Cape York Peninsula

Regional Economic & Infrastructure Framework

REPORT

November 2007
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1. INTRODUCTION

This report was commissioned by the Cape York Peninsula Development Association, with support from the then Queensland Department of State Development (now Tourism, Regional Development and Industry). The objective was to review the economic and infrastructure strategies set out in the 1997 Cape York Peninsula Land Use Strategy (CYPLUS) Stage 2 Report and develop specific strategies which position Cape York to take better advantage of economic and infrastructure opportunities.

In reviewing the strategies the report was to basically analyse progress to date, identify strategies that have not progressed, why not and develop ‘where to from here’ recommendations.

The overall vision expressed in the Terms of Reference is for a vibrant, broad and sustainable economy based on:

a. Secure land tenure with multiple land uses;
b. Economic benefits retained and reinvested in the region;
c. A suitably skilled workforce
d. Necessary transport, energy, water, tourism and service infrastructure including the Peninsula Development Road supporting a diversified economy

This report is to identify actions which contribute to achieving this.

As noted in the body of the report, it was found that the economic and infrastructure strategies could not be reviewed entirely in isolation. This is especially as the CYPLUS Report presented strategies as a cross-referenced set of interdependent strategies, but also because of the intrinsic relationships between economic, life style, conservation, industry sectors and infrastructure issues.

The report begins with a reasonably extensive general situation review to set the contemporary environment for the specific sector strategy areas which follow. The ten years which have elapsed since CYPLUS have seen major changes in almost all aspects of the local, National and global operating environment. This has meant that many of the original strategies are less relevant, or have been overtaken by events.

In these circumstances the approach that has been adopted has been to place emphasis on what is seen as ‘the way forward’ at a strategic level, rather than attempting to track the detail of each of the original strategies. This it was felt will make the best contribution to the objective set for this report and the vision expressed for Cape York.
2. EXECUTIVE SUMMARY

Different Operating Environment
In the ten years since CYPLUS Stage 2, the internal Queensland and global operating environments have changed dramatically.

In 1997, climate change was not the growing issue it is now seen to be. The possibility of a permanent drying of southern Australia was not anticipated. The Murray-Darling system had not been widely identified as being in crisis. The prospect of producing fuels, fibres and resins from renewable sources were not mainstream considerations and China had not emerged as the global resource hungry powerhouse it now is, with India likely to follow. Both ATSIC and DATSIP have ceased to exist, with dramatically different structures in place to address Aboriginal and Torres Strait Islander needs and issues.

The contemporary view of the likely future and the risks, opportunities and imperatives it represents has changed in keeping with these developments.

The underpinning principal for the CYPLUS process was for the sustainable development of the Cape York economy, fully recognising and accommodating natural heritage and conservation values and needs. Neither CYPLUS nor subsequent events have delivered this model.

Major Constraints
There are three key major constraints on the development of Cape York infrastructure and a broader economy:

1. The standard of the road network, especially the Peninsula Development Road;
2. Limitations in the skills base available, which has a number of dimensions;
3. Level of access to the resource base due to requirements placed on natural heritage conservation and management.

The Road Network
The standard of the road network is at the core of facilitation of both economic and supporting infrastructure development on Cape York. A 2000 – 2001 Investment Strategy report for the Peninsula Development Road noted a range of reasons for the importance of this road.

This included the general observation to the effect that the condition of the road is now a barrier to entry into a globally connected regional economy that has been rapidly developing with Cairns and Weipa as hubs. Whereas Cape York might still be remote from world markets, the Tropical North Queensland region is now a sophisticated economy, with links into Micronesia, Asia and the global economy. There is an international airport and deep water ports in Cairns, Weipa and Mourilyan. The Peninsula is now close to one of the largest and fastest growing population concentrations outside the south east corner of the State, with a range of support services, infrastructure and skills base to service a variety of industries.
It further made the point that although the distance between Cairns and Weipa is about 10% shorter than Townsville to Mount Isa, the freight costs Cairns / Weipa are twice to three times the cost of Townsville / Mount Isa. The significant difference is that Townsville / Mount Isa is serviced by both a sealed road and rail link.

Road closures during the wet season and rough conditions leading to damage to livestock, produce and other goods further exacerbate the competitive disadvantage.

The report further found that continuous re-sheeting of gravel was environmentally unsustainable.

Evidence of the impact road upgrades can have is to be seen in the increased agricultural activity at Lakeland Downs and increased visitation and economic development activity in Cooktown since sealing of the Mulligan Highway was completed. Building approvals have jumped by some 150% in the period since, while some statistics indicate a jump in visitor numbers in the order of 40%.

At the present the Peninsula Development Road is being sealed at the rate of around 10 kilometres per annum. At this rate the balance of the road will take some 45 years, well beyond the horizon of industry development planning.

The current estimate of the cost of sealing the road and providing high level flood immunity is some $700 million in current dollar values. The order of cost to upgrade the entire Cape York network ranges between $460 million and $2 billion, depending on the standard set for the upgrade.

Nevertheless there has been progress since CYPLUS, apart from the 10km per annum on the Peninsula Development Road, many Indigenous community roads have been sealed and work performed on the wider road network.

Skills Base
Skills base issues include well known work readiness deficiencies in Indigenous communities, together with training access and delivery issues, but also extends to instability in the workforce recruited to positions in Cape York. High turnover results in lack of continuity, re-churning of ideas, lack of trust and ability to lead. Lack of suitable housing is a factor in this. The third dimension is the lack of due process and care frequently associated with establishment of joint ventures in Indigenous enterprise development.

Resource access
Resource access is tied to the way natural heritage management and conservation has been approached in Cape York to date. There is a very strong view across Cape York stakeholders that there has been a serious imbalance between the CYPLUS objective of sustainable industry development and conservation. This is to the point of precluding industry development at any level that would be viable in the circumstances of Cape York,
with its small internal market and remoteness from external markets. The view is that the approach to date has:

- Lost the ‘hearts and minds’ of local stakeholders who were previously supportive of the CYPLUS principles;
- Failed to recruit property managers to adopt comprehensive property management plans;
- Locked up areas in National Parks along property boundary lines that have little or no relationship to either provision for mobile wildlife populations or alignment with areas of high conservation value;
- Provided scant resources to manage park areas, such that they are reportedly and demonstrably degraded with the impacts of feral animals and exotic weeds in particular;
- Increased the bio-security risks to Australia due to a level of depopulation of the landscape.

A 2001 assessment of the Natural Heritage Significance of Cape York observes that there is a unique opportunity in Cape York to find a model that can make its mark in history, if a truly sustainable model can be fashioned.

However in the light of events since, it has to be observed that a model that locks up large areas with scant management resources and hopes for the best is not likely to achieve this vision, especially without the active partnering of those land managers who live in the region. If the sustainable model envisioned above can be achieved, then the model itself will be a source of wealth generation in a global knowledge driven economy.

The combination of recent legislative initiatives provides some indication of a desire to address the imbalance that has developed, especially in relation to Indigenous interests across Cape York. The centrepiece is the Queensland Cape York Peninsula Heritage legislation. This includes:

- Establishment of a special category of national park to apply only to Cape York
- Opens up the possibility of joint management arrangements for these national parks with Indigenous Land Trusts who may contract to Land & Sea Centres to deliver their obligations
- Commits to mapping of high conservation value areas across Cape York
- Establishes provision for ‘Indigenous community use areas’ outside of high conservation areas in which a range of industry activities can be established
- Provides the basis for a model to develop tourism either as independent Indigenous enterprises and / or in joint venture arrangements
- Rewards good land stewards prepared to enter into management arrangements for conservation areas within their lease area, by extending leases to up to 75 years.
A potential flaw in the model is that it would seem to have been crafted by agencies whose job is natural heritage conservation and management. They cannot be expected to have skills in industry development. (This is not a criticism of such agencies).

There are risks seen for viable industry development in this model.

The effectiveness of Indigenous community use areas in supporting significant economic development on Cape York will rest in the scale of development made possible. Further, if these areas are isolated pockets of land, it is less likely that significant industry development will occur. Development generally requires supporting infrastructure and tends to historically cluster around regional assets. Isolated pockets on a small scale to service small communities must be seen as tokenism and likely to fail, as so many projects have in the past. This would potentially leave Indigenous community use areas as degraded due to failed developments.

**General Infrastructure**

While there has been broad progress in infrastructure development across Cape York, there are still large gaps, un-addressed needs and some of the specific items listed in CYPLUS are still outstanding. This is not surprising given its remote area nature, large geographic area and sparse population. It can also be argued that there is still no ‘comprehensive and integrated’ approach, as infrastructure is still provided through a bewildering array of State and Commonwealth programs and agencies.

One specific CYPLUS strategy achieved in 2000, was the opening of ‘Nature’s Powerhouse’ in Cooktown.

The Commonwealth Government NAHS Scheme, part of the wider Community Housing and Infrastructure Program (CHIP) has spent or committed some $55 million in Cape York, on Indigenous community infrastructure, including housing since CYPLUS Stage 2 – about $5.5 million per annum. This is only a fraction of what has been spent on overall infrastructure items.

Historically much of the case for infrastructure development has been to rely mainly on social justice and equity. These are of course valid, but the case for infrastructure development is always much stronger where there is also an economic case. Economic development tends to draw with it supporting infrastructure, as much as strategic infrastructure can stimulate economic development. The two create a ‘virtuous circle’, each reinforcing the other.

The cost of Infrastructure provided on the grounds of social justice and equity is a public good argument - never to produce a financial return on investment, a cost line item for taxpayers forever. This is not to say the infrastructure is not justified. The point is that there is a hidden public cost of failure to take up viable economic development opportunities, which would offset the public good costs with greater utilisation of infrastructure and a whole range of flow on effects.
A second matter that constrains infrastructure development is the substantial under-reporting of Cape York demographics in ABS statistics. This affects the grant formulas for Local Government, which will presumably become a wider problem for Cape York with the creation of Aboriginal Shire Councils under more ‘mainstream’ arrangements. It is thought that the level of under reporting across census data is at least one third.

One of the specific CYPLUS strategies was to make more land available for residential development in small centres. This is an important point, seen to impact on the ability to recruit and retain a suitable skills base for the region. This still needs attention.

The region is specifically excluded from the current FNQ 2025 infrastructure planning exercise. For whatever reason, this will not enhance and support the operation of Far North Queensland as a strong regional economy. It is an economic region by virtue of history, cultures, tropical conditions, family ties, road networks, transport systems, industry opportunities and its shared human capital.

Support for infrastructure submissions was seen as important in CYPLUS and it was envisaged that the organisation responsible for CYPLUS Stage 3 would provide advocacy and support for Local Government in this regard. In the absence of a CYPLUS Stage 3 process, this has not occurred.

Transport
These CYPLUS strategies fell under four areas – ports, airports, air services and shipping. Due to the subsequent downturn in live cattle export, there has been less of a case for infrastructure development at Weipa. The other industry sector that might support this would be agriculture in the suitable areas east of Weipa. However since the potential for such development has not been confirmed, there is still no immediate case. Archer Point, also mentioned in CYPLUS was subsequently investigated in 1999, when it was found that Great Barrier Reef boundaries and lack of supporting infrastructure were major barriers to development.

Proposals to address infrastructure needs of the Cooktown waterfront have not been addressed.

As to airports, there has been a range of work undertaken, but not to all and not to the standard envisaged in CYPLUS. There were calls for investigation of linking communities directly without hubbing on Cairns. This has not occurred to any extent and will depend on commercial judgements as to the market. Development of tourism may in the longer term contribute to creation of such services. As to shipping, lower cost alternatives have not eventuated to date and the integrated regional transport plan proposed by the Department of Transport in its response to CYPLUS has not eventuated.

Telecommunication Services
There is wide acceptance that these services have improved significantly since CYPLUS and service providers are continuing network and service upgrades. An important development is the rolling out of the third generation (3G) mobile network. (Telstra refers to its system as ‘Next G’). While coverage is not yet as good as could have been
expected from Telstra promotions, it provides an advance in service access. Apart from telephone coverage, this network can provide fast access to broadband and its associated data access.

Along with access, which provides potential to link into the global economy, comes the need for appropriate skills to engage with the technology. Due to the low levels of computer access and literacy across Cape York, this is seen as a core need to be addressed.

**Radio & Television Services**

Although there has been some progress since CYPLUS, Cape York residents can still more readily access services from central Australia than those based in Cairns. Although safety considerations as to weather warnings have been at least been partially addressed, this is a significant consideration. Far North Queensland is emerging as a strong economic region with global opportunities. Part of the key to grasping these is collaboration, shared sense of purpose, identification with the region as a whole and knowledge of what is going on in the region. Cohesive radio and television services reaching across the region will contribute.

**Mining**

Mining is still by far the largest industry sector on Cape York and has been impacted by the resources boom. There has been significant expansion since 1996, with further major development underway and/or planned.

It would seem that at a practical level, the two key strategies of CYPLUS relating to sustainability and access are in place. Although not perfect from all parties’ point of view, new mining is proceeding, agreements are being reached, ILUA’s signed and legislation followed.

Indigenous access can be said to be improving, with increased levels of employment in the sector and better strategies in place to address work readiness issues. The people of Aurukun are in the process of developing initiatives that will see them as partners in development rather than employees in enterprises, if the model is successful.

Generally the mining industry is a very global industry, oriented to global conditions and development. It is these more than anything else that will determine the future of mining on Cape York.

**Tourism**

While there have been incremental steps in tourism industry development on Cape York since the 1997 CYPLUS report, there has been little progress at an overall industry development level as envisaged by CYPLUS until recently.

Industry conditions have changed and enhanced the opportunities for Cape York to develop as a tourism destination. This industry more than most others has potential to create dispersed and significant employment across Cape York.
The most significant recent development is the formulation of a Cape York & Torres Strait Tourism Development Implementation Action Plan. It is founded on the original CYPLUS strategies, but now adds a comprehensive process for achievement, together with more detailed actions. Importantly, it will provide the means to engage fulltime Tourism Development Officers for both Cape York and Torres Strait. Experience has shown that little can be achieved without such resources on the ground.

The emerging new model for management of Cape York National Park areas inherent in the Cape York Peninsula Heritage legislation may also assist in addressing CYPLUS strategies.

The joint management model with the Indigenous Traditional Owners proposed should open up possibilities for a range of innovative approaches to tourism ventures in National Parks, including Joint Ventures with commercial tourism interests, thus perhaps attracting additional management resources to natural heritage management and conservation in public/private partnerships.

Generally upgrade of the Peninsula Development Road would be likely to be have a major impact on development of a viable tourism industry on Cape York.

**Commercial Fishing**

The fishing industry is one increasingly driven by global market conditions. Opportunities for industry development on Cape York are impacted by such conditions. The scale of investment and operating costs required limits local participation in offshore fisheries, including the aquarium fishery.

Indigenous participation has been increased in the sense that licenses have been underwritten for Indigenous ownership and leased back to commercial fishing interests. There are also small joint ventures, which are most likely to be successful in the case of high value species that can sustain high transport costs to market.

**Pastoral Industry**

In the ten years since the formulation of these strategies, there have been huge changes in the pastoral industry and the circumstances impacting the industry. For instance, at the time, building on live cattle export out of Weipa was seen as a key objective.

Traditional ‘Peninsula Reds’ have been virtually replaced by improved stock based on Brahmin blood strains and there has been a substantial change in lease holders, with up to 60% of major leases thought to have changed hands over the past six years. This is associated with increased investment in infrastructure and pastures in many cases and properties tend to be operating as feeder properties for conditioning blocks elsewhere. More properties are reportedly being run on business principles rather than as lifestyle operations.

A CYPLUS objective was to increase the herd to around 400,000 head. There is thought to be a steady increase in numbers, to be now about 220,000 to 230,000 head.
Road infrastructure is seen as a key impediment to development by the industry, due to stock damage incurred in transit over rough roads and lack of access to markets during the peak summer selling season during the wet.

Industry access has improved for Indigenous people, but is constrained by access to capital, management skills and available workforce:

- ILC now pursuing working property status for its properties and supporting training activities
- Land Trusts and ‘Indigenous use areas’ to make more land available to Indigenous people
- Land Trusts and Indigenous Use Areas under Cape York Heritage legislation to provide access to and control over more parcels of land

Pests and weeds are still not under control, with some properties inevitably better managed than others. Land Care is making a contribution to sustainable property management in the absence of the failed property management plan initiative under the first tranche of NHT funding.

The new model to engage Land & Sea Centres in land and conservation management could if successful provide at least a partial answer to this issue.

Existing cleared land has not been utilised for cropping to any great extent, except in the Endeavour Valley and Lakeland.

The improved security of land tenure called for may at least be partly addressed under the Cape York Peninsula Heritage legislation, which will offer lease extensions to up to 75 years for land holders entering into conservation agreements.

A key factor to consider as to the grazing industry is that it provides a widely dispersed opportunity for economic activity across Cape York, where there are many communities which have limited economic development opportunities.

While an industry strategy was attempted in 2000, it represents only a start. It included only lists of industry objectives and a list of SWOT factors. This needs to be re-developed with current stakeholders, in the light of current industry circumstances. To be an effective strategy, it needs to test assumptions, include processes to achieve objectives and use the SWOT factors as the foundations for building industry strategies.

**Cropping & Horticulture**

Increases in area under crops called for in CYPLUS have been progressing at Lakeland and the Endeavour and McIvor Valleys. This is in part due to their finding a competitive advantage in early cropping and partly due to completion of sealing the road links.

There has been no progress towards the broad economic development called for through grasping new opportunities. However due to the scale of land and water resources thought to be available even under highly sustainable regimes, cropping and horticulture could be major opportunity sectors for Cape York.
However the important point to be made is that a **region needs more than suitable conditions for agriculture**. A point of competitive advantage, effective links into supply chains and distributions systems, together with organisational marketing and supply capabilities are also required. Cape York, with its small internal market and distance to major external markets may have difficulty in sustaining not only competitive advantage, but also comparative advantage. That is, other regions closer to markets, with better supply chain links may be better placed to supply those markets. This has not been tested in the contemporary global environment and is a place to start in assessing industry feasibility.

DPI&F, in a commentary on CYPLUS strategies indicated that there may be potential to more than double gross regional product of Cape York in a cropping and horticulture scenario it envisaged. This utilised a small proportion of land with suitable soils, but concentrated on areas to the east of Weipa, which probably has the best soils and better market access through the port of Weipa. This scenario would involve utilisation of 100,000 hectares out of the total of some 2.8 million hectares of suitable agricultural soils thought to exist across Cape York. (These exclude existing National Park areas).

A crude estimate of indicative yields for water harvesting was quoted in a 2003 DPI&F situation analysis. This was aimed more at providing an idea of the extent of the resource than being a harvesting proposal. It noted that a one percent diversion of peak (flood) discharges for ten hours would harvest enough water to irrigate 270,000 hectares of crops. As to storage, in the circumstances of Cape York, off-stream storage for flood harvesting would seem the most appropriate approach.

A variety of crops for which there may be market opportunities were suggested in the DPI&F 2003 situation analysis report. These included peanuts, for which there has been a long standing shortfall in Australian production compared to domestic demand. However, most crops, being commodities, face varying market prospects.

There are also new crops being developed, and new uses for crops creating new markets. For instance low GI sugar is under development at the Mossman Mill. Crops as renewable sources of alternative energy, resins as alternatives to plastics, fibre crops for industrial uses and plants bred to yield high value proteins are all on the horizon, with potentially, huge markets and high demand.

Global trends would also seem to inevitably point to higher demand for agricultural produce, especially in neighboring countries in South Asia, with a parallel likely reduction in productive land available globally. For instance, as the 2003 DPI&F report pointed out:

- **Between now and 2030, Asia’s population will increase by two billion.**
- **In May 2000 India’s population reached one billion.**
- **By 2050, Africa will have more than a third of the world’s population**
- **By 2030 Queensland’s population could reach 5.3 million, making it Australia’s second most populous State.**
World consumption of water is increasing at twice the rate of population growth. Over the next 30 years the number of countries facing water shortages will double.

Despite a global food surplus, 82 countries have trouble feeding all their people. To feed everyone, the world must produce more food during the thirty years 2000 – 2030 than it has in the whole of human history. But the area of land available for food production – and the amount of water – will fall.

There will be 20 mega cities in Asia by 2025 with a population of 400 million. This is equivalent to one eighth of the world’s current population.

There is an imperative to produce enough food, clothing and energy to meet the reasonable needs of the world’s population. It is partly an issue of where and how that production should take place, rather than if. For instance there are reportedly plans to develop 1.5 million hectares of West Papua for farming.

Cape York would seem to represent an opportunity to develop a new model, a sustainable model that could be a best practice example to the world. An illustration in a different industry is the way tourism has managed to develop in Far North Queensland with its two World Heritage icons, yet with a low environmental footprint.

What is required is a definitive assessment that builds on the broad brush data available to date. If there is to be a definitive assessment of high value conservation areas across Cape York, it seems reasonable that an examination of the full range of land use options be undertaken, as an expression of good faith in preserving a balance between sustainable development and conservation. Where industry development is found sustainably feasible, then it needs to be facilitated through an industry development framework, to avoid fragmented decision making and developments, poor planning and higher risks of failure. This is of a particular concern as to the future of Indigenous community use areas.

This approach has been advanced in at least three different proposals from different agencies since CYPLUS.

Aquaculture

Aquaculture development on Cape York has not progressed since CYPLUS. However in 2004 a major report was commissioned to look at the reasons for failure and the potential, especially as to Indigenous projects.

Central issues were found to be lack of planning, lack of industry understanding and general lack of skills. However, as with other industries, remoteness from markets and lack of supply chains (including transport and road infrastructure) are key constraints.

While Indigenous stakeholders were interested in joint ventures, they wished to retain control. While this may be understandable, the parties to a joint venture need to objectively assess what value they each bring to the joint venture. This will determine shareholding. However the organisational structure and agreement between the parties
can be fashioned to protect the interests of both parties in a genuine JV, where there is an
cultural match of objectives.

In the circumstances of Cape York, those species that suggest themselves as having
most potential will have features such as being high value; easy to store and transport;
and / or the farming techniques have some affinity with Indigenous peoples’ preferred life
styles. Red claw crayfish, pearl oysters, sea cucumber and mud crabs may therefore
have most potential.

**Forest Industries**
The CYPLUS Strategies envisioned basically the maintenance of the status quo as to
forestry on Cape York, with seed collection at around 200kg per year and low levels of
timber harvest at around 2,000m³ per annum (an insignificant amount given the size of the
resource). A number of the outcome areas were directed to ensuring sustainability, rather
than economic development objectives.

The two areas in which significant contributions can be made to the Cape York economy
are in timber salvage from bauxite leases and plantation forestry on the same lease areas.

The ‘timber salvage project’ for the southern bauxite lease areas is proceeding. As it
progresses, there may be need for some additional support from the State Government
and it certainly envisages progressing in collaboration with the Department of State
Development, Rio Tinto and Chalco.

If successful, it may provide a model and some flow on effects that will facilitate further
development in the northern lease areas.

Plantation development is not a current project and requires some exploratory actions.

**Risk Management**
The key risk to development of the Cape York economy is lack of collaboration and
cohesion across Cape York stakeholders. The need is for advocacy for sustainable
development of the economy, widely supported and based on a solid evidenced based
case.

Management of this risk has two aspects to it. The first is for CYPDA to facilitate a
dialogue across key stakeholders to achieve consensus as to the way forward. The
second is securing the resources to support the effort required to collect and present the
objective data required to support the required advocacy on an ongoing basis.

Associated with this overarching risk is what has been referred to as ‘the tyranny of small
decisions’, leading to fragmentation and lack of industry level development. Management
requires:

- Review and development of the Beef industry strategy;
- Seek to clarify how the Indigenous community use areas will work in practice and
  point out the inherent risks;
- Pursue a thorough feasibility assessment of sustainable cropping and horticulture development, as a first priority, followed by development of an industry development framework and action plan. This same approach should be applied to other industry sectors. It should not be about assessment of only one land use, that is, high value conservation areas. All sustainable land use opportunities need definitive assessment.

**Public Expenditure**

Public expenditure allocations will only flow from considered, well-mounted, evidenced based cases.

Key items to be addressed encompass the road network, funding of a beef strategy and support for industry feasibility assessments and development frameworks.
3. RECOMMENDATIONS

Foundations

Peninsula Road Network
- Re-visit the 2000 assessment of the case for upgrading the Peninsula Development Road and develop a robust, extensive triple bottom line cost benefit based case;
- Consult with Main Roads Department on prioritisation of road works to include consideration of facilitation of economic development initiatives;
- Mesh the case developed for road upgrades with industry development frameworks also recommended

Resource Access
- Pursue recognition of the imbalance in land use and resource access that has developed on Cape York, supported by evidence based argument, that might include:
  - Hidden costs of non-performing infrastructure,
  - Opportunity costs of lost industry opportunities,
  - Changed National & International operating environment,
  - Bio-security risks,
  - Degradation of public assets & natural heritage values,
  - Risks of lack of protection for suitable agricultural lands,
  - Budget estimate for comprehensive management of weeds, feral animals & existing national parks,
  - An alternative model for sustainable use of resources consistent with protection of high value conservation areas and overall conservation management. (This was the basis for CYPLUS, but neither CYPLUS nor subsequent history has delivered it),
  - Consult with EPA on development of a suitable model, to avoid the ‘tyranny of small decisions’ potentially creating fragmentation and unviable projects in the absence of industry development frameworks,
  - Order of scale necessary for viability in Cape York circumstances
  - Consult with key Indigenous organisations on development of comprehensive assessments of industry feasibility and industry development frameworks

Skills Base
- Determine what is required to stabilise staff recruited to Cape York positions. This will include housing requirements, tenure arrangements, career considerations,
- Support a training model for Indigenous people that features:
  - Training on the job, for a job
  - Emphasis on learning by doing rather than classroom
  - In an environment that takes trainees out of community or at least out of their usual social environment
  - Includes mentoring support for life skills after work hours
• Support a process supported with professional, experienced advice to match Indigenous business opportunities with appropriate joint venture partners that includes due diligence, matching of objectives and general organisational cultures

Industry Assessments and Development Frameworks
• Conduct comprehensive feasibility assessments of industry sector development
• Construct industry development frameworks for industries / industry sectors assessed as being feasible

Supporting Recommendations

Community Infrastructure & Services
• That infrastructure requirements be part of overall industry feasibility assessments and industry development frameworks recommended elsewhere;
• Statistics be collected and maintained from administrative collections and other sources that will serve to provide a more accurate statistical picture of Cape York;
• An education and awareness program be designed and delivered to increase participation rates and accurate statistical collection across Cape York;
• Assistance be offered in Indigenous communities with completion of census forms
• A review of housing requirements to meet the needs of all staff postings to Cape York be undertaken and a strategy developed to meet those needs;
• The Queensland government’s attention be drawn to the flaw seen in confining FNQ2025 process to the more immediate Cairns region and note the need to regard the Far North Queensland region as a regional economy.

Community & Other Facilities
• Develop support mechanisms for infrastructure applications from Local Government on Cape York

Transport
• Develop an integrated regional transport plan, to mesh with industry development frameworks

Telecommunication Services
• Provide resources and support for computer literacy initiatives

Radio & Television Services
• Advocate for comprehensive public network coverage of the region based on recognition of the need to foster Far North Queensland as a cohesive socio-economic region.

Tourism
• Generally support delivery of the actions proposed in the Tourism Queensland Cape York Peninsula & Torres Strait Tourism Development Action Plan
• Support preservation and presentation of the Old Laura Homestead as the basis for tourism product development
• Support development of public / private partnerships for development of tourism infrastructure within National Park areas, partly as a means of attracting resources to National Park management

• Support the emerging model that can bring together Indigenous Land Trusts, Land & Sea Centres, joint arrangements for National Park management, bio-security contracts and Indigenous rangers with holistic roles across conservation, biosecurity and tourism.

**Pastoral Industry**

• Re-visit the 2000 Beef strategy, update it and develop it into a robust strategy, with processes for a way forward to achieve industry vision and ownership across current industry stakeholders

• Engage with Indigenous stakeholders in development of the revised beef strategy, especially in relation to the implications of ‘Indigenous community use areas’ for a viable industry development framework

• Provide support for Indigenous stakeholders to form fair, equitable and profitable joint ventures

• Support the concept of a feedlot and processing facility based around Lakeland

**Cropping & Horticulture**

• In recognition of the contemporary global environment and the potential previously identified for this sector on Cape York, undertake definitive and comprehensive assessment and construct an industry development framework as part of the foundation recommendations above.

**Aquaculture**

• Robust feasibility assessment of the viability of a multi-species hatchery perhaps on Thursday Island;

• Identification of specific sites with suitable attributes and likely acceptable impacts as to natural heritage management;

• Review industry interest in joint ventures with Indigenous communities and facilitate a process of engagement that will see appropriate matching of JV partners as to interests, culture and complementary attributes;

• Access professional support services for the objective and comprehensive assessment of project viability and consequent business model development;

• Review the possible role of DPI&F facilities at Walkamin in industry facilitation, especially in establishment of an appropriate and effective capacity building model and program;

• Support research and review of the viability of taking crocodile eggs from the wild on Western Cape York;

• Place priority on new development involving Redclaw, pearl oysters, sea cucumber and mudcrab species.
Forest industries

- Explore feasibility of plantation development on bauxite mining leases as a first priority being a likely large scale opportunity:
  - Initiate discussions involving Rio Tinto, Chalco & Traditional Owners, DPI&F and Department of Tourism, Regional Development and Industry
  - Feasibility Assessment, including:
    - Level of Traditional Owner support
    - Species selection for suitability
    - Environmental impacts
    - Optimal plantation model as to triple bottom line
    - Long term market analysis
    - Corporate structure options & governance systems
    - Business model options
    - Sources of Investment /JV partners
    - Labour, training & ongoing operational security
    - Financial analysis – break even, Internal Rate of Return, cash flows, etc

- Place these investigations in the wider context of alternative land use options for economic return on mined areas.
4. SITUATION REVIEW AND ANALYSIS

CHANGED ENVIRONMENT

It has been a little over ten years since the CYPLUS Stage 2 Report – ‘Our Land Our Future – A strategy for Sustainable Land Use and Economic and Social Development’ was published. Although it was envisaged there would be a review every five years, this is the first to occur. It is now reasonably difficult to obtain a copy of this report and much of the enabling structures envisaged in the document either failed to materialize and / or were discontinued after a short period before the outcomes sought were achieved. For instance CYRAG (Cape York Regional Advisory Group) still exists, but in name only as it is not resourced and does not meet.

