extensive expertise and facility in tropical environment and climate aligned with 40% of world's population. • Isolation from diseases and their rapid spread. • Counter seasonality.
<p>Support Infrastructure:</p> <ul style="list-style-type: none"> • International sea and airports. • Advances in IT and transport reducing disadvantages of remoteness.
<p>Industry and Physical Resources:</p> <ul style="list-style-type: none"> • Major minerals development projects. • Major oil & gas reserves. • Substantial tourism industry based on “big nature” themes - faster growth than in Southern Australia. • Contains most of Australia's harvestable water. • Major tropical horticultural and aquaculture industries. • Well-developed beef and livestock industry, including growing live trade. • Extensive, cost competitive land reserves for agriculture, development & settlement.
<p>Human Resources and Tradeable Services:</p> <ul style="list-style-type: none"> • Lower average wage costs, less turnover than urban Australia in certain regions. • Large indigenous population compared to Southern Australia, with emerging, major commercial partnerships. • Specialist tropical skills for R&D activities and development of tradeable services industries. • Opportunities to attract “sunbelt” migrants and commuters (Including tele-commuters)

An elaboration on a number key areas followed, summarised as:

Geographic and Cultural Positioning

The geographic position of Northern Australia is a strategic advantage, due to its closeness to one quarter of the world's population. The map on page 9 illustrates the North's regional context and proximity to what is a close chain of Asian nations, basically on our doorstep. This geographical positioning provides obvious advantages in relation to:

- Freight costs.
- Freight lead-times and minimum stockpile requirements.
- After sales service and warranty support.
- Sales and marketing visit costs and time.
- Environmental and cultural familiarity.
- Gateway to inbound tourism to Australia.

While Asian migration to the rest of Australia is also having an effect, there are important distinctions.

- Mixing between cultures and races has had a long and cumulative effect. There is also a high level of seamless integration in Northern Australia;
- The largest regional cities in the North have populations ranging from 100,000 to 150,000. Compared to a capital city of 1 to 3 million, the cultural impact on regional centres has been much greater;
- The North shares a tropical, sub tropical climate with its northern neighbours. This affects life styles and attitudes and there is much in common, including many crops and their associated issues;
- Southern capitals feel very remote to people living in the North and the life style is very different, though with a common base culture;
- Northern visitors from smaller nations in particular, feel more comfortable in visiting, or doing business in small tropical cities.

Business and Professional Skills

'Life style settlers' are bringing with them business expertise and cultural knowledge in the case of international arrivals. The region is a service centre for mining, oil and gas projects in Melanesia and South East Asia, bringing additional skills to the region.

Development Level

Good levels of resources and infrastructure, but less advanced stage of developed provides opportunities.

Climatic Implications

Tropical living skills, technology and expertise, as well as crops provide opportunities for production alliances to extend supply periods in value added food products for instance.

Tradeable Services

Core competencies associated with 'sustainable tropical resource management' from which a range of tradeable services can be built in the areas of:

- Support Skills
- Environmental Services
- Tourism in a sensitive environment
- Tropical forestry
- Farming practices
- Fisheries management
- Resource management
- Mapping skills

Water and Land Resources - Availability

The region covers 60% of Australia's water runoff and most of the remaining harvestable water, plus large land reserves.

Indigenous Cultures and Business Development

The North is strong in Indigenous culture and art and potential for joint venture developments and skill transfers on projects to develop resources held by Indigenous communities, as they seek to develop business skills and commercial projects.

Rapid Disease Spread

A fragile advantage lies in relative isolation from disease spread in tropical agriculture.

Sunbelt Settlers and Commuters

Technology has overcome many of last century drawbacks to living in the tropics. It is now an attractive place to live, with attributes such as:

- Stunning beauty;
- Clean and uncrowded;
- Long periods of reliable, sunny weather;
- Relaxed life-style;
- Very short commuting times;
- Lower real estate costs;

These will attract new settlers and urban development

COLLABORATION

A concept at the core of leveraging the assets and attributes held in common across Northern Australia is collaboration. It is a technique for learning, sharing knowledge and resources to build collective critical mass and build markets. It is about 'increasing the size of the pie' together. The way the shares in the pie are distributed can then be competitive, but until the benefit is built, there are no, or only smaller shares to be had. The Tropical North Queensland Tourism Industry has for instance been successfully applying this logic for many years.

This seems particularly important to Northern Australia, in which micro businesses and most institutions have very limited resources due to lack of scale.

DOTARS commissioned a study into industry collaboration opportunities across Northern Australia, as a direct outcome of the Katherine Forum.⁴

⁴ Kleinhardt Pty Ltd, 2001b, *Industry Collaboration Opportunities Across Northern Australia*

The 2001(b) paper reviewed a range of industries and areas for possible collaboration across Northern Australia, together with successful models based on collaboration internationally and suggested techniques to create successful collaborations.

Central conclusions drawn on the nature of successful collaboration were summarised as:

*Technology, global forces and the pace of change have now placed **knowledge and its rate of assimilation** at the centre of determining prosperity.*

At the heart of acquiring and assimilating knowledge is the rate and quality of human interactions. Technology provides only better tools. This recognition is globally leading to a move towards decentralised, participative “bottom up” design of economic policy and the organization of production into what has been termed “associational economies”.

The success of this approach is illustrated in a growing number of successful regional economies, using collaborative techniques going by a variety of names.

*These regions are being classified as “learning regions”. However in considering learning, there are distinctions between first and second order learning. **First order learning refers to the refinement of existing practices – doing things better; while second order learning refers to the production of novel practices – doing better things.***

First order learning can be achieved through tradeable knowledge and can be to some extent centrally codified and distributed. Second order learning requires personal interactions leading to intuitive adaptations. It is these interactions that produce innovation. It has been felt that innovation is a linear event, typically beginning with scientific or engineering R&D activity and then moving down through the production system. In fact R&D need not be innovative at all, as some national systems have demonstrated. Innovation can rather occur right throughout the production and value chains and equally move upwards as easily as downwards through systems.

Collaboration can occur at a variety of levels, from one requiring only formal interaction and low order trust, to intense face to face collaboration, requiring high levels of trust and intuitive learning likely to produce innovative outcomes.

A variety of recommendations were made that fell into three stages:

- Establish a suitable framework
- Gather the information
- Develop the opportunities

One of the recommendations made was to build the Area Consultative Committee’s into a more cohesive network and to assign them a more extensive and strategic role in ‘bottom up’ regional economic development. This has been largely taken up.

Another possibility outlined now being taken up was in the field of tropical medicines, referred to under “**Investment In Innovation**”:

An example of potential benefit would be a drug discovery program aimed at treating tropical diseases. A difficulty here is a lack of initiative for drug companies to fund such research, due the likely poor commercial returns from poor countries in tropical regions.

The potential is for Northern Australia, with its advanced tropical research capabilities, to initiate research and alliances with countries in tropical regions. There is a range of interconnected opportunities flowing from this.

If Australia positioned itself as a world leader in this field, the opportunities are not restricted to sale of drugs. The opportunities are across the whole value chain associated with the application and delivery of tropical medicines and technologies. The number one priority for many tropical countries is effective health care for their citizens. Alliances with these countries that assisted in addressing these issues would produce a range of commercial opportunities for other Australian goods and services, provided these health care and other products were packaged through cross-industry collaborations within Northern Australia.

GREATER GOVERNMENT COORDINATION

The Katherine Forum pointed to the need for greater coordination and cooperation between all spheres of government concerned and Senator Macdonald agreed to initiate regular ministerial meetings.

Continuing attention to building this coordination and cooperation is critical to successfully optimising and leveraging Northern Australia's competitive potential.

Due to Australia's origins, the institution frameworks and lines of communication have been traditionally north-south, aligned with State / Territory borders. These are artificial lines on a map, but the differences between the various jurisdictional laws, standards, regulations and procedures now represent barriers drawn across a region that in reality has more in common than the present north-south orientation dictates.

The 2001 *Investing in Northern Australia* paper referred to this in the following terms:

*There is now a strong and growing community of interests **across** Northern Australia that warrants a conceptual shift. The geographic region defined shares a tropical/sub tropical climate, an environment in good condition with rich possibilities, similar industries, the challenges of extended supply lines, developing infrastructure, a large indigenous population, similar life-styles and its proximity with Asian neighbours, with whom Northern Australia has much in common and a wealth of knowledge and understanding.*

There are also emerging alliances across the North and with Asian neighbours, between research institutes, governments and industry sectors. The emerging opportunity is for a tropical region with a strong technical support base, with special products, skills and understanding to be a conduit for Australia into 40% of the world's population.

It is interesting to reflect that the Northern Territory has the only seat of government (excluding LGA's) located in the tropics. It is the only government whose bureaucrats and politicians all live and work in the tropics. It is significant to recognise that a conceptual shift associated with a collaborative approach is required to leverage the advantages held in common 'across the top'. The Northern Territory Government would seem to be well placed to lead in this process.

OTHER EVENTS AND INITIATIVES

Six years have passed since the Forum in Katherine. Since then there have been a series of events, initiatives and developments, both large and small, with some impact and relevance to the concepts canvassed in Katherine 2000. Some have been mentioned above. Others are listed below:

- Alice Springs to Darwin Railway completed;
- East Arm Port in Darwin

- Investment and Trade in Regional Australia – This was a DOTARS program aimed at identifying and addressing barriers to investment and trade in regional Australia generally. Barriers identified included:
 - Lack of depth or flaws in business structure
 - Lack of expertise in investment attraction
 - Remoteness in terms of both geography and business culture from investors and investor networks. This leads to lack of confidence on the part of investors
 - Lack of sufficient access to debt and equity finance

The initial phases of the program ran in parallel with the Kierney Report in to Small Business and conclusions and recommendations made were consistent. The DOTARS program ran an extensive seminar program around regional Australia aimed at addressing weaknesses in skills and produced a range of literature providing advice for those seeking investment and in building export capacity. Following these a pilot program has been run aimed at building regional capacity. There have also been a range of State and Territory government initiatives seeking to address these issues.