An Advisory Committee with the same name is now to be created under the Cape York Peninsula Heritage legislation, which would seem to have a narrower focus.

This is not to say there have been no developments since. In the ten years that have elapsed, it is not too dramatic to observe that the world is a different place. There have been numbers of subsequent studies, reports, debates, meetings, changes to policy settings, new legislation, programs and initiatives. It is not intended to attempt to track all this history, as the task at hand is basically to identify the current status of the CYPLUS Stage 2 strategies and a way forward.

In 1997, climate change was not the growing issue it is now seen to be. The possibility of a permanent drying of southern Australia was not anticipated. The Murray-Darling system had not been widely identified as being in crisis. The prospect of producing fuels, fibres and resins from renewable sources were not mainstream considerations and China had not emerged as the global resource hungry powerhouse it now is, with India likely to follow. Both ATSIC and DATSIP have ceased to exist, with dramatically different structures in place to address Aboriginal and Torres Strait Islander needs and issues.

Both the internal Queensland and global operating environments are starkly different to that which applied in 1997, with the above being some of the key changes. Because there has been no process in place for the strategies to evolve with the changing operating environment, they are in some cases at odds with the contemporary environment, in some cases less relevant now and in some cases have been overtaken by events.

SCOPE OF REVIEW

This review is specifically directed to those CYPLUS strategies in the areas of economic and infrastructure development. However the vision articulated in CYPLUS was an integrated vision encompassing six sectors, underpinned by the objective of sustainable management & development. The two areas subject to this review cannot therefore be considered entirely in isolation. All six sectors, with their sub-areas are listed below:

Conservation
  Protected Area
  Ecosystem Management
Indigenous Management

Cultural
  Self-Determination
  Maintenance & Practice of Multiple Cultures
  Places, Sites & Moveable Cultural Property of Traditional Significance
  Respect & Communication
  Land
  Outstation Movement

Economic
  Mining
  Tourism
  Commercial Fishing
  Pastoral Industry
  Cropping & Horticultural Industries
  Aquaculture Industry
  Forest Industries

Lifestyle & Social
  Health
  Housing
  Employment & Vocational Training
  Education
  Customary law
  Social Activities
  Government Staff, Processes & Services

Infrastructure
  Regional Road Links
  Community Infrastructure & Services
  Community & Other Facilities
  Transport
  Telecommunication Services
  Radio & Television Services

Land Tenure

**POST CYPLUS**

The Department of Natural Resources was subsequently nominated as the lead agency for the Queensland State Government and the CYP2010 Secretariat established in their Cairns office.

Detailed whole of government responses to CYPLUS Stage 2 were prepared by both the State (March 2000) and Commonwealth (May 2002) Governments.

Underpinning the approach to CYPLUS and principles inherent in the 1996 Cape York Heads of Agreement (which was an important milestone leading to CYPLUS), was an acceptance by all parties of the significant natural heritage values of areas of the Cape
and a desire to protect these values. The agreed vision on which these processes proceeded over 1994 to 1997 was based on the principles of ecologically sustainable development, self-determination, respect, the continuation of multiple cultures and voluntary partnership approaches.

In every report on local stakeholder approaches since the 1980’s, there is evidence of Cape York residents’ love of country, identification with the landscape and pride in the unique beauty of many parts of the Cape. This goodwill towards preservation of the natural values of the Cape is important to note, because the processes that have occurred since, have for whatever reason, widely eroded this goodwill towards what is now seen as a ‘conservation agenda’ of ‘locking up the Cape’. This view is wide-spread and held not only by private citizens, who might be expected to have less than fully informed views. It is a common view held by officers of both government and NGO organisations and those who had a long association with the CYPLUS process.

The view is that CYPLUS was intended to strike a balance between conservation and sustainable development initiatives, but this has not occurred. The very strong view is that the approach to protection of the natural heritage of the region has been seriously flawed, tremendously under resourced and contributing to a deterioration of natural heritage rather than its protection.

This review of course is to consider only the economic and infrastructure strategies in CYPLUS Stage 2. However this includes an examination of the reasons for any of these classes of strategies not progressing.

There are three major areas constraining economic and infrastructure development on Cape York. If these were resolved, economic development and supporting investment in infrastructure would be most likely to flow into Cape York.

The first area is the constraints placed on access to and use of resources for economic development initiatives (still including land tenure issues), due to conservation of natural heritage values.

The second is lack of sealed road access on the main arterial roads of the Cape. This is a major infrastructure item in itself and is discussed under the individual strategies subject to this brief.

The third area relates to limitations in the skills base available. This impacts all industry strategies. There are a variety of facets to this:

- Those in both public service and other positions recruited to work on Cape York represent an unstable, yet a key skills base. There is a high turnover of staff. This turnover reduces the ability of such staff to build trust and mutual understanding, transfer skills, generate and see initiatives through, to motivate and lead. This generally reduces corporate memory. The last leads to a tendency to re-churn plans and initiatives. A determination of what is required to create longer term postings is required. This will include adequate housing no doubt;
• Flowing from the last point, Cape York has long been regarded as a ‘frontier’. The difficulty in attracting people leads to issues in the quality of personnel, their skills and sometimes motivation for being there. This is not to detract from the many talented and dedicated people working on the Cape;

• The well-known work readiness issues associated with poor social conditions in many Indigenous communities limits the ability of employers to recruit a reliable, productive workforce. Wherever a business is located, these days it is difficult to escape the need for global competitiveness to be viable;

• The training regime followed for Indigenous people has produced many people with paper certificates, yet few with jobs. Access to courses with the most appropriate modules to suit needs is also an ongoing issue. Training needs to be practical, on the job, for a job, preferably take trainees out of their usual social environment and be associated with mentoring for life skills, beyond the hours on the job;

• There is also some history of the wrong partnerships being established. Joint ventures are a way for Indigenous people to gain access to skills, investment capital and markets for business development. However if their partner is more concerned with fast profit then exit, the partnership is likely to be a failure at a number of levels. Such partnerships need careful facilitation and negotiation between the parties, with professional, experienced and practical support and advice.

As to conservation of natural heritage values, the extent of constraints to resource access that are desirable and acceptable are ultimately a function of the values and aspirations of the wider community. They are also a function of the extent to which innovative solutions can be found to sustainable resource utilisation.

In a broader sense, natural heritage and conservation matters were fundamental drivers in the CYPLUS process and are still fundamental to Cape York management and development issues. It is therefore inevitable and prudent for any situation review to encompass some understanding of the state of play in this area.
NATURAL HERITAGE CONSERVATION AND MANAGEMENT

Needs and Approach

Clause 13 of the Cape York Heads of Agreement3 provided as follows:

The parties agree that areas of high conservation and cultural value shall be identified by a regional assessment process according to objective national and international criteria. There shall be an independent review acceptable to all parties in the case of dispute as to whether the values are consistent with the criteria. Where such areas are identified, the landholder shall enter into appropriate agreements to protect the area under State or Commonwealth provision which may include World Heritage listing. As part of such agreements, funds shall be provided for management of the area, monitoring of agreements and equitable economic and social adjustment.

Later, in the CYPLUS Stage 2 strategies, Section 6.2.12, basically reiterates this in the following terms:

As described in Section 6.2.4, a necessary first task in protecting conservation values is to recognise their significance and to identify their management needs. It has been established that there is currently insufficient information regarding the significance of values and management needs and that a formal assessment is required.

An initial high level assessment was subsequently undertaken and reported on in 20014. The authors of the Report sought to clarify the meaning of what they had been asked to assess and adopted the following definition of natural heritage (p3):

Those elements of biodiversity, geodiversity, and those essentially natural ecosystems and landscapes which are regarded as worthy of conservation or preservation for transmission to future generations in terms of their existence value or for their sustainability of life and culture.

Under ‘Background’ (p 1) of the Executive Summary, the purpose for the Report was referred to in the following terms:

The completed Statement of Natural Heritage Significance will be presented to the Tenure Resolution Group and other committees involved in CYP 2010, the Cape York Natural Heritage Trust Plan process, the property planning process and will be a significant planning tool in guiding policy and land use decision making in the Peninsula.

Unfortunately to a significant degree, this does not seem to have been the outcome.

The Cape York Natural Heritage Trust Plan was developed and was supported by a Commonwealth Government commitment of ‘up to’ $40 million through Natural Heritage Trust funding. The nominal allocation of these funds was referred to in the Commonwealth’s 2002 response2 to CYPLUS as follows (p4):

The plan’s success depends upon the support and involvement of local communities, individuals and commercial interests.

The Plan is divided into 10 strategies, which are listed below with funding allocations.

(Note that the table below incorporates the Carpentaria Shire and the Kowanyama Aboriginal Community which was included in the ‘original’ CYPLUS area. These are not included in the rest of this response as Carpentaria Shire and Kowanyama Aboriginal Community are both in the study area of the Gulf Regional Development Plan.)
Despite five years effort and expenditure of NHT funds, no Cape York Property Plans were ever been completed under this initiative. The funding aimed at providing expert advice and planning assistance for plans to realise the economic and conservation potential of the land. Various reasons have been given for this failure. The plans were considered a major plank in the engagement of local stakeholders, as indicated in the above quotation. Sustainable economic development and successful natural heritage and conservation were seen to rest heavily on this engagement. Some of the factors which emphasise this need are discussed below. Successful heritage conservation and management are critical to the continuing appeal of the region as a ‘pristine wilderness’ in building the regional tourism industry. Sustainable land management and adequate and appropriate access to land are fundamental in the pursuit of economic development.

It is noted that in the absence of property management plans, the Landcare program is reportedly filling at least some of this gap.

Heritage site management is also important to tourism potential and it would seem there is still an under allocation of resources in this area. For instance it was reported that the old Laura homestead, a central piece of Cape heritage, is neglected and rapidly deteriorating, whereas it could potentially be an iconic part of the presentation and interpretation of Cape heritage for tourism purposes. This was a specific action called for under the CYPLUS tourism strategies.

Land acquisitions have been progressing as proposed under the above NHT funding, with numbers of former cattle properties acquired, some converted to National Park status and some transferred to Aboriginal control. Flowing from this approach:

- The surveyed property boundaries do not coincide either with high conservation value areas, nor with the needs of wildlife as they move across the landscape;
• The areas acquired are very large and neither the Parks and Wildlife Service, nor Indigenous people currently have the resources to manage them;

• Where National Parks span arterial roads (notably the Cape Development Road), this limits Department of Main Roads ability to maintain and upgrade the road. Water and gravel cannot be accessed from the National Park, necessitating higher cartage costs. Vegetation clearing and road re-alignments are limited so making it difficult to upgrade the carriageway to contemporary standards. Also, since private infrastructure is then precluded from long stretches of road, the potential for road access to facilitate additional developments serviced by the road (thus contributing to its cost / benefit) is reduced;

• The overall pre-existing and long term impact of the Cape Development Road is not addressed. The road bisects most of the Cape and is both a wildlife hazard and barrier, especially in country which sees major shifts in wildlife populations with changing circumstances and variations in seasonal conditions.

This changed land tenure is tending to de-populate the landscape. If Cape York were in fact a pristine wilderness, this approach might work to the benefit of natural heritage management and conservation. However this would ignore the forty thousand years of history during which the region has been traversed by people as a frontier between Torres Strait, PNG and Indonesian cultures and eco-systems. This interchange has been heightened since white settlement and added to with movements from the south, bringing feral animals and weeds. This frontier between Micronesia, Asia and Australia now also brings with it a range of bio-security concerns that are not best served with a de-populated landscape.

Despite NHT funding for feral weed and animal control, they are an ongoing major risks to preservation of heritage values of Cape York, with many claims that feral weeds and animals are out of control in National Parks due to lack of resource allocation. Lakefield National Park is the oldest declared National Park area on Cape York. There are reports from ex-rangers and locals who know the area that since declaration as a National Park there has been a decline in both species diversity and numbers. The lagoons once teeming with wild birds are now choked with weeds to the extent as one local put it:

“A duck would break its leg if it tried to land on one”.

It is understood some remedial action has now commenced with respect to these lagoons.

Consistent with these anecdotal reports is a paper delivered as part of the proceedings in an ‘Appropriate Economies Roundtable held in November 2003 in Cairns. The Roundtable was sponsored by the Rainforest CRC and the Australian Conservation Foundation®, with participants including eminent representatives of Indigenous, academic and conservation interests. As one paper noted:

Perhaps the most important point to take from this brief summary is that many of the most pressing problems demand active intervention. Depending for conservation solely or even mostly on a system of reserves invites continued losses, because no system of widely spaced sites can protect the full range of ‘refuges’ or resource rich patches needed under different conditions. Weeds, feral animals and fire cannot be managed by walking away and treating places like Cape York Peninsula...
as ‘wilderness’. More rather than fewer people active on country may be needed to deal with existing threats.

However these people need to be supported in some way. How can they derive a living from north Australian landscapes and support their land management activity without adding new problems or increasing the severity of existing ones? This is a very large question and I touch on only some of what I think are the most critical issues and options.

First, developments of any sort need to be much better planned, implemented and monitored so that the worst mistakes can be avoided or corrected. But it should also be acknowledged that even the best planned large scale developments will involve some losses. The warning in displacement of many species from relatively intact unfragmented landscapes should alert us to the great risks that the addition of large scale development tinkering will involve.

In parts of the savannas, Indigenous people have responded to this challenge by forming ‘Ranger’ groups who both carry out land management work themselves and assist others to be more active on their country. These groups may be involved in tourism and commercial use of wildlife to help fund their work, but the primary objective is to ‘care for country’ by managing fire, feral animals and weeds. Preliminary analysis suggests that the cost of achieving arguably similar conservation outcomes in this way (see Yibarbuk et al. 2001) is much lower than the alternative formal reserve management model.

Unfortunately there has been little recognition of the contribution of this work to the national good and our capacity to meet national commitments to conservation of biodiversity and sustainable resource use, or to enhance biosecurity by monitoring remote areas for exotic animal disease. Despite the commitments in Federal legislation (the Environmental Protection and Biodiversity Conservation Act 1999) to engage Indigenous people and apply Indigenous knowledge to conservation and sustainability issues, Ranger groups have to cobble together bits and pieces of funding and depend heavily on CDEP, so the movement remains fragile. Much greater and more coherent government support is needed.

(Source: Whitehead P, ARC Key Centre for Tropical Wildlife Management, Charles Darwin University, ‘Economic Development and Conservation In Northern Australia: Threats and Opportunities)

The need for a holistic approach was a strong theme in the 2001 assessment of Natural Heritage Significance referred to previously (4). The need for this was reinforced by one of the authors in a paper delivered to the same 2003 Roundtable (5) referred to above (at p25 of reported proceedings):

This is particularly so for Northern Australia, much of which is characterised by a high degree of variability in the distribution through space and time of landscape productivity and how the products of that bio-production are allocated and made available to food chains. As a result, many species are nomadic or highly dispersive such that they need to move around very large areas to acquire the necessary food and related habitat resources. Thus, the locations providing critical habitat and food resources for these taxa can and do vary from year to year depending on the prevailing climatic conditions.
Indigenous Point of View

Important stakeholders on Cape York are the Indigenous people who are connected to this region. While it was assumed that Indigenous people were natural allies in conservation, it has become apparent that their aspirations and approach to caring for country do not coincide with those of at least some sections of the conservation movement.

In fact there is widespread frustration on the part of Indigenous people, who have come to think of the conservation movement as yet another white man’s trick to frustrate their control over their land and economic future. This frustration was expressed by the then chair of Balkanu Cape York Development Corporation at the ‘Appropriate Economies Roundtable’\(^5\) (at p2 of the report on the proceedings):

> Despite this, the legacy of earlier debates remained and being heard amongst the throng of stakeholders was still a major challenge.

As a result of this legacy, in the 1990s the Heads of Agreement which secured prominence for the key stakeholders in the Cape was born. Its presence has ensured that the role of Cape York’s key players has remained central to government policy to this day. It is a reflection of the enduring nature of this agreement that sees us all here today.

In northern Australia the key to the conservation agenda rests with your ability to successfully engage Aboriginal people on their own terms.

Yet nearly a decade on from the $40 million dollar promise which spawned the Natural Heritage Trust Mark 1 in Cape York, are we any closer to our goals?

The answer is NO.

- Land use debates remain unresolved and Aboriginal employment in land management and decision making remains marginal;
- Opportunities for the proper management and protection of country are still going begging; and
- Innovative arrangements that would allow for sustainable development and conservation outcomes are still elusive.

> It is a time to end money wasted on more pig shooting from helicopters

These types of feelings were further expressed at the closed session for Indigenous representatives held during the Roundtable and are consistent with those expressed in a variety of places. (At p73 - 74 of the report of proceedings):

> The perception was that the Green movement is more intent on blocking or stalling economic development for Aboriginal people rather than providing support to Aboriginal people in dealing with the social climate of communities and families.
“Greens view the environment as more important than people”

“[It needs to be understood that] traditional trade and economies existed, this needs to be recognised, land and country have always had an economic base”

“[there] is no trust between Indigenous people and the Greens, the Greens are using us as a tool against Government, and they don't trust us to look after country properly”

Another paper presented at the Roundtable set out the approach of ‘Cape York Partnerships’, which was developed between the Queensland Premier, Indigenous and business representatives and released by the Queensland Government in May 2000. A Cape York Partnerships Economic Development Policy Framework was subsequently developed to support the overarching commitments enunciated in the Partnerships document. The thrust of the paper was for a ‘bottom up’ approach, driven by Indigenous people, supported by appropriate enabling resources including training.

(Paper presented by J West, Queensland Department of State Development, Brisbane)

Recently a new organisation has been created by young, articulate Aborigines, the ‘Indigenous Environment Foundation’ (IEF), which is specifically opposing the approach to Cape York adopted by the Wilderness Society. They accuse the Wilderness Society of treating Cape York Indigenous people in a ‘neo-colonialist manner, and engaging in a new form of dispossession’. For their part, the Wilderness Society claims Indigenous leaders are trying to bully them out of the Cape.

A newspaper article of 14 October 2007, published in the ‘NZ Herald’ and ‘Independent’ newspapers reports a looming battle between the IEF and Wilderness Society.

( http://article.wn.com/view/2007/10/16/Cape_York_alliance_in_major_meltdown/ )

**Appropriate Economic Activities**

The high natural heritage values of Cape York are undisputed and the need for conservation and management is supported by virtually all stakeholders. However there are certainly differences in opinion in what level and type of economic activities are appropriate, the level of impact that might be acceptable and how conservation and economic objectives may be achieved collaboratively. These remain core issues for the implementation of CYPLUS Stage 2 economic and infrastructure development strategies.

Appropriate economic activities on Cape York were a key subject for the 2003 Roundtable. In particular a model from north America, referred to as a ‘conservation economy’ was presented as a potentially appropriate model. It was described as (p56 of report of proceedings):

*The ‘conservation economy’ concept encourages development of economic enterprises and strategies that do not deplete the ‘natural capital’ on which all life depends, and that develop and promote economic alternatives to more environmentally harmful industries.*
According to the leading advocate of the ‘conservation economy’ in the Pacific north-west, Ecotrust, the conservation economy is one that sustains itself with so called ‘principled income’ that encourages economic activities that protect and restore rather than deplete natural capital, and which provide long term and stable employment in remote communities rather than the traditional boom and bust cycles of resource sector industries such as large scale commercial fishing, intensive forestry operations and non renewable mining operations.

(Source: Schneiders, L, The Wilderness Society, Brisbane: The Conservation Economy in North America)

Ecotrust is a long established and apparently successful organisation. It operates in a region where the natural systems and resource base had been seriously degraded. Its operations have been directed at environmental remediation work and re-building of industries on a sustainable model. The organisation therefore participates in maintenance of a robust fishing industry, sustainable forestry and logging regimes and extensive farming operations. This is considerably different to some conservation interests views of the future for Cape York, but not too far removed from the original vision of CYPLUS.

Another major difference to Cape York and the environment in which Ecotrust works is the large markets within the immediate reach of the region in which Ecotrust operates.

Later in the proceedings, Roundtable participants broke out into four working groups to develop ‘environmentally appropriate economies’ for Cape York. These were consolidated into one table, reproduced on the next page.

While participants may have considered these viable from an environmental point of view, there has been no test of their economic viability. A central issue arises from a combination of allowable scale and demand chains to market. The internal market for Cape York is very small and distance and costs to external markets tend to indicate large scale operations being required to achieve viability through economies of scale and / or high value products which can sustain high supply chain costs.

In addition, small operations in remote areas have difficulty in securing the professional resources required to operate successful businesses. The history of Cape York is littered with failed economic development initiatives that have foundered on their inability to attract and retain the right people with the management skills and drive to make them successful.
Table 1. Combined sliding scale of environmentally appropriate economies.

<table>
<thead>
<tr>
<th>Largely compatible</th>
<th>Potentially compatible with good management prescriptions</th>
<th>Incompatible</th>
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<tr>
<td><strong>SLIDING SCALE</strong></td>
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- Cultural industries: arts, craft, architecture, events
- Land and Sea Management: monitoring, enforcement, local employment
- Protected Areas: management, monitoring
- Education, training and mentoring for local communities
- Communication and information technology

- Food: market gardens, bush foods, nurseries, seed collection
- Eco-commodities carbon credits
- Renewable energy technologies, information technology for remote communities
- Non destructive research
- Human and community services
- Traditional medicines and health

- Nature based and culture based tourism (community based)
- Protected Areas: access fees
- Feral animal and weed management
- Education and training for fee paying
- Language revival

- Pastoralism: no land clearing; no intensive practices: feedlotting, improved pastures, subdivision fencing (minimal)
- Eco timber: community based forestry
- Aquaculture: low impact, low input
- Feral animal harvest.
- Sport and extreme sports
- Bioprospecting

- Small scale novel crops, e.g. Sandalwood
- Recreational fishing

- Aquaculture: commercial; high input; introduced species

- Large scale cropping
- Industrial scale forestry

- Broadscale land clearing
- Large scale water impoundment
- Uranium mining
- Sand mining
- Mining exploration
CONTEMPORARY LEGISLATION

There are four key areas of Queensland legislative development since CYPLUS Stage 2 which have significant relevance to the economic and infrastructure development strategies.

**Qld Vegetation Management Act 1999**

This act has placed restrictions on clearing of native vegetation in response to high rates of clearing reported across Queensland. This has to date stopped any projects or project concepts dependent on significant clearing on Cape York.

**Wild Rivers and Other Legislation Amendment Acts 2006 & 2007**

This 2005 Act was amended in 2006 to qualify activities that would have been previously prohibited and in 2007 has been amended to make provision for inclusion of a number of Cape York River systems. Those now to be included encompass the majority of river catchment areas on Cape York, with the notable exception of the Mitchell catchment. The act thus imposes economic and infrastructure development bans and restrictions on a major proportion of the total area of Cape York.

The legislation provides a management regime for declared ‘Wild River’ catchments. A 2006 summary of the legislation explains the management regimes in the following terms:

A wild river area will contain two types of preservation areas and may also contain two types of management areas to regulate future development activities. A high preservation area will extend up to one kilometre each side of the wild river, its major tributaries and any special features (for example, off stream wetlands). The location and extent of the area will be detailed in the declaration. In this area, future development activities and resource allocations will be mostly prohibited. The remainder of the wild river area will be the preservation area. In this area, activities and resource allocations that are likely to have an effect on the wild river natural values are assessable and will be evaluated against prescribed codes and any other applicable rules outlined in the declaration.

The declaration may also identify floodplain management areas and sub-artesian management areas depending on individual catchment characteristics. These areas will be defined to manage activities that impact on flood flows across specific floodplains, and activities that may alter any significant natural sub-artesian flows into the river.

A summary of the amendments made in 2006, qualifying access and permitted activities was provided by the Queensland Government at the time and is included as Attachment 1.
**Cape York Peninsula Heritage Bill 2007**

The objectives of this legislation are stated as:

... To identify significant natural and cultural values of Cape York Peninsula, to provide for cooperative management, protection and ecologically sustainable use of land, including pastoral land, in Cape York Peninsula, to recognise the economic, social and cultural needs and aspirations of Indigenous communities on Cape York Peninsula in relation to land use and to recognise the contribution of the pastoral industry in the Cape York Peninsula to the economy of land management.

The Bill only applies to Cape York Peninsula as it has outstanding natural and cultural values and Indigenous communities in the region have an ongoing, strong attachment to their land and culture. The Bill addresses these matters by allowing for the continued return of homelands to traditional owners and provides opportunities for them to develop a sustainable economic, cultural and social future.

These objectives are to be achieved by providing for:

- The declaration of areas of international conservation significance;
- The cooperative involvement of landholders in the management of the natural and cultural values of Cape York Peninsula;
- The continuance of an environmentally sustainable pastoral industry as a form of land use in Cape York Peninsula;
- The declaration of Indigenous community use areas in which Indigenous communities may undertake appropriate economic activities; and
- The establishment of committees to provide advice on the implementation of the Cape York Peninsula Heritage Act

The concept of ‘Indigenous community use areas’ is of particular relevance to CYPLUS Stage 2 economic and infrastructure development strategies. Division 2 of the Bill deals with these.

**Clause 14** under that Division explains that the Governor in Council may, by gazette notice, declare an indigenous community use area on Aboriginal land, DOGIT land or Aurukun Shire lease land, and specifies that the notice must define the area to be declared. The purpose of the declaration is to identify an area that would be suitable for use for agriculture, aquaculture or grazing purposes, without significantly impacting on the natural and cultural values of the area to be declared.

**Clause 19** describes what must be included in an application for proposed development in an indigenous community use area, where the application being considered is for a special Indigenous purpose. The application must be accompanied by a property development plan that includes particulars of the development, including a business plan showing the viability of the proposed project. The clause also describes that the Minister must be satisfied that a number of additional criteria have been met, before making a
decision to accept that an application to clear vegetation is for a special indigenous purpose.

Clause 27 goes on to provide that a wild river declaration or water resource plan in the Cape York Peninsula Region must provide for a reserve of water in the area under the declaration or plan for the purpose of helping Indigenous communities in the area achieve economic and social aspirations.

Consequential amendments to various other State Acts are also provided for, being:

- Aboriginal Land Act 1991
- Land and Other Legislation Amendment Act 2007
- Nature Conservation Act 1994
- Vegetation Management Act 1999
- Wild Rivers Act 2005

Basically this Act will therefore allow for economic development activities that might not otherwise have been possible under pre-existing legislation in declared ‘Indigenous community use areas’. However to proceed development will need to demonstrate both business viability and negligible impact on natural and cultural values. This is likely to be a difficult balancing act, especially if areas declared were to be on a small scale only, given difficulties in attracting professional resources for small businesses and distance from markets mentioned previously, with associated logistical and cost factors.

However, with this qualification, it must be said that this legislation, taken with other recent legislative amendments, appears to signal the Queensland government’s intention to pursue a new model for Cape York that may produce a better balance between economic, social and environmental issues. This is discussed later.

Aboriginal Land Act 1991

This Act, as recently reviewed provides for the transfer of land to groups of Aboriginal people. The lands that are transferable are described as:

- Certain Aboriginal or Torres Strait Islander reserve land;
- DOGIT land;
- Aurukun Shire lease land;
- Mornington Island Shire lease land;
- Land declared by a Regulation to be transferable land.

Freehold title is provided to the grantees through establishment of a land trust. Such title has two restrictions that do not apply to other freehold title:

- The transferred land can never be sold;
- A lease to a non-Aboriginal or non-Torres Strait Islander person for longer than 10 years needs the approval of the Minister, (spouses of Indigenous persons being excluded from this provision).

A critical factor in the effectiveness of such Trusts in achieving any economic development aspirations the grantees may have will be the skills and resources available
for management of the Trust. Without an understanding of Trusts, the way they work and their good governance, plus administrative and business skills and resources, the Trusts are likely to achieve very little. Since the land cannot be sold, it will also be difficult to raise capital on these assets through normal commercial sources. Early reports are that Trustees are having difficulty coming to terms with Trust administration and ways to drive them forward.

State Government Assistance Programs

Government programs, both State and Commonwealth, change over time to reflect changes in policy, priorities and governments. However there have been a variety of programs in place aimed at supporting business and economic development for Indigenous people. They will have varying levels of impact on the achievement of the CYPLUS Stage 2 strategies. Two current State government programs of key interest to the Cape York contemporary environment are:

- Indigenous Business Development Grants Program
- Indigenous Business Capacity Building Program

Both fall under the Department of Tourism, Regional Development and Industry and are of particular interest firstly because eligible applicants specifically include ‘Land & Sea Resource Management Centres and Land Trusts’. Secondly assistance with businesses development and capacity building may assist in addressing the risks and weaknesses inherent in creation of Land Trusts as noted previously.

PRESSURES OPPORTUNITIES AND RISKS

The contemporary and long term serious issues likely to flow from climate change were not considerations in the formation of CYPLUS, but are now likely to add to pressures and risks for the region. Calls are already being made for agriculture to ‘move north’ and there is some evidence that this is already occurring to some degree. The extent of soils on Cape York suitable for agriculture identified by DPIF referred to later are tempting for extensive development.

However any approach that simply tries to transplant southern agriculture to the North would be likely to fail and leave a legacy of long term damage to the environment.

All levels of government have policies in place which recognise the value of protecting the availability and condition of good agricultural land as part of the nation’s heritage to be passed to future generations. In the case of the Queensland Government the policy is contained in State Planning Policy 1/927, which notes in part:

2.2. The agricultural industry remains one of the most important components of the national and state economies. As with any industry, world markets and economic factors create cycles of prosperity interspersed with periods of difficulty for agriculture. Economic downturns and particular crop surpluses should not obscure the fact that productive land provides the long term basis for an efficient and flexible agricultural industry that can be responsive to changing demands for products and which generates community wealth through income and employment.

These policies could become more critical in the short to medium term, as globally there is a distinct risk of loss of more agricultural land to climate change through inundation,
drought, or possibly ice sheets. At the same time the world is seeking to reduce carbon emissions and in any event to move away from reliance on fossil fuels. The future in renewable energy sources includes broad acre production of crops suitable for energy production (ethanol, bio-fuels) and resins (plastics replacements).

In these circumstances an argument can be mounted that land use for broad acre production of renewable energy crops could be equally responsible as putting it into the National Estate. It can be further argued that locking up agricultural land for production in Australia simply exports satisfaction of world demand to unsustainable clearing of Amazon, PNG and South East Asian forests. For instance the net result in Australia of ceasing wet tropics logging of cabinet timbers, was, over the ten years following, a reduction in real terms of cabinet timber prices in Australia through import of such timbers (possibly unsustainably harvested). This may or may not still be the case.

These are not easy issues and should not be taken as an excuse for abandoning the protection of Cape York natural heritage values. It is a risk to both conservation and economic development to pit them against each other.

The issue for Cape York, as it is for the rest of the world, is how to strike the right balance between conservation and economic exploitation. It was always the consensus of the parties to CYPLUS that Cape York wilderness and natural heritage values be recognised, respected and conserved. However, the trajectory since CYPLUS has:

- Lost the 'hearts and minds' of local stakeholders so far as the way the conservation agenda has played out to date;
- Failed to recruit property managers to adopt comprehensive property management plans;
- Locked up areas in National Parks along property boundary lines that have little or no relationship to either provision for mobile wildlife populations or alignment with areas of high conservation value;
- Provided scant resources to manage Park areas, such that they are reportedly and demonstrably degraded with the impacts of feral animals and exotic weeds in particular;
- Increased the bio-security risks to Australia due to a level of depopulation of the landscape.

If these perceptions are accurate, they will find their way into public awareness and the good will and acceptance of the need for preservation of Cape York as a 'wilderness' will be eroded over time. This will also significantly impact the appeal of the region as a tourism destination. Word of mouth will spread if visitors see a degraded environment and large areas styled as national parks with little apparent natural heritage values.

As the 2001 assessment of National Heritage Significance on Cape York observed (p5 Executive Summary):

What we call natural heritage reflects those natural phenomena that are valued by the community – which usually refers to the present-day community (though the act of valuing can sometimes be a selfless attempt to identify those things that we think our grandchildren and their children might
value in the future). Identifying what constitutes natural heritage on Cape York Peninsula, or any region, therefore must be based on what is valued by the community.

Community values will inevitably shift over time, hopefully in the direction of better informed, more enlightened approaches to a range of matters including and beyond natural heritage. Many of these values will be in tension with natural heritage conservation. This is especially where scarce resources and security of goods and services to sustain a standard of living that meets community norms are concerned.

It will always be a balancing act. Just where the point of balance lies is a public interest test, which no individual sectoral interest has the right to assume responsibility for as judge for the community.

The Queensland Resources Council passed comment on public interest in their 2006 Annual Report in relation to their negotiations which saw them securing amendments to the Wild Rivers Act:

A blanket ban on exploration across a relatively unexplored area of the most highly mineralised province in Queensland was never going to pass a realistic public interest test, but almost did.

(Chief Executive’s Report)

(The province referred to was not Cape York, but the North West minerals province).

Finding the right balance to address the public interest and community values was fundamental to the CYPLUS process and to achievement of the economic and infrastructure development strategies formulated as part of the process. For this reason this situation review has endeavoured to set the contemporary environment as the platform to underpin the review of the specific strategies included in the terms of reference for this assignment.

The executive summary of the 2001 assessment of National Heritage Significance on Cape York4 expressed the challenge and the opportunity succinctly in its second last paragraph:

It is rare that a community has the opportunity to make its mark in history. Usually communities are simply swept up in the currents of their times, and are unable to set a new course. In considering the future of Cape York Peninsula, we have the opportunity to choose a new path of development, different from that previously followed elsewhere in Australia. Indeed throughout the world, communities, nations and their governments struggle in their attempts to redirect the path of economic development in order to promote a more sustainable way of living. Is it possible to generate economic wealth in ways that are environmentally and socially responsible? Can development occur that protects rather than destroys nature, and respects rather than degrades indigenous rights and values? These are the fundamental questions of our time and are of global as well as national significance.

A model that locks up large areas with scant management resources and hopes for the best is not likely to achieve this vision, especially without the active partnering of those land managers who live in the region. If the sustainable model envisioned above can be
achieved, then the model itself will be a source of wealth generation in a global knowledge driven economy.

**EMERGING MODEL**

The situation to date indicates the need to find a new model, one with better balance and availability of appropriate resources to sustain it. The practical application of the contemporary legislation referred to above, with the Cape York Peninsula Heritage legislation as the foundation, is reportedly intended to provide such a model. It would seem to directly address many of the core issues expressed by stakeholders, both in consultation for this report and in various publications and forums since CYPLUS.

Reforms to land tenure on DOGIT lands may make more land available for housing development – a key constraint to economic development and the attraction and retention of staff referred to previously and mentioned by numbers of stakeholders.

Good land stewards are to be rewarded through the ability to access a lease term of up to 75 years. This extended timeframe will not be available anywhere else than Cape York. To achieve this, a lessee will need to demonstrate that they have:

- Entered into a conservation agreement that, in particular, protects the World Heritage values on their lease; and
- Negotiated an Indigenous land use agreement for use and access rights of traditional owners and the ILUA has been registered.

The new legislation also provides for the protection of the viability of the Cape York grazing industry by requiring an industry impact assessment of any decision to transfer ownership or convert a lease to another tenure. This assessment requirement appears to be limited to the grazing industry. The protection of access to good quality agricultural land is not directly addressed.

The legislation opens up the possibility of multiple use and better management of a new class of National Park that has been created – the *National Park (Cape York Peninsula Aboriginal Land)*. A number of elements are intended to come together to facilitate this.

A process is to be put in place to map areas of high conservation significance. This will reportedly have the following impacts:

- Provide a basis for the conservation agreements referred to above;
- Move away from old property boundaries defining National Park areas in a practical sense. Those areas not of high conservation significance within the new class of National Park will be open to application for Indigenous Community Use Area status;
- Provide a basis for eventual submission for declaration of World Heritage Areas;
- Develop Indigenous Management Agreements for joint management between the Traditional Owners and the State.

The Premier’s Second reading speech in Parliament introducing the Cape York Peninsula Heritage Bill outlined the intention for these joint management agreements⁹:
The bill proposes a new model for tenure resolution by creating a new class of protected area under the Nature Conservation Act 1994 called National Park (Cape York Peninsula Aboriginal Land). The new class will enable a perpetual national park to coexist with Aboriginal land and allow for joint management of national park land by traditional owners and the state. Joint management arrangements will be defined under an Indigenous land use agreement and an Indigenous management agreement. An Indigenous management agreement will include details such as how the land will be managed, the responsibilities of each party involved in the agreement and to confirm public rights of access.

The extent of the EPA’s role in the management of national park land will be negotiated for each subregion and be dependent on the capacity of traditional owners to undertake day-to-day management. The greater the capacity of the traditional owners to manage the day-to-day aspects of the national park, the greater their responsibility will be. Subcontracting arrangements to traditional owners will be detailed in the Indigenous management agreement. Where the EPA undertakes management of the national park land, it will occur in accordance with Aboriginal tradition. This will bring a new dimension to the presentation of the Cape York Peninsula national park estate and ensure that Aboriginal cultural heritage is fully acknowledged.

It is understood that importantly, resources will be provided to Traditional Owners to empower them to fulfil management contracts they may enter into.

Re-formed and resourced Land and Sea Centres are seen as another plank in the new model. There is recognition that lack of a long term plan for these Centres has been a serious flaw. At departmental officer level it is also recognised that short term contracts with a consequent lack of continuity and certainty are not appropriate for attraction of good staff resources and effective services.

The legislation also enables land trusts to form subregional aggregations for the purposes of negotiating resources and management arrangements.

A number of land trusts could therefore all contract to a regional Land and Sea Centre to undertake management of National Park areas of high conservation value under their control. Collectively they might also broker arrangements for development of tourism businesses. It would also be desirable for the Land and Sea Centres to be provided ‘whole of government’ contracts to manage bio-security requirements for the region, (given demonstrated capacity and competency).

Such arrangements would see the Land and Sea Centres with a range of responsibilities that could encompass:

- Conservation and Park management and maintenance, including feral animal and weed control;
- Management of tourism assets, access and provision of guides;
- Bio-security surveillance and reporting;
- Provision of Rangers under the Wild Rivers Legislation.

Initial funds to employ 20 ‘wild rivers rangers’ have reportedly been set aside, with the objective of eventually having up to 100. It is not known if there are funds to increase ranger numbers to an adequate level to manage existing national Park areas.

To date the training arrangements for Indigenous rangers for National Parks has not been effective. Clearly the approach needs review if Indigenous people are to fill a significant
number of ranger positions and provide the workforce for Land and Sea Centres. If workforce and skills issues cannot be addressed this will clearly frustrate the legislative objectives of greater participation of Indigenous people in national heritage management on Cape York.

The provision for ‘Indigenous community use areas’ includes limited clearing of remnant vegetation, with the approach described in the Premier’s Second Reading speech in the following terms:

Indigenous community use areas will be designated on a case-by-case basis in locations that have the capacity to support aquaculture, animal husbandry, agriculture or grazing activities. Expert advice will be sought to determine where these locations occur. A policy will be developed to provide guidance on who should be consulted and a process for consultation before the declaration of an Indigenous community use area.

Applications for limited clearing of remnant vegetation will be permitted within Indigenous community use areas where a number of criteria have been demonstrated including—

- the clearing is for agriculture, animal husbandry, aquaculture or grazing;
- the development is likely to be economically viable;
- clearing will not occur in an ‘endangered’ regional ecosystem, ‘of concern’ regional ecosystem or in essential habitat for a threatened species;
- clearing will not occur for the purpose of planting high-risk species or for trees to make woodchips; and
- a property development plan has been prepared.

A Vegetation Management Code will be developed to assess clearing within areas of Indigenous community use on Cape York Peninsula. The code will be based on part S of the current Regional Vegetation Management Code. It will also consider the size and configuration of clearing in a way to maintain ecosystem functioning and ensure that remnant vegetation remains in the landscape.

As noted previously, the effectiveness of this provision in supporting significant economic development on Cape York will rest in the scale of development made possible. Further, if these areas are isolated pockets of land, it is less likely that significant industry development will occur. Development generally requires supporting infrastructure and tends to historically cluster around regional assets. Isolated pockets on a small scale to service small communities must be seen as tokenism and likely to fail, as so many projects have in the past. This would potentially leave Indigenous community use areas as degraded due to failed developments. It is not intended to be overly negative in making such a statement, as the new approach appears well-intentioned to address the imbalance between development and conservation, at least for Indigenous communities.

Another potential flaw is that the model would seem to have been crafted by agencies concerned with land management, conservation and natural heritage. This is not a criticism of those agencies. However if the model is to seriously address economic development on Cape York, it will need to have solid input and effective influence from those with industry development, business and commercial expertise.

It is also noted that water allocations made as part of a wild rivers declaration are now to include a reserve of water for future use by Indigenous communities for sustainable
development. Access to water is basic to agricultural development and is discussed elsewhere.

It is too early to predict the effectiveness of this new model, but it would seem to have the potential to go at least some way to addressing the imbalance perceived by stakeholders as between sustainable economic development and conservation on Cape York over the past 10 years or so.
5. INFRASTRUCTURE STRATEGIES

A full copy of the strategies expressed in CYPLUS Stage 2 for the following areas is provided as part of Attachment 2. Only key points from those strategies are referred to in the following review for the sake of being concise and avoiding a need to canvass aspects of strategies that have been overtaken with changed circumstances in the ten years that have passed since.

The strategies in this section appear in the same order as in the CYPLUS Stage 2 report. However these infrastructure strategies have been placed before economic development strategies – the reverse order to the CYPLUS Report, as they are seen as underpinning the ability to achieve many of the economic strategies. This is particularly the case for the road link strategies. Without the achievement of these, value chain and cost factors are likely to render a variety of economic development initiatives unviable.

REGIONAL ROAD LINKS

Under the ‘Actions Required’ in this strategy, there is only one overall outcome listed:

An adequate regional road system

The section goes on to identify specific priority roadworks.

Peninsula Development Road

A Key to Economic Development

This is overall the most important for all Cape York industries and communities, being the ‘backbone’ link from Cairns, up the centre of the Cape, at least to Weipa. Achieving a sealed surface is basic to the objective stated in the Terms of Reference for this assignment to identifying ‘future actions with the objective of developing a vibrant, broad and sustainable economy…..’

The ‘current situation’ section of this strategy in the CYPLUS Report outlined some of the reasons for its importance. Subsequently a major examination of the road was undertaken in 2000 – 2001 by Flanagan Consulting Group, which sets out in more detail the reasons for the importance of the road and assessed upgrade options. An Overview Report (Flanagan’s) and an Economic Development Issues paper (Cummings) were produced as components of that overall study. This study was the basis for a Queensland Government application to the Commonwealth for the road to be declared a ‘Road of National Importance’. This was not successful, with the Commonwealth giving the reason being that the Roads of National Importance Program was fully allocated at the time as part of its formal response to CYPLUS Stage 2, (page 123).

The following points are drawn from the Flanagan Reports and in some cases supplemented with additional material.

1. The condition of the road is now a barrier to entry into a globally connected regional economy that has been rapidly developing with Cairns and Weipa as hubs at each end of the road. Whereas Cape York might still be regarded as a remote
part of Australia, remote from world markets, the Tropical North Queensland region is now a sophisticated economy, with links into Micronesia, Asia and the global economy. There is an international airport and deep water ports in Cairns, Weipa and Mourilyan. The Peninsula is now close to one of the largest and fastest growing population concentrations outside the south east corner of the State, with a range of support services, infrastructure and skills base to service a variety of industries.

If it were not for the barrier the road condition represents, Cape York would be in a superior position to many other regional areas of Australia.

2. The distances between Cairns / Weipa (802 km) and Townsville / Mount Isa (883 km) are similar and both have the similarity of being between a regional service city and mining province. The Townsville / Mt Isa links are across a good sealed road paralleled by railway access. A comparison of transport costs (2000 prices) indicates the extent of competitive disadvantage suffered by Cape York Peninsula.

The Cummings report makes the point that ‘for dry and refrigerated freight, the cost Cairns to Weipa via the Karumba / Weipa barge is about 3.5 times the rail cost Townsville to Mt Isa. When roads are open, the cost comes down to a level about twice the rail rate and one third higher than the road transport rate for dry cargo Townsville – Mt Isa, but is still about 3 times the rate for refrigerated cargo.’

‘For passenger movements, Cairns to Weipa by air at $194 one way is about double the cost of Townsville / Mt Isa coach travel at $84.’

‘The coach Cairns / Weipa during the dry season is about 60% higher than the coach Townsville / Mt Isa. In addition to the extra cost, the coach trip Cairns to Weipa is slow and rough.’

For many located along the road, outside of Weipa, the cost disadvantages are likely to be even higher.

3. The road is closed for up to four months per year due to the summer wet season. Consistent access is basic for industry development. For instance in a 1984 study, Comalco indicated at the time that unless there was at least 11 months per year access by road, it was not viable for them to ship ore by road.

4. The road takes a heavy toll on the condition of all but the most durable goods in and products out of the Cape. In the case of cattle, bruising and loss of condition reduces sales value. Road closure during the wet season precludes turning off cattle during summer, usually the best time for producers to market their cattle.

5. There has been a rapid expansion in the extent and value of agricultural production around Lakefield since the section of the road from Mt Molloy has been sealed.
6. In a cost / benefit analysis, economic benefits were calculated to exceed costs of road upgrade and maintenance over a thirty year time frame.

7. The Flanagan Study concludes that - ‘A continuous resheeting program in order to provide acceptable pavements for growing traffic demands imposes a requirement to find approximately 120,000m$^3$ of gravel resources annually. Given the scarcity of reasonable quality pavement gravel in close proximity to the Peninsula Development Road (PDR) and the potential environmental impacts of establishing gravel sources the requirement to continuously resheet the PDR is environmentally unsustainable.

8. The report notes that usage rates were growing by an average of 4% per annum, largely due to tourism. However it also assessed that if the road were sealed this would facilitate a significant expansion in the volume and pace of tourism industry development. Part of this effect would be the ability to extend the present season into pre and post wet season ‘shoulder’ periods. This would tend to make local tourism businesses and those deriving income from tourism visitors more viable.

The recent experience of Cooktown supports this assessment, as did the sealing of the road North of the Daintree some years ago. After that road was sealed there was a significant surge in visitor numbers. However the case of Cooktown is probably more pertinent, as it has been less of an iconic destination than Cape Tribulation.

The sealing of the Mulligan Highway, connecting Cooktown to southern centres, was completed in 2005. Anecdotal evidence from Cooktown accommodation and other businesses reports that the effect has been significant and almost instantaneous. There are reportedly two visitor profiles that are driving much of the growth, although there has apparently been an increase for all profiles. This includes international visitors are reportedly now also ‘finding’ Cooktown. This is significant, as experience of other destinations has been that a trickle soon becomes a healthy flow.

Visitors to the Port Douglas region are increasingly using their hire cars to visit Cooktown on day trips, whereas hire cars were previously precluded due to the unsealed road. Visits from older Australians, sometimes referred to as ‘grey nomads’, on extended tours of Australia have also increased. This sector includes those who do not have 4WD vehicles and many with caravan rigs which they are reluctant to use on gravel roads. It is these tourism sectors which have apparently shown the most dramatic increase.

One test of these anecdotal reports is the visitor figures from the Cooktown Museum. Most first time tourism visitors to Cooktown could be expected to visit especially older people, who as a demographic generally exhibit a higher interest in museums and history than other sectors. It must be remembered that in early 2006, the region experienced two cyclones, one south of Cairns, the other
crossing Cape York above Cooktown. This could have been expected to dampen any effects from completion of the road seal in late 2005.

Despite this, overall visitor numbers to the museum for the 2006 calendar year were 8.8% higher than for 2005, (26,736, compared to 24,571). More significantly and tellingly, the group of visitors receiving concession entry tickets increased by 21%, (7,269, compared to 5,990). This group could be expected to encompass many of the ‘grey nomad’ sector mentioned above. The further increase for this group between 2006 and 2007 figures available is dramatic. Figures available at the time of reporting were to August 2007. A comparison between the first eight months of 2006 with those of 2007 demonstrated a 41% increase, (7,158 compared to 5,072. It is highly likely that the total visitor increases are more dramatic, since museum visitors represent only a sample (although probably a very significant sample).

Another less direct indicator of the effect of sealing the road to Cooktown is the building approval figures for Cook Shire. While there are other factors, including speculative development and the effect of mining industry generated demand, the road can be assumed as significant driver of development. Shire building approval figures are:

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Value of Building Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 – 2007</td>
<td>$20,763,936.32</td>
</tr>
<tr>
<td>2005 – 2006</td>
<td>$8,040,110.60</td>
</tr>
<tr>
<td>2004 - 2005</td>
<td>$8,320,050.60</td>
</tr>
<tr>
<td>2003 – 2004</td>
<td>$5,634,619.20</td>
</tr>
<tr>
<td>2002 – 2003</td>
<td>$9,747,903.90</td>
</tr>
<tr>
<td>2001 - 2002</td>
<td>$7,521,967.00</td>
</tr>
</tbody>
</table>

The financial year following the completion of the road seal has therefore seen an increase of 158% in value. While building costs have been escalating, this is still a remarkable outcome.

9. The state of the road represents a security risk for Sherger air base during any hostile actions, should shipping channels to Weipa be blocked. (The base is supplied fuel from Weipa port by up to 20 road trains per day. (When in use). The only alternative is supply via the Peninsula Development Road from Cairns. The state of the road would severely limit or close this supply line).

10. On the wider aspects of security, involving bio-security, sealing of the road should contribute to national objectives in this area through facilitation of better access for surveillance and control measures. It would also contribute to reduction of the cost of keeping National Parks Rangers in the field. It is understood on Cape York, it costs some three times the cost of maintaining Rangers in most other parts of Queensland.
Progress to Date
Sections of the Peninsula Development Road have been sealed since CYPLUS in 1996. The most notable is the progress made to sealing the surface to Laura. Laura has the potential to be an important tourism destination, being the site with the internationally recognised Quinkan rock art, the Laura Festival and opportunities for development of authentic ‘Indigenous experiential’ products.

The strategies adopted by Queensland Main Roads Department, in the face of budget constraints, have been:

- Provide overtaking opportunities every 40km;
- Upgrade the easiest sections first, in order to seal the longest distances with the funds available;
- If possible seal those sections with the highest maintenance demand due to wet season degradation;
- Take advice from the trucking industry as to the most desirable sections to seal

Under these strategies, the length of sealed surface has extended from 40km in 1999-2000, to an expected sealed surface of 110.2km by the end of 2007. A summary the road seal status follows:

<table>
<thead>
<tr>
<th>MRD Road Link</th>
<th>Description</th>
<th>Total km</th>
<th>Sealed distance 99/00</th>
<th>Sealed Distance Dec 2007</th>
<th>Remaining Unsealed Dec 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>90B</td>
<td>Lakeland to Laura</td>
<td>61.8</td>
<td>8.0</td>
<td>20.5</td>
<td>41.3</td>
</tr>
<tr>
<td>90C</td>
<td>Laura to Coen</td>
<td>246.6</td>
<td>4.0</td>
<td>40.4</td>
<td>206.2</td>
</tr>
<tr>
<td>90D</td>
<td>Coen to Weipa (to Comalco lease)</td>
<td>219.5</td>
<td>21.0</td>
<td>45.3</td>
<td>174.2</td>
</tr>
<tr>
<td>Comalco</td>
<td>Comalco lease to Airport (not MRD road)</td>
<td>30.6</td>
<td>4.1</td>
<td>4.1</td>
<td>26.6</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>558.5</strong></td>
<td><strong>37.1</strong></td>
<td><strong>110.2</strong></td>
<td><strong>448.3</strong></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Queensland Department of Main Roads)

At current funding levels, the rate of sealing achieved over the past seven years has therefore been an average of 10.4km per annum. At this rate, it would take some 43 years to complete the sealed road link, beyond the range of most industry development and business planning regimes and possibly at the end of the life of bauxite mining around Weipa. In addition, to bring the road to the standard required to facilitate industry development, the crossings prone to flooding, but not able to be addressed at current funding levels would need to be addressed. At current funding, this is therefore not likely to happen in anything like a meaningful timeframe for industry development.

Future Direction
The main barrier to progressing this underpinning CYPLUS strategy area at a more meaningful rate for economic development is of course the high cost involved compared to the budget available to the Queensland Main Roads Department. The budget allocation will only change significantly if the road upgrade is accepted as a priority at
Queensland and Commonwealth Government levels. It is recommended that CYPDA adopt the advocating of the acceleration of these major works as a priority activity.

To achieve this, the project would need to achieve the status of a ‘nation building’ project. This requires a re-examination of previous cost / benefit analysis work in the contemporary and projected environment, from a ‘quadruple bottom line’ approach. This inevitably includes a realistic re-examination of industry development opportunities in the face of land use constraints imposed by natural heritage management considerations, together with emerging global demands for agricultural food, fibre and renewable fuel crops. It could be anticipated that factoring in these 21st century needs and industries will be likely to demonstrate a much higher cost / benefit ratio than previously. In addition, the increased focus on and priority given to Indigenous community issues is likely to also increase the cost / benefit when social factors are realistically costed. It recommended that CYPDA seek to facilitate the undertaking of this re-evaluation of cost benefit as part of their advocacy role.

The impacts on small communities of forced isolation in the circumstances of Cape York are fairly obvious, but apparently have not been fully costed to date. As was commented in a 2006 support case developed for a multi purpose centre project at Lockhart River11:

This is a small community with close family relationships. People are confined to the community for typically over six months per year due to the wet season. There is almost no full time employment and little in the way of active or interesting diversions. The social and health issues which arise are hardly surprising on this ground alone.

The Main Roads Department has undertaken a review of the cost of providing road links across Cape York roads that would achieve in full the CYPLUS overarching strategy of an adequate regional road system. These amount to the order of costs, as reliable costing could only be undertaken after planning, inspection and design phases were completed.

In the case of the cost of sealing the remaining Peninsula Development road and providing a high level of immunity to flooding, it is understood the order of cost is a little in excess of $700 million. This is at 2007 dollar values and includes some provision for risk factors due to unknowns in the design requirements. Escalation in costs, based on contemporary experience is likely to be in excess of 10% per annum.

At this level of required funding, any upgrade will face competing priorities with other regions with claims on road budgets. Even if the funding were immediately available, the size of the task will dictate that it will take a significant timeframe to complete. While the strategies adopted by Main Roads indicated above appear sensible, it would be useful for CYPDA to review the impact of the sequence adopted for upgrade to the road on achievement of CYPLUS economic development strategies. In what sequence would road upgrades have most immediate impact on industry facilitation? It is recommended that CYPDA facilitate such a review and seek to engage the MRD in this process, which should seek to mesh with existing upgrade strategies.
**Balance of Road Network**

The MRD has undertaken a similar exercise to provide upgraded access to all Cape York communities. It is assumed that this would substantially coincide with roads listed in the CYPLUS strategy in a table of ‘priority roadworks’ (p 140). It is understood the order of cost at 2007 dollar values ranges from some $460 million for 15% of length sealed with low flood immunity, to some $2 billion for all sealed and high flood immunity.