- AQIS charges were reviewed and reduced. This was a direct consequence of the Katherine conference, aimed at reducing costs for exporters of agricultural products;
- DOTARS, the prime mover of the Katherine conference, moved on to its wider focus on regional Australia generally, with programs such as ‘Sustainable Regions’, ‘Regional Solutions’ and ‘Regional Partnerships’;
- ‘Desert Knowledge Australia’ – incorporation in 2001;
- The concept of ‘Tropical Expertise’ evolved as a regional focus and driver for at least the Far North Queensland economy;
- On farm innovation and value adding has increased in the face of deregulation and competitive commodity markets;
- The ‘CAPS’ concept formulated (Commercial Agro-forestry Production Systems);
- Australian Tropical Forest Institute (ATFI) established;
- Centre for Tropical Agri-tech Research (CTAR) established;
- The concept of ‘The Savannah Way’ takes shape and gains recognition;
- Collaborative concept for a ‘Centre for Sustainable Tropical Industries’ established;
- ‘Partner Up’ initiative launched by the Northern Territory to produce collaboration across Northern Australia in the engineering industry;
- Australian Tourism Resources concept launched;

- Tropical health initiatives

Those listed above with the most contemporary implications for the 'Northern Australia' community of interests are discussed in more detail later.

OPERATIONAL ENVIRONMENT

The contemporary environment facing Northern Australia suggests there is even greater merit in the concept of a collaborative 'Northern Australia' to leverage common interests, assets and expertise to achieve critical mass and sustainable competitive advantage.

If anything, the world has become even more competitive in the six years since the Katherine conference. Trends identified then continue to further squeeze competitive niches, but they also open up opportunities for those who can embrace and use change to their advantage.

The 'Resources Boom' underpinned by continuing Chinese development (with India close behind), is cushioning the effects on the Australian economy at a national level. However the manufacturing base continues to struggle and contract and many regional centres are impacted by continuing drought, agricultural price instability, imported disease and consequential 'brains' drain' to larger urban centres in Australia and overseas where there are better opportunities for the best and brightest. This is at a point in history where knowledge and human talent are better recognised as the driving forces especially in regional economies.

Economic forecasters are not generally predicting an end in sight for the resources boom. This is provided reasonably stable world conditions continue.

What happens in China is a key. Both Hong Kong and Taiwan have been and continue to be conduits between the Chinese mainland and Western capital, expertise and technology. Family and cultural ties in China, while also having access to Western networks and knowledge bases, have provided a natural advantage for Chinese business people living in Hong Kong and Taiwan. While responsible for a huge proportion of many global industries' total production output, Chinese operations are still only responsible for some 20% of value added. This is largely in assembly and lower technology end of industry demand chains. It is still largely a component assembly operation, utilising low cost workers.

China well understands this and is pushing to move up the value chain in its production systems. Yet they are still likely to retain their low labour cost status for perhaps 25 years. Factory production labour is largely sourced from the poorer, western provinces. Workers come for two years to the Pearl River Delta and Shanghai regions, live in barracks, save all they can and then return to their villages to establish themselves in a house, a business or other personal enterprise. This is producing a 'trickle down' effect. It is estimated that there are still some 400 million people available for this 'rotation', at a labour cost of some US\$1,200 per annum.⁵

⁵ Enright et al, 2005, The Competitiveness Institute Conference Hong Kong

However no one can ever be sure of the future and there is always a possibility of dramatically changed circumstances, given the lessons of history. For instance two possible scenarios with profound effects are:

- A global bird flu pandemic
- A trading alliance between China, South America and Iran.

For the present, the resources boom is creating strong demand, producing a tight labour market, stretched resources and demand for additional infrastructure to support greater resources extraction, processing and export activities.

With this focus, Australian firms are at risk of foregoing opportunities to strategically position themselves in wider global markets. The engineering industry is a particular example. A narrow focus can be a high risk strategy in the medium to long term.

The resources boom is one consequence of wider global forces often lumped together under "Globalisation". On the positive side, globalisation is lifting hundreds of millions out of poverty. There is a new global middle class with disposable incomes for consumer goods and services; more sophisticated societies with more consciousness of the need for social, economic and environmental sustainability.

The some 20% of the world's population living in developed countries has in the past been able to sustain its standard of living by harnessing something like 80% of available resources. As more of the world's population aspires to similar standards of living, a squeeze is being placed on resource availability. There are three options:

- Find and use more resources
- Lower living standards in developed countries
- Find better, more sustainable ways to use the Earth's resources

The first option is producing:

- A surge in mining exploration;
- New technologies for finding and exploiting resources;
- Faster rates of extraction;
- Higher oil prices,
- Shrinking forest resources in countries where forests are mined' rather than 'managed';
- Rampant pollution in parts of China in particular, flowing to neighbouring countries;
- Climate changes that challenge the world, with Australia leading in the sense of having the highest rate of greenhouse gas emissions per capita in the world;
- More locally, the prospect of losing that part of the Queensland and Northern Territory tourism industry based on the Great Barrier Reef, Wet Tropics Rainforests and Kakadu.

In the case of the second option – pressure on living standards - Australia is to some extent cushioned from global effects due to its resource rich base. It remains to be seen how long this will continue. Many sectors face increasing pressure upon their participants to compete and survive against low cost producers and new and innovative replacement products.

The third option – new and sustainable use of resources - is producing a plethora of concepts and proposed solutions. Many are as yet untested, despite the promise and rhetoric associated with them. There is much debate about relative merits at a time when there is a need to press forward to stay ahead of the wave of change that will wash over the Earth.

There is always a tendency to assume the operating environment will continue in much the same way, but with incremental changes. However even where changes are incremental, they often reach a point where their accumulation produces a sudden, profound change that seems to come from nowhere, unless stakeholders have followed and understood trends and driving forces. As the keynote speaker to the Katherine Forum observed, this understanding tends to distinguish between the approach of a ‘manager’ and that of a ‘leader’.

While the future cannot be predicted, the implications of events that have already happened provide clues to future scenarios. This thought was developed in a 1997 Harvard Business Review paper, “Looking Ahead – Implications of the Present”⁶, in which five eminent thinkers in various fields were asked for their views on the future.

Extracts from Peter Drucker’s contribution, are particularly interesting, bearing in mind it was written some nine years ago.

The developed world is in the process of committing collective suicide. Its citizens are not having enough babies to reproduce themselves and the cause is quite clear; its younger people are no longer able to bear the increasing burden of supporting a growing population of older nonworking people. They can offset the rising burden only by cutting back on the other end of the dependence spectrum, which means having fewer or no children.

He goes on to point out that this will produce profound changes in society and notes a number statistics:

- The US population would be in decline without massive immigration from Mexico and Asia;
- Italy’s population will drop from 60 to 40 million within 50 years and below 20 million in 100 years;
- Japan will drop from 125 million to 55 million within this century;
- Retirement ages in the developed world will consequently go up to 75 for healthy people

With China’s ‘one child’ policy, it is reasonable to expect a similar drop there.

The paper goes on to make the following points about knowledge:

The only comparative advantage of the developed countries is in the supply of knowledge workers. It is not a qualitative advantage: the educated people in the emerging countries are every whit as knowledgeable as their counterparts in the developed world. But quantitatively, the developed countries have an enormous lead.

The paper notes that on then current figures (1997):

⁶ Drucker, P, Senge, P, et al (October 1997), Harvard Business Review

- China, with a population of 1.25 billion had no more than 3 million college and university students;
- The USA, with a fifth of China's population had some 12.5 million college and university students.

Today, the equivalent figures would be likely to show China catching up quickly.

Professor Drucker goes on to observe:

To convert this quantitative lead into a qualitative lead is one – and perhaps the only way – for the developed countries to maintain their competitive position in the world economy. This means continual, systematic work on the productivity of knowledge and knowledge workers, which is still neglected and abysmally low.....

Knowledge constantly makes itself obsolete, with the result that today's advanced knowledge is tomorrow's ignorance.....

Knowledge makes resources mobile. Knowledge workers, unlike manufacturing workers, own the means of production: they carry their knowledge in their heads and can therefore take it with them.

The last contribution in the paper is by Peter Senge, who observes:

Almost everyone agrees that the command and control corporate model will not carry us into the twenty-first century.....

The deep systemic problems that afflict our institutions and society are not likely to be remedied until we rediscover what has been lost in this age of specialisation; the ability to honour and integrate theory, personal development and practical results.....

Poised at the millennium, we confront two critical challenges: how to address deep problems for which hierarchical leadership alone is insufficient and how to harness the intelligence and spirit of people at all levels of an organisation to continually build and share knowledge. Our response may lead us, ironically, to a future based on more ancient – and more natural – ways of organising communities of diverse and effective leaders who empower their organisations to learn with head, heart and mind.

All these considerations, touched on above seem to be key considerations in the operating environment facing Northern Australia in 2006.

NORTH AUSTRALIA ECONOMIC DEVELOPMENT FORUM CAIRNS 2006

SCENE SETTING

The 2006 North Australia Forum was initiated through the Gulf Savannah Development organisation in order to build on the success of the Savannah Way, which can largely be attributed to the significant cross border cooperation and collaboration between the state and Territory jurisdictions. The Savannah way had gone from being a series of roads looping across the north to one of the greatest transcontinental drives in the world in 5 years.

It is also worth noting that a Board member of GSD was one of the attendees at the Katherine 2000 Forum and had observed that as DOTARS had moved on to a wider focus, the spotlight had moved away from realising the potential identified in 2000. Most of all there had not been a diffusion of key lessons, nor an opportunity for industry sectors in particular to come together again to progress the vision.

While the Organising Committee for the 2006 North Australia Economic Development Forum was essentially Cairns based, also involved were the 4 ACCs represented across northern Australia.

The NAEDF keynote speaker outlined events from Katherine 2000 to Cairns 2006 along the lines of the previous sections. He noted that the unifying theme from all the events could be seen as competitive advantage – how to identify, build, achieve, optimise and sustain it, given local, national, global trends and competitive operating environments.

Delegates were urged to consider their industry prospects across Northern Australia under four themes:

- Recognition of trends and driving forces
- Addressing barriers
- Building connectivity
- Fostering and releasing creativity.

It was noted:

*In 2000, 2006 **was** the future. What vision for the future did we have then? How far have we come? Is it far enough, because the rest of the world certainly has not been sitting around waiting for Northern Australia? We are in a global race and the spoils go to the fleet of foot. ¹*

Trends and Driving Forces

Some of these have been touched on in the previous section. Why is it important to be abreast of these? It has always been important to know the environment in which an industry and business operates and likely future scenarios. Now it is more important since change is almost a given. Industry intelligence will quickly date. It is also important if the stance of a leader is to be taken. Rather than simply trying to cope with and manage change, how can trends and driving forces be applied to create a preferred future for the enterprise, industry and/or region?

Barriers

Delegates were urged to consider 'barriers' rather than 'issues'. Issues may never be resolved, but 'barriers' imply a temporary check. A way can generally be found through or around a 'barrier'.

Connectivity

Delegates were referred to a huge body of literature that all points to success in the 21st century going to those industries, regions, enterprises that build connectivity. It is the age of information and knowledge, flexible manufacturing systems, fast communication and product development; shorter and shorter product life cycles. Competition outside a local sense is not so much between individual firms as between supply / demand chains.

It is not networking that is called for, although that may be involved. It is about much more pointed and focused interactions aimed at producing deal flows and knowledge exchanges.

This is the point of the 'Northern Australia' concept. Common interests, assets and cultures can forge connections that create a collaborative approach better suited to fast and flexible responses required to compete.

Critics of collaborative models such as industry clusters and geographic collections of industry point to the ability to gain knowledge by remote means, such as the Internet. This is true, but this is access to 'tradeable knowledge' referred to earlier. Second order learning involves intuitive adaptations and is most easily acquired through personal interactions. Where industry clusters and geographic collections of industries have failed, **the lack** of free flowing and extensive face to face interactions across institutions and organisational levels can often also be found.

It is second order learning that is at the heart of the knowledge generation driving industry in the 21st century.

Creativity

The keynote address emphasised the need to foster creativity:

In the face of our changing environment and especially strong competitive challenges, creativity is an essential element of how we develop our responses. An open mind, lateral thinking, preparedness to accept new ideas – these are all elements of creativity.

I could have used different words but used creativity deliberately – because I suspect it is a quality many of us in the business world think we do not have. It is educated out of us, yet as children we all have it. In varying degrees, yet it is there in everyone.

.....Look at the big picture – the vision for a future Northern Australia, the opportunities, how to grasp them, how to push through the barriers and by knowing the trends and driving forces, be at the right place at the right time, in terms of your thinking, strategic plans and industry positioning.⁷

INDUSTRY SECTORS

Key speakers during the morning session included Larry Bannister, Executive Director Innovation and Knowledge Economy NT, Dr Ron Edwards, Chair seafood Enterprise

⁷ Bitomsky, J, 2006, NAEDF keynote address

Australia WA, Rod McInnes Chief Executive Timber Queensland, Scott Walters, National Aquaculture Council, Ian Kikkert Tropical fruits Association, Jenny Tonkin Cairns Coconut Caravan Park, 2006 Tourism Australia Award winner.

Industry groups in the afternoon session then considered potential for new and ongoing collaboration based on common interests, shared benefits, dialogue and development of trust.

A significant number of delegates to the 2006 Forum had not attended the Katherine Forum and in many cases had no prior knowledge of that event and initiatives developed since. This especially applied to industry representatives. Therefore due to this lack of continuity, the 2006 Forum was partly held to build a wider appreciation of the concepts being developed and the potential.

The decision to prepare this paper was based on the need for continuity.

Despite the background being new to many, the seven industry workshop groups soon identified common interests and aspirations for their sector where previously it had been thought there was only competition and divergent views. An approach of *finding and sharing what is possible* was generally adopted by workshop groups as a starting point. A summary of central issues and conclusions emanating from each group follows.

Tourism

While each region across Northern Australia has its own particular tourism theme and market targets, it was agreed that the 'Savannah Way' is the unifying theme to adopt and develop. The view was put that 'Savannah Way' is a brand that could and should be adopted across the North beyond tourism marketing.

The vision for the Savannah Way is to be the 'The World's Greatest Transcontinental Journey'. To complete it should be associated with a sense of achievement bringing with it rich memories of Outback Adventures.

This is a longer term vision, even though the media is even now adopting this phraseology. There are presently a range of gaps in infrastructure, product development and marketing components. Business development, education, marketing collateral, packaging and other initiatives based on the 2001 development plan for the Savannah Way are required. The workshop group considered key actions required to advance towards achievement of the vision include:

- Extend the Savannah Way Steering Committee to provide broader connectivity into key networks and secure funds to engage an coordinator;
- Lift the Savannah Way to the next level in terms of education and awareness in terms of:
 - Public Profile – What does it offer
 - Business – how to engage and capitalise on the concept
- Develop fly / drive packages and engage with airlines to deliver
- Develop and promote more marketing collateral and increase profile in Visitor Information Centres

Fishing

The industry is facing increased competition in both export and domestic markets. At the same time cost pressures and changes in terms of trade are squeezing profitability. Despite having an excellent product and for the most part well-managed fisheries, the industry has no cohesive marketing plan. The group came to the realisation that rather than compete, the different industry sectors had much to collaborate on. It was observed that no other industry relied purely on reputation to sell product. As a result, opportunities were being lost. The group considered the following to be key actions to address industry challenges:

- Develop connections and strategic partnerships with the tourism and hospitality industry, including Regional Tourism Authorities such as TTNQ. Develop regional as an integral part of regional branding and tourism marketing;
- Develop a cohesive industry marketing plan across Northern Australia to raise awareness of product features, industry standards and environmental performance. This should include special promotions to coincide with major regional, national and international holidays and events;
- Encompass all industry sectors in marketing, rather than compete – to include wild caught, aquaculture and Indigenous product lines.

Forestry

The industry outlook is for domestic demand to outstrip domestic supply. As access to Australian native forests for forestry is restricted, there are increasing quality issues with available domestic supplies of hardwoods and imports are increasing. Imports are not necessarily from sustainably managed resources. Globally there is an increasing wood fibre shortage, with demand growing at 1.2 to 1.5% per annum and world forest cover reducing at 9.4 million hectares per annum. Workshop members came to the conclusion that plantation, native forest and agro-forestry interests all had common interests and strengths to be gained from collaboration, whereas previously participants considered these to be competing interests.

Northern Australia has opportunities to develop competitive advantages derived from:

- Available stocks of suitable land and soil types
- Wet season rainfalls and harvestable water
- Cost advantage of land relative other areas
- Stocks of private native forests

Barriers to Northern Australian industry development include:

- Market access
- Limited processing capacity
- Government policies and regulations
- Climatic extremes
 - Lack of regular rainfall (Wet / dry seasons)
 - Cyclonic activity

The workshop group considered the following to be key actions to address sustainability and supply shortages:

- Generally, initiatives that result in a huge increase in tree plantings for forestry, public landscape amenity and environmental support systems;
- Develop regional processes to stimulate dialogue on the appropriate use of forests;
- Unlock sections of forest for sustainable management;
- Develop state of the art processing and harvesting equipment to optimise yields and minimise forest disturbance;
- Position North Australian forestry / timber as Australia's new innovative forest frontier;
- Remove the numerous institutional constraints to forestry;
- Promote and market forestry industries and products effectively including:
 - Engage with the whole of the construction industry to raise understanding and to promote the use of sustainable and enviro friendly timber products
 - Raise positive public perceptions of the industry
 - Develop 'smart wood' – smart with wood concepts

Primary Industries

The primary industries group covered a wide spectrum of industry sectors. Broadly, barriers to industry development include lack of orderly marketing and industry wide strategic plans agreed upon across a broad base of growers. The group necessarily adopted a broad approach due to the breadth of industry sectors concerned and arrived at the following:

Building Connectivity

- Facilitate industry clustering across Northern Australia, including training and education activities;
- Promote a more open interface between government and growers;
- Identify and capitalise on cross industry synergies, for instance with tourism and transport;
- Conduct Northern Australia Forums for specific industry sectors modelled on the Katherine and Cairns Forum approach and principles;
- Develop regional marketing initiatives;

Fostering Creativity

- Foster recognition of the real constraints and barriers and develop agreed solutions;
- Accept and raise awareness of international trends;
- Foster innovative value adding;
- Strive to be market leaders;
- Provide support for development of sustainable businesses and business skills;
- Market to key strengths;
- Invest in R&D

2020/2050 Asia Initiative

The Cairns 2020/2050 Business Research Manual was produced in the Cairns region in 2005 to help businesses in the region to plan beyond the immediate future.

The 500 page manual authored by Cairns based economist, Bill Cummings, and project director, Bill Gordon, with input from 30 corporate, academic and departmental specialists in various fields, looks back at the development of the Cairns/Far North Queensland regional economy over 20 and 50 year time frames identifying the forces and factors that have led to its development. It then looks forward on similar time scales at the factors and forces likely to shape the region's future growth.

Following the successful launch of the Cairns 2020/2050 Business Research Manual at a Symposium held in Cairns, it was suggested to the group that prepared the manual that:

- a) The manual and the major points made in it should be presented at a symposium to be held in Asia to coincide with one of the regular meetings of Australian Trade Representatives in the Asian region.
- b) The presentation should be extended to cover the whole of the tropical far north of Australia, including the top end of the Northern Territory and the Kimberley.

While there are differences between the two major far northern regions based on Cairns and Darwin, there have been strong similarities, including:

- Very strong growth from a small base.
- Major growth in outside earnings based on previously underdeveloped natural resources.
- Impacts of strategic position in relation to nearby Asia/Pacific areas with ramifications for trade development and defence/security spending.

Looking forward:

- Populations in both areas are still very low compared with their underlying natural resource potential.
- Both areas are projected to grow more rapidly in population and economic activity than the nation as a whole.
- Both are close to major resource hungry global growth areas in Asia.
- Both share an immense interest in the passing of a global lag in technology in the tropics.
- Both share an interest in strong economic progress and political stability being achieved in the tropical South West Pacific/South East Asia area.
- Both are underlying winners from improving global transport and communications.
- Both regions are water rich and likely to increase their share of the nation's water resources.
- Both areas are likely to benefit immensely from the major global advances taking place in biotechnology through its impacts on the region's agricultural potential, forestry and marine resource potential.
- Both areas are likely to benefit from a sustained growth in demand for minerals.
- The energy situation in both areas is being transformed by natural gas pipelines from the north.

- Both areas are likely to continue to be major growing global providers of nature based tourism experiences.
- Both areas offer strong lifestyle advantages as they pass from being hardship postings to desired places to live.
- Importantly, while both areas have potential for continuing strong growth in resource based industries, the core cities of Cairns and Darwin are developing a role as gateway hub cities for Australia, and, in the wider Asia/Pacific region, with prospects of developing 'cluster' type earnings in special fields like maritime and aviation servicing, non-leisure tourism, international education, and in various fields of tropical expertise.

It was envisaged that as with the 2020/2050 manual, cost of mounting the project, would be primarily met by corporate sponsorship.

Small Business

Northern Australia is a region where small and micro business operations predominate. They are typically short on financial and human resources and have very limited capacity to support anything except their immediate business operations and objectives.