This is the balance of work after taking into account upgrades already achieved since CYPLUS Stage 2 - and there have been achievements. From the table on page 140 referred to above, notable achievements have been:

**All Roads in All Residential Areas**

Many local community roads, unsealed in 1996, have now been sealed, thus reducing dust and providing better amenity and health environment. The 2002 Commonwealth response to CYPLUS\(^2\) referred to funding announced under the ‘Roads to Recovery’ Program in November 2000 in this respect, as follows (p2):

<table>
<thead>
<tr>
<th>Local Governing Bodies</th>
<th>Roads to Recovery Grant over 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurukun</td>
<td>$223,002</td>
</tr>
<tr>
<td>Cook</td>
<td>$2,932,229</td>
</tr>
<tr>
<td>Hope Vale</td>
<td>$166,647</td>
</tr>
<tr>
<td>Injinoo</td>
<td>$127,663</td>
</tr>
<tr>
<td>Lockhart River</td>
<td>$203,379</td>
</tr>
<tr>
<td>Mapoon Aboriginal Council</td>
<td>$42,741</td>
</tr>
<tr>
<td>New Mapoon</td>
<td>$78,927</td>
</tr>
<tr>
<td>Pormpuraaw</td>
<td>$231,614</td>
</tr>
<tr>
<td>Umagico</td>
<td>$30,615</td>
</tr>
<tr>
<td>Napranum</td>
<td>$40,417</td>
</tr>
<tr>
<td>Wujul Wujul</td>
<td>$27,450</td>
</tr>
</tbody>
</table>

**Other Priority Roadworks Identified in CYPLUS**

<table>
<thead>
<tr>
<th>Road</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooktown - Hopevale</td>
<td>Total length 44kms. Sealed from Cooktown to old dairy 30kms. Gravel Old Dairy to Battlecamp Rd intersection 15kms. Gravel Battlecamp Rd to Palm Tree Ck 3kms. Sealed Palm Tree Ck to Hopevale 7kms.</td>
</tr>
<tr>
<td>Access Road to Port Stewart</td>
<td>Total length 61 kms all gravel. A considerable amount of flood damage moneys have been expended on this road recently. Stabilization of the range section with gabions has recently been completed.</td>
</tr>
<tr>
<td>Battlecamp Road</td>
<td>Total length 76kms, gravel 66kms, formed 10kms.</td>
</tr>
<tr>
<td>Road</td>
<td>Current Status</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Access to and through National Parks</td>
<td>No data available</td>
</tr>
<tr>
<td>Road to Pormpuraaw</td>
<td>Total length 170kms. Sealed 9kms from bottom of range and beyond. Remainder gravel.</td>
</tr>
<tr>
<td>Portland Roads Road</td>
<td>Total length 124kms. Start of road moved 14kms North on Peninsular Development Rd since 1996. 60kms maintained by Council, remanding 64kms maintained by Lockhart Community Council.</td>
</tr>
<tr>
<td>Aurukun to Peninsula Development Road</td>
<td>Minor works have been carried out, but basically in the same poor condition as 1996. The Chalco bauxite project has associated with it some $300 million committed from the State Government for infrastructure works, including upgrade of this road.</td>
</tr>
<tr>
<td>Yarraden to Aurukun Outstations</td>
<td>Holroyd Rd. Total length 48kms, gravel 10kms, formed 38kms. Generally in the same condition as 1996.</td>
</tr>
<tr>
<td>Fairview to Palmerville – Pinnacle - Killarney</td>
<td>Fairview to Palmerville Total length 80kms. 10 concrete causeways have been constructed, but basically in the same condition as 1996. Gravel 34kms, Formed 15kms, Unformed 31kms. Pinnacle Rd (Kimba – Gamboola Rd) same condition as 1996. Killarney Access same condition as 1996.</td>
</tr>
<tr>
<td>Artemis to Dixie - Koolatah</td>
<td>Total length 99kms. Gravel 39kms, Unformed 60kms. Minor works have been carried out, but basically in the same condition as 1996.</td>
</tr>
<tr>
<td>Musgrave to Marina Plains – Lilydale</td>
<td>Musgrave to Marina Plains Rd. Total length 58kms, gravel 50kms, formed 8kms. A considerable amount of flood damage moneys have been expended on this road recently. Lilyvale Rd. Total length 52kms, gravel 28kms, unformed 24kms. Minor works have been carried out, but basically in the same condition as 1996.</td>
</tr>
<tr>
<td>Weipa Turnoff – Jardine River to Bamaga</td>
<td>Weipa Turnoff to Moreton. Total length 71kms, gravel 71kms. Road has good gravel surface and is in good condition. Moreton – Bramwell – Southern Bypass Rd. Total length 152kms, sealed 4.5kms, gravel 89.5kms formed 14kms, unformed 44kms. Road has good gravel surfaces and is generally in good condition.</td>
</tr>
<tr>
<td>Moreton Telegraph – Bromley – Wattle Hills</td>
<td>Not dedicated roads, bush tracks only.</td>
</tr>
<tr>
<td>Mareeba to Dunbar &amp; Kowanyama</td>
<td>No current data provided</td>
</tr>
<tr>
<td>Weipa township access</td>
<td>No current data provided</td>
</tr>
<tr>
<td>Main arterial road through Weipa</td>
<td>No current data provided</td>
</tr>
<tr>
<td>Northern Peninsula Area</td>
<td>No current data provided</td>
</tr>
</tbody>
</table>

**Future Direction**

Given the order of costs involved, it is inevitable that upgrades will continue to progress incrementally, especially since it is unlikely that the same order of cost / benefit as a Peninsula Development road upgrade could be demonstrated. In these circumstances, it would seem prudent for CYPDA to develop an order of priorities for road upgrades. This may be difficult in the face of community rivalries. Accordingly an objective set of criteria would be required on which decisions could be defensibly based.
COMMUNITY INFRASTRUCTURE & SERVICES

CYPLUS Strategies

This section had only one Desired Outcome, but one which expressed a broad objective, involving multiple layers of actions:

A comprehensive and integrated approach to meeting community infrastructure needs

Under the ‘Need for Change’ section, the strategy discussed Total Management Plan (TMP) investigations and listed a range of infrastructure needs. The strategies then supported the continued implementation of this TMP, with the expenditure of $23 million then remaining under that Plan.

The actions under the strategy called for further investigations into infrastructure needs and the reintroduction of the subsidy scheme for remote area (alternative energy) power supplies.

Priority actions called for were:

• The release of residential land in small centres
• The provision of aged, crisis and community (low cost) housing

Situation Review

General

While there has been broad progress in infrastructure development across Cape York, there are still large gaps, un-addressed needs and some of the specific items listed in CYPLUS are still outstanding. This is not surprising given its remote area nature, large geographic area and sparse population. It can also be argued that there is still no ‘comprehensive and integrated’ approach, as infrastructure is still provided through a bewildering array of State and Commonwealth programs and agencies.

However government agencies are making efforts to implement a ‘whole of government’ approach, with varying degrees of success to date. As an example, since CYPLUS, the Indigenous Coordination Centres (ICC’s) have been established to coordinate program delivery into communities. It was advised that they are seeking to move away from a ‘funding round’ approach to the adoption of a place management approach. This is potentially an important, positive development.

One specific CYPLUS strategy addressed has been the reintroduction of the Remote Area Power Scheme (RAPS).

One of the items not apparently addressed to date is the jetty at Seisa, an infrastructure item now picked up in the current Tourism Queensland tourism implementation plan for Cape York and Torres Strait. Recommended action 47 (p26) in that plan is:

Identify options for overcoming difficulties and dangers at the Seisia jetty and boat ramp being presently utilised for both tourism and industrial purposes.
Unfortunately it is still a strategy, rather than an accomplished fact.

One Commonwealth program that provides a significant proportion of the funding available for Indigenous community infrastructure is NAHS (National Aboriginal Health Strategy). A summary of projects funded for Cape York communities since 1997 follows:

<table>
<thead>
<tr>
<th>Community</th>
<th>Summary Description of Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopevale</td>
<td>Major sewerage upgrade including connection of additional properties</td>
</tr>
<tr>
<td></td>
<td>Major water supplies upgrade, including new more reliable water source</td>
</tr>
<tr>
<td></td>
<td>9 new / replacement dwellings</td>
</tr>
<tr>
<td></td>
<td>Roadworks</td>
</tr>
<tr>
<td></td>
<td>Upgraded refuse tip facility</td>
</tr>
<tr>
<td>Injinoo</td>
<td>Upgrade of internal roads and drainage</td>
</tr>
<tr>
<td></td>
<td>Extension of roadworks for new sub-division</td>
</tr>
<tr>
<td></td>
<td>6 new dwellings</td>
</tr>
<tr>
<td></td>
<td>4 dwellings upgraded</td>
</tr>
<tr>
<td></td>
<td>New / upgraded water supply</td>
</tr>
<tr>
<td></td>
<td>New / upgraded power supply</td>
</tr>
<tr>
<td></td>
<td>New / upgraded refuse tip facilities</td>
</tr>
<tr>
<td>Kowanyama</td>
<td>Sanitation pondage upgrade works</td>
</tr>
<tr>
<td></td>
<td>Water supply – new reservoir &amp; reticulation upgrade</td>
</tr>
<tr>
<td></td>
<td>New / upgraded sewerage system</td>
</tr>
<tr>
<td></td>
<td>New / upgraded refuse tip facilities</td>
</tr>
<tr>
<td>Lockhart River</td>
<td>Sanitation system upgrades to housing</td>
</tr>
<tr>
<td></td>
<td>Water supply upgrades</td>
</tr>
<tr>
<td></td>
<td>74 dwellings upgraded</td>
</tr>
<tr>
<td></td>
<td>Roadworks</td>
</tr>
<tr>
<td>Napranum</td>
<td>14 new houses</td>
</tr>
<tr>
<td></td>
<td>30 houses upgraded</td>
</tr>
<tr>
<td></td>
<td>Sewerage upgrades</td>
</tr>
<tr>
<td></td>
<td>Water supply upgrades</td>
</tr>
<tr>
<td></td>
<td>Road &amp; drainage improvements</td>
</tr>
<tr>
<td>Umagico</td>
<td>Upgrade of internal roads &amp; drainage</td>
</tr>
<tr>
<td></td>
<td>2 new dwellings</td>
</tr>
<tr>
<td></td>
<td>2 dwellings upgraded</td>
</tr>
<tr>
<td></td>
<td>New / upgraded sewerage system</td>
</tr>
<tr>
<td></td>
<td>New / upgraded water supply – 104 buildings connected</td>
</tr>
<tr>
<td></td>
<td>New / upgraded refuse tip facilities</td>
</tr>
</tbody>
</table>
### Community Summary Description of Works

<table>
<thead>
<tr>
<th>Community</th>
<th>Summary Description of Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wujul Wujul</td>
<td>4 Replacement houses&lt;br&gt;3 Renovations&lt;br&gt;Major water supply upgrade&lt;br&gt;Power – Standby generator&lt;br&gt;New rubbish dump&lt;br&gt;25 dwellings upgraded</td>
</tr>
<tr>
<td>Aurukun</td>
<td>New / upgraded sewerage system – 200 homes connected&lt;br&gt;New / upgraded water supply – 200 homes connected&lt;br&gt;New / upgraded power supply&lt;br&gt;Drainage works&lt;br&gt;Roadworks&lt;br&gt;New / upgraded refuse facilities</td>
</tr>
<tr>
<td>Coen</td>
<td>9 replacement houses&lt;br&gt;New / upgraded sewerage system&lt;br&gt;Port Stewart – upgraded septic system – 6 houses&lt;br&gt;Port Stewart – New / upgraded water supply</td>
</tr>
<tr>
<td>Mapoon</td>
<td>New / upgraded septic system – 8 homes&lt;br&gt;New / upgraded water supply&lt;br&gt;New / upgraded refuse tip facilites</td>
</tr>
<tr>
<td>New Mapoon</td>
<td>4 new dwellings&lt;br&gt;4 dwellings upgraded&lt;br&gt;New / upgraded water supply – 156 buildings connected&lt;br&gt;Roadworks – 2km&lt;br&gt;New / upgraded refuse tip facilities</td>
</tr>
<tr>
<td>Pormpuraaw</td>
<td>New / upgraded sewerage system – 125 buildings connected&lt;br&gt;Roadworks&lt;br&gt;New / upgraded refuse tip facilities</td>
</tr>
</tbody>
</table>

The total cost of the above completed and committed works under this program is some $55 million, or about $5.5 million per annum since CYPLUS.

NAHS is an element of a broader Commonwealth program, the Community Housing and Infrastructure Program (CHIP). Figures were not obtained on Cape York spending for this overall program. However, the Australian Government announced in its 2007-08 budget that it will provide $293.6 million in new funds for this program, over and above the current level of funding of some $380 million per year. It is not known what the impact of this might be on Cape York infrastructure.
In attempting to attract sufficient resources for infrastructure development to the region overall, there are strategic level considerations.

**Social Justice – Economic Foundations**

Historically much of the case for infrastructure development has been to rely mainly on social justice and equity. These are of course valid, but the case for infrastructure development is always much stronger where there is also an economic case. Economic development tends to draw with it supporting infrastructure, as much as strategic infrastructure can stimulate economic development. The two create a ‘virtuous circle’, each reinforcing the other.

The cost of Infrastructure provided on the grounds of social justice and equity is a public good argument - never to produce a financial return on investment, a cost line item for taxpayers forever. This is not to say the infrastructure is not justified. The point is that there is a hidden public cost of failure to take up viable economic development opportunities, which would offset the public good costs with greater utilisation of infrastructure and a whole range of flow on effects – wages spent, PAYE tax, GST, company tax, export earnings, etc, etc. Constraints placed on the ability of Cape York to realise economic development potential accordingly have a cost in non performing infrastructure assets and revenues foregone.

It is suggested that realisation of really satisfactory levels of infrastructure for Cape York, with its sparse population and low tax base, will only be achieved through:

- Balance in asset use that will access economic development opportunities on an appropriate scale in keeping with the region’s remoteness from markets;
- A will on the part of government to facilitate viable economic development opportunities;
- The inclusion of economic cost / benefit assessments in association with the social justice and equity arguments in cases for infrastructure development.

This is in line with the underpinning principles espoused in the State Infrastructure Plan, which (in part) state (p273):

- The consideration of infrastructure issues and the development of proposed action plans for each region should be directed towards realising sustainable economic opportunities, taking into account the characteristics of each region, its resource base and the relative strengths and weaknesses of businesses and industries.
- In general, infrastructure initiatives will be supported where there is a clearly established economic (not just financial) benefit for the State and a clear linkage to the Government’s strategic development priorities.
- The development of new infrastructure is not an end in itself. Consistent with the Government’s ‘Managing for Outcomes’ framework, the merits of a proposed infrastructure project should be judged in performance terms, with equal consideration given to how existing infrastructure may be practicably made to operate more efficiently and effectively. Infrastructure users and taxpayers should not be unnecessarily burdened by the need to support uneconomic or inefficient infrastructure, which will detract from the productivity of the State’s economy.
Statistical Under Reporting
A second matter that constrains infrastructure development is the substantial under-reporting of Cape York demographics in ABS statistics. This affects the grant formulas for Local Government, which will presumably become a wider problem for Cape York with the creation of Aboriginal Shire Councils under more ‘mainstream arrangements.

Cook Shire provided an illustration from the 2001 ABS figures, which reported 240 persons in the 5 – 15 year old age groups, whereas, there were some 500 enrolments as schools in Cook Shire, including only about 50 at high school who could have been outside this age grouping. This indicates an under reporting of almost 50%. Popular belief is that the general under reporting level across census data is at least one third.

Only two avenues to address this issue suggest themselves.

In the shorter term, supplementary statistics that can be collected would provide evidence of the extent of under reporting and provide the basis for at least close estimates of the real figures. The school enrollments are one example. The Aboriginal Councils also have other figures such as the number of occupants in Council housing, which tends to cover the majority of the community. Government and NGO’s also have figures on the number of staff members based on Cape York.

In the longer term, an awareness and education campaign and perhaps assistance offered in filling out the Census form seems the only other option to increase the participation rate.

Housing Availability
One of the specific CYPLUS strategy actions was for the release of residential land in small centres. The shortages in housing for Indigenous people their communities are quite well-known. However attention also needs to be drawn to the effects of housing shortages on recruitment and retention of key staff from outside Cape York. This is seen as contributing to one of the three key constraints to Cape York economic development, which is deficiencies in the skills base, discussed earlier. In some locations, there is simply no land available on which agencies can build (Coen was given as an example).

FNQ 2025
The planning exercise for infrastructure planning for the ‘FNQ’ region is presently underway. This will be a Statutory Plan. It is understood that Cape York is not included in the region for the purpose of this exercise. There is a community of interests across Far North Queensland, centred on Cairns as the major regional hub. It is an economic region by virtue of history, cultures, tropical conditions, family ties, road networks, transport systems, industry opportunities and its shared human capital. It seems regrettable that the infrastructure plan will apparently not reinforce and underpin the operation of Far North Queensland as a cohesive economic region.

Rate Base
As National Park areas are extended, the Cook Shire rate base shrinks, thus having an impact on capacity for infrastructure development.
At the same time increased tourism traffic increases use of and demand for public facilities, yet tourists do not contribute to Council revenues.

**Future Direction**

Drawing on the above, the following would enhance Cape York infrastructure development:

- The case for infrastructure developments on Cape York be associated with a triple bottom line cost benefit analyses;
- That infrastructure requirements be part of overall industry feasibility assessments and industry development frameworks recommended elsewhere;
- Statistics be collected and maintained from administrative collections and other sources that will serve to provide a more accurate statistical picture of Cape York;
- An education and awareness program be designed and delivered to increase participation rates and accurate statistical collection across Cape York;
- Assistance be offered in Indigenous communities with completion of census forms;
- A review of housing requirements to meet the needs of all staff postings to Cape York be undertaken and a strategy developed to meet those needs;
- The Queensland government’s attention be drawn to the flaw seen in confining FNQ2025 process to the more immediate Cairns region and note the need to regard the Far North Queensland region as a regional economy.
COMMUNITY & OTHER FACILITIES

CYPLUS Strategies

This strategy area also had only one, broad Outcome Area, with extensive reach and implications:

Reliable infrastructure that matches community requirements and preferred lifestyle

The four action areas under the outcome area are summarised as:

- Public Works Committee to develop comprehensive and long term works program
- Identification of government and non-government funding sources
- Organisation responsible for CYPLUS Stage 3 provide support and advocacy for Local Government
- Funding to be sought for Sir Joseph Banks Interpretative Centre

Situation Review

Much of the comment in the previous section under Social Justice – Economic Foundations will apply to this section.

Since CYPLUS Stage 3 has not effectively eventuated, there has been no pivot point for delivery of the first three action areas.

As to the fourth action, this has been achieved. ‘Nature’s Powerhouse’ was opened in Cooktown in December 2000 and was listed as an item in the Commonwealth’s response to CYPLUS².

As to the second action, the Commonwealth’s response referred to the Regional Solutions program.

One specific key item of infrastructure at risk at present is the Quinkan Visitor Centre at Laura. This provides a physical focus for the rock art of the region and a base for visitation. It is likely to increase in importance when the sealing of the road to Laura is completed. Support funding for the Centre has reportedly ceased and there are land tenure issues as to the site on which it has been built.

Future Direction

The support and advocacy role for Local Government has not eventuated. There is a case for the coordination of resources across Cape York Local Government Authorities in the preparation of submissions for infrastructure requirements. Some of the smaller organisations certainly struggle to mount comprehensive support cases and no doubt there is an overlap of effort. It would also be useful if ROCCY could for instance play a role in facilitating preparation of a prioritised infrastructure development plan for Cape York, together with professional triple bottom line cost benefit assessments.
TRANSPORT

CYPLUS Strategies

This is another strategy area with only one, overarching Desired Outcome area:

_Adequate transport facilities and services to facilitate economic development, improve services to remote centres and lower the cost of living._

The actions were divided into four areas – ports, airports, air services and shipping services.

Situation Review

The Queensland government response to CYPLUS – the draft CYP2010 document signaled the intention of the Department of Transport to develop an Integrated Regional Transport Plan for CYP2010 in consultation with all relevant agencies and the community of Cape York Peninsula (p82). It was observed that at that time the budgets and sharing with other agencies were yet to be negotiated. As far as is known, such a process failed to materialise.

Ports

A focus at the time of CYPLUS was facilitation of the live cattle trade, with calls for the development of Weipa as a point of export. This trade has not developed as expected and is referred to elsewhere. There was also thought to be potential for Weipa to be a point of export for agricultural produce. At least until a definitive industry development framework referred to later under the Cropping and Horticultural Industries section is in place, there is little point in considering upgrading port infrastructure. An assessment of the cost / benefit and timing for supporting port infrastructure would be a part of the industry development framework.

A proposal for a port at Archer Point was reviewed by the Ports Corporation of Queensland and Cook Shire Council in 1999. It was determined that there were significant difficulties in establishing a viable commercial port operation due to the location within the Great Barrier Reef Park boundaries and the lack of supporting infrastructure (roads and water supplies). It is unlikely that there will be further progress in current circumstances.

Another development not envisaged at the time of CYPLUS is the proposed new bauxite mine to be developed by Chalco on leases near Aurukun. This is likely to include construction of a new port.

A current action proposed in the Tourism Queensland Tourism Development Action Plan for Cape York is as follows (p26):

_Address infrastructure needs on the Cooktown waterfront in recognition of its importance as a key tourism asset by developing a strategic plan to upgrade marine moorings, slipway and harbour dredging._
This is similar to the action called for in the CYPLUS actions. As such it is still a strategy rather than an accomplished fact.

**Airports**
A summary of works on regional airstrips since 1996 follows. There has not apparently been any progress towards making them night-safe as called for in CYPLUS strategies. This was especially oriented to RFDS services (Royal Flying Doctor Service).

- **Aurukun** Runway was sealed in 2000/1.
- **Bamaga/Injinoo** Runway was reconstructed in 2000/1 and additional runway repairs are underway at the moment.
- **Hope Vale** No change since 1996.
- **Kowanyama** Runway was resealed in 2005/6. There is a current application in for extending the apron, renewing animal proof fencing and clearing trees at the end of the runway. This will probably be undertaken in the next financial year.
- **Lockhart River** Application in for upgrade of runway. This will probably happen next financial year.
- **Old & New Mapoon** Nothing since 1996
- **Pompuraaw** Minor fencing and clearway deforestation currently underway. There is an application in to extend sealed runway. This will probably be undertaken in the next financial year.
- **Seisa** Nothing since 1996
- **Umagico** Nothing since 1996

**Air Services**
The action called for was the investigation of potential for linking centres directly with services without hubbing on Cairns. As far as is known, this investigation has not taken place. However any development in this respect will be driven by market demand and commercial decisions.

**Shipping**
Investigation of lower cost alternative shipping services was called for. The same comment applies as per Air Services above.

**Future Direction**
The integrated regional transport plan proposed in 2000 would still be desirable, especially if it were to mesh with industry development strategies called for elsewhere, especially for the grazing and agricultural industry sectors.
TELECOMMUNICATION SERVICES

CYPLUS Strategies

Under this strategy ‘Actions Required’, there are two overarching desired outcome areas:

*Complete a telecommunication system in Cape York Peninsula which facilitates economic development, assists health and emergency services and enhances the general lifestyle on Cape York Peninsula.*

*Adopt a ‘best practice’ approach in relation to telecommunications technology as this becomes available.*

Generally speaking there has been considerable progress in this area since 1997 acknowledged in anecdotal reports from regional residents.

Current & Completed Infrastructure Works

Advice from Telstra Countrywide is as follows:

**Optical fibre** connections are being progressively extended to Cape communities, with the following links either complete or imminent:

- Main link up the Cape to Bamaga;
- Extension to Pormpuraaw and Kowanyama;
- Link into Cooktown from Lakeland;
- Batavia Downs to Weipa

This replaces either existing older technology cabling or aging radio based links. Optical fibre provides more reliable service and is less prone to damage from water and washouts, apart from its faster operation and much higher capacity to carry additional services (including broadband). Only one light frequency is apparently being utilised at present, whereas the cable provides up to 64 frequencies.

**ADSL** broadband is directly now available in Weipa, Bamaga, Coen, Cooktown and Thursday Island. This presently provides a service of up to 8 Mbs for customers within 4-5km of the exchange. Where there is no ADSL, satellite broadband is available, which is provided to many cattle properties. The cost of this is subsidized by the Commonwealth Government.

**Mobile** coverage reportedly now extends to most Cape communities. Old Mapoon is one exception, with no coverage at present. Telstra is currently working on the coverage for the tip of the Cape. The extent of coverage outside the communities depends on the terrain and much of Cape York is out of range of the network. Iridium satellite phones are an option, but the cost of purchase (about $2,000) and call charges are high. The Commonwealth Government provides a subsidy to eligible subscribers of up 50% and beyond on the purchase costs.
Health Support

Internet health support systems referred to in the CYPLUS strategies are being progressively rolled out and becoming available to health professionals.

As a first step in facilitating improved access to broadband for health care providers, the Australian Government introduced the Broadband for Health Program (1 July 2004–30 June 2007). This $60 million program aims to provide broadband Internet access to general practitioners, community pharmacies and Aboriginal Community Controlled Health Services (ACCHS) nationwide. Funding has also been made available through the Managed Health Network Grants to assist in the development of Managed Health Networks across Australia (December 2005–April 2007). The development of these networks are to enhance connectivity and provide a platform for the advancement of the e-Health agenda nationwide.

Likely Development

Optical fibre is expensive and while it will be progressively extended into more Cape York communities, it is unlikely to ever extend past exchanges for what has been called ‘the last mile’ into individual homes. What is more likely is the extension of the coverage and reliability of mobile technology to provide voice, data and perhaps even television services. There are different policy positions as between the Government and Opposition at present on the extension and upgrade of broadband services across Australia, so the future direction in this respect will not be clarified until after the November 2007 election.

For the present, the Government position on broadband is outlined in a document styled as a ‘broadband blueprint’12 This includes an outline of the status of and the potential seen for the mix of systems and technology being rolled out to provide fast broadband access across Australia. It makes the point that due to the widely different circumstances pertaining across the country, one approach will not fit all circumstances.

The 3G network is seen to have a role to play in providing adequate access for Cape York. As noted in the Broadband Blueprint:

*Third generation—or 3G—mobile phone networks are designed to provide both fixed and mobile voice and broadband services. The broadband service can be supplied to a mobile handset, to a modem for a personal computer or a data card that is inserted into a laptop computer.*

On 6 October 2006 Telstra launched its own 3G network—called ‘next G’—which can deliver multi-megabit broadband services. At present the next G network is the largest wireless broadband network in Australia with Telstra indicating that it will be available to 98 per cent of Australia’s population when it is fully operational. Currently this network offers speeds of up to 14.4 Mbs, more than comparable to what is currently available in many urban locations. It is speculated that this could increase over time to up to 40 Mbs.
**Future Direction**

The ongoing issue in provision of telecommunications services to Cape York will be the distances and consequent costs of providing coverage to a sparsely populated region of Australia.

In these circumstances it is a matter of achieving and maintaining access at a level that supports rather than impedes business attraction, development and economic development generally. In other words access levels and systems must be reasonably close to contemporary standards available in urban centres.

Another issue is the very low access and usage levels for computer equipment in the homes of Indigenous people. ABS Census figures indicate usage levels to be some of the lowest in Australia. In these circumstances, good network access with broadband will not be particularly useful. The barriers for Indigenous people include:

- Costs – households see they have other priorities
- Low computer literacy
- Virtually zero access to installation and maintenance services
- High risks to equipment in crowded households, often with transient family members

Computer literacy is an issue that extends beyond Indigenous communities. Survey results from a survey of properties conducted by Land Care placed computer training as a number one priority.

For CYPDA, the roles that suggest themselves are:

- Monitoring the situation on an ongoing basis and making appropriate submissions supported by a business case where gaps and shortfalls are identified;
- Provision of support for development of computer literacy and enhanced access to computers in Indigenous communities and residents generally. Encouragement of more broadband users will also have the effect of building a more robust market for service providers on Cape York, thereby reducing barriers to technology upgrades as available.

Currently UHF radio provides communication coverage for vehicles outside of communities and they are included equipment in many hire vehicles. However, visitors to the Cape are not necessarily familiar with operating protocols, local practice and channels which should be used. There is a need for an awareness and education program that might include strategically placed signage, small brochures and information on appropriate web sites.
RADIO & TELEVISION SERVICES

CYPLUS Strategy

This is perhaps the shortest strategy section in the CYPLUS Stage 2 report. Under ‘need for change’, the strategy notes:

Essential services such as weather reports, forecasts and cyclone warnings which refer to Cape York Peninsula conditions are not available as the stations received in Cape York Peninsula provide regional news and weather information which relates to Central Queensland.

The actions required were stated as:

Appropriate radio and television services.

- Develop and transmit radio and television programs from Far North Queensland to ensure their relevance and accessibility to Cape York Peninsula residents (ABC, BRACS and other providers).

- Improve access to relevant regional television through the provision of a second commercial satellite licence (Service providers).

The aspect of relevance is an important point for ‘Far North Queensland’ in terms of its identity as an Australian region. All residents tend to regard themselves as residents of ‘Far North Queensland’ apart from their more immediate region. Common media channels tend to enhance this sense of regional identity and pre-disposition to act as a cohesive region. The sharing of information is an important element of this. It does not make a lot of sense for Cape York residents to be abreast of contemporary news in Alice Springs and be uninformed about Cairns.

Since development of the strategies, not a lot has changed. The strategies have largely not been achieved. However there has been some progress.

Commercial

One of the difficulties in achieving this strategy area is that investment in network coverage is subject to commercial decisions, apart from the public broadcasting network. Since the strategies were formulated, Southern Cross TV has pulled out of local news in the region (including Cairns) and WIN (Channel 7) news service is still limited to a Monday to Friday service.

In the case of those who have satellite receivers, TV coverage is of course less of an issue and many of the remote properties have such systems.

BRAC & CYPDN

Both BRAC and CYPDN (Cape York Peninsula Digital Network) are now operational in varying degrees. BRAC operations seem to vary between communities with the ability to attract willing, qualified operators and budget to maintain equipment.
CYPDN is also operative, with the same apparent limitations. Reports have been that community members find the cost of access high. There is now availability of video conferencing from at least some communities.

**Public Network**

The ABC is the official emergency broadcaster for the Far North Queensland region and has been investing in enhanced coverage for both radio and TV coverage since CYPLUS. The following summarises the current situation:

- Weipa is provided ABS local radio service through a re-broadcast system;
- From 2008 ABC local radio will reportedly be moving to a satellite delivery system to fill in some black holes. This is subject to additional transponder space becoming available;
- Existing transmitters are being upgraded to provide improved audio;
- A new ‘fly away’ transmitter has been acquired, which can be stationed in a region as part of emergency responses. This is of course an ‘after the event’ response, which would have been very useful if it had been available for Innisfail region after cyclone Larry;
- Radio Australia is utilised through Shepparton to make short wave emergency information available from FNQ local ABS radio as required.

**Future Direction**

Regional radio and TV coverage is important not only from the point of view of public safety, but also for building and maintaining the regional identity and cohesion that underpin economically strong regions.

Broadband and satellite technologies would seem to be the answer for remote, sparsely populated regions like Cape York. This is part of the story of globalisation, technology is progressively linking more and more regions into the global economy. The role for CYPDA would seem to be largely one of monitoring and expediting this development as required and as opportunities are seen to arise, similarly to the telecommunications systems with which they are increasingly interconnected.
6. ECONOMIC STRATEGIES

As per the previous Section, a full copy of the strategies expressed in CYPLUS Stage 2 for the following areas is provided as part of Attachment 2. Only key points from those strategies are referred to in the following review for the sake of being concise and avoiding a need to canvass aspects of strategies that have been overtaken with changed circumstances in the ten years that have passed since.

The strategies appear in the same order as in the CYPLUS Stage 2 report.

MINING

CYPLUS Strategies

The following were the Desired Outcome areas for mining:

- Achievement of Ecologically Sustainable Development
- Fair access to land for exploration and mining
- Value-adding
- Indigenous access and benefits
- Improved and streamlined administration procedures

Situation Review

Mining was in 1997 and is still by far the largest industry sector on Cape York. It generates a major share of gross regional product and is the largest employer. Corporate miners are companies which operate globally. The industry as a whole tends to be very globally oriented, as it is affected by global conditions including commodity prices and exchange rates. While it shares these global concerns with other commodity producers such as sectors of agriculture, there are important differences. These include its transnational corporate structures, tendency for its skilled workforce to be very mobile and international, different cost structures and capital requirements and markets which are driven by manufacturing production levels rather than global weather conditions producing varying yields.