While there are collaborative opportunities, distance, lack of communication and costs of establishing face to face interactions limit small business capacity to realise the potential of common interests and assets across Northern Australia. The 2001 'Collaboration Across Northern Australia' paper made a number of suggestions to overcome these barriers. The workshop group considered the following as key actions for small business development:

- Use the Savannah Way concept as a catalyst to create cohesion and a sense of common identity across the Northern Australian small business sector;
- Ensure continuing support and promotion of the Savannah Way as 'the unifying spine' for realising Northern Australian potential;
- Search out and document investment opportunities along the Savannah Way;
- Foster ongoing mechanisms to develop collaboration across Northern Australian business sectors;
- Encourage federal government capital injection into:
 - North Australia pool development fund
 - Indigenous development fund
- Support targeted investment opportunities with training and capacity building activities, including Indigenous communities;
- Strengthen service hubs, including IT capacity building

Tropical Expertise

The concept of 'Tropical Expertise' as a source of competitive advantage has evolved over time and was given impetus with the insights gained at the Katherine Forum. It conceptually underpins much of the concept of 'Northern Australia'; as a community of shared assets and opportunities. It also recognises that the skills gained through living and working in the tropical zone of the world are reasonably unique. This is due to the developed nation resources, systems and technologies which have been brought to bear on tropical living, working and industry development.

Actions considered by the workshop group to advance the concept were:

- Mining technologies – Establish the status of the ‘tropical mining futures group’ from the 2004 Tropical Futures Forum and provide a status report to the Cooperative Framework Senior Officers Group;
- Water technologies – Investigate options and resources for Northern Australia to develop and market water reuse technology and water conservation technology;
- Alternative and renewable energy – Showcase alternative and renewable energy sources in the tropics;
- Tropical disease expertise – Better marketing and higher profile for expertise in management of tropical infectious diseases;
- Agriculture technology – Better marketing and communication of technologies for total plant utilisation and production of low GI and high anti-oxidant foods.

ACHIEVING A PREFERRED FUTURE

KEY MECHANISMS

Since 2000, the concept of 'Northern Australia' has evolved and spawned some thought, derived concepts and useful initiatives. It can be the basis for leveraging critical mass and competitive advantages, based on common interests, assets and core competencies, leading to collaborative action.

There is along way to go before the potential articulated in Katherine is realised. In a competitive world that potential may never be realised if the players are too slow to capitalise on their strengths.

A key weakness has been insufficient profile, continuity and distribution for the ideas generated so far. There are also typically very limited resources to pursue such concepts in a predominantly micro-business economy. They need to become part of government, industry and business thinking across 'Northern Australia'.

There is some evidence that in some sectors and with some concepts, this is beginning to occur, reflected in the ongoing projects and concept developments outlined in the next section.

The concept of 'Northern Australia' provides a broad framework for thinking under which a variety of sustainable competitive advantages may be assembled. It provides scope for leadership thinking to 'achieve a preferred future', rather than managing incremental change in the style of a manager.

Individual concepts, projects and initiatives would gather strength from an overarching framework and ongoing process that fosters information flows, knowledge creation collaboration, cross-fertilisation of ideas and broad-based unifying support. This is not to advocate a centralised process.

It is a facilitation framework that is required – to build the foundations referred to at the outset:

- Common interests – Identify them and reinforce them to become part of stakeholders' view of the world
- Shared benefits – what are the main concerns and aspirations of sector stakeholders; are they similar and if so; couldn't joint initiatives achieve shared benefits?
- Dialogue – provide opportunities in supportive environments to create information flows and real communication exchanges
- Trust – build trust slowly with small initiatives likely to be successful.

What needs to emerge is a unifying, widely shared vision for a Northern Australia of the future – as advocated by the keynote speaker in Katherine 2000, who quoted "where vision perishes, the people perish" (book of Proverbs).

Perhaps the vision is emerging and is based on the 'Tropical Expertise' theme – that is expertise in living and working in the tropics across the north of Australia. There is a will to pursue synergies, collaborative ventures, business opportunities and shared learning in tropical expertise.

If these foundations can be successfully laid, they will form a solid platform to build collaborative actions to:

- Recognise trends and driving forces
- Push through barriers
- Build connectivity
- Foster and release creativity

NORTHERN AUSTRALIA INITIATIVES

There are a variety of contemporary projects, initiatives and concepts that illustrate progress towards grasping the potential recognised in Katherine. Those which seem to best illustrate the potential are reported below, without purporting to cover all.

Tropical Expertise

Tropical Expertise is a term that has evolved and increasingly adopted. It provides a unifying theme to encapsulate much of what the core competencies and potential competitive advantages of the whole of Northern Australia rest upon. It provides an important framework for thinking about possibilities that unites common interests. It encourages innovative combinations of ideas for new and / or improved products, services, industries and delivery mechanisms, focused around a key strength for which there would seem to be an emerging large market.

It is therefore important to take the key message out into business and the general community and potentially creating a feeling of common identity, common purpose and focus. As such the use of the term should not be underestimated as a tool in achieving an overall vision for a future Northern Australia.

A successful 'brand' must be associated with a strategy for its effective use and to prevent dilution. Such a strategy is yet to be developed. The term should only be used in association with truly differentiating features of expertise derived particularly from living and working in the tropical region that is Northern Australia. Otherwise it runs a high risk of becoming just a useless label.

The NAEDF Consortium has adopted the term which has been steadily gaining higher profile for the concepts inherent in it. The Queensland Government Smart State Tropical Science Knowledge and Innovation Strategy has also adopted the concept as a source of key competitive advantage and the Queensland Department of State Development and Innovation is preparing a strategy for realising the potential.

As a concept, it underpins many of the initiatives outlined below.

Environmental and Land Management

Tropical Rivers and Coastal Knowledge (TRACK) project - a consortium of more than 50 researchers based in Queensland, the Northern Territory and Western Australia.

With a budget of \$40M over the next four years, \$22M has already been secured from sources including Commonwealth Environmental Research Facility Program, National Water Initiative, Land and Water Australia and the Northern Territory Government. The project will focus on increasing our knowledge of the important natural assets and ecosystem services provided by tropical rivers and coasts; understanding the implications of potential developments; and identifying opportunities to foster genuinely sustainable enterprises in the region, particularly for Indigenous coastal communities.

Leaders include Dr Michael Douglas and Prof. Stephen Garnett from Charles Darwin University, Prof. Stuart Bunn from Griffith University, Prof. Peter Davies from University of Western Australia, Assoc. Prof. Jon Olley from CSIRO, Joe Morrison from the North Australian Indigenous Land and Sea Management Alliance and CRC Tropical Savannas Management and Jim Donaldson from Land & Water Australia.

CRC for Tropical Savanna Management with offices in Darwin, Townsville and Kununurra, the research focuses on Australia's tropical savannahs covering almost a quarter of the continent ranging from Townsville on the East Coast across the Gulf, Top End and over to the Kimberley. The aim of the CRC is to help ensure that this vast area is healthy and managed to provide long-term benefits (economic, aesthetic, social and cultural) to those who use them and to sustain the Biodiversity and habitat endemic to them.

Sustainable Tourism Industry

Savannah Way

The Savannah Way grew from discussions beginning almost ten years ago, across Queensland, Northern Territory and Western Australian tourism organisations and governments. It is presented as a themed tourism route, connecting Cairns and Broome via Katherine; a journey of outback adventures and diverse landscapes across 3,800 kilometres of the Australian continent.

In 2001 an analysis of the potential was undertaken and a strategic plan developed, incorporating the following areas:

- Management Framework
- Branding the Route
- Marketing
- Transport Network
- Visitor Guidance Network
- Corridor Services / Visitor Management
- Accommodation
- Interpretation
- Aboriginal Tourism
- Heritage Tourism
- National Parks

A Steering Committee for development of the concept, consisting of the following bodies across the three jurisdictions concerned was subsequently formed:

- Gulf Savannah Development Inc.

- Tourism Northern Territory
- Western Australia Tourism Commission
- Tourism Queensland
- Katherine Region Tourism Association
- FNQACC
- NQACC
- NTACC
- Kimberley ACC

The Route was officially launched at the 2003 Australian Tourism Exchange and has captured the imagination of travel writers and potential consumers. Consumer research indicates that it is rated in the top ten tourism routes in terms of consumer recognition. One recent article also described it as one of the 'world's great transcontinental journeys'.

Despite the appeal of the vision and the resonance it has with target markets, achieving the vision is still some way off. The ten years taken to date have illustrated that the processes referred to in the previous section – *Key Mechanisms*, do really work and produce outcomes.

A lack of resources has contributed to making the process slow, together with pioneering a collaborative approach across the three jurisdictions concerned, with different systems, attitudes, priorities and approaches. There are four areas that now require attention to bring the concept closer to realising the vision:

- **Sustainable business model** – Development of a model that will support adequate resources for the ongoing development, management, marketing and promotion of the route;
- **Market Research** – Fill gaps in market intelligence to inform and direct marketing strategies;
- **Destination and Package Development** – Develop packages of products, including fly / drive options, work with business to develop new and enhanced product, establish and adopt standards, improve networks of Visitor Information Centres and National Parks, development of appropriate marketing collateral;
- **Product and Business Enhancement** – Review businesses across the route, identify key weaknesses and opportunities and address them;
- **Key Infrastructure Gaps** – Continue improvements to hard infrastructure, especially bush camping facilities and waste management systems. Continue to improve soft infrastructure involving connectivity, skills, consistent approaches.

It would be hoped that this project will pave the way for greater collaboration through the lessons learnt and the illustration of the benefits to be gained by jointly leveraging assets, core competencies and interests held in common across the North. In the present world environment, it can be argued that ten years is too long for development of new product.

(Web site: www.savannahway.com.au)

Great Tropical Drive

In 2005 the **Great Tropical Drive** Project was proposed as a Joint Venture by Townsville Enterprise and Tourism Tropical North Queensland. It received Commonwealth Government funding of \$ 6 million for a period of 3 years.

Its main goal is to create an iconic tourism destination that provides a large range of tourism experiences across a region that begins south of Townsville, goes all the way north to Cooktown and includes the western outback shires and cities in North Queensland.

The combined skills and experiences of the regions two Tourism Organisations guarantees the professional execution of the many individual initiatives and sub-projects.

Existing and new tourism products and services are linked by 1 main and 13 themed drive loops. This allows the effective promotion of all experiences and supports the aim to extend the visitors stay in regional areas.

Extensive marketing and media campaigns complement the development of comprehensive signage and information materials, both nationally and in selected overseas markets. The project will run for another year and has already created a much improved awareness of the regions tourism capacities. A special focus has been placed on indigenous and eco-tourism products and services. Combined with the established tourism sectors they form a unique set of experiences.