Traditionally the industry has been cyclical, with wide fluctuations in activity levels. The current high demand levels in Australia are an aberration in terms of industry history. This is by virtue of their sustained nature and expected continuation into the foreseeable future, provided there is no global recession, or unforeseen disaster of global proportions.

It is one industry sector that has been expanding on Cape York, in line with the global resources boom and strong minerals commodity prices. Weipa in particular has been expanding in line with current and planned increased bauxite mining on the part of Rio Tinto. The consequent general increase in infrastructure and economic activity centered on Weipa improve its standing as an important regional centre, with increased capacity to support a broader sub-regional economy beyond mining.

South of Weipa, Rio Tinto is also testing lease areas in preparation for mining. In the same general area around Aurukun, Chalco, the Chinese miner is in a two year feasibility
process in preparation for the mining of extensive bauxite lease areas. These last two developments are seen by the people of Aurukun to open up extensive economic development opportunities. They are in the process of creating a series of enterprises designed to realise these opportunities. One that has been created is Aurukun Earthmoving. The following extract from the strategic plan for that company summarises the approach and intention, drawing a distinction between this and previous models:

*The earthmoving company represents a deliberate move away from previous models with an emphasis on taking responsibility and control of economic development for the community. It is intended to provide a best practice corporate model for a well-run Indigenous business.*

*The difference to previous models centres on the direct operation of a commercial venture, rather than solely relying on flow on effects provided by other stakeholders.*

*The earthmoving company is a commercial operation, to be operated on commercial principles, as opposed to social welfare connotations often associated with ‘community businesses’. It will provide the participants the opportunity to grow their commercial experience and expertise. At the same time the culture and principles adopted by the Board encompass the objectives of generating not only profit for shareholders, but also wider community flow on effects.*

*These include facilitation of independent contracting businesses, provision of training on the job for jobs in the company and less tangible benefits such as job satisfaction, pride, self-respect and self-reliance and mentoring employees in managing their financial affairs.*

Cape Flattery silica mining is still operating on the eastern side of the Cape, while kaolin is being worked at Kendall River, as are numbers of small operations based on the gold fields of the Palmer River. With very large increases in the price of tin, there is resurgence in tin mining and new discoveries are creating new mines including a tungsten deposit near the border of Cook and Mareeba Shires and a bluestone mine.

So far as CYPLUS strategies in particular are concerned, it would seem that the first two in a practical sense are in place. The mining industry will always advocate minimal restrictions on access to the resource, but in a practical sense, they are obviously managing to work with the protocols in place, evidenced by an expanding sector. Access is being negotiated, ILUA’s signed and legislation aimed at sustainable development followed.

It would seem that to the extent that the State government benefits in terms for increased royalty and other revenues from these developments, there is a better case for better overall supporting infrastructure to facilitate economic development across Cape York. An example is $300 million committed by the Queensland government for the development of infrastructure in support of the Chalco bauxite mine around Aurukun.

So far as strategies concerned with value adding are concerned, these have largely not been achieved.
Proposals for tourism related to mining have not been developed and are unlikely at present.

Timber salvage before mining is still limited, but under development, as discussed under Forestry. Plantation timber, cropping and other land uses following mining have not eventuated, but may still have potential.

The strategies under Indigenous access and benefits could be said to have been largely achieved. Rio Tinto has an ongoing program to increase employment levels of local Indigenous people. This has been constrained by well-known social issues. The emerging model being pursued by the Aurukun people will if successful deliver the status of true partners in mining.

**Future Direction**

As noted above, the mining industry more than most others is subject to global driving forces, which are largely beyond the control of Government at all levels. It is only possible to provide an operating environment that enables, rather than erodes the competitive position of a region and its mineral deposits.

At present, the operating environment is obviously favourable for mining on Cape York, evidenced by strong expansion since 1997.

The future and what may be the industry needs is dependent on this global situation.

The area where most development can be influenced would seem to be in the area styled as ‘value adding’ under the CYPLUS Strategies. These are considered elsewhere. Accordingly no recommendations are made under this section.
TOURISM

CYPLUS Strategies

The strategies for tourism development were quite extensive, involving a long set of actions of both a general and very specific nature under each desired outcome area. These are included in Attachment 2. The desired outcome areas heading these actions provide the scope of the actions:

- Presentation of accurate and appropriate information
- Appropriate infrastructure (this must be compatible with the Natural Resource management Strategy and Cultural Resource Management Strategy)
- A high quality tourism product
- A well-managed tourism asset
- An industry with well trained staff
- A comprehensive itinerary
- A comprehensive research base
- Indigenous access and benefits

Situation Review

While there have been incremental steps in tourism industry development on Cape York since the 1997 CYPLUS report, there has been little progress at an overall industry development level as envisaged by CYPLUS until recently.

Particularly encouraging has been the development of a number of successful Indigenous run tourism initiatives since 1997. The case samples most often referred to are:

- Walker family guided tours at Bloomfield
- Willie Gordon guided tours out of Hope Vale / Cooktown
- Eco-tourism based on turtles at Mapoon
- Wetland charter tours on a houseboat based in Aurukun

There have also been a number of important changes in the operating environment. In the past 10 years there has been very significant growth in eco-tourism, driven by consumer demand. There is a volume of research data in this area on both the rate of growth and the underlying drivers of this consumer trend. There has also been a realignment of the regional tourism industry’s thinking, leading to much more support for wider dispersal of visitors across Tropical North Queensland. This has been driven by the recognition of the need to ever refresh the regional image and product offerings to maintain market appeal; the increasing numbers of repeat visitors who seek new experiences; and the need to take pressure off popular areas to maintain the ‘pristine nature’ image regional product is based on.

The potential of Cape York for tourism development has steadily been gaining more profile and recognition. For instance the 2004 Cape York Indigenous Employment Strategy identified tourism development as one of the limited opportunities for significant employment growth.
One of the attachments to that report outlined what amounted to a situation analysis of the then current situation for all Cape York Industries\textsuperscript{14}. Some pertinent extracts follow:

Success in tourism can generate funds to support better infrastructure otherwise beyond the means of a community. It can also become an intrusive industry which impacts the everyday life and enjoyment of local amenity and facilities for local people. Community attitudes can therefore impact on the extent to which this economic opportunity may be realised.

This is an important point for Cape York, where inadequate infrastructure is a constraint across industries. Tourism could contribute to a resolution of these issues across industries.

The potential scope of the industry was also discussed:

The total Australian tourism industry represents little more than 1\% of the value of global tourism. Although numbers tend to vary with the impact of world events, the trend line is for strong growth. Predictions are that the number of international visitors to Australia will be double the year 2000 figure (4.9 million) by 2010 (est. 10.2 million).

As to Cape York, there are no accurate figures of visitor numbers. A 1995 estimate placed the number at 60,000 people, with 20,000 travelling to the tip. 1999–2000 estimates indicated 62,000 Australians plus 13,000 international visitors, making a total of 75,000, providing a growth rate of 4.5\% between 1995 and 2000. This is very rough with a wide margin for error, being based on survey and anecdotal evidence.

Nevertheless this figure appears to attract some consensus in the industry. In 2002 tourism operators felt that these numbers were static. There is currently some debate on the affect on numbers due to alcohol restrictions imposed by Queensland government Alcohol Management Plans. The effect is uneven, depending on market sector. For instance bookings through the Kowanyama Land and Natural Resource Centre are currently running at about 33\% less than 2003. Their market is almost exclusively regional Queensland and locals on fishing camping visits. This is a significant sector for the Cape, but it is not clear if alcohol restrictions have had as severe affect on other sectors. (Tours and free and independent travellers ‘on the way to the Top’).

Putting aside this current debate, there is tourism industry consensus that Cape York has unrealised tourism potential. It is estimated that for every $1 billion generated from tourism, over 11,000 jobs are created in Australia. This would indicate that if the Cape York industry were to achieve some $90 million in visitor spending, it would support some 1,000 jobs, a little over 20\% of the current adult Indigenous population. This represents only 4.9\% of the current value of visitor expenditure for the Cairns region. If it were assumed that average length of stay were 6 days and average spend only $90 per day, it would take some 166,500 visitors to meet this level of expenditure. This is very rough science, but provides some dimension to the size and reality of the opportunity.

It should be noted that the estimate of 75,000 per annum visitors would not spend anything like an average of $90 per day. Daily spend will only build with more product.
More broadly, there have been various strategy level developments since 1997, with varying degrees of impact and relevance to development of Cape York tourism, listed below:

- 2004 Tourism Queensland Indigenous Tourism Strategy
- The Smart State Strategy
- Community Engagement Improvement Strategy
- Partnerships Queensland
- Cape York Partnerships Economic Development Policy Strategy
- Cape York Employment and Training Strategy
- Indigenous Business Capacity Building Program
- Indigenous Business Establishment Program
- Cape York Peninsula Heritage Bill 2007
- Blueprint for the Bush
- Queensland Skills Plan

However the most pertinent development for overall industry development, is the recent release of a tourism development action plan for Cape York and Torres Strait, by Tourism Queensland. The document is presently styled as a draft for comment.

It specifically refers to the CYPLUS Tourism strategies and makes the point that these have been used as the underlying basis for this plan. It represents a major step towards achieving the objectives of CYPLUS for tourism development, in that it features a specific implementation action plan and makes provision for resources on the ground for implementation. The actions are inline with CYPLUS but build from that base with the benefit of industry developments since.

The priority action identified for both Cape York and Torres Strait is:

*The establishment of fulltime Tourism Development Officer positions for Cape York and the Torres Strait.*

These positions have now been advertised as three year contracts under the auspices of Tourism Queensland, with the objective of filling them by December 2007. This is a key development, as tourism development was never going to progress at a strategic, industry level on Cape York without dedicated staff resources with appropriate skills.

There are nine strategy areas under the implementation plan, with sets of integrated actions under each, which would seem to be in keeping with the content, thrust and spirit of the CYPLUS strategies:

*Strategy 1 - Formalise leadership & coordination of tourism in the regions*
*Strategy 2 - Improve community & industry tourism planning and knowledge*
*Strategy 3 - Develop tourism products, experiences & supporting services*
Strategy 4 - Define and develop the destination marketing & promotional messages of Cape York and the Torres Strait

Strategy 5 - Develop and maintain tourism resources & infrastructure

Strategy 6 - Improve workforce skills and capacity

Strategy 7 - Attract the financial resources required to develop, maintain and upgrade tourism infrastructure and product, including identifying funding grants at Commonwealth, State and Local Government levels which are appropriate for Indigenous tourism operators.

Strategy 8 - Develop new and utilise existing distribution channels to disseminate tourist information

Strategy 9 - Establish ongoing Cape York and Torres Strait specific tourism research

Apart from the priority action to engage staff, there are nine others identified as priorities for Cape York:

Priority 2 – Establish a local tourism network in each sub-region throughout Cape York

Priority 3 – Establish a Cape York Tourism Steering Committee comprised of key regional tourism stakeholders

Priority 4 – Develop Tourism Development Action Plans for those communities or clusters of communities on Cape York that have identified tourism as a priority

Priority 5 – Develop a bush camping strategy for Cape York

Priority 6 – Prepare a tourism strategy for Cape York National Parks

Priority 7 – Confirm and refine existing and potential tourist markets for Cape York

Priority 8 – Establish a Cape York brand within the context of the regional TNQ brand

Priority 9 – Determine the promotional marketing messages that reflect Cape York’s core values and brand components

Priority 10 – Develop a joint marketing plan for Cape York with Tourism Tropical North Queensland and industry

The new model envisaged under the Cape York Peninsula Heritage legislation, outlined elsewhere, will have a particular impact on the priority six action – a tourism strategy for National Parks. The joint management model with the Indigenous Traditional Owners proposed should open up possibilities for a range of innovative approaches to tourism ventures in National Parks, including Joint Ventures with commercial tourism interests, thus perhaps attracting additional management resources to natural heritage management and conservation in public / private partnerships.

Tourism Queensland advise that they are also in the process of entering into an Agreement with Balkanu for tourism business development across Cape York.
Another minor action area in CYPLUS has also been recently addressed, with the release in November 2007 of a visitors guide map to Cape York as a joint initiative of Tourism Queensland and the Wilderness Society.

**Future Direction**

It would seem that tourism industry development for Cape York will now have resources and a structured approach to development, consistent with that envisaged in CYPLUS.

This is not to say the constraints have been cleared away

However it is noted that improvements in road access would make a significant contribution to industry development (p9):

*Improvements to road access will open the Cape to a wider touring market and present communities off the main track the opportunity to cater to the more adventurous 4WD traveller.*

Under the TQ Strategy 5, dealing with infrastructure development, the question of the standard of the Peninsula Development Road is the first action area. Other tourism infrastructure items are referred to under the sections covering infrastructure
COMMERCIAL FISHING

CYPLUS Strategies
Desired outcomes under this section were:

- Continued sustainable yields.
- Improved indigenous access to commercial fisheries and continued access for traditional purposes.
- Growth in the aquarium fishery.

Situation Review
The fishing industry is one increasingly driven by global market conditions. Opportunities for industry development on Cape York are impacted by such conditions. Some of the observations as to industry conditions cross-reference with those made under ‘Aquaculture’.

One of these is the effect of recently adopted requirements to label seafood with the source country, which is reportedly having a positive impact on the local industry.

Current Fisheries
Under the first outcome area, strategies included achievement of sustainable practices, including trawl net design to limit by-catch. One of the achievements of the past ten years has been the East Coast Trawl fishery attainment of ISO 14002 as a sustainable trawl fishery as one of the few to do so globally. This has included net design to limit impact on non-targeted species.

Increased surveillance has also been implemented over the period. Whether the appropriate level has been achieved is still a matter of debate.

The impact flowing from fuel price increases on the East Coast trawl fishery has seen a reduction in activity north of Cooktown, due to the additional costs of keeping mother ships at sea. The Northern prawn fishery is heavily corporatised and requires large vessels to be at sea for extended periods. Licenses cost millions of dollars, as do the vessels. Costs here are also squeezing commercial sustainability.

On the west coast of Cape York there are only set net fisheries for barramundi and threadfin salmon. These are being assessed at present and if the management plan passes the required standard, export may be allowed from this fishery.

DPI&F perceive there is still a niche market opportunity of unfilled demand for high quality wild caught barramundi.

In Princess Charlotte Bay, a Special Management Area under GBRMPA, there are eight permit holders for set net barramundi, threadfin salmon and mud crab. The average age of these permit holders is around sixty and they reportedly operate more as lifestyle operations, rather than at a commercial level that would have a significant impact on the Cape York economy.
Indigenous Access
Balkanu was provided funds to purchase licenses, which they have done, (involving coral trout licenses it is understood). These licenses have been leased back to fishermen, with the proceeds reportedly going back into a trust. As such this has not contributed to direct increased Indigenous participation in the fishing industry. However it should provide income streams which could be used to support viable opportunities for Indigenous people.

There are two small joint ventures with commercial fishing interests. One is based out of New Mapoon, where the Department of State Development invested in vessels and other equipment. This is mud crab fishery, which is judged to have good potential in the circumstances of Cape York, as the species is high value – capable of sustaining the costs of air transport, native to the area and in good supply. It was reported that production has dropped due to difficulties in maintaining local participation rates in the venture.

There is also a joint venture reportedly proceeding at Lockhart River for a tropical rock lobster fishery. This is also a high value species which can sustain charter flights to remote beaches for transport of the catch.

In general there appears to be the will to provide improved Indigenous access to commercial fisheries, but a limited take up of opportunities. It must also be observed that any opportunities are likely to be constrained by quotas and licensing, which endeavor to strike a balance between resource availability and sustainability.

Aquarium Fishery
Collection of species for aquariums on the east coast may represent an opportunity (e.g: out of Lockhart River or Hope Vale), provided licences were made available. Cairns Marine Aquariums is the major operator in this industry sector in the region. It would see room for collaboration with Indigenous communities in this respect. However appropriate skills and infrastructure to support husbandry of the animals to shore then to Cairns are large issues. Larger animals that are collected tend to be caught a long way off shore and require significant vessels, handling, management and life support systems.

Opportunities for local participation are therefore presently limited in the prevailing conditions.

Future Direction
Opportunities are seen as limited beyond what has been done to date.

Large scale fisheries require large investment and internationally competitive operations. A marketing alliance for north Australian industry participants to promote north Australian species was proposed at the North Australian Forum held in Cairns in April 2005. This would promote cohesive effort across what are often now fragmented industry sectors. The industry may need some support to bring this to fruition.
PASTORAL INDUSTRY

CYPLUS Strategies

The desired outcomes under this section were:

- An increase in cattle numbers in keeping with the principles of ecologically sustainable development embodied in this Report which, on the basis of available information and according to some current assessments, would give an estimated total of 400,000 head
- Broad economic development/new opportunities
- Improved indigenous access to the pastoral industry
- Effective control of exotic pests
- Effective control of land degradation
- Effective land use planning, co-ordination and management
- Effective training
- Effective infrastructure

The first three are industry development objectives, while the others are more in the nature of industry support measures.

Situation Review

In the ten years since the formulation of these strategies, there have been huge changes in the pastoral industry and the circumstances impacting the industry. For instance, at the time, building on live cattle export out of Weipa was seen as a key objective. This led to the strategies under ‘effective infrastructure’ being:

- Develop a purpose-built live cattle export facility at Weipa (livestock exporters)
- Upgrade key road links to Weipa and areas south (DMR)

However the live cattle trade has since collapsed due to lack of demand, at least in part due no doubt to appreciation in the Australian dollar and partly due to the lack of critical mass in terms of cattle numbers available for export. Accordingly port infrastructure development has not occurred and is not likely to until supply and demand are built. There is a view that there are current opportunities for cattle into Malaysia and China.

The nature of the stock on the Cape has also changed. It is understood that the traditional ‘Peninsula Reds’ have been substantially replaced by improved stock based on Brahmin blood strains. It was reported that this has at least been partly facilitated through compensation received arising from land clearing legislative restrictions and partly due to turnover in lease ownerships. Conversion to Brahmin blood strains was seen as a key objective in 1997 for achievement of a viable cattle industry on Cape York.

Since CYPLUS Stage 2 there has been a substantial change in land holdings. It was reported that over the past six years, some 60% of the major lease holdings have changed hands, with associated investments in infrastructure. This is apparently being partly driven by the perception of more reliable water in the face of the drought in southern Australia. More properties are operating as feeder properties to conditioning blocks south of Cape York. Some industry personnel expressed doubts as to the viability of these properties in the face of the substantially increased prices being paid and the inexperience
of some operators in Cape York conditions. On the other hand, there is evidence that more properties are being run to business principles, rather than as lifestyle operations. The investment required dictates this.

Apart from herd improvement, supplementary feeding, improved pastures and fencing for better management is being put in place. A proviso noted for fencing is that in the conditions of Cape York, stock need to be mobile for wet season conditions and to graze a variety of country types. Fencing therefore needs to be appropriate for the country.

Better improved pasture species are being developed, with DPI&F reportedly undertaking work on legumes in the form of non-invasive stylos. The ongoing drought may have an adverse impact generally on the industry through increased prices of grains and supplementary feedstock.

A number of properties have been acquired by the State and converted to National Parks and so to date have been mostly taken out of the areas available for grazing. It was advised that there will be further acquisitions, as budget has been made available.

The new approach flowing from the Cape York Heritage legislation (discussed earlier) may substantially alter this situation over time, depending on the real outcomes from giving effect to 'Indigenous community use areas'. Cape York Indigenous people have an expressed affinity with the pastoral industry and it could be expected that a proportion of the applications for land usage in their Trust areas will be for grazing.

There are a number of constraints for full participation of Indigenous land holders in the grazing industry. These are:

- There are decreasing numbers of older Indigenous people with cattle industry experience;
- Many of the younger people have either left the community, or are not interested;
- The usual work readiness issues for some Indigenous community members;
- The experience of Indigenous people in grazing was for the most part as employees rather than property managers. While they know land and cattle management and husbandry, the contemporary cattle industry especially requires increasingly sophisticated management skills;
- Access to capital for breeding stock and infrastructure is required, but to date has been not available for many Indigenous industry participants. Properties handed over to Indigenous people have been largely de-stocked and infrastructure often run down. For instance, Silver Plains alone needs some $3 million for breeding stock.

The Indigenous Land Corporation is now seeking to develop three properties held on Cape York as working stations, having previously been de-stocked. These are Crocodile, Welcome and Merepah Stations.

Crocodile and Welcome now have 4,000 breeders, with a total of 6,000 head. The objective is to run a total of 10,000 head. Merepah was run down and the ILC has
concentrated to date on building a new homestead and improved infrastructure. It is planned to be a working property with 10,000 breeders and 20,000 head.

The ILC currently has 16 Indigenous people in training courses. Training for second year students involves providing contracting services for Bulimba Station at Chillagoe. Consistent feedback from a variety of sources indicates considerable benefit flowing from getting trainees out of communities, away from adverse social pressures and in training ‘in a job for a job’, providing practical on the job experience. As is often the case on Cape York, attracting appropriate management expertise is an issue.

It was reported that there are also a number of pilot Indigenous cattle grazing schemes, but they involve only a few hundred head. These are providing practical experience on a small scale, with the outcomes varying widely between schemes, largely resting on the qualities of the person running them.

The meatworks at Innisfail has closed since formulation of CYPLUS strategies, which had a negative effect on the Cape York industry at the time. Transport of stock to Townsville for processing adds to costs and further reduces stock condition, rendering operations less viable.

The status of the road network is a serious impediment to development of the grazing industry, as it was in 1997, for either transport into Weipa or to destinations south of Cape York. This situation generates the following issues:

- Restrictions on road access during the wet season often prevent access to markets during the peak time of year for turnoff of cattle in good condition. The Peninsula Development Road (PDR) is the key, as while other access roads may also be cut, many property owners would be capable of accessing the PDR with stock;
- Road conditions lead to damaged stock, reduced condition and consequently lower prices;
- Road conditions contribute to high freight costs, due to higher operating costs for transport. The 2001 *Peninsula Development Road Investment Strategy Report* noted that freight costs were up to $132 per head even then.

The above report and industry sources speculate that improvements in the PDR would result in a substantial increase in the Cape York herd, increased take off and better industry viability. Some estimates from industry sources estimated the likely increase to be a doubling of the herd.

Another weakness for the industry arising from distance to the point of market is that buyers are aware that cattle shipped over 500 kms to market are unlikely to be shipped back to the properties, irrespective of prices offered. This tends to weaken prices in all but markets where demand significantly exceeds supply.

The current size of the herd is difficult to ascertain, but certainly well short of the target of 400,000 head adopted in the CYPLUS strategies. ABS figures are probably not even a close estimate of the real numbers. Where the 1995 Department of Lands report for
CYPLUS Stage 1 estimated the number to be 265,000, the ABS figure for 1996 – 97 was 139,000, with a turnoff of 9,000. ABS figures for 2000 – 2001 indicated a drop to 110,000 head, but a turnoff of 19,000. While there are presently some private initiatives aimed at a realistic estimate of the herd size, these are not presently available. However there is a consensus that numbers are increasing and likely to increase further given reasonable industry conditions, in view of the range of activities and initiatives underway. ‘Best guess’ estimates obtained from industry sources consistently placed total current numbers at around 220,000 to 230,000.

If stock quality improvements are translated into higher value and input costs the same as for low quality stock, these increases indicate a substantial increase in potential industry value. Higher value stock could also contribute to environmental sustainability, as not as many may be required for viability. This will depend on what markets the industry targets.

As to the strategies relating to improved sustainability, the property plans discussed earlier, which were to be a cornerstone for sustainable management failed to materialise. Land Care, a Federal Government funded program, operating since 2005, has been filling this key gap to some extent. The program has been marketing a sustainable development message and reportedly gaining good support for initiatives and projects, which include:

- Fencing of rivers and wetlands
- Fencing plans to facilitate rotation and spelling of country
- Cattle nutrition courses
- Grazing Land Management Program

The last program involves undertaking a mapping of the property, to consider the property as a whole, grading the country into types A,B,C&D, then developing a plan to upgrade the land according to types.

The Cape York Heritage legislation provides for an extension to maximum lease terms for land holders from 50 to 75 years, where land holders enter into an agreement for management of natural heritage areas of significance on their property. Cape York will be the only area with this option, which is aimed at providing both additional security and certainty and more effective natural heritage management.

The Wild Rivers legislation is basically requiring a development exclusion zone 1km back from the river. Fencing materials are being supplied to property owners for this purpose, with cause for some cynicism, as it is observed that the areas being fenced have weeds growing within this zone. An example provided was the Hann River, where Gamba grass is growing up to 10 metres from the bank. Property owners’ experience of National Parks with runaway weed infestation due to inadequate resources available to the Parks and Wildlife Service, gives cause for scepticism as to effective management of these Wild River zones.

Land Care estimates that current resources available for control of feral weeds and animals on Cape York could barely manage 1% of the total area requiring management.
There are also roadblocks in pest management plan approvals for properties, which have been waiting in excess of 12 months for approvals of plans submitted.

In May 2000 representatives of the Cape York cattle industry initiated development of a *Cape York Peninsula Beef Industry Strategy*. Rounds of meetings were held with industry participants between May and September 2000, during which industry members discussed what they would like their industry to look like in 10 years and what they considered to be the industry Strengths, Weaknesses, Opportunities and Threats. A draft strategy was developed and circulated for comment in November 2000.

The document listed major strategy areas as:

- **Large areas of land with unrealised potential** - Encourage participation in industry from all landholders;
- **Diversification** – Potential for Horticulture, Agriculture and other industries;
- **Improved management practices**: pasture, cattle numbers, cattle quality;
- **Taking advantage of export & domestic opportunities**;
- **Dedicated and united people living and working together for the continued development of CYP**;
- **Roads**;
- **Government & Government agencies**;
- **The Unknown Future**, eg. Native Title, Lease security;
- **Build on Cape York unity & Voice**
- **Infrastructure - Communications**
- **Employment opportunities**
- **Exotic pest & disease control, weeds & feral animals**

Basically the document strategies were a statement of the industry vision for where they wished to be, but did not include process for achieving the vision.

The second section of the document listed an extensive set of Strengths, Weaknesses, Opportunities and Threats as perceived at the time. These were not related back to strategies or vision. As a list, such a SWOT is of limited use. It would be of far more use if each element were tested by defining what the strategic implications of each might be, together the possible responses available to build strengths, limit or eliminate weaknesses, grasp opportunities and defend against threats.

As far as is known, the strategy has not led to any substantial cohesive industry action.

**CYPLUS Strategies Status**

It is difficult to identify the status of CYPLUS strategies from the above broad review due to the changing circumstances of the industry, the multiple factors impacting it and the number of CYPLUS strategies for this industry. The following summary against each strategy is therefore provided to crystallise the current situation for each:

**An increase in cattle numbers**

- Steady increases thought to be occurring – now some 220,000 head;
- Improved blood Brahmin blood strains now dominant

**Broad economic development/new opportunities**
- Export constrained by low demand and lack of critical mass of numbers available for export
- Road infrastructure a key impediment

**Improved indigenous access to the pastoral industry**
- ILC now pursuing working property status for its properties and supporting training activities
- Land Trusts and ‘Indigenous use areas’ to make more land available to Indigenous people
- Constrained by capital, management skills, available workforce
- Land Trusts and Indigenous Use Areas under Cape York Heritage legislation to provide access to and control over more parcels of land

**Effective control of exotic pests**
- Pests still not under control across Cape York, with some properties better managed than others
- National Parks infestation provides a secure base for infestation of leasehold areas. There is a substantial shortfall in available resources
- Land Care is providing some support resources towards management of grazing properties
- The new model proposed that utilises a combination of reward for conservation management, use and resourcing of Land & Sea Centres in concert with Indigenous management of special national park areas and engagement of Indigenous people in land and conservation management would seem to represent an answer to this vexed question, depending on how it rolls out in practice.
- The strategy called for growing of fodder on Cape York to reduce risks associated with imported feeds. This has largely not been achieved

**Effective control of land degradation**
- This strategy called for use of existing cleared land for cropping. This has not eventuated, except in the Endeavour Valley and at Lakeland. This is discussed under the section dealing with horticultural industries.
- Land Care addressing issues property by property

**Effective land use planning, co-ordination and management**
- This strategy called for establishment of Cape York Property Plans – none completed. Land Care now contributing to this strategy.
- Improved security of land tenure for land holder called for. Cape York Heritage legislation will provide for extended lease terms. Through the combined effect of current legislative initiatives, Indigenous people are being provided freehold title in the form of Land Trusts.
Effective training

- Some training for the grazing industry now taking place
- This strategy area was cross referenced with Strategy 19 – Employment & Vocational Training. This raises a range of other considerations beyond the economic and infrastructure strategies this report was asked to review. However they are of course very relevant to industry development issues and general comment is made elsewhere. Workforce limitations represent the third of the three key issues constraining Cape York economic development. This is in terms of skill sets, population location and work readiness, together with instability and productivity losses due to high turnover rates.

Effective infrastructure

- This strategy called for a purpose built live cattle export facility at Weipa. This is unlikely to occur until both demand and supply are built to a critical point
- The second strategy called for the upgrade of key road links. This is steadily occurring, but at a rate that will take at least fifty years to complete at the present rate

Future Direction

The cattle grazing industry is closely linked with the history of Cape York since white settlement. Indigenous people see it as a traditional industry for them after some 150 years of participation in it. Indigenous peoples aspirations in this regard are one reason for its importance, associated with its wide geographical spread.

The Cape York Indigenous Employment Strategy, prepared for Commonwealth and State Government departments in 2004, included an analysis of industry opportunities for Cape York industry by industry and according to dispersal. An issue for many Indigenous communities is that they are located on the basis of sites originally chosen as church missions. Historically communities tend to develop around an economic activity or opportunity. The report found that access to jobs and economic development opportunities were not dispersed across Cape York. Some communities have very limited economic development opportunities.

With its wide dispersal, the cattle industry therefore assumes more importance as an opportunity for especially those communities with limited alternatives.

Revision of Industry Strategy

The development of an industry strategy in 2000 would seem to be a good starting point for setting of future direction. It importantly demonstrated a stakeholder willingness to collaborate. The strategy needs revisiting for a number of reasons:

- The 2000 plan did not test assumptions or provide process and methodologies for achievement of the visions espoused. It did not build on the SWOT analysis as the foundation for strategies. A more robust plan, facilitated appropriately to attract industry ownership and commitment is required;
- Industry conditions have changed so much that industry stakeholder position and intent requires revisiting;
• If an export trade is to be re-established, joint actions are required to build markets and supply. A clearer idea of industry capacity is needed;

• If there is no clear, accurate picture of the current industry, with the opportunities industry participants see for it, then there is less chance of influencing government agencies and policy to assist in industry development initiatives.

Peninsula Development Road
As for other industries, sealing of the Peninsula Development Road within a reasonable time frame is a key to facilitation of grazing industry development. The order in which work is undertaken needs to be reviewed with MRD to include facilitation of economic development.

Sales & Processing
Distance to market and processing is an issue. Holding facilities near Weipa for consistent supply for export trade are a basic requirement. The type of country generally available makes it difficult for most properties to finish stock on the property.

A feedlot around the Lakeland area, with an associated abattoir facility would have a very favourable impact on the Cape York cattle industry. Feasibility assessment would be worthwhile. Currently grain price increases may mitigate against viability.

Indigenous Access and Participation
• In partnership with Indigenous stakeholders, establish the likely scale of industry operations that will be allowable under Indigenous Use Areas. Lifestyle scale operations are unlikely to make much of a contribution to economic development and wealth generation for the people of Cape York. The remote nature of the area and contemporary industry conditions dictate larger scale, professional operations;

• Foster and encourage genuine joint venture partnerships with Indigenous land holders, that attract JV partners prepared for long term partnerships, skills transfer an a schedule for operational hand overs. This will access investment capital and industry skills for the Indigenous partners;

• Support on the job, practical training schemes, which take young people out of their community environment. Training packages must include holistic mentoring for life skills and personal issues.
CROPPING & HORTICULTURE

CYPLUS Strategies

The desired CYPLSU outcome areas and actions are summarised as:

- Increased area under crops in keeping with sustainable development principles, in particular:
  - 5,000 ha at Lakeland
  - 1,500 ha Endeavour river Valley
  - 1,500 ha McIvor Valley
  - 500 ha around Weipa
  - Other areas identified by land suitability analysis

- Broad economic development – new opportunities
  - Assessment of land suitability
  - Identification of industry opportunities
  - Identify CY natural advantages
  - Promote market recognition of CY crops
  - Promote community market gardens
  - Explore with government financial concessions

- Improved Indigenous access to cropping and horticulture

- Effective control of exotic pests
  - Fodder growing to reduce imports
  - Increased customs & quarantine services

- Effective control of land degradation
  - Use existing cleared land for crops and horticulture

- Effective land use planning, coordination & management
  - Make smaller parcel of land available for cropping

- Effective Training

- Effective infrastructure provision
  - Investigate Weipa as an export point
  - Improve key roads around Cooktown, Lakeland & Weipa

The last four to some extent duplicate strategies for other industries, especially those applying to the pastoral industry and are therefore not considered in any detail here.

Situation Review

Lakeland / Cooktown Areas

There has been an expansion of agriculture and horticultural activities at Lakeland and in the Endeavour and McIvor Valleys since CYPLUS Stage 2. This has been in no small part due to sealing the main arterial roads accessing these areas. The first desired outcome area above has therefore been achieved to some extent.

The expansion of cropping and horticulture in the Endeavour Valley is unlikely to be seen as impacting on the natural heritage values of the Cape, as it is not a new phenomenon.
Prior to World War II, the area had a significant citrus industry, plus large areas of maize and small crops. These were shipped to Cairns by sea. Following World War II, the road and rail infrastructure connecting Cairns to southern areas meant that supply from other regions supplanted the Endeavour Valley.

This underlines a **region needs more than suitable conditions for agriculture.** A point of competitive advantage, effective links into supply chains and distributions systems, together with organisational marketing and supply capabilities are also required.

A 2003 situation analysis of the potential for field and horticulture crops on Cape York Peninsula prepared by DPI&F staff\(^{15}\) broadly addressed the second CYPLUS strategy area dealing with new broad economic development opportunities. It is referred to later at some length being the major work in this field since CYPLUS. It referred to Lakeland Downs and the Endeavour Valley, in terms of key issues faced, which have application across Cape York:

**Supply Chain Development Issues**

Lakeland Downs producers have good linkages to their principal customers. The cost of transport and lack of export facilities in North Queensland for grain, significantly impacts on their competitiveness. Given the distance to market, there are only limited opportunities to lower costs. Further developing customer relationships is likely to improve markets for emerging higher value products such as niche variety bananas. Some potential may exist for local supply of fresh fruit and vegetables and coffee to nearby communities, such as Cooktown.

**Horticulture in the Endeavour Valley**

A range of horticulture crops is grown in the Endeavour Valley. Many of the properties are small with less than 10 acres under production. The majority of crops are grown to meet a high priced seasonal window in the domestic market and are supplied to wholesalers in Brisbane, Sydney and Melbourne. (Note: in other words, their competitive advantage is early cropping). These crops include passion fruit, bananas, papaya, rambutans, lychees, limes mangosteen and mangoes. The markets for all of these crops have the potential to become oversupplied quickly, leading to prices and are unviable. When this occurs, growers only harvest for local sales.

**Supply Chain Development Issues**

Currently, few of the growers interact significantly with their major customers and because they are supplying the market for only a short seasonal window, few have strong linkages to their supply chain. As the number of growers in the areas under production increases, there will be more risk of oversupply and a greater need for supply chain development activities. Some cool chain management problems exist, particularly with regards to road transport. The small volumes of varied products consigned make holding all products at their optimal temperature and at the same time providing cost effective freight, extremely difficult.

The CYP 2010 Horticulture and Cropping Strategy implementation committee have indicated that they plan to address these issues through initiatives carried out under the strategy.

The issues are apparently still substantially unchanged.
Broad Economic Development – New Opportunities
This second desired outcome area listed a number of proposed actions for achievement of the strategy. There has been a variety of actions towards each, discussed below.

The economic development issues paper prepared as a component of the Peninsula Development Road Investment Strategy published in 2001, included a section prepared by DPI&F that bought together their work and commentary on the CYPLUS strategies. A summary section of their commentary as to agricultural development noted the following:

- The overall vision for Cape York includes "a high level of economic independence which builds on the strengths and special characteristics of the Peninsula". This vision includes agricultural development.
- Agricultural development provides suitable rewarding employment in the region and will help to support infrastructure and services.
- Land suitability studies have indicated large areas suitable for broadacre cropping, including peanuts, sugar, maize, sorghum and horticultural crops.
- Currently strategy (STRATEGY 14) provides for only modest agricultural expansion. This may be considered to be short sighted and not taking heed of the land suitability information available.
- A scenario relating to STRATEGY 14 is presented on integrating agricultural development of broadacre crops and horticulture.
- This scenario has a potential annual farm gate value of production of $370 million. This would more than double the 1991/92 Gross Regional Product (Note: including mining) of 303 million dollars and with the multiplier effects more than treble it. Thus it would have a major impact on the economic viability of Cape York and would provide substantial employment and services.
- The scenario is based to a large degree on export of produce to expanding markets in the nearby Asian region.
- This development would be dependent on provision of infrastructure centred around Weipa, including port and road development. Agribusiness services and expertise would also be necessary.

The scenario mentioned was based on development of extensive agriculture north east and south east of Weipa on some 100,000 hectares. Peanuts were assumed to be an important component of the scenario, together with the provision of irrigation for cropping. Apart from peanuts, anticipated crops were maize, sorghum, tree crops and winter row crops.

In addition to the presence of suitable soils, (discussed later), the view was put in the covering DPI&F letter to the work, dated 10 September 1998, that:

If cropping is to happen on a large scale in Cape York Peninsula it will be led by markets requiring supplies. If it is to happen the focus will be on Weipa because it has a deep water port to bring in production requirements and to export produce, because Weipa has a defence forces air strip which CYPDA has been informed can be made available for heavy transport commercial use to export produce and because Weipa is close to what are likely to be the best agricultural soils.
To this could be added the observation that suitable road infrastructure into Weipa is likely
to be more achievable in the shorter term than sealing the whole length of the Peninsula Development Road.

The 2003 DPI&F situation analysis reviewed four assessments of land suitability for
agriculture carried out on Cape York. The last (Webb 2000), found that there is:

- 266,500 ha of Class A land (arable land with the highest potential for the
  production of a wide array of crops).

- And that a further 2,580, 900 ha were classified as Class B land (limited arable
  land comprising land suitable for some crops or crops with specialised
  requirements, such as paddy rice, dryland cassava/sugar cane. This class also
  includes land of lower suitability for irrigated crops, including sugar cane, tea-tree
  and horticultural tree crops).

This study included only freehold, leasehold, unallocated State land and ‘action pending’
land in the analysis. The results were basically consistent with two of the earlier studies,
with the third finding a larger amount of suitable soils due to a difference in the limitations
assumed. The 2003 situation analysis observed that there was little arably suitable soil
found in designated National Parks and was not a major deduction when calculating land
suitability.

This 2003 situation analysis especially noted that all studies “are broad brush studies
and detailed examination would be needed for more specific proposals on a
property or sub-catchment basis”.

Apart from the suitability of the land itself, water availability is of course another major
factor in agricultural production. The 2003 situation analysis also reviewed available data
on water. Given the distinct wet/dry seasonal conditions, together with environment and
natural heritage management imperatives on Cape York, the most practical method of
diversion of water from streams is likely to be flood harvest associated with off-stream
storages, where any diversion might be allowed under current legislative arrangements.
An indication of the size of resource possible was provided by a very general calculation
in the 2003 report (p 26):

A crude method to estimate indicative yields especially for water harvesting may be a percentage
of the mean peak flow (above some minimum level). Mean peak discharges (at a gauging station,
which only represent small percentages of the total flow of most catchments) from table 7 indicates
that a one percent diversion could yield 534,456 mega litres per hour for the listed rivers. At five
percent this rises to 2,672,280 ML/hour.

A general rule of thumb for irrigating horticultural crop is 5 to 10 mega litres per hectare per annum.
Allowing 50% storage efficiency; one percent diversion for one hour would have the potential to
irrigate 27,000 ha of horticultural crops and for ten hours 270,000 ha. At five percent the potential
is quintupled. All this is very hypothetical, but serves to indicate that a very small percentage
diversion could potentially allow the irrigation of significant cropping enterprise or other industries (tourism / recreation & aquaculture). A detailed examination would be required to see whether it is physically possible to water harvest at these rates.

Another crude estimate of potential (in lieu of current water resource plans), could be to suggest the allocation of 1 or 5 percent of mean annual discharges. Eg. One percent would yield approx. 600,000 ml which at 50% efficiency could potentially irrigate 30,000 ha (at 10ml/ha) or 150,000 at 5%.

It is noted that the river systems included in the calculations, included the Mitchell catchment, which rises on the Atherton Tablelands and flows across southern Cape York north west, finally into the Gulf of Carpentaria just north of Kowanyama. The Mitchell River Basin is Australia’s second largest river system, with a mean annual runoff of 22.9 million mega litres, (just below the Murray Darling basin with 23.8 million mega litres).

The analysis also considered underground water supplies on Cape York. It observed that in general there are abundant quantities of groundwater, with large overall reserves. These represent a more reliable year round source than surface water, but may be difficult to access in some areas. Generally there is not a good understanding of the reserve and the hydrology across the Cape.

The first action proposed to achieve ‘broad economic development – new opportunities’ was the ‘assessment of land suitability’. The analysis discussed above contributes to this action, but could be said to be of a preliminary nature only, as the authors themselves observe. While the exact area of suitable soils may be debated, it does appear clear that the area is extensive and would if developed create a substantial industry sector on Cape York.

The next action proposed was ‘identification of industry opportunities’. The same 2003 analysis report includes a market analysis (commencing p 80) of opportunities then seen for a matrix of crop categories, rather than individual crops. Most opportunities were seen to be constrained by the standard of Cape York infrastructure. The categories considered were:

- Grains and pulses
- Sugar
- Forage
- Fibre crops
- Fruits & vegetables
- Other tree crops
- Bush foods
- Oils & aromatics
- Amenity horticulture

As to those categories and crops within those categories that are commodities, internationally traded, their fortunes and therefore industry attractiveness, vary with global trading conditions. For instance the ongoing drought in Australia and smaller grains harvest is currently pushing up global grain prices; the price of sugar tends to vary with the amount of sugar converted to ethanol in Brazil, in what is in any event a distorted
market. Locally, coastal sugar production is slowly being pushed out, due to steady loss of sugar cane farms to urban development and alternative uses such as plantation forestry. This is steadily pushing the industry to look for alternative production areas.

There are also new crops being developed, and new uses for crops creating new markets. For instance low GI sugar is under development at the Mossman Mill. Crops as renewable sources of alternative energy, resins as alternatives to plastics, fibre crops for industrial uses and plants bred to yield high value proteins are all on the horizon, with potentially, huge markets and high demand.

In such circumstances, it is difficult to be definitive as to particular crop opportunities for Cape York. This is with the exception of peanuts, for which there has been a longstanding excess of demand over supply in Australia, with shortfall in domestic demand imported.

Predictions for the future are notoriously unreliable. However current trends do tend to provide insights into likely future conditions. The 2003 analysis report included consideration of a range of global trends, covering consumers, economics, environment, political and social trends. All have implications for the future of Cape York.

The social trends in particular provide some indication of the scope of market opportunities which may in the longer term force a re-look at Cape York as a location for agricultural production (p51):

This century, 98 percent of population growth will occur in developing countries; developed countries will grow slowly or not at all.

- Between now and 2030, Asia’s population will increase by two billion.
- In May 2000 India’s population reached one billion.
- By 2050, Africa will have more than a third of the world’s population

- By 2030 Queensland’s population could reach 5.3 million, making it Australia’s second most populous State.
- South-East Queensland will grow fastest, Far North Queensland second fastest. Three quarters of the growth will occur in South-East Queensland.

World consumption of water is increasing at twice the rate of population growth. Over the next 30 years the number of countries facing water shortages will double. Conflict and even wars could result from disputes over water.

Despite a global food surplus, 82 countries have trouble feeding all their people. To feed everyone, the world must produce more food during the thirty years 2000 – 2030 than it has in the whole of human history. But the area of land available for food production – and the amount of water – will fall. Resource scarcities may result in more population displacement, economic disruption and civil strife.
More refugees from poverty stricken and war-torn countries may seek refuge in developed countries, including Australia.

There will be 20 mega cities in Asia by 2025 with a population of 400 million. This is equivalent to one eighth of the world's current population.

- The populations of Pakistan's two largest cities, Karachi and Lahore, are likely to treble by 2025, making Pakistan a key market for Australian agricultural produce, particularly for pulses, oilseed and dairy. Karachi is also ideally located as a gateway to Pakistan's northern landlocked neighbours.
- The food needs of the city of Jakarta in Indonesia will far exceed the capacity of local suppliers to fill demand, opening up opportunities for Australia's leading agribusiness suppliers.
- South-East Asia's second largest mega city will be Bangkok (22.5 million by 2025) and trade experts are predicting its development will turn out to be a golden opportunity for Australian exporters.

It is sobering to realise that even a global pandemic of bird flu is not likely to materially change these trends. It would simply be a temporary disruption. It is not really known as yet what the impact of global warming might be on food production, nor what advances in technology might contribute to increased agricultural productivity. However apart from a major global catastrophe, it is difficult to anticipate a scenario that will be overall, materially different than the above, exacerbated by higher pressure on agricultural production due to disruptions from climate change. At the same time there will be market growth for agricultural products of food, fibre and fuels.

The agricultural industry opportunities for Cape York are still evolving and will never be stable, given the nature of global commodity markets. However, given the trends, they may well be substantial, given the latent resource base.

This leads to the third action proposed under this section of CYPLUS strategies. That is, 'Identify CY natural advantages'. This has not been specifically undertaken, but could be summarised as:

- Extensive areas of suitable agricultural land (some probably subject to seasonal flooding);
- Major, (though seasonal) surface water supplies;
- Major, (largely un-researched) underground water supplies;
- Early seasonal advantage compared to southern Australian producers for some crops;
- Geographically close to a large and growing segment of the world’s population;
- Tropical conditions suit production of crops suitable for South Asian markets.

The extent of the advantage these assets represent has not been assessed. For instance for as long (and if) there is excess production capacity in other established major producing areas of Australia, Cape York relatively speaking will not be attractive for major agricultural development. This may or may not be the case at present and would need to be reviewed. The impacts of general global pressures from climate change, drying of
areas of Australia and population demographics referred to elsewhere are all part of the assessment required.

However the constraints are presently such that development is unlikely on a commercial scale. This is with the exception of Lakeland, Endeavour and McIvor Valleys.

The lack of key components in supply chains and barriers to accessing effective supply chains are no doubt the major barrier to Cape York agricultural development. As the 2003 analysis report observes (p89):

*The scope for commercialisation of cropping and horticultural products to date has been limited by the inability to access supply chains and distribution channels far more than by other market or demand factors.*

Efficient supply chains these days make the difference between success and failure, especially for commodity producers. The 2003 analysis observes (p4):

*Supply chains are rapidly emerging at a local and global level. They can create strong competitive efficiencies and in some cases lockout other ‘stand alone’ suppliers, who are unable to copy these competitive advantages.*

In fact globally, it is now more a matter of competition between supply chains than individual enterprises or industry sectors.

As to the road infrastructure, the 2003 analysis reinforced the general constraint to industry development it represents for Cape York (p39):

*.......... The needs of the cropping and horticultural industries would be vastly enhanced by well paved major and minor arterial roads. The current lack of industry establishment on CYP except for that found around Lakeland, Cooktown and Weipa is most likely, in part at least, a reflection of the poor road infrastructure.*

*......................................................

*The constraints of travel on gravel road not only reflect in more costly transport but also to the type of product capable of movement. For example fleshy fruit are likely to be severely damaged by moving on unpaved roads, so that even where suitable markets exist, a marketable product could not be realised due to excessive vibration and slow time of delivery.*

*Given the current state of roads, any options considered would opt for non-perishable, light, compactable, high value products, such as fibres, hay and nuts for example.*

Workforce availability and skills base are another constraint across all economic development opportunity areas and are discussed elsewhere.

Limitations on access to land and water resources are obviously a major constraint to agricultural development. The ‘new model’ discussed earlier that will provide Indigenous people access to water and land for designated ‘Indigenous community use areas’ may provide a better balance and address the CYPLUS strategy of ‘Improved Indigenous access to cropping and horticulture’. However if these areas are small scale and fragmented, their viability will be in doubt. They will certainly be unlikely to provide a significant industry base on which to attract supporting infrastructure.
Community Market Gardens
Actions included in this strategy area also included ‘Promote community market gardens’.

Several Cape York Indigenous communities have established market gardens. These are generally small in terms of production volumes and supplement fresh fruit and vegetable supplies from external sources rather than being the primary source of supply. Supplies are often provided as a community service to aged care and like community facilities. The level at which they operate tends to vary with the enthusiasm, energy and leadership qualities of the person running them from time to time. The 2003 analysis identified a variety of opportunities in this area (p84), covering:

- Martins IGA Supermarket Cooktown
- Woolworths Weipa
- Community stores
- Consumer buying cooperatives

These opportunities have not been taken up. It is also noted that the labour for these operations has been provided under CDEP. It is not known how the changes in approach to this ‘work for the dole’ scheme may impact the ability of these operations to continue.

There is a case for reviewing the whole concept of community market gardens, whether they are viable and if so how to grasp the opportunities.

Effective Control of Exotic Pests
Control measures have been substantially under resourced, as observed earlier. However this outcome area referred to ‘Increased customs and quarantine services’. There have been increased resources directed to this area over the past ten years and AQIS is attempting to increase the participation levels of Indigenous people in its delivery model. The renewed commitment to Land and Sea Centres also provides an opportunity to develop service agreements across bio-security requirements as discussed elsewhere.

The 2003 DPI&F analysis referred to extensively above, commented on the expansion of horticulture on Cape York in terms of quarantine issues (p12):

With fruit tree crops and some of the other horticultural crops and issue has been expressed about increasing the risks of exotic insect and disease spread from close tropical regions to more southern based industries. Whereas the region is viewed as a quasi buffer zone at present. An increased industry presence could allow faster spread if control measures and good monitoring are not planned, but would also bring enhanced recognition allowing for early warning and appropriate response. Any concomitant increase in road infrastructure would allow faster dispersal of pest agents but would also allow increased surveillance and speedier control. Good planning in road infrastructure design including user-friendly washdown points would be an obvious improvement regardless of any horticultural involvement.

Tourism and recreation visitors have most probably already been responsible for the spread of weed species and pose a risk as to exotic insects and disease. This is especially where they travel by 4WD vehicles into more remote areas of the region off the more significant road links.
Uncanvassed comments were made by a number of stakeholders for the need for two washdown points, reflecting the above quotation. One would be possibly at Lakeland and one on the Battle Camp link road between Cooktown and Laura. This would cover the usual routes into and out of the Cape.
**Future Direction**

Based on currently available information as to land suitability, water and emerging markets, the opportunity would appear for Cape York to develop as a significant agricultural producer over time. This of course must be balanced with the need for natural heritage conservation and management.

A major barrier to development is the road network, evidenced by the development that has been occurring at Lakelaland and in the Endeavour Valley since upgrades of road links to these locations.

There is an imperative to produce enough food, clothing and energy to meet the reasonable needs of the world’s population. It is partly an issue of where and how that production should take place, rather than if. For instance there are reportedly plans to develop 1.5 million hectares of West Papua for farming.

It is likely that pressure will build from a number of driving forces for the expansion of agriculture across the globe. It is happening now. The effects on the Amazon and Kalimantan can be seen from space. Also land that is now in production may no longer be suitable, while new areas may come into production due to climate change.

Cape York would seem to represent an opportunity to develop a new model, a sustainable model that could be a best practice example to the world. An illustration in a different industry is the way tourism has managed to develop in Far North Queensland with its two World Heritage icons, yet with a low environmental footprint.

If a major economic development opportunity can be secured for Australia at the same time as providing a lead in sustainable practice and making at least some contribution to reducing pressure on less sustainable development elsewhere, then it would seem worthwhile to seriously investigate what it would take to achieve.

What is missing is a **definitive assessment leading to a framework for industry development**. It would begin to provide a foundation for industry to make commercial judgements and attract investment. The assessments available are too broad and need follow up work, as the authors of the work would acknowledge. A few of the initial questions that need to be answered include:

- What is the status of the areas of land identified as having suitable soils (especially around Weipa);
  - Which areas of these have been cleared previously
  - What is their ownership status
  - Are they flood prone
  - Are there conflicts with high conservation area requirements and general natural heritage management and conservation and are there strategies to resolve these
- To what extent do water resources coincide with potentially available suitable land
• How practical is it to access adequate water from both technical and legislative viewpoints
• What scale of operations are likely to be viable
• What are the current and emerging market opportunities and what time frame for development is likely to grasp these and still be consistent with sustainable development
• Can industry sectors be developed on Cape York with sustainable comparative and competitive advantages, compared to other regions
• What would be an effective competitive supply chain and distribution system and is it practical to achieve
• Is there a viable business case and financial model, including a cost / benefit assessment as to the provision of supporting infrastructure
  o The supporting infrastructure that requires particular consideration includes:
    ▪ The Peninsula development Road
    ▪ Weipa as an agricultural port
    ▪ Skills base development
• What are the appropriate bio-security protocols. (There appears to be already a case for washdown points for instance)
• What legislative enabling framework might be considered by the Queensland Government

These are some of the factors need to be included in building a framework for industry development. There will of course be many others. It is recommended that a well considered terms of reference be developed for firstly testing the feasibility of agricultural industry development on Cape York in the context of what might be a sustainable model. The second step if positive feasibility is assessed is development of the framework for development.

This is not the first time such an approach has been recommended. For instance Cook Shire Council made a submission to CYRAG in a similar vein in 2000, for a review of all economic development opportunities, including agriculture.

The Queensland Government response to CYPLUS, the Draft CYP2010 Action Plan 2000 – 2001\(^1\) included two similar proposals. One was included in the DPI&F response section, which indicated a submission had been made to deliver and initiative referred to as Cape York – Planning Sustainable Development. This was described as (p69):

As part of this submission Industry development plans for Cattle, Forestry, Fisheries and Intensive Industries will be developed. This will include the development of plans for Cropping and Horticulture Industries.

It is assumed this submission was not successful.

The second proposal was in the Department Of Natural Resources response in the context of a proposed ‘Cape York Water Development Study’ (p61):
Agricultural development in Cape York has until now received only cursory examination due mainly to problems associated with gaining access to markets but also due to the challenges associated with cropping in a sub tropical climate. Water based development is becoming increasingly complex as proponents strive to address the interrelated factors which distinguish a viable and appropriate development form those which create long term problems due to an insufficient understanding of the environment or failure to adequately include the community in the planning of the schemes.

This study will establish strong links to and work within the framework of CYP2010.

The outline referred to the large tracts of land apparently suitable and the annual discharge of 70 million megalitres per annum from Cape York rivers. It went on to list tasks proposed to be included in the study (p62):

- Review of existing information and studies, including regional development objectives, key water-related policies
- Assessment of available water resources, both in terms of quantity and quality, covering surface water, ground water and non-conventional sources of water such as waste water reuse.
- Assessment of available land and soil resources, in terms of their capacity for irrigated agriculture and potential for degradation.
- Assessment of environmental & cultural values of areas impacted both directly & indirectly
- Assessment of feasible cropping systems, crop water requirements, marketing potential and strategies (including aquaculture and export opportunities).
- Evaluation of existing water resources development and land use, including commitments of existing infrastructure, water allocation and efficiencies.
- Assessment of future water demand for agricultural, domestic (rural / urban), industrial, land for various uses and ecological purposes.
- Preliminary analysis of major issues and alternative options (potential projects) for satisfying future demand, both in the short and the long term, under various development scenarios to provide a list of potential projects in each sub-basin.
- Evaluation of need for supporting infrastructure and services as well as access to labour.
- Screening of projects to prepare a short list of potentially viable projects.
- Formulation of strategies for developing and managing water resources.
- Further investigation and analysis of selected options in terms of their engineering (including geotechnical) feasibility, water management requirements, economic viability, financial requirements, social and cultural acceptability and environmental impacts.
- Evaluation of selected strategies based on their ability to meet key objectives, performance criteria and priority stakeholders.

Of course this proposal was oriented to water resource assessment and it is assumed was overtaken by events.

Rather than a ‘mega study’, it might be more effective to divide such a study into prioritized elements, with pass / fail benchmarks for each level to trigger the next phase. In any event, it seems timely to now institute such a process if the stated intention of
delivering balance between conservation and economic development on Cape York is to be realised.

A mapping process for areas with high conservation values is reportedly to now proceed. It would seem reasonable that a parallel process should proceed with respect to the other major land use option, being agriculture to arrive at a serious assessment of economic development opportunities. This would place agricultural industry prospects in a strategic context and address the inherent risk seen in what was referred to a ‘the tyranny of small decisions’ in the 2001 examination of the Natural Heritage Significance of Cape York Peninsula⁴.
AQUACULTURE

Strategy Scope & Constraints

Under this strategy area there were eight desired outcome areas, as follow:

- Moderate increase in production
- Broad economic development / new opportunities
- Improve Indigenous access to the aquaculture industry
- Effective control of exotic pests
- Effective control of land degradation and reduction in water quality
- Effective planning, coordination and management
- Effective training
- Effective Infrastructure provision

The first two could be said to be the economic development objectives, with the remaining six being support mechanisms for industry development. Without viable opportunities for development, the last six are largely irrelevant.

The review of the current situation at the time identified a number of pearl oyster operations at the tip of Cape York, plus some barramundi, crocodile and prawn farming as current operations. Constraints were identified as:

- lack of identification of the potential areas suitable for aquaculture
- lack of localised infrastructure to support production
- high cost of inputs and
- lack of oyster hatcheries

Since 1997, aquaculture operations on Cape York have not increased and if anything, have diminished. A prawn farm outside Cooktown has closed apparently due to the impact of disease, while a barramundi farm on Kings Plains has also closed. The industry still faces the same constraints as listed in the CYPLUS Report in 1997.

Central issues are transport costs, distance to markets and skills base available. These increase both input costs and costs of transport of product to market. Distance to market also increases quality control issues and increases risk due to the long cool chain and the poor state of roads increasing packaging requirements.

In such circumstances, it is obviously more difficult to establish sustainable competitive advantage. Efficiencies produced by large scale operations, especially with their ability to provide support infrastructure, are one strategy for establishing competitive advantage. However the opportunities for large scale developments are likely to be constrained across Cape York due to natural heritage management and conservation requirements.