Partner Up

This is a joint initiative between the Northern Territory Manufacturers Council and the Cairns Region Engineering Cluster and at an early stage of development. A significant barrier is high demand being experienced by engineering firms, which at the same time are facing labour shortages. This is tending to force a short term view and perceived inability to work on longer term strategies for industry development.

A workshop involving NT and Qld participants was held in May 2005 to explore the collaborative opportunities. The workshop included presentations from major customers on future requirements. Just two listed potential for \$254 million of work per annum which small to medium firms on their own are unlikely to access. These major clients supported a collaborative approach. It was also pointed out that there were particular collaborative opportunities arising from:

- Changes in traditional methods of procurement / construction, with the rise of pre-assembled modules (PAM's), using different locations to overcome skill shortages and reduce lead times through simultaneous construction, rather than construction on site;
- Defence contracts that are typically large and have long lead times, with tenders closing up to 5 years prior to job commencement.

Potential outcomes from the workshop were considered to be at two levels:

Macro: winning business with big companies. Big companies offered big projects with big budgets at the workshop provided firms collaborated effectively;

Micro: sharing industry knowledge, opportunities and potentially labour, getting to know each other and building trust.

Potential barriers were seen as:

- Parochialism
- Unwillingness to share information – lack of trust
- Busy-ness and lack of long term focus
- Stand-offishness (to be addressed by industry champions)
- Commitment to using local suppliers by big projects (Lined back to the need for industry to demonstrate collective capability)
- Lack of government support
- Mechanism for follow up (to keep the momentum of ideas moving)
- Variable systems & standards between SME's
- Lack of ongoing liaison with major customers
- Poor resourcing (as to ability to deal with large projects)
- Complexity of cross-border collaboration (contracts, regulation, standards)
- Cluster resources (need for people to drive ideas forward)

The workshop has led to a wider dialogue developing. Ongoing discussion has now drawn in Townsville engineering firms through their cluster – Townsville Region Engineering Cluster (TREC), Mount Isa and Mackay engineering networks.

Star Fish Project

This project was conceived at the North Australia Forum in March 2006 and is a direct consequence of the workshop of participants in the seafood sector at the time. It is intended as a pilot project, as part of a national strategy.

The national strategy, is being formulated by Seafood Experience Australia (SEA), which is a joint seafood promotion body combining the Australian Seafood Industry Council, the National Aquaculture Council and the Fisheries Research & Development Corporation. The proposed project enjoys the full support of SEA.

The proposed project would, in effect, be a prototype that SEA could replicate in other regions of Australia, especially across Northern Australia, which shares target seafood species.

The project will identify 5-6 “Star” fish from the region, which may be:

- Barramundi
- Red Emperor
- Coral Trout
- Mackerel
- Mud Crab
- King Prawns

It will also collect baseline data on patterns of seafood consumption and consumer perceptions of seafood. This will be utilised to measure the effectiveness of the trial marketing and promotion activities. These are to include:

- Feature dishes from participating chefs,

- A website,
- TV advertising,
- Point of sales collateral,
- Promotions to coincide with festivals,
- Cooking demonstrations,
- Articles in popular magazines
- Links to existing food networks

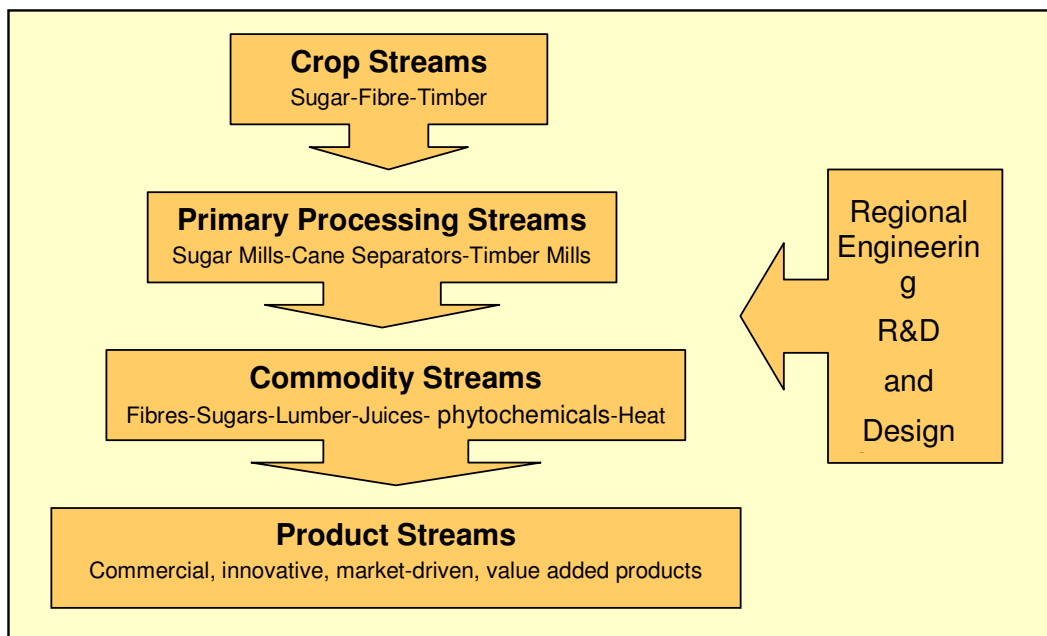
The project will evaluate the extent of impact the project has on public perception of seafood production. It is intended to be a collaborative project involving James Cook University, Ecofish TNQ Ltd – a network of seafood industry participants, TTNQ - the Regional Tourism Organisation, Les Toques Blanches – a regional network of chefs and restaurants, Australian Tropical Foods - the regional food cluster and Seafood Experience Australia.

Commercial Agroforestry Production Systems (CAPS)

CAPS is a concept for the creation of a cohesive sugar–fibre–timber system in North Queensland as a framework to drive diversification and solutions to the issues facing the sugar industry sector. It considers crops as output streams for input into major regional primary processing facilities, which in turn would produce a range of materials to form the basis for value added products. Central features are integrated utilisation of the biomass produced and the waste streams from each level of processing through infrastructure clustering.

A 2005 report on the potential of the system to DOTARS Regional Partnership Program⁸ included a product and market review of potential product streams.

The review divided product streams into the different levels in the production system, represented by:



⁸ CAPS RPP Consultative Committee (Jan 2005) , *Commercial Agroforestry Production Systems project report*

Areas reviewed were:

<p>Crop Streams</p> <ul style="list-style-type: none"> • Sugar Cane • Timber • Bamboo • Hemp and Kenaf • Sorghum • Cocoa <p>Primary Processing</p> <ul style="list-style-type: none"> • Traditional Sugar Milling • Cane Separation Technology • Timber Processing • Dairy Processing • Engineering Capacity 	<p>Product Review</p> <ul style="list-style-type: none"> • Cane Juice and Health Drinks • Nutraceuticals & Phytochemicals • Wood Plastic Composites • Reinforced Plastics • Bio Fuels • Panel Board • Oriented Strand Board • Laminated Veneer Lumber • Fibre Cement Blocks • Activated Carbon • Stock Feeds • Pulp & Paper
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The system aims to reduce the vulnerability of the sugar industry and so also the farms and communities reliant on it. It aims to build in flexibility through diversification, extend uses for the sugar mills and to provide environmental benefits flowing to the community and the tourism industry.

As such it represents a triple bottom line approach.

Diversified use of the mills will value add to cane production, diversify land use from monocultures and produce environmental benefits through reduction of erosion and fertiliser run off, which will contribute to protection of the Great Barrier Reef.

Diversification is to increase agricultural income and being higher up the industry value chain, retains more of the industry value chain revenues in the region of production.

This in turn is to protect growers and the industry from global price fluctuations typical of commodity trading.

Environmental benefits include more sustainable land use through multiple crops and uses, which produce a higher economic value for land use.

CAPS is no longer a concept only:

- It has provided a blueprint for development of the CSIRO 'Healthy Countries' National Flagship program;
- It is part of the Far North Queensland Natural Resource Management Plan;
- The Regional Advisory Group on Sugar have used CAPS as a primary reference in development of the Far North Queensland Sugar Industry strategic plan;
- It has been a starting point for what is now an international collaborative project based on cane separation technology at the Mossman Mill;
- That project has led to development of business networks, linkages and sister region status between Far North Queensland and Okinawa, which like Northern Australia enjoys a tropical environment.

Being a concept that considers products to be derived from biomass produced in the tropics, CAPS is highly relevant to the interests and opportunities held in common across Northern Australia.

The following have particular links to the CAPS concept:

Centre for Tropical Agri-tech Research (CTAR)

This is a Centre based at James Cook University that provides a key link between plant biotechnology research, sustainable agricultural practices and economic and educational expertise within JCU and the tropical agriculture and bio industries of the region. **CTAR** has also been developed to support a regional technology incubator and to support integrated production and processing of new bioproducts.

CTAR Agroforestry and Novel Crops are engaged on:

- Tropical tree domestication and the development of novel crops,
- Agroforestry, agro-ecosystem function;
- Development of sustainable and profitable land use systems;
- Processing and commercialisation of agroforestry tree products;
- Clonal approaches to tree improvement and production

Academics and practitioners are connected through the Network for Sustainable and Diversified Agriculture (NSDA).

BioNQ is part of this collaborative network and is the bio-industry component. It is an autonomous not-for profit industry cluster, under the umbrella of Cairns Region Economic Development Corporation. Its membership is made up of high technology and knowledge intensive research and development institutions in the region. (www.bionq.com.au).

The **Molecular Farming Unit** develops research opportunities in molecular farming in the region. Plant molecular farming uses transgenic science to produce pharmaceutically important and commercially valuable proteins in plants. This industry is predicted to grow to US\$160 billion by 2010. A particular regional project involves tobacco, which would re-invent an industry that was the backbone of the Mareeba Shire.

The **Rapid Assessment Unit** is a collaborative research unit established in conjunction with the Queensland Department of Primary Industries and Fisheries Emerging Technologies Unit. It is undertaking research into the application non invasive technologies for the rapid assessment of foods for safety and quality purposes. There are obvious advantages for a system that could for instance instantly grade fruit for ripeness and sweetness as part of the grading process.

Australian Tropical Forest Institute (ATFI)

ATFI is an institute also located within JCU Cairns. It collocates the key research organisations of CSIRO, Department of Primary Industries and Fisheries and the Environment Protection Agency. The Institute is to build on the work of the previous Rainforest CRC and JCU global leadership in rainforest science and management. Its work includes projects concerning tropical landscapes, biodiscovery, bioprospecting and agricultural technologies.