In view of the transport and freight costs and logistics applying to Cape York, it could be expected that high value to weight products, with low sensitivity to damage and degradation during transport will tend to be the most viable.
**Minniecon & Burke Report 2004**

A scoping study into the potential for Indigenous aquaculture in North Queensland provides some additional insights into the potential and constraints for aquaculture on Cape York. It was commissioned by Department of Primary Industries and Fisheries (DPIF). The study report was produced in May 2004.

The study area included Cape York, but covered all of North Queensland.

The reasons for failure and / or stalling of a number of Indigenous aquaculture projects were reviewed, with key points for attention summarised as:

- **Unresolved Native Title issues** within indigenous communities can stall projects indefinitely, and minimise community commitment to the project. (Here the report was referring particularly to the proposed Yarrabah barramundi farm);
- **Indigenous proponents need to accept** that aquaculture development is potentially high risk and consideration of triple bottom line outcomes is needed to inform funding agencies and government about project planning, development, and decision making;
- **All indigenous aquaculture projects require comprehensive feasibility studies, business and marketing plans to inform project planning and development**;
- **Projects need certainty of funding**; and
- **It is critical that project staff have the skills and expertise to successfully manage and operate an aquaculture project**.

A central issue for many initiatives and activities on Cape York is the available skills base. This includes a difficulty in attracting skilled staff to work in the remote conditions of Cape York, low skill levels in local communities, lack of work readiness and difficulties in sustaining the level of interest and effort needed to create and maintain a successful enterprise. Reading the detail of the above report indicates these to be central reasons for Indigenous aquaculture project failure, giving rise to the key points above.

Skills and continuous sustained operations are critical in aquaculture operations. The conditions in ponds need to be closely monitored and maintained. An oxygen crash or onset of disease will result in large stock losses.

Despite failures and constraints, the report noted interest on the part of Indigenous people in aquaculture; that a number of communities were planning projects; and that there was general preparedness to consider joint ventures. However the proviso was that Indigenous people wished to retain majority interest in the projects.

During the study, the consultants sought expressions of interest from joint venture partners. Five were received it would seem without extensive effort. These sought to explore joint ventures with Indigenous communities in species such as Pearls, Sandfish, Barramundi, Red Claw crayfish and Tropical Lobster grow-out.

None of these expressions of interest have led to any projects since the 2004 report. Joint venture partners are a means of attracting the financial resources, industry expertise and vital links into industry marketing and distribution systems. However the history of
Cape York generally has consistently seen the wrong joint venture partners attracted to projects. There has been a lack of process in matching the objectives and culture of the parties, together with a lack sufficient due diligence to create successful partnerships. The outcome more often than not has seen big expectations built up, to come crashing down to the detriment of Indigenous people’s confidence and self esteem.

One other obstacle to robust joint ventures is the natural desire of Indigenous people to retain the majority interest in any projects (including aquaculture), as reported in this 2004 report. They understandably do not want to feel they are being exploited by white people, again. On the other hand, if the joint venture partner is bring reputation, skills, investment and industry linkages, they will not wish to risk these by handing control an inexperienced major shareholder.

Well thought out, robust joint ventures represent a way forward on Cape York, beyond aquaculture. These need careful structuring to be enduring in that they meet the objectives of both parties. It is a matter of realistically talking through the value that both parties bring to the table and structuring the JV accordingly. It may be that the Indigenous parties retain the major shareholding, but the organisational structures will need to provide for management and decision making processes that protect the interests of all parties.

An essential component of arrangements often called for, but rarely achieved, is provision for systems of transfer of knowledge over time. This is part of the process of ensuring a cultural fit. Only JV partners prepared for a long-term relationship, rather than a quick profit, are likely to be suitable. They will need to be committed to training and capacity building over time, with the objective of passing control to their Indigenous partners.

For their part, the Indigenous partners will need to be realistic about what they bring to the JV and be prepared for a sustained commitment to achieve long term objectives. This is what has often been lacking.

The Minniecon & Burke Report divided North Queensland into eight geographic regions for the purposes of suggesting the most appropriate species for aquaculture in each. Those regions and species relevant to the CYPLUS area were:

- **Cairns, Cooktown regions:** Marine Prawns, Redclaw Crayfish & Barramundi
- **North Eastern Cape:** Oysters, Pearls and Ornamentals
- **Southern Gulf, Mount Isa regions:** Redclaw, Crocodile, Sea Cucumber, & Marine Prawns
- **Western Cape:** Redclaw, Crocodile and Mudcrab

Some comment is made on each species as to the current industry and market conditions relevant to Cape York developments.
**Marine Prawns & Barramundi**

Aquaculture systems for both these species are well-established and proven. Farms in Australia face competition from imported products from overseas aquaculture operations. Prawn farms in South East Asia in particular are extensive. Imported Nile perch is another species which could be seen to compete with barramundi, as it is virtually identical. However barramundi has a major market advantage in terms of reputation and established popularity. Barramundi farming has been steadily expanding in Australia, with farms generally seen as viable and on a smaller scale than required as a minimum for prawn farming, which has some constraints due to the marine environment required to rear prawns. Over the past ten years, the quality of product from both prawn and barramundi farms has improved significantly.

In both cases, there are reports that demand for locally produced product is increasing significantly following the requirement to label the source of seafood products. Consumers are showing a distinct preference for local product, which is perceived as fresher, not frozen, with fewer ‘food miles’. There is probably some suspicion as to the environmental conditions in which imported product is produced, with a perception of Australian product being ‘safer’.

There seems to still be some market opportunities for new operations in these species. However, while there are cost effective sites still available which are closer to market, transport infrastructure and sealed roads, with consequently lower costs and fewer risks than Cape York sites, the opportunities for Cape York are likely to be limited with respect to these species. In addition, consumer preferences for fresh chilled, rather than frozen product will also tend to work against what may be possible to deliver out of Cape York, given the present level of infrastructure. This is of course subject to a project by project feasibility assessment.

**Redclaw Crayfish**

The aquaculture of redclaw is tried and tested, with DPI&F models suggesting good levels of returns. The animal is very resilient, easy to breed and highly suitable for selective breeding and significant improvement. However after some 15 years of development, redclaw farming is still dominated by very small operations, typically as a supplementary operation as part of a wider farming operation. Overall Queensland production is too small to build general market consciousness and reputation. In the Australian market context, they are still associated with ‘yabbies’. There is reportedly a small amount exported. Where there has been preliminary testing of export markets, customer responses have been favourable.

In Europe, the market is thought to be substantial for good quality product, especially since freshwater crayfish (‘lagouste’ or ‘Kreb’), is a traditional dish, but supplies of European equivalents have been severely limited by disease. If, as is thought, average size at harvest can be lifted to 200gms, then redclaw could develop as a substitute for marine lobster. Fisheries for wild caught crayfish and lobster are unlikely to produce higher than present yields. Aquaculture of these species is at best difficult, unproven and possibly not feasible. This opens the possibility of a Redclaw market in the US, where
demand for Maine lobster and crayfish reportedly continues to grow at 16% per annum in the face of static production levels.

Queensland producers have worked on the premise that the ability to deliver redclaw live to the market was a core significant advantage. This meant that farm processing infrastructure has been limited. However, this may be a major factor in limiting market development. Larger operations, with processing infrastructure linked into a cool chain, would be able to provide fresh chilled products including whole crayfish, cooked crayfish, crayfish halves, tails, smaller crayfish for garnish and decoration and crayfish bisque for commercial kitchens as a crayfish sauce base. The viability of these products are of course subject to market testing.

Redclaw may present a better opportunity for Cape York than marine prawns and barramundi. Market opportunities are largely untapped. They are native to the region, thrive in the hot conditions and wet season events trigger behaviour patterns. The scale required is probably smaller than that required for barramundi and prawns. However, the limitations of transport, high costs and skills base available will mitigate against successful projects.

**Sea Cucumber**

Sea cucumber, sand fish or trepang are a high value product in Asian markets. An advantage for Cape York is that they can be simply processed by drying. This reduces the need for significant infrastructure and extensive skill sets. The high value to weight of dried product will offset the high transport costs on Cape York. They are also a native species to there is a possibility they can be farmed in ‘ranching’ style operations, where the natural population on the sea bed is re-stocked with juveniles bred in the aquaculture operation.

There is currently a Hervey Bay hatchery which supplies trepang juveniles. There has also been a long standing project under development in the Northern Territory to develop ranching style operations in partnership with Indigenous communities. An advantage seen is that the ranching style operation is more consistent with the Indigenous traditional hunter / gatherer lifestyle than intensive pond aquaculture.

The prevalence of sharks and crocodiles in the environment in which the ranching could take place is a serious hazard that would need to be addressed for any harvesting operation. This ranching style involving ‘seeding’ of natural populations has not been proven to be effective as yet for Cape York species and circumstances.

**Crocodile**

There is an existing Indigenous crocodile farm on Western Cape York. A major constraint to development of this industry on Cape York has been the prohibition on harvest of eggs from nests in the wild. This practice is permitted in the Northern Territory.

It is understood that the Queensland Government is to re-examine the possibility of egg harvest on Western Cape York. To date it has been considered that crocodile numbers
are not at a level that would indicate this to be a sustainable practice. Research is to be undertaken to determine sustainability.

The high value to weight of crocodile belly skin in particular, low sensitivity to damage in transit, with good market demand levels offset freight and transport costs and conditions applying to Cape York. However, the meat ‘by-product’ is subject to all the constraints due to the Cape York location referred to elsewhere and there are doubts as to the size of market.

Industry expansion would seem to rest largely on the ability to access eggs in the wild.

**Oysters & Pearls**

As in 1996 when the CYPLUS report was developed, there is existing aquaculture of pearl oysters on the eastern side of the tip of Cape York. Market conditions would seem to support an expansion, but the availability of pearl spat may be a constraint.

There are high levels of competition in the industry, with Indonesian imports at the low price/quality end and Paspaly high quality pearls which both place pressure on the smaller scale operation of Cape York.

The Minniecon & Burke Report recommends establishment of a multi-purpose hatchery, possibly based on Thursday Island. This would seem sensible and could facilitate development of the pearl industry, as well as underpinning ‘tropical rock lobster’ aquaculture in Torres Strait.

As to oysters, there are no projects either past or under development of which the authors of this report are aware. However there are impressively large oyster varieties endemic to Eastern Cape York. Commercial development of oyster farms on the Eastern Cape would of course be constrained by the Great Barrier Reef Marine Park requirements, possibly to the point of not being a viable consideration. Although of relatively high value, transport costs and cool chain logistics are likely to mitigate against viability.

There are also large successful oyster culture operations in other parts of Australia closer to markets. Any Cape York operation is likely to be most effective in targeting a local regional market, (with its tourism component), with the messages of ‘fresh’ and ‘local’ probably being effective

**Mudcrab**

There is extensive native habitat for mudcrabs, in the form of mangrove mudflats, with existing populations of mudcrab. It is understood that aquaculture of this species is now possible, provided holding facility design addresses predation issues. This is still at an early stage and not fully proven for viability.

The high value of the species tends to improve its viability in the circumstances of Cape York, with a robust regional market through especially tourism. There has been a managed fishery operation out of Mapoon, run by an experienced fisherman in partnership with the Mapoon community. This was apparently doing well, but reportedly has run down its operations due to difficulties in maintaining the interest of local Indigenous people in working the fishery.
Skills & Training

A lack of suitable skills base and associated constraints to building one is a key issue across development of many economic activities on Cape York, referred to above. Since the CYPLUS Report in 1997, there has been training activity in aquaculture for local people across Cape York. The flaw has been, as in so much other training activity, is that there have not been jobs for the trainees to move into.

It is strongly felt that a suitable skills base will only be developed if training has the following characteristics:

- Trainees provided on the job experience in commercial or DPI&F operations outside their community and the social pressures pertaining in many such communities;
- Holistic mentoring is provided, not just on the job. Support for life skills development, work ethic and counselling has to be available;
- Training is preferably ‘on the job, for a job’, with an emphasis on practical skills;
- People bought from outside Cape York for their skills must be offered some tenure and incentives to try to avoid the historical high turnover of staff. Typically good operatives gain trust, respect, support and action, only to leave soon after to have the project fall into disarray.

The existing DPI&F facility at Walkamin, with its track record of research and experienced staff would seem to have potential to play a key role in a process of engagement with industry and Indigenous communities to facilitate the above style of training and support for project development on Cape York.

Future Direction

While there are significant constraints, there appear to be unrealised opportunities for aquaculture. These may be advanced through the following:

- Robust feasibility assessment of the viability of a multi-species hatchery perhaps on Thursday Island;
- Identification of specific sites with suitable attributes and likely acceptable impacts as to natural heritage management;
- Review industry interest in joint ventures with Indigenous communities and facilitate a process of engagement that will see appropriate matching of JV partners as to interests, culture and complementary attributes;
- Access professional support services for the objective and comprehensive assessment of project viability and consequent business model development;
- Review the possible role of DPI&F facilities at Walkamin in industry facilitation, especially in establishment of an appropriate and effective capacity building model and program;
- Support research and review of the viability of taking crocodile eggs from the wild on Western Cape York;
- Place priority on new development involving Redclaw, pearl oysters, sea cucumber and mudcrab species.
FOREST INDUSTRIES

Strategy Scope & Constraints

The CYPLUS strategies basically envisioned the maintenance of the then current level of activity as being appropriate pending further assessment of the resource. It was noted that activities encompassed seed collection, sandalwood harvest, plus production of sleepers, poles and building timber at low production levels. Under ‘The Need for Change’ it was noted that the focus on high volume low value products may not be sustainable and that there needed to be a move to low volume, high value products.

There were eight desired outcome areas with required actions under each. The outcome areas were:

- Sustainable use of forest resources.
- Broad economic development/new opportunities
- Improve indigenous access to the forest industries.
- Effective control of exotic pests.
- Effective control of land degradation.
- Effective land use planning, co-ordination and management.
- Effective training.
- Effective infrastructure.

The first three represent economic development initiatives, while the balance could be said to be industry support and management matters.

Events in the form of the Vegetation Management Act have overtaken some aspects of these strategies, in that forestry activities are now very limited. The resource on Cape York is also generally not adequate for sustainable harvesting regimes to be commercially viable.

The provision of Indigenous Community Use Areas under the new Cape York Peninsula Heritage legislation may provide some forestry activity opportunities, but it is too soon to judge the outcome. If it does it will contribute to achievement of outcome area three above. The most significant new areas of opportunity identified in the strategy arose from the salvage of timber from mining leases (notably the bauxite mining leases around Weipa). Land restoration and reforestation of mined areas and could contribute to achievement of all of the first three outcome areas and the last two.

Timber Salvage

The concept of salvaging timber from bauxite mining leases has been under discussion for many years. Since the CYPLUS Report, there has been a variety of steps taken to bring the concept to reality. It is a high profile project concept, discussed at the Premier’s Weipa Business Summit in August 2000.

Nanum Tawup, based in Napranum, has a sales license and has what amounts to a limited operation which harvests and processes timber from Rio Tinto mining lease areas. The mill could be classed as a medium sized mill and produces generally rough sawn
hardwood. Its fortunes have fluctuated over a period of years and the Department of State Development has invested significant funds in support of its development. The viability of operations has tended to fluctuate in line with the skills and capacities of the management in place from time to time.

Training has been conducted for Indigenous people in forestry and timber industries. However productivity continues to be an issue that impacts viability of such operations.

In 2004 - 05 the Western Cape Communities Coexistence Agreement Trust (WCCCA) entered into discussions with a potential joint venture partner to establish a major central mill. Rather than proceeding immediately into a joint venture, the Trust decided to test feasibility and viability of optional business models. In this assessment the Trust was supported by the Department of State Development and Rio Tinto. A feasibility / business case assessment report was subsequently produced in February 2006.

This 2006 report was asked to consider optional business models - one a large central mill, one involving three smaller community mills. The option of having a number of portable mills was discarded as not viable. It was found that rather than three community mills, a better model was two intermediate sized mills, one ‘northern mill’ the other a ‘southern mill’. The northern mill would sensibly involve a progression from the existing Nanum Tawup model, with the southern mill being a ‘Greenfield’ project. Key findings from the report were:

- Both northern and southern bauxite lease areas have been subject to timber resource assessments (2002, 2003 & 2004). All found that the resource is very extensive, with predominant species suitable for structural, building, flooring, furniture and a range of other uses;
- There is generally strong market demand, but the market may not be fully cognizant of the species attributes. Marketing is required to fully penetrate higher value markets for value added products;
- Both the central mill and north/south mill model were viable and profitable, with the larger central mill likely to be more efficient and profitable;
- Better business viability would be attained by development of a second, finishing mill to produce T&G flooring and architectural mouldings, plus furniture components;
- The finishing mill should probably not be located on Cape York, but in the region, with Mareeba being a possible location;
- There may be a good opportunity to export furniture ‘blanks’ as components for finishing and furniture manufacture in China or Vietnam for instance;
- Subject to further analysis as to the suitability of the Weipa area, the mill/mills could significantly value add by solar drying of milled timber;
- Key risks identified were:
  - Lack of reliability in supply would break down customer confidence
  - Low productivity would reduce viability and perhaps lead to financial loss
Under all models, an appropriate, committed joint venture partner with industry skills and links into the industry marketing and distribution system was seen as a key component.

While there is still considerable support for the establishment of a significant timber salvage industry on Western Cape York, there has not been a great deal of progress since the 2006 report was presented.

However it is understood that certain core issues involving royalty levels on salvaged timbers and access protocols are no longer barriers to proceeding further.

A recent development is that the Southern Trust, being one of the four making up the WCCCA, has decided to proceed independently. This would develop a timber industry based in Aurukun, drawing resources from the Rio Tinto southern lease areas and the potential of the lease areas now held by Chalco. A 2004 thesis found the timber resource in these areas to be quite extensive and of a better quality than the northern lease areas.

The consultancy firm that completed the 2006 feasibility assessment has been appointed by the Southern Trust with the objective of the assignment to bring the project concept to fruition. This is likely to include:

- Development of an effective training regime;
- A robust business model with appropriate governance systems and standards;
- A business plan;
- Attraction and screening of a suitable joint venture partner;
- Assisting the parties in negotiation of a satisfactory agreement;
- Securing finance as required.

This assignment commenced only in October 2007 and is likely to require an extended time frame for completion. It is understood there is strong support for the project from both Rio Tinto and Department of State Development. One constraint is that mining of these southern lease areas is yet to commence.

Rehabilitation & Plantations

New industries envisioned in the CYPLUS strategies included plantation forestry based on local species and land restoration and reafforestation e.g: of mined areas with native timber species.

While there has been some activity and interest on the part of plantation forestry companies, opportunities could be expected to be limited to areas already cleared. There has for instance been some plantation establishment of Teak and Mahogany in the Endeavour valley. However the most extensive cleared areas are on the bauxite mining leases of the Western Cape. While there has been some experimentation with plantations, the Rio Tinto lease areas have been generally rehabilitated after mining with native endemic species. It has been demonstrated over time that the rehabilitated areas do not regenerate to be what they were before mining. This is thought to be because the
vegetation has become adapted to the bauxite in the sub soils and its absence produces a different outcome.

There is an opportunity to adopt a different approach to rehabilitation which will create a long term industry and source of wealth generation beyond mining for local people.

Plantation forestry could be established on at least a proportion of the mined area. The extent required to be economically sustainable would need to be established as part of a feasibility assessment. It is understood that there is support for such a project from within Government departments. Whether it were to be mixed or single species plantations would also need to be determined in the context of the most environmentally sustainable approach over the long term. Perhaps plantation blocks could be interspersed with re-vegetated blocks, with the opportunity to return it all to natural vegetation at some future point.

The species thought to be the most suitable at this stage is Sandalwood. Selection of type and host tree would need to be undertaken for a successful plantation operation. It is a species native to Cape York and there appear to be solid markets. Another advanced as a possibility is African Mahogany. It is already growing well on Cape York without forestry management. However, it is also understood there could be some low level concern for its potential to be a weed. The species and the development of an appropriate model require careful consideration, with the opportunity to create an innovative model that supports economic development and is consistent with natural heritage management objectives for the region.

These plantations would also be likely to provide a long term future for the proposed timber salvage industry beyond mining.

Plantations on the bauxite mined areas would require the support and agreement of the Indigenous owners and their long term commitment. Such plantations require ongoing management and maintenance. This would provide long term employment for local people. The experience to date has been it has been difficult to obtain this ongoing commitment from sufficient local community members. However there is some evidence that this is changing. A robust and practical business model would be required.

**Future Direction**

The CYPLUS Strategies envisioned basically the maintenance of the status quo as to forestry on Cape York, with seed collection at around 200kg per year and low levels of timber harvest at around 2,000m³ per annum (an insignificant amount given the size of the resource). A number of the outcome areas were directed to ensuring sustainability, rather than economic development objectives.

As noted above, combined effect of current legislation may achieve these sought outcomes.

The two areas in which significant contributions can be made to the Cape York economy are in timber salvage from bauxite leases and plantation forestry on the same lease areas.
In the words of the Terms of Reference they may contribute to achieving the objective of developing a vibrant, broad and sustainable economy, especially in terms of economic benefits retained and reinvested in the region.

The ‘timber salvage project’ for the southern bauxite lease areas is proceeding. As it progresses, there may be need for some additional support from the State Government and it certainly envisages progressing in collaboration with the Department of State Development, Rio Tinto and Chalco.

If successful, it may provide a model and some flow on effects that will facilitate further development in the northern lease areas.

Plantation development is not a current project and requires some exploratory actions, suggested to be as follows:

- Initiate discussions involving Rio Tinto, Chalco & Traditional Owners, DPI&F and Department of Tourism, Regional Development and Industry
- Feasibility assessment, including:
  - Level of Traditional Owner support
  - Species selection for suitability
  - Environmental impacts
  - Optimal plantation model as to triple bottom line
  - Long term market analysis
  - Corporate structure options & governance systems
  - Business model options
  - Sources of Investment /JV partners
  - Labour, training & ongoing operational security
  - Financial analysis – break even, Internal Rate of Return, cash flows, etc
7. **RISK MANAGEMENT**

The Terms of Reference called for *a risk management strategy to improve capacity and sustainability.*

Risks seen to achieving increased capacity and sustainability in the Cape York economy have been canvassed under each strategy section.

Perhaps the biggest overall risk is for there to be a lack of collaboration and cohesion between the Cape York stakeholders. The need is for advocacy for sustainable development of the economy, widely supported and based on a solid evidenced based case. This perhaps more than any other factor has contributed to the lack of balance that has been evident as between sustainable development and conservation.

Management of this risk has two aspects to it. The first is for CYPDA to facilitate a dialogue across key stakeholders to achieve consensus as to the way forward. This document may be a tool that can be used in that process. The second is securing the resources to support the effort required to collect and present the objective data required to support the required advocacy on an ongoing basis.

Associated with this overarching risk is what has been referred to as ‘the tyranny of small decisions’. This leads to fragmentation and fails to provide the basis for viable industry development. There are a number of strategies that have been proposed to manage this:

- Review the Beef industry strategy and build a cohesive, agreed industry action plan;
- Seek to clarify how the Indigenous community use areas will work in practice and point out the risks inherent in them for fragmentation, inability to attract supporting infrastructure and lack of industry level strategy development;
- Pursue a thorough feasibility assessment of sustainable cropping and horticulture development, as a first priority, followed by development of an industry development framework and action plan. This same approach should be applied to other industry sectors. It should not be about assessment of only one land use, that is, high value conservation areas. All sustainable land use opportunities need definitive assessment.
8. **PUBLIC EXPENDITURE ALLOCATIONS**

Public expenditure allocations will only flow from considered, well-mounted, evidenced based cases. Any recommendations made here will alone not result in these allocations.

However, as to the key constraining factors seen for development of the Cape York economy, the following are seen as priorities.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Allocation Range</th>
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<tbody>
<tr>
<td>Peninsula Development Road</td>
<td>Say $75,000 for thorough cost / benefit analysis</td>
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<tr>
<td></td>
<td>$700 million minimum over say 10 years to be meaningful for industry development</td>
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<tr>
<td>Cape York secondary roads</td>
<td>$400 million - $2 billion, depending on proper assessment of justifiable needs. This might be over 20 years. (The Aurukun – Development Road link is likely to be addressed in the context of the Chalco project)</td>
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<tr>
<td>Assessment &amp; industry development</td>
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<tr>
<td>For Agriculture</td>
<td>In the order of $250,000 - $500,000</td>
</tr>
<tr>
<td>Beef strategy</td>
<td>Perhaps $30,000 - $40,000</td>
</tr>
</tbody>
</table>
9. LIST OF REFERENCES


7. State Planning Policy 1/92 (Development and the Conservation of Agricultural Land) Order. (made by the Governor in Council on 17 December 1992)


13. Tourism Queensland (July 2007) Cape York Peninsula & Torres Strait Tourism Development Action Plan


15. Gunton J, Horsburgh C (May 2003) Field and Horticulture Crops on Cape York Peninsula - A Situation Analysis Department of Primary Industries
16 Minniecon & Burke Pty Ltd, Oliver, M, Whitney, S (May 2004) Scoping Study Report into Opportunities for Indigenous Aquaculture in North Queensland

17 Kleinhardt (February 2006) Feasibility Report Western Cape York Timber Salvage Project

Summary of Amendments to Wild Rivers Legislation
**Wild Rivers and Other Legislation Amendment Act (2006)**

**SUMMARY OF AMENDMENTS TO WILD RIVERS LEGISLATION**

**Fodder crops** (Clauses 16, 19 & 66)
- Previously (before Act amendments), establishing new crop areas (clearing, levelling, etc) was
  - prohibited in high preservation areas (HPAs)
  - assessable outside HPAs
- Now, for new crop areas outside HPAs –
  - no assessment if using low-risk species
  - assessable if using moderate-risk species
  - prohibited if using high-risk species
- Species based on level of risk of invasion of aquatic environments
- Species will be listed in a Regulation
- Allow pasture improvement in HPA without assessment if –
  - use low-risk species, and
  - cause minimal soil disturbance (eg seeders, drills)
- Also allow regrowth to be cleared in crop areas that are existing in a HPA at the time of declaration, subject to assessment.

**Mineral exploration** (Clauses 36, 49, 52 & 53)
- Previously, couldn’t explore in HPAs, except for hand sampling in streams
- Now, allow low-impact exploration in HPAs outside streams, subject to assessment
- Low-impact methods include seismic surveys and drilling, but not bulk sampling
- However exploration can’t occur within 100m of any streams in the HPA
- Previously, all exploration outside HPAs was an automatic level 1 project
- Now remove this requirement, i.e. can be level 1 or 2 depending on impact
- However can’t explore within 100m of any nominated waterway outside the HPA

**Mining in HPAs** (Clauses 34, 37, 38, 51 & 53)
- Previously, couldn’t mine in HPAs
- Now, allow mining under HPAs provided -
  - The minimum safe depth is determined by an EIS (to avoid collapse)
  - conditions are set to protect groundwater levels and quality
  - no surface disturbance in the HPA
Mining in nominated waterways  (Clauses 6, 34, 37, 38, 51 & 53)

- Previously, couldn’t mine in any watercourse outside HPAs
- Now, limit this rule to selected watercourses (called nominated waterways)
- Allow mining under nominated waterways if meet the same criteria for HPAs
- Also allow mining in nominated waterways if -
  - it is a project of state significance (approved by the Premier)
  - the value of resource justifies mining in sensitive areas
  - the resource cannot be accessed by underground mining
  - the activity will not adversely affect the natural values

Essential urban infrastructure  (Clauses 35 & 72 – 74)

- Previously, environmentally relevant activities (ERAs) were not permitted in HPAs
- Some ERAs (eg mechanics, fuel storage, etc) are essential for urban communities.
- Now, allow these ERAs in designated urban areas.
- These developments are generally low-impact so won’t have any wild river requirements but continue to be assessable by local government and /or EPA.
- Also allow sewage and water treatment plants in a HPA, subject to assessment, if no alternative location for the treatment plants outside the HPA

Non-urban residential complexes  (Clauses 39 & 72 – 74)

- Previously, constructing a residential complex (homestead, outstation or resort) outside an urban area could be constrained if need to access quarry material in a HPA
- Also previously could not store more than 10,000 litres of fuel or install a sewage or water treatment plant in a HPA
- Now, propose to allow quarrying, fuel storage and treatment plants in a HPA for residential complexes, provided there is no alternative location for the treatment plants outside the HPA.

Communal gardens  (Clause 19)

- Previously, domestic gardens could only be established in HPAs for residents’ needs
- Now, allow communal domestic gardens in HPAs
- The size of gardens to be limited based on the number of people relying on them
Quarrying (Clauses 34 & 72-74)
- Previously, couldn’t extract sand and gravel from any watercourse in a wild river area
- Now, allow new quarry pits within non-tidal streams provided -
  ▪ used for specified works (eg roads, pipelines, etc) or residential complexes
  ▪ demonstrate that there is no alternative off-stream source within reasonable distance
- Previously, couldn’t extract quarry material from off-stream pits in a wild river area
- Now, allow new off-stream quarry pits –
  ▪ within HPAs provided material is used for specified works or residential complexes, subject to assessment
  ▪ outside HPAs but within a floodplain management area - for specified works or residential complexes, subject to assessment
  ▪ outside HPAs and floodplain management areas - for any purpose, subject to assessment

Minor declaration amendments (Clause 14)
- Previously, could make minor corrections to a declaration without a full public consultation process
- Now, will also allow minor amendments with limited landholder consultation
- Now include minor adjustments to management area boundaries and references to development assessment codes

Existing animal husbandry and agriculture (Clause 12)
- Previously, activities authorised by a permit or licence at the time of declaration could continue unaffected.
- Now, this includes animal husbandry and agricultural activities that did not require a permit or licence prior to the declaration to clarify they can continue unaffected.