Bioscience North Australia

Complementing the ATFI (albeit at a reduced scale) is Bioscience North Australia at Charles Darwin University, a molecular biology facility with gene sequencing capabilities to detect and diagnose crop and emerging human diseases, and invasive species, allowing development of solutions to combat outbreaks. Other emerging capabilities includes work on micro-organisms used to remediate contaminated mine sites, and abilities to identify filleted catches off illegal foreign fishing vessels in Australian waters.

Bio-based Industries – Cumulative Effect

In addition to the institutional based research and development work, there is a plethora of research and development being undertaken on-farm and through private individuals and consortiums in far North Queensland, given impetus by the market uncertainties of trading in commodities.

The potential being realised is due to the regional assets and core competencies that are steadily being built upon and are derived from the tropical environment in all sense of the word. Flow on effects include:

- Broadening of the regional skills base
- Enhancement of environmental sustainability
- Contribution to growth in other industries (IT, engineering tourism)
- Increased participation of Indigenous people in innovative industries – based on their traditional skills and knowledge

The connectivity between initiatives and the approach adopted is leading to a regional *bioentrepreneurial* mindset – derived from tropical biomass.

Centre for Sustainable Tropical Industries

This is at concept stage and proposes a physical Centre, with the vision that it grow into a 'precinct' housing organisations connected by the common thread of their interest in tropical expertise. It is intended to:

- Foster powerful connections between learning, creating and innovating for sustainable living in the tropics;
- Provide a global access point for research and development in tropical innovation across diverse fields;
- Be underpinned by Queensland's world class expertise in Tropical Sciences Knowledge and Innovation;
- Lift the community profile of "Tropical Expertise" to add depth and momentum to development of tropical expertise products and services

The Centre will co-locate the regions' industry clusters and development organisations and showcase world class products and services for tropical living; in partnership with James Cook University (JCU).

The building itself will showcase sustainable design, construction and landscaping concepts for tropical living. The Centre will be located on a site with room to

accommodate additional buildings and agencies and grow into a 'precinct' supporting tropical expertise, knowledge and derived products and services.

This collaborative framework is intended to operate on the foundations of common interests and shared benefits that produce dialogue and trust. It will build connectivity between tenants and through intuitive learning, address barriers and foster wider creativity and innovation.

It is a project to bring together regional hard and soft infrastructure to create in one location the benefits flowing from the concepts of:

- Portal
- Knowledge Hub
- Showcase
- Business incubator
- Innovation and Commercialisation Centre

As a portal, the Centre will have both an internal and external focus. Internally it will create stronger connections between JCU, regional business, industry and agencies, both government and non government. It will also improve business and community access as a one stop shop as well as lifting the profile of tropical expertise as a focal point to galvanise community interests, creativity and talent. It is intended to also house business incubation facilities for regional knowledge intensive business.

As a showcase, the building will include facilities for display / demonstration of best practice sustainable tropical living products and designs.

Externally, the Centre will be a portal for visiting business people, academics, professional services personnel and international delegations.

Cairns, in common with Darwin is an Asia / Pacific gateway by virtue of geographic position, climate, cultures, history and family ties. The longer term vision for the Centre is to advance the vision of Cairns as an international hub of global significance in all things tropical.

For instance the Cairns campus of JCU is currently under consideration for a United Nations University of Traditional Knowledge. There is also interest from the OECD to establish a hub of their LEED (Local Economic & Employment Development) division in Cairns, perhaps in partnership with the Asian Development Bank. These prospects, together with tropical expertise have led to consideration of the Centre as an AusAid delivery hub.

This concept is at feasibility assessment stage.

Tropical Health

Cooperative Framework on Tropical Science Knowledge and Innovation

A Cooperative Framework on Tropical Science, Knowledge and Innovation was signed in March 2004 by the Northern Territory, Queensland and Western Australian Governments. This Framework seeks to harness the expertise in tropical science, knowledge and innovation across northern Australia to deliver positive economic, social and environmental outcomes for tropical Australia and tropical regions around the world.

Under the Cooperative Framework the Northern Territory continues to work with Queensland and Western Australia on the North Australia Emerging Infectious Diseases Alliance. The alliance is aimed at establishing a network of medical and scientific capabilities across northern Australia to rapidly detect and diagnose, and rapidly respond to, diseases incursions, particularly those incursions from near northern neighbours. Potential threats include outbreaks of Japanese encephalitis, dengue fever, and zoonotic diseases like avian bird flu. The three jurisdictions are working on funding support from the Commonwealth through the National Collaborative Research Infrastructure Strategy.

The Queensland Tropical Science, Knowledge and Innovation Strategic Plan - 2006-2016

The Queensland Tropical Science, Knowledge and Innovation Strategic Plan - 2006-2016, recognises opportunities in tropical health, medicine and veterinary science for the State in a collaborative framework both within the State and across Northern Australia. It canvasses opportunities for scientific discovery and commercialisation exist at the interface of human health and medicine with emerging zoonoses (diseases transmissible from animals to man), such as BSE, avian influenza, or leptospirosis.

Australian Institute of Tropical Medicine (AITM).

A North Queensland Tropical Health Precinct at James Cook University has been established in Townsville under the leadership of AITM. The Precinct is expected to provide a multidisciplinary and coordinated approach in tropical health research, teaching and public health service delivery.

It would incorporate all existing facilities at the Townsville Hospital, JCU's School of Medicine, the new veterinary science facility, Comparative Genomics Centre, WHO Collaborating Centre for Lymphatic Filariasis, North Queensland Centre for Cancer Research, the Anton Breinl Centre and the Tropical Infectious Disease and Biosecurity Group.

It would link to Queensland Health's Tropical Public Health Unit Network in North Queensland, the Australian Centre for International and Tropical Health and Nutrition, the Army Malaria Research Unit, Griffith University's Institute for Glycomics and Natural Product Discovery Unit (Brisbane), Queensland University of Technology's Institute for Health and Biomedical Innovation (Brisbane), Queensland University's Institute for Molecular Bioscience, Queensland Institute of Medical Research, the Australian Biosecurity CRC, the CRC for Vaccine Technology and TetraQ.

Menzies School of Health Research

In the Northern Territory the Menzies School of Health Research at Charles Darwin University is based in Darwin, with a smaller unit in Alice Springs. The Menzies School is uniquely positioned to conduct research combining laboratory, clinical, public health and community based lifestyle studies to tackle complex health problems facing northern and central Australia, and neighbouring countries to Australia's north.

Research spans:

- Tropical and emerging infectious diseases (such as melioidosis, skin health, malaria, ear and respiratory health);
- Chronic diseases including diabetes, heart and renal disease, with a focus on causal pathways of chronic illness; and

- Population health encompassing social, physical and environmental influences on health, and the effectiveness of health services particularly on small, isolated and Indigenous communities.

Australian Marine Training Centre

The Australian Marine Training Network (Cairns) has recently completed a business case in support of a world class Marine Training Centre of Excellence. This iconic institution will service the training needs of a diverse marine industry. Cairns and its regions form a major hub for marine activities including cargo, commercial and passenger shipping, pilotage, fisheries, Customs and Navy. In addition, the area hosts one of the largest marine tourism industries in the world.

The business case has determined that the Centre will meet the demands of a robust and competitive industry. It will create clear career paths for local students and provide advanced training in a flexible and real world environment. As a modern and specialised institution, the Centre will tap into more than three decades of intellectual property and best practice to attract staff who can produce much needed outcomes not currently available in Cairns. This means employees will no longer have to travel to Launceston or Freemantle to undertake advanced training. The outcome will be enhanced skilling of staff and improved retention rates with training geared to meet industry needs.

This Centre is a much needed and important development for Cairns and is continuing to gather significant support from all quarters of industry training and education.

Marine & Tropical Sciences Research Facility

The Commonwealth Environment Research Facilities (CERF) program has allocated \$40 million to establish a Marine & Tropical Science Research Facility at James Cook University campuses in Cairns and Townsville. The work of the facility is intended to contribute to national priorities set by the Australian Government for “An Environmentally Sustainable Australia”. While it is not a collaborative project ‘across northern Australia’, the facility is an important resource, set in tropical Australia, oriented to sustainability of the tropical assets of the Great Barrier Reef, Wet Tropics rainforests and other environmental assets and attributes of North Queensland.

The mission of the Facility will be to plan, fund and coordinate the highest quality, cross-disciplinary research for public good to:

- Ensure the protection, conservation, sustainable use and management of environmental assets of the Great Barrier Reef and its catchments, tropical rainforests including the Wet Tropics World Heritage Area and the Torres Strait
- Foster an understanding of the interactions of North Queensland’s natural environment with the social and economic aspects of North Queensland communities
- Support the adoption of science-based knowledge in ecologically sustainable management policies and practices *and*
- Facilitate capacity-building for sustainable environmental management and environmental management research, in partnership with the community, environmental managers, research institutions, industry and policy-makers.

The Facility's goals are to improve understanding and delivery of knowledge relating to the following areas:

- Status of the ecosystems
- Risks and threats to the ecosystem
- Halting and reversing decline of water quality
- Sustainable land use and management
- Sustainable use and management of natural resources

AIMS

The Australian Institute of Marine Science is a reminder that the thought of capitalising on the tropical assets of Northern Australia as a means to competitive positioning is not new. However perhaps it has come of age. The Australian Institute of Marine Science is located in Townsville and has a partnership with James Cook University. It was established in 1972 by the Australian government under the Australian Institute of Marine Science Act. Its brief is wider than tropical Australia.

The Institute's expertise is engaged throughout Australia's ocean territory, from tropical northern Australia to the Antarctic, and in tropical waters worldwide. National and international research partnerships and collaborations enhance AIMS' capacity and influence well beyond Australia's shores.

Its proximity to the geographical centre of the Great Barrier Reef and access to clean seawater has strategic significance. It provides a fast transition from the sea to the lab, a key advantage in the field of marine science. Two smaller offices, in Fremantle, Western Australia and Darwin, Northern Territory, provide direct links for research partners and clients in these regions. There is therefore a long-established collaboration across Northern Australia in the fields of marine science.

AIMS' mission is to conduct innovative research that advances understanding of our oceans and coastal ecosystems, facilitates good stewardship of marine resources, develops sustainable wealth creation opportunities, and contributes to the discovery and development of new marine-based bioproducts for industry and human health.

To do this, AIMS surveys and documents marine life – from the coast to the edge of the continental shelf; monitors changes and identifies trends in the marine environment; and searches the seafloor for novel compounds that can be used to develop pharmaceuticals, health care products, crop protection agents, and applications for environmental remediation. The organisation is also developing aquacultural techniques for the production of food, materials and fine chemicals

AIMS has an active program for patenting and commercialising technologies developed within the Institute, including those developed in conjunction with academic or commercial partners. AIMS takes seriously its responsibility to transfer its intellectual property to users.

AIMS is recognised worldwide for the quality of its research into marine environments, and their resources including biotechnology and aquaculture.

(Material drawn from AIMS website: www.aims.gov.au)

Under the Cooperative Framework on Tropical Science Knowledge and Innovation the Northern Territory is working with Queensland and Western Australia to build a north Australia marine research node in Darwin to complement the principle base of research in Townsville. North Australian waters generally bounded by the Arafura and Timor Seas (from Cape York to Broome) are Australia's most politically sensitive borders, with significant implications for border security and diplomacy, and for the nation's economy. The waters form Australia's most sensitive international borders, containing major energy reserves and important fisheries, through which pass billions of dollars in Australian exports, and illegal immigration and fishing. An understanding of the science of these waters (tidal and current movements, temperature and salinity gradients) is fundamental to understanding such matters as vessel movements, pollution plumes and other potential vectors. Darwin is strategically placed to make a significant contribution to this research.

North Queensland (Townsville) Initiatives

In addition to the established institutions and initiatives within the North Queensland Region Townsville Enterprise Limited highlights a number of specific and/or unique initiatives that demonstrate a pro-active, strategic and future focussed economic development in North Australia.

The established institutions include:

- James Cook University, JCU
- Australian Institute for Marine Science, AIMS
- CSIRO, Davies Laboratories Townsville
- Great Barrier Reef Marine Park Authority, GBRMPA incl. Reef HQ Aquarium
- QLD Department of Primary Industries & Fisheries, DPI&F

Innovative Energy Solutions

Townsville has been nominated as Queensland's only **Solar City** is September 2006. The initiative to become one of five Solar Cities in Australia was lead by Ergon Energy, which is providing half of the \$ 30 million that will be spent in Townsville.

The Solar Cities Program is a \$75 million Federal Government initiative to implement distributed solar technology (including photovoltaic and solar thermal), energy efficiency, load management, smart meters and cost reflective pricing in large-scale grid-connected urban sites.

The Solar Cities Program forms part of the Federal Government's long-term greenhouse response in the energy sector to move towards integrated use of low-emission supply technologies, distributed generation, significantly enhanced energy efficiency and markets that deliver responsive and effective wholesale price signals. The program is expected to run from 2005 to 2012 - 2013 (the first Kyoto commitment period).

The main program objectives are, to:

- Demonstrate the economic and environmental impacts of integrating cost-reflective pricing with the concentrated uptake of solar, energy efficiency and smart metering technologies; and

- Identify and implement options for addressing barriers to distributed solar generation, energy efficiency and electricity demand management for grid connected urban areas.

The Townsville Solar City consortium is working with industry, businesses and the local community to rethink the way they produce and use energy. The Townsville Solar City project will focus on Magnetic Island to become a Solar Suburb and the Townsville region, including Serene Valley and Riverway.

In the Solar Suburb of Magnetic Island it will:

- Install up to one megawatt of solar energy across 500 selected residential and business premises, at no cost to the owner.
- Install 1700 smart meters to monitor energy data.
- Install in-house energy displays in 1600 premises to give householders and business owners more information about the use and cost of their electricity.
- Assist 2500 participants to better manage their electricity demand and save money.
- Trial electricity tariffs and incentives to encourage participants to reduce electricity use when demand is high.
- Test better electricity management systems including enhanced air conditioning control.

Across the Townsville region it will:

- Provide energy efficiency advice to thousands of households and businesses.
- Install an additional 800 smart meters to monitor energy data.
- Install additional solar energy systems and energy efficiency measures in two new housing estates and a central business district building.

As a result this will:

- Save more than 47gigawatt hours of electricity.
- Reduce greenhouse emissions by 50,400 tonnes.
- Supply valuable information and lessons learned will inform energy and greenhouse policies.

Tropical Design

Initiated by the key foundation partnership between City of Townsville, City of Thuringowa, Department of Public Works and James Cook University Centre for Tropical Urban and Regional Planning, a “Virtual” **Centre for Excellence in Tropical Design (CETD)** is being established in North Queensland.

It is the Centre’s aim to stimulate a more collaborative partnership between local governments, state government, universities, business and the community.

CETD shall be established in a more permanent form in the coming years. It would serve as the focus for accessing the extensive range of expertise related to tropical design available throughout the Centre’s network of involved organisations.

The ultimate vision is to be able, in the next twenty years, to export practical models for tropical cities and sustainable patterns of living to a global community.

It is envisaged in ten years that a 'Centre for Excellence in Tropical Design' is part of an exciting series of hubs of learning, innovation and business development on sustainable design and living in North Queensland.

Desert Knowledge Australia

This is another pioneering project which has had a long lead-time. It evolved from a workshop held in Alice Springs in 1997, which considered *Knowledge Economy* concepts. The Desert Knowledge Consortium was later formed, which merged with what was the 'Alice in Ten Arid Zone Project' to form the Desert Knowledge Project.

'Desert Knowledge Australia' was incorporated in 2001 and in 2003 it became a Statutory Corporation under the *Desert Knowledge Australia Act*, while the Desert Knowledge Cooperative Research Centre (CRC) formally commenced as a separate and independent body.

Significant funding from both Northern Territory and Australian governments has been secured for both organisations and a Desert Knowledge Precinct has been established to house both organisations, plus a Desert Peoples Centre.

The mission for Desert Knowledge Australia is - *Building networks and partnerships across Australia to create an economic and socially sustainable future.*

For the CRC, it is - *A national research network linking Indigenous and local knowledge with science and education to improve desert livelihoods.*

The Desert Peoples Place brings together two independent institutions as partners in service delivery. They are the Batchelor Institute of Indigenous Tertiary Education and the Centre for Appropriate Technology. A single strategic plan has been developed for the Centre, incorporating the operations of the two institutions plus the Centre itself, which is based on providing services under seven themes to focus activity:

- Language and culture;
- Learning, knowledge sharing and communication services;
- Well-being and human services;
- Human expression;
- Land and resources;
- Technology and infrastructure
- Livelihoods and economic futures

This development also illustrates organising around perceived common interests to achieve critical mass and shared benefits, while not being constrained by political borders.

(Web site www.desertknowledge.com.au)

REGIONAL COORDINATING AGENCIES

Area Consultative Committees

The federally funded Area Consultative Committees provide a basis for coordination and facilitation across northern Australia and between the jurisdictions of the states and Territory. Four (4) ACCs are involved: FNQACC, NQACC, NTACC and Kimberley ACC and all are members of the Savannah Way Steering Committee.

ACCs are governed by the priorities and principles of the Australian Government. The original Ministerial Statement of Priorities for the ACCs were:

- Supporting a planned, cooperative approach to regional development, particularly to the social and economic impacts of structural change in rural, regional and metropolitan Australia;
- Improving business and investment in regions;
- Addressing pressing social issues faced by regional communities, particularly through building community skills and capacity;
- Improving regional services, particularly by encouraging Commonwealth Government program take-up and support for partnership solutions;
- A partnership approach with Indigenous communities to bring whole-of-government solutions to Indigenous disadvantage;
- Encouraging the growth of regional businesses and employment;
- Sustaining our natural resources and environment; and
- Actively seeking out those principles that arise from the evolving economic, social and technological environment that lend themselves to/are suitable for, joint private/public sector development.

Four (4) new priorities were announced by the Minister for Transport and Regional Services, the Hon. Warren Truss MP for 2006-2007:

- Small or disadvantaged communities - the Australian Government recognises that despite the strong economic growth of recent years not all regions and communities have been in a position to take full advantage of the prosperity. ACCs are to give priority to Regional Partnership Program (RPP) applications that assist small (population less than 5,000) or disadvantaged communities.
- Youth – building youth capacity and local youth leadership is important for creating sustainable regional futures for young people and their communities. Supporting local youth leadership needs to be recognised as one of the cornerstones for building local community capacity.
- Economic growth and skills development – there are now many regions that face shortages of key skills or labour to support ongoing growth. It is important that all Australian communities work to increase their economic prosperity and workforce participation to reduce reliance on government income support.
- Indigenous communities – the government is concerned that while there has been progress in addressing the needs of ATSI communities, it has been too slow and the gap between Indigenous and non-Indigenous Australians remains too great. All government portfolios have been asked to develop ways in which they can better meet the needs of Indigenous people. One way is through the RPP process.

Websites: www.fnqacc.com; www.nqacc.org.au; www.ntacc.com.au; www.kimberleyacc.org.au.

Cairns Region Economic Development Corporation

CREDC was established to achieve regional economic growth with the objective that the region becomes known as progressive, trading globally; with a strong and diverse skills base and a desirable place to live and work.

CREDC's primary activities include promoting business, investment and trade interest in the greater Cairns region and raising the profile of FNQ. In doing so CREDC works collaboratively with other regional and business development agencies across north and far north Queensland, including FNQACC, Gulf Savannah Development, Advance Cairns, JCU.

CREDC has continued to position itself as one of the most progressive and productive regional development organisations in Australia. A key achievement is CREDC's support of industry clusters, with 16 now existing under the CREDC umbrella.

CREDC was a leader in the development of the Tropical Knowledge and Expertise concept and continues to play a critical role in facilitating the integration of research with industry practice and assisting to identify commercial outcomes to position Cairns as the Australian Tropical Knowledge and Expertise Centre.

Website: www.credc.com.au

Townsville Enterprise Ltd

Many stakeholders in private industry and Government throughout the North Queensland region are committed to a cooperative approach for the sustainable economic development of the region and to promote its assets and opportunities to visitors, investors and potential migrants (intrastate, interstate, international).

This has led to wide-based support for the regions peak Economic Development and Tourism Marketing Organisation **Townsville Enterprise**. The integrated approach of industry development and destination marketing campaigns is delivering multiple benefits to the region and ensures a consistent representation of the region to the outside world.

A focus on strategic, long-term development objectives avoids overlap or duplication with existing programs from other local authorities. It also enables the realisation of long-term projects beyond budgetary and electoral cycles.

The marketing of the region to visitors (tourism and business events) and investors benefits from the knowledge and substantial resources that are provided through a team of 20 multi-skilled professionals within a single organisation.