Water moratorium (Clause 9)
- Previously, applications for licences to take water were captured during a moratorium period and not dealt with
- Now include applications for licences to interfere with water, eg build a dam

Development assessment codes (Clauses 10 & 11)
- Previously, development assessment codes were ‘part’ of each declaration
- Now declarations only refer to codes, providing flexibility to update codes

Specified works (Clause 18)
- Previously, the term ‘specified works’ included linear infrastructure (roads, etc) and emergency works (eg levees)
- Now, includes public jetties and boat ramps, and land restoration works.
CYPLUS Stage 2 Report Strategies – Infrastructure and Economic Development
STRATEGY 10
ECONOMIC: MINING
CURRENT SITUATION
The mining industry provides the majority of the income from Cape York Peninsula. In 1991, this sector generated $156 million (52% of the Gross Regional Product) and employed over 800 people (12% of the work force). Mining activity on Cape York Peninsula currently includes corporate miners whose major activities are focused on the bauxite (and formerly kaolin) deposits on the west coast near Weipa and the east coast silica sand deposits at Cape Flattery, and the largely non-corporate miners who operate small ventures based on the gold fields of the Palmer River, the West Normanby River, Ebagooloa, Coen, the Alice River and Munburra. (The distinction between corporate and non-corporate miners is not meant to be based on the legal structure of their businesses, rather the relative size of their operations and impacts.) The mining industry also includes petroleum and natural gas interests, although no such projects are yet operational.

In addition to these proven reserves which support established industries are a number of areas throughout Cape York Peninsula with potential for significant mineral development. Key areas are north of Weipa, Vrilya Point, Aurukun (bauxite); Kendall River (kaolin); Wolverton, Jeannie River and Collingwood (tin); Shelburne Bay and the Escape River (silica sand); Colmer Point (ilmenite); Bathurst Bay (coking coal); Palmerville and Kings Plains (limestone) and Maitland Downs (tungsten). The Pandora gas field lies offshore to the north-east of Cape York.

A little over 4% of Cape York Peninsula is occupied by various mining tenures, leases or other permits, while the actual area subject to mining is perhaps one-tenth of this. The total resource is not known due to incomplete exploration activity and the difficulty of remotely sensing mineral deposits, coupled with the fact that several rounds of exploration are often required to identify resources. It has been estimated that 1,000 exploration programs are required to find a single economic mining deposit, while for petroleum the number is approximately 30.

The industry is very susceptible to fluctuations in commodity prices, currency exchange rates and other aspects of the global economy. These fluctuations routinely affect the competitiveness of Cape York Peninsula mining and the viability of individual mines.

A range of legislation currently regulates exploration and mining aspects of the industry and a draft Environmental Protection Policy (Mining & Petroleum) has recently completed its public review phase. While this draft Environmental Protection Policy (EPP) has been referred to in this Strategy on the basis that it provides helpful material already familiar to the industry and the community, this Strategy is not intended to pre-empt the on-going development of the EPP as a community-based and industry-based document.

NEED FOR CHANGE
The need for change arises from:
- problems in achieving ecological and economic sustainability (in the context of mining, the ecological aspects of ESD relate largely to the maintenance of downstream and off-site ecological processes and values)
- uncertainty regarding future access to land for mineral exploration and mining
- increased competition for resources from other land uses and in particular conservation (in some cases the economic value of mining is ignored when making decisions about conservation initiatives)
rising conflict with other land users and communities affected by mining and exploration
increasingly complex governmental administrative arrangements which non-corporate miners in particular find difficult to understand and respond to
inadequate access to the industry and its rewards for indigenous people and
poor representation of non-corporate miners in decision-making.

HOW DECISIONS WERE REACHED
In workshop sessions over three months the Mining, Fishing and Tourism working group investigated the nature of the mining industry and the likely trends in this industry. The group took submissions from the Queensland Mining Council and member companies, the non-corporate miners, the Department of Minerals and Energy (Qld) and the Department of Primary Industries and Energy (Cwlth). In arriving at the preferred strategy, recognition was given to the following points:

- the international nature of mining and hence the impossibility of developing a definitive strategy or program
- key CYPLUS visions, goals and principles regarding sustainability and protection of natural and cultural values as well as equity issues associated with community interests
- the impracticality of accurately determining all mining values at any one time and
- attention to the goals and objectives of the draft Environmental Protection Policy (Mining & Petroleum), recognising that this is a draft document with its own consultation agenda.

DESIRED OUTCOMES
The desired outcomes for the mining industry on Cape York Peninsula are:

10.1 Achievement of Ecologically Sustainable Development.
10.2 Fair access to land for exploration and mining.
10.3 Value-adding.
10.4 Indigenous access and benefits.
10.5 Improved and streamlined administration procedures.

ACTIONS REQUIRED
[KEY: (by whom); bold = lead agency]
Desired Outcome 10.1
Achievement of Ecologically Sustainable Development
- Support the following objectives which have been derived from the draft Environmental Protection Policy (Mining & Petroleum) (EPPM) (DME, DPIE, DoE, Queensland Mining Council):
  - to ensure the wise use of the State’s mineral and energy resources for the benefit of the community
  - to ensure that appropriate weight is given to biophysical, ecological, social and economic values in assessment and decision-making by prescribing specific environmental management objectives
  - to manage impacts of exploration and development projects on environmental values (including social values) by providing an environmental management planning framework to guide developers
  - to maximise industry adoption of “best practice environmental management”
  - to transparently and effectively assess environmental impacts and make decisions commensurate with the nature, size and environmental sensitivity of an exploration or development proposal
  - to protect environmentally sensitive areas
- to promote research into cost-effective operational solutions to environmental problems, including social issues, associated with exploration and development activities
- to educate the community and promote a sense of ownership of environmental management issues and processes relevant to the minerals and petroleum exploration and development industries
- to maximise industry compliance with statutory requirements for protecting the environment
- to monitor, assess and report on changes to environmental quality associated with environmental harm and nuisance caused by mineral and petroleum exploration and development
- to ensure satisfactory rehabilitation of disturbances to the land and the environment caused by exploration, mining and petroleum developments (this should involve the re-establishment of existing topography, drainage and vegetation to the greatest extent possible)
- to identify and rehabilitate abandoned mine sites that present an unacceptable hazard to public health and the environment.

• Support the adoption of the draft Environmental Protection Policy (Mining & Petroleum) as it applies to the development and implementation of the Policy on Environmental Management for activities under exploration permits and mineral development licences, and in particular the Code of Practice for managing environmental impacts of exploration.
• Enhance this Code of Practice for Cape York Peninsula conditions, including:
  - taking account of the highly significant natural and cultural values on Cape York Peninsula as determined by the Natural Resource Management Strategy and the Cultural Resource Management Strategy (some high value areas need to be “off-limits” under the Code of Practice)
  - utilising techniques such as airborne surveys, minimisation of track construction, geological mapping, hand sampling, and other low-impact methods
  - developing specific protocols to be observed when dealing with indigenous interests (in particular, these need to ensure culturally appropriate consultation during all stages of mining and also to determine equitable compensation packages).

Desired Outcome 10.2
Fair access to land for exploration and mining.
• Provide access to land for exploration in accordance with the Code of Practice (see Desired Outcome 10.1) and possibly a Heads of Agreement (Mining) and follow-up agreement if appropriate. This Code is to recognise constraints imposed by natural and cultural values as determined by the Natural Resource Management Strategy and Cultural Resource Management Strategy (all stakeholders).
• The procedures for converting an exploration authority into a mining venture will follow existing procedures, but all assessments are to take into account the findings of the significance of values assessment described in the Natural Resource Management Strategy (Section 6.2) (DME, mining industry).
• Establish additional reserves for small non-corporate miners, based on (DME, DoE):
  - appropriate mineral resources
  - protection of natural and cultural values
  - recognition of the needs of non-corporate miners in terms of lifestyle, economic return and ability to meet standards of environmental protection
Desired Outcome 10.3
Value-adding.
• Investigate options to integrate tourism with mining ventures (mining industry, CYPDA - during development of tourism strategy):
  - incorporate in CYPDA Tourism Strategy
  - address insurance and risk implications.
• Adopt sequential land use involving (mining industry, DoE, DPI):
  - timber salvage (see Glossary) before mining
  - short term cropping following salvage and prior to mining
  - consideration of a range of other uses following rehabilitation. These could include conservation, sustainable agro-forestry, horticulture and cropping, aquaculture, bush tucker and medicinal plants in consultation with local indigenous people. Rehabilitation should consider ecological and cultural needs as well as economic returns.
• Investigate opportunities to better utilise infrastructure such as mine electricity generation, water supplies, and wastewater treatment in conjunction with communities (mining industry, local government).
• Investigate options to better utilise existing infrastructure (ports, roads, townships) when considering new projects (mining industry).
• Involve local people in any value-adding projects to achieve CYPLUS goals regarding economic independence and the use of local knowledge (mining industry).

Desired Outcome 10.4
Indigenous access and benefits.
• Recognise and respect indigenous aspirations for land management and access to areas of importance on exploration and mining leases (mining industry).
• Involve indigenous communities in meaningful consultation prior to any exploration or mining activity in accordance with the Code of Practice (mining industry).
• Encourage and facilitate indigenous involvement in the mining industry, either as partners or in their own right (mining industry and communities).

Desired Outcome 10.5
Improved and streamlined administration procedures.
• Reduce “red tape” regarding permits, consistent with the need for improved environmental management (DME).
• Improve conflict resolution procedures in accordance with the Code of Practice and a possible future Heads of Agreement (Mining) (all stakeholders).

STRATEGY 11
ECONOMIC: TOURISM
CURRENT SITUATION
Tourism and recreation on Cape York Peninsula are based on the region’s natural and cultural assets and resources. Total visitation is less than 70,000 visits per year, with this activity being concentrated in the south-east (i.e. Cooktown). This visitation level is very low compared to key tourism areas in the FNQ region, such as Cape Tribulation (just south of the CYPLUS area) which attracts some 250,000 visitors annually, while in 1991 nearly 2.7 million people visited the Wet Tropics World Heritage Area.

There is a relatively small but growing commercial tourism industry on Cape York Peninsula and this has an estimated annual turnover of $26 million.

The industry is currently composed of a large number of small operators based both within Cape York Peninsula and in Cairns. Access is restricted by the wet season
when many roads are impassable. Because Aboriginal people currently own or control most of the land on both the west and east coasts or could be expected to be in this position during the life of CYPLUS, they are expected to play an increasingly important role in the tourism industry.

NEED FOR CHANGE
The tourism industry is seen as being important to the regional economy as well as the economic independence of Cape York Peninsula’s residents. Tourism has the potential to better educate visitors about the region and its people and this is expected to have benefits in terms of achieving CYPLUS conservation outcomes. The industry has problems in terms of:

• seasonal restrictions
• undesirable environmental and social impacts of tourism, including excessive fishing catches by unlicensed fishers, littering, and overcrowding
• a poorly co-ordinated tourism industry which lacks focus and diversity
• insufficient and inaccurate information on places to visit and appropriate activities
• insufficient information on and adherence to cultural protocols and
• insufficient involvement in and influence over the tourism industry by indigenous people.

There is considerable potential for the development of a tourism industry on Cape York Peninsula based on the twin assets of the land and people provided that:

• A base level of infrastructure related to visitor management and information provision is established including information and interpretation centres, signage, boardwalks.
• There is a focus on information in order to increase understanding and cross cultural education amongst the stakeholder groups.
• Itineraries are developed which facilitate opportunities for residents to participate in tourism activities which will enhance visitors understanding and appreciation of varied elements of the assets of land and people.
• There is a respect for the principle of inclusion of indigenous people in terms of freehold tenure and traditional landowning interests.

HOW DECISIONS WERE REACHED
In workshop sessions over three months the Mining, Fishing and Tourism working group investigated the nature of the tourism industry and the likely trends in this industry. The group took submissions from the FNQ Regional Economic Development Organisation, the Far North Queensland Promotion Bureau and CYPDA.

In arriving at the preferred strategy, recognition was given to the following points:
• recognition of key CYPLUS visions, goals and principles regarding sustainability, protection of natural and cultural values, and equity issues associated with community interests, and
• inclusion of elements from a special paper prepared by the CYPDA for consideration by CYRAG.

DESIRED OUTCOMES
The focus of the early stages of the strategy is to manage impacts adequately before expanding the industry.
Objectives for the tourism industry on Cape York Peninsula are:
• a well-co-ordinated, non-intrusive, low impact and culturally appropriate industry which provides employment for Cape York Peninsula residents
• accurate portrayal of the resources and values of the area and promotion of the understanding and appreciation of and respect for the land and its people
• understanding of the effects of recreational fishing on fish stocks and ecology
• more flexible tenure arrangements which permit and encourage tourism development
• diversification including a possible cruise ship industry
• improved involvement in and influence over the tourism industry by indigenous people and
• integration with other industries such as grazing and mining.

Specific desired outcomes are:
11.1 Appropriate protocols for working with stakeholders.
11.2 Appropriate management structures and arrangements.
11.3 Presentation of accurate and appropriate information.
11.4 Appropriate infrastructure.
11.5 A high quality tourism product.
11.6 A well-managed tourism asset.
11.7 An industry with well trained staff.
11.8 A comprehensive itinerary.
11.9 A comprehensive research base.
11.10 Indigenous access and benefits.

Important note - this strategy is largely based on the strategy developed by the CYPDA. While it has been perused by CYRAG, there is much detail with which CYRAG has not involved itself other than in a cursory manner. In considering the strategy outlined below it is necessary to refer to the key aspects of the desired outcomes listed above.

ACTIONS REQUIRED
Desired Outcome 11.1
Appropriate protocols for working with stakeholders.
• Establish the necessary protocols to allow access, visitation, utilisation, and culturally and environmentally appropriate management of tourism resources on Cape York Peninsula.
• Finalise development of a Tourism Heads of Agreement to establish common ground amongst key stakeholders with an interest in the sustainable development of tourism on Cape York Peninsula.
• Publicise existing relevant Shire and Community Council local laws and rules regarding access/behaviour within Cape York Peninsula.
• Develop general and site specific protocols and codes of conduct e.g. motoring behaviour and codes of conduct on pastoral properties.
• Develop and support tourism relevant By-laws for Aboriginal councils.

• Desired Outcome 11.2
Appropriate management structures and arrangements.
• Establish a small, action-oriented body charged with the responsibility to initiate concrete visible actions on community-determined priority issues to encourage the sustainable development of tourism on Cape York Peninsula. This body should:
  - bring together relevant organisations and stakeholders to develop policy and make recommendations regarding implementation of tourism policy and to facilitate joint venture possibilities
  - provide links to domestic and international markets
  - lobby government
  - facilitate between deliverers of programs to assist the sustainable development of tourism in Cape York Peninsula.
• Establish CYTAG and a Secretariat within CYPDA.
• Create a lean, action based, reconciliation focus addressing specific informational deficiencies.
• Coordinate and facilitate development of tourism related policy and recommend implementation to other bodies.
• Promote and encourage joint venture possibilities.
• Secure long term funding for CYTAG operation.
• Facilitate the negotiation of sub-regional agreements.
• Develop information links with key tourism bodies.
• Develop lines of communication and support with other stakeholders and management authorities.
• Support the establishment of a non-profit organisation “The Friends of Cape York Trust” whose role would be to generate funds to enhance the appreciation of the environmental, educational and cultural values of residents and visitors to Cape York Peninsula. This Trust should be headed up by an eminent person, recognised nationally/internationally who, by virtue of his/her association, would generate funds to facilitate ecologically and culturally sustainable development. This Trust would be a vehicle for the maintenance of a longer term association with the place that a tourist has experienced, encourage repeat visitation and provide opportunity for creative partnerships for broad-based gain and edification.
• Facilitate the involvement of indigenous people in both the ownership and operation of tourism facilities and services.

Desired Outcome 11.3
• Presentation of accurate and appropriate information.
• Assist Shire and Community councils, pastoralists, corporations and other interested residents to prioritise the information required to be delivered to identified target groups to lessen impacts and increase the information base in regard to the chief assets of the land and people of Cape York Peninsula.
• Identify priority areas where tourism impacts on residents’ activities or natural or cultural values where, through the erection of signage or the provision of key information, visitor understanding would be enhanced and/or visitor impact reduced.
  - In association with each community, develop signage which includes each participant organisation’s logo.
• Develop an Information, Protocols and Services Directory for Cape York Peninsula for distribution at consumer and trade shows to inform and educate the potential tourist market.
• Support the compilation of:
  - Calendar of Events
  - Infrastructure and Services Directory
  - Thematic guidebook/s.

Desired Outcome 11.4
Appropriate infrastructure (this must be compatible with the Natural Resource Management Strategy and Cultural Resource Management Strategy).
• Ensure that the necessary infrastructure and services are provided within the Peninsula.
• Encourage the development of a road system which can accommodate local needs and at the same time encourage the development of a suitable mode of transport for tourists.
• Encourage the development of a good network of entry hubs, interpretation and information centres where all the needs of tourists may be met.
• Investigate the opportunities that may be accessed by local communities along both the west and east coasts of the Peninsula. Those opportunities may offer another unique experience as well as diversifying the existing travel pattern.

• Encourage the development of a good system of internal air travel throughout the Peninsula for use by both residents and guests.

• Seek commitment from Commonwealth and Queensland Government for adequate funds to address road and access deficiencies.

• Support the Cook Shire in accessing funding for the installation of toilet facilities in key visitation areas.

• Support Community and Shire Councils and Corporations in securing funding for impact management infrastructure e.g. boardwalks/walking trails, rubbish pits, scenic lookouts, roadside rest areas.

• Support Shire and Community Councils in being adequately resourced to address safety and directional signage needs:
  - distance indicators
  - more dip-depth indicators and other road warning signs
  - road safety motoring advice
  - service and facility advice
  - community determined priority information.

• Promote better safety information for road travellers.

• Identify alternate road patterns for tourist usage and consider recommending tourism circuits while not overly encouraging the self-drive segment of the market.

• Support the establishment of a self-supporting Cape York Peninsula information, service and merchandise base in Cairns possibly in shared space with Cape York Peninsula tourism products.

Desired Outcome 11.5
A high quality tourism product.

• Encourage the development of an appropriate and diverse range of unique destinations and activities/experiences for visitors.

• Increase, within socially, culturally and environmentally acceptable limits, the nature-based tourism industry of both the terrestrial and marine natural assets.

• Realise, where appropriate, the potential for tourism development in the exploration and examination of the wealth of cultural places and events in Cape York Peninsula.

• Promote and monitor cultural aspects of the industry on Cape York Peninsula to ensure that cultural and environmental objectives are respected and that there is a fair return from such activities to the respective host communities.

• Investigate the potential for tourism development based on Weipa as a recreational and tourism destination.

• Establish a line of communication with the proposed Arafura Tourism Development Council to maximise the ability to tap into that market through ports and airports throughout the Peninsula.

• Support traditional owners and the Department of Environment to ensure adequate controls and appropriate management within culturally and environmentally sensitive areas.

• Investigate the places identified in Stage 1 of CYPLUS (Report 31 “Tourism Study”) for the basis of niche tours and self-guided tours with various cultural themes.

• Develop Cooktown’s potential as an historic town, its connection with Cook and the link with the Palmer River Goldfields through the development of thematic trails.

• Support the Manth Thayan Association in funding applications to support low key ecotourism possibilities in developing outstation enterprise options.
• Support Rirrmerr, Gungarde and Ang Gnarra Corporations, Hope Vale and Wujal Wujal Community Council and the Cook Shire Council to continue to build profitable partnerships.
• Promote the interpretation of Old Laura Homestead Precinct as the focal point for the story of the evolution and history of the pastoral industry in the Peninsula. It is one of the Peninsula’s most important historical places and well placed from Cooktown and Lakefield National Park to enable relatively easy access.
• Support moves by traditional owners to develop tourism opportunities within national parks.
• Support the construction of low-impact accommodation and service nodes on the edge of national parks to cater for nature-based tourism, and encourage the use of more appropriate methods of accessing and viewing these environments.
• Pursue potential for combinations of road/sea/air exploration of the Peninsula maximising existing resources in these areas and encouraging the development of new resources, routes and options.
• Commence negotiations with all the major cruising companies to explore the further potential for the cruise market at appropriate destinations including those such as Cooktown, Pajinka, Thursday Island, Weipa or other interested communities.
• Establish close co-operation with DoE (national parks) staff, pastoralists, Shire and Community councils, and other relevant land managers.
• Maintain support for the provision of cultural activities by way of annual or other regular but not routine cultural performances such as the Torres Strait Islander Cultural Festival and the Laura Dance Festival (rodeos, race days, Napranum cultural festival, sports days, football carnivals) which enables Aboriginal and Torres Strait Islander culture to be introduced to Peninsula visitors.
• Investigate the potential for the commercial use of plants known to have medicinal qualities with full respect for the intellectual property rights of the owners of that knowledge.
• Promote the viewing part of the tourism experience, of local flora such as the Cooktown orchid, the Cape York Lily and the many other forms of orchids available.
• Jointly investigate with the GBRMPA the potential for combined land and sea experiences in appropriate areas and particularly with interested Aboriginal people.
• Look to an increase in the small-scale guided tours through environmentally-sensitive areas as opposed to the present uncontrolled access in many cases. This includes the investigation of niche market potential in areas such as botany, bird watching and fauna viewing under controlled conditions, that meet ecological objectives.
• Produce a Cape York Peninsula Fishing Directory and Map.

Desired Outcome 11.6
A well-managed tourism asset.
• Ensure the sustainability of both the natural and cultural tourism asset base in the Peninsula.
• Maintain dialogue with relevant land management agencies, pastoralists, Shire and Community Councils and Corporations involved in the planning and management of places with tourism potential.
• Support the resourcing of Aboriginal communities and owners for both training and implementation of appropriate land management for their lands, including National Parks, impacted by tourism.
• Support adequate resourcing of agencies and instrumentalities to properly manage areas and to provide the necessary level of infrastructure and minimise land degradation.
• Improve the standard of interpretation of the tourism asset base in interpretation centres, interpretive material, signage and training.
• Support the continued re-stocking of waterways in the Cooktown region and other appropriate areas to develop recreational fishing opportunities. Re-stocking should only be undertaken in the full understanding of the reasons for the original decline and ecological factors.
• Support the traditional owners to establish a comprehensive tourism management plan for all Cape York Peninsula national parks and for each individual park, to enable the varying demands of tourism for different attractions to be met efficiently and with minimum impact on the natural and cultural resources.
• Seek support from commercial, industrial and governmental sponsors for the installation of facilities like boardwalks, bird hides and interpretation displays.
• Consider the establishment of special facilities to enable tourists to observe particular wildlife attractions.
• Support and utilise the existing information and research facility provided by the Hibberd Library’s Cape York Collection which is owned and supported by Comalco.
• Recognise the anticipated gradual transferring of control over land from non-Aboriginal to Aboriginal people and organisations in the next decade through native title determinations and other Government land transfers.
• Communities should receive informed assistance about whether or not they wish to become involved in tourism at what time and in which ways.
• As far as possible, tourism products should be available in areas which do not interfere with the social or cultural values of the respective communities.
• Support the investigation of opportunities for exploitation by Aboriginal people of plants known to have medicinal and other special qualities as a component of cultural tourism.
• Promote and interpret the natural and cultural values which exist in the Peninsula as distinct from the image promoted for the Cairns Region.
• Assist the tourist industry to keep themselves informed of the wishes, requirements and interests of the Cape York Peninsula Aboriginal Communities.
• Adequate resources should be provided to enable traditional craft skills to be maintained and enhanced.
• Support the appropriate and realistic zoning of national parks.
• Support the repatriation of cultural property to Aboriginal owners.

Desired Outcome 11.7
An industry with well trained staff.
• Ensure that Cape York Peninsula residents have access to culturally-appropriate training opportunities to develop the tourism industry on Cape York Peninsula.
• Educate the tourism industry outside Cape York Peninsula as to the unique product range available to the industry and the protocols to access the product.
• Identify opportunities to deliver culturally-relevant community-based training via new technology.
• Identify opportunities for cross-cultural education programs for the tourism industry.
• Identify particular curriculum needs for developing community-based tourism opportunities.
• Pursue partnership arrangements in relation to sustainable opportunities eg. CDEP workers and rangers.
• Facilitate the involvement of local communities in the development of culturally-appropriate training.
Desired Outcome 11.8
A comprehensive itinerary.

- Support the broadening of the tourism product base by encouraging the development of itineraries which explore the natural and cultural wealth of Cape York Peninsula.
- Support the development of a series of specialist tourism itineraries based on cultural tourism (indigenous culture and historical):
  - for the independent 4WD traveller
  - for prime national and international cultural tourism institutions
  - to broaden product range for packaged touring.
- Support the development of new packages linking appropriate Cairns based product with cultural and educational opportunities in the Cape York Peninsula region.
- Support the development of itineraries which, through thematic exploration, take advantage of alternative travel routes and modes and increase the visitors’ understanding and appreciation of the region’s natural and cultural wealth.
- Promote itineraries in key “stories” of interest to tourists, e.g.:
  - Cape York Peninsula Aboriginal peoples from “pre-Cook” to present day, in particular the telling of the full story of Aboriginal and Torres Strait Islander relocation and settlement throughout the Peninsula, the social and cultural effects these actions had, and the changes which they brought to Aboriginal and Torres Strait Islander life
  - the Jardine story in the North of the Peninsula, with reference to all Jardine sites such as Somerset, Lockerbie and Paira
  - the Telegraph coming to the Peninsula, the stories connected with it and the Track from its construction in the nineteenth century through WW II to the present day
  - the Peninsula and WW II, the impact the war had on the local people; the airports, runways, wharves and other constructions which can still be seen; as well as sites such as the Bamaga DC3 crash site.
- Assist community organisations to secure funding to research and document the history of the relationships between people and places to increase understanding of the traditional and historical links of people to country.
- Support the promotion of parts of the Old Telegraph track for ardent 4 wheel drive travellers.

Desired Outcome 11.9
A comprehensive research base.

- Contribute to the base of knowledge in connection with tourism’s chief assets of the land and people of Cape York Peninsula.
- Establish a sound methodology to build a clear profile of the potential markets for Cape York Peninsula tourism.
- Develop linkages with the Bureau of Tourism Research, James Cook University and other relevant institutions to assist in developing methodologies for the collection of relevant baseline data to provide a clearer picture of tourism trends and the region’s potential for tourism.
- Develop relationships with educational and scientific bodies for community and landowner controlled research which contributes to the tourism asset base.
- Assist community organisations and traditional and historical Peninsula residents to secure funding to research and document the history of the relationships between people and places to increase the understanding of the traditional and historical links of people.
- Develop an integrated approach to baseline data-gathering at those hubs where information on Cape York Peninsula is delivered.
Desired Outcome 11.10
Indigenous access and benefits.
• Recognise and respect indigenous aspirations for land management and access to areas of importance in areas used by the tourism industry.
• Involve indigenous communities in meaningful consultation prior to any tourism activity in accordance with the principles enshrined within the Cape York Tourism Heads of Agreement.
• Encourage and facilitate indigenous involvement in the tourism industry, either as partners or in their own right.

STRATEGY 12
ECONOMIC: Commercial Fishing

CURRENT SITUATION
The commercial fishing industry of Cape York Peninsula is based on the region’s highly productive and relatively unpolluted marine and freshwater environments. In 1991 the industry contributed $6.9 million (2.3%) to the GRP and, together with crops and livestock, employed 400 people (6% of the work force). Existing prawn, net and line fisheries are widespread along the entire coastline of Cape York Peninsula and in adjacent offshore waters. Both trawl and net fisheries are considered to be fully utilised and there is evidence that some fisheries are over-exploited. Recent management changes have reduced fishing capacity in many fisheries although catch levels overall are relatively stable despite large annual variations. There appears to be scope for growth in the aquarium industry.

Indigenous use of commercial fisheries (on a commercial basis) is currently extremely limited.

The fish stocks are managed through the Queensland Fisheries Management Authority, advised by the Far North Queensland and the Gulf of Carpentaria Zonal Advisory Committees and other similar committees, while the Queensland Department of Primary Industries is responsible for habitat management. Fishing is also controlled by zoning under the Great Barrier Reef Marine Park and Queensland Marine Park zoning plans by the Great Barrier Reef Marine Park Authority and Department of Environment respectively.

Indigenous people assert their native title rights to the access, management and ownership of marine resources within their traditional estates. They also have a desire to become more involved in the commercial fishing industry.

NEED FOR CHANGE
While the industry is generally operating at a level consistent with sustainable yields, individual fisheries are possibly operating under or over sustainable limits. Change is needed to both reduce fishing effort in over-exploited fisheries (to achieve sustainability) and to increase effort where this can increase economic return sustainably. Undesirable aspects of the industry are habitat damage and substantial discards of non-commercial fish species in the prawn trawl fisheries, and mortality of non-targeted species (including the protected dugong and turtle) in gill nets and trawl nets. Illegal commercial-scale fishing which is undertaken by recreational fishers (some of whom also illegally kill crocodiles) results in unfair competition and unregulated activity. Littering, pollution and disposal problems involving by-catch are all issues which need to be addressed.

More information is required for stock assessments of most fisheries in the region as an input to a better understanding of sustainable yields for all fisheries.
Indigenous people seek to expand their involvement in commercial fishing.

HOW DECISIONS WERE REACHED
In workshop sessions over three months the Mining, Fishing and Tourism working group investigated the nature