The combined skills and networks administered through Townsville Enterprise have contributed to the positive outlook and dynamic growth perspectives that are enjoyed by the regions residents and business's.

Website: www.townsvilleonline.com.au

Advance Cairns

Advance Cairns is a peak coordinating body to advance the interests of the far North Queensland region. It strives to develop a vibrant and sustainable regional economy that promotes and facilitates diverse employment, growth, social and lifestyle opportunities.

Advance Cairns monitors the regional economy and assesses infrastructure needs. The group has been active in identifying business development opportunities and raising the profile of FNQ as a region for investment, with several AC sponsored delegations to China over the past few years.

Advance Cairns pins the economic future of the FNQ region on the expanding tourism industry particularly in tourism management and development; tropical expertise and tropical living particularly in tropical health, architecture, landscaping; value adding from regional products and crops (resins, fibres, bio-fuels, tropical medicines); education services and language tuition; bio-technology; film and television production; niche horticulture expansion and continued expansion of core competencies e.g. boat building and fitting.

Website: www.advancecairns.com

Regional Development Organisations

Several smaller regional development agencies represent regions across north Australia. They include Kimberley Development Commission (www.kimberley.wa.gov.au); Katherine Region Tourist Association (www.krta.com.au); Barkley Region Economic Development Committee; Gulf Savannah Development (www.the-gulf.info and www.gulf-savannah.com.au), Cape York Peninsula Development Association (www.cypda.com.au).

CAIRNS FORUM COMMITTEE

It was the initiative of Gulf Savannah Development to conduct the North Australia Forum in Cairns held in April 2006, to build further on the beginnings made in Katherine 2000. The initiative was supported through the following organising committee members:

Tom Vieira, FNQACC	ceo@fnqacc.com
Kate Sutcliffe, Gulf Savannah Development	ceo@gulf-savannah.com.au
David Maguire, Advance Cairns	maguired@advancecairns.com
Steve Oldham, CREDC	steve.oldham@credc.com.au
Tracy Scott-Rimington, CREDC	tsr@credc.com.au
Steve Moorhouse, Dept. of State Development, Innovation	Steve.Moorhouse@sd.qld.gov.au
Jim Bitomsky, Kleinhardt Business Consultants,	jim@kleinhardt.com.au

The event was supported by funds from DOTARS through the FNQ Area Consultative Committee and the Queensland Department of State Development and Innovation (now Department of State Development).

North Australia Economic Development Forum Cairns

Agenda

28th April 2006

Venue:
Cairns Colonial Club
Conference Centre

- 8:00am** Registration
- 8:30am** **OPENING** by Federal Minister for Small Business and Tourism, the Hon Fran Bailey MP
- 9:00am** *Chair—David Maguire*
Presentation by Jim Bitomsky Kleinhardt - ***The Road from Katherine 2000 to Now***
- 9:30am** Scene Setting by Industry
- ***Collaboration across the North:***
Larry Bannister Executive Director, Innovation and Knowledge Economy
Department of Business, Economic and Regional Development NT
 - ***Fishing:*** Ron Edwards, Chair, Seafood Experience Australia
 - ***Aquaculture:*** Scott Walter, National Aquaculture Council; Stan Lui, Aquaculture Cape York.
 - ***Tropical Exotic Fruit:*** Ian Kikkert, Rambutan & Tropical Exotic Growers' Association
- Panel Discussion
Questions from the floor
- 11:00am-11:30am** ***Morning Tea***
- Chair—Steve Oldham*
Scene Setting by Industry
- ***Indigenous Business:*** Tony Martens Chair Advance Indigenous Business
 - ***Forestry:*** Rod McInnes CEO Timber Queensland and David Skelton EO Private Forestry North Queensland
 - ***Tourism:*** Jenny Tonkin, Joint Owner Cairns Coconut Caravan Resort (2006 Tourism Australia Award Winner)
 - ***Tropical Knowledge and Expertise:*** David Maguire, CEO, Advance Cairns
- Panel discussion
Questions from the floor
- 1:00pm-1:45pm** ***Lunch***
- 1:50pm-2:00pm** **North Australia 2020/2050 Asia Initiative:** Bill Cummings & Bill Gordon, Cummings Economic Research.
- 2:00pm-3:30pm** *Chair—Tracy Scott-Rimington*
- 2:00pm-3:30pm** Industry discussion groups
Industry leader chairs each group assisted by a facilitator
- 3:30pm-4:00pm** ***Afternoon Tea***
- 4:00pm-5:20pm** *Chair—Kate Sutcliffe*
Plenary Session: Sharing outcomes and future directions
From Cairns 2006 to Where?
Jim Bitomsky to wrap up Plenary Session
- 5:20pm-5:30pm** Close – Councillor Irene Fitzsimmons & Kate Sutcliffe
5:30pm-6:30pm Social and Networking

CAIRNS FORUM ATTENDEES

A list of those in attendance in alphabetical order of surnames follows.

First Name	Last Name	Organisation
Dennis	Ah-Kee	Dept. Agriculture Fisheries & Forestry
Mark	Annandale	Department of state development & Innovation
David	Anthony	DPI&F
Richard	Aspinall	ICC Kimberley
Larry	Bannister	Northern Territory Government
Renee	Bergerson	Vocational Partnerships Group
Jim	Bitomsky	Kleinhardt Pty Ltd
Jeremy	Blockey	The 20/20 Group
Geoff	Bowes	Ergon Energy
Malcolm	Buchanan	Forest Home Station
Mary	Buchanan	Forest Home Station
Geoff	Bulow	
Steve	Buskie	Arup
Trish	Butler	GSD
Gerard	Byrne	Department of Primary Industries & Fisheries
Lee	Chaney	Email to me from Trish via Tom Vieira
Mayor - Jim	Chapman	Atherton Shire Council
Irene	Chapman	Wheelie Easy Pty Ltd
Cam	Charlton	Kleinhardt Pty Ltd
Greg	Clarke	Department of Employment and Training
Michelle	Cochrane	Aboriginal Rainforest Council
Charissa	Cok	Unknown - getting more information
Gus	Cole	Bendigo Bank
John	Colless	Private Forestry North Queensland
John	Courtenay	Probe
Bill	Cummings	Cummings Economic Research
Frank	Dallmeyer	Townsville Enterprise Limited
Raymond	D'Ambrosio	Northern Territory Area Consultative Committee
Shelley	Davis	Katherine Tourism
Michael	Daysh	Horticulture Access Solutions Pty Ltd
Russell	Dennis	Etheridge Shire Council
Wally	Donaldson	Telstra Country Wide
Professor Gordon	Duff	Tropical Savannas CRC
Ron	Edwards	Speaker
Bert	Edwards	Pormpuraaw Aboriginal Shire Council
Peter	Elliot	
Anne	English	Bottoms English Lawyers
Fay	Falco	JCU
Irene	Fitzsimmons	Carpentaria Shire
Emma-Jane	Ford	AusIndustry
Michael	Fordham	Cairns Indigenous Coordination Centre
Ashley	Gallagher	Carpentaria Shire
Tom	Gilmore	Cape York Peninsula Development

First Name	Last Name	Organisation
Bill	Gordon	Cummings Economic Research
Peter	Gottstien	Pormpuraaw Aboriginal Shire Council
Romy	Greiner	River Consulting
David	Ham	DPI&F
Laureen	Harris	State Development Centre
Dianne	Hawgood	OIPC
Andrew	Hayes	Dept. Local Government & Planning
Michael	Heidenreich	DPI&F
Bood	Hickson	NSDA
Mike	Hintz	Oz Tour Safaris
Owen	Hitchings	Dept of Communities - Ministerial Office
Peter	Holden	DPI&F
Chris	Horsburgh	QDPI & F
Ian	Kikkert	Speaker
Michael	Kitchener	
Peter	Larsen	Integrated Tree Cropping Ltd
Stephen	Lindsay	GHD
Mark	Love-Linay	Community Renewal - Department of Housing
Ian	Lowth	Cairns City Council
John	Ludwig	Tropical Savannas Coop. Res. Centre
Stan	Lui	DPI&F
Simone	MacDonald	Tourism Holdings Ltd (Britz & Maui)
Senator Ian	MacDonald	Senator for Queensland
David	Maguire	Advance Cairns
Mike	Mahoney	Tourism Queensland
Fred	Marchant	FNQACC
Tony	Martens	Speaker
Neil	McGilp	Cape York Business Development
Geraldine	McGuire	Sustainable Solutions Consulting
Rod	McInnes	Timber Queensland Limited
Jill	Mills	Office of Indigenous Policy Coord - Perth
Steve	Moorhouse	1 x more from State Development
Joe	Moro	Mareeba Shire Council
Keith	Morris	Organic Producers Association of QLD Inc
Sheridan	Morris	CRC Reef Research Centre Ltd
Rick	Murray	Savannah Guides Ltd
Nancee	Myles	Qld Apprenticeship Services
Ross	Nagar	Department of Communities
Keith	Noble	Growcom
Keith	Noble	Growcom
Ken	Norman	Tourism Tropical North Queensland
Erik	Oates	Bamanga Bubu Ngadimunku (BBN) Inc.
Sinan	Ogun	
Steve	Oldham	CREDC
Susan	Parsons	Department of Employment and Training
Fred	Pascoe	Carpentaria Shire
Fiona	Pelling	Macair
Graham	Poon	Chamber of Commerce NT
Tony	Potter	Dept. of Main Roads

First Name	Last Name	Organisation
Bruce	Prideaux	JCU
Dr Brian	Prove	Department of state development & Innovation
Jason	Quin	Unknown - getting more information
Kathy	Rankin	Department of state development & Innovation
Russell	Reichelt	CRC Reef Research Centre Ltd
Gary	Roberts	Community Renewal - Department of Housing
Chris	Robertson	DPI&F
Lance	Rodman	Farming for the Future - Babinda
George	Ryan	Etheridge Shire Council
Jemma	Sargent	GHD
Charmaine	Saunders	DEWR
Tracy	Scott-Rimington	CREDC
David	Skelton	Speaker
Kate	Sutcliffe	Gulf Savannah
Michelle	Thompson	JCU
Frank	Tirendi	Australian Institute of Marine Science
Jenny	Tonkins	Speaker
Craig	Turnour	Burke Shire Council
Steve	Turton	James Cook University
Tom	Vieira	FNQ ACC
Scott	Walters	Speaker
Dr. Janice	Warren	Northern Territory Government
Kevin	White	FNQACC
Julia	Williamson	Office of Indigenous Policy Coord - Mt Isa

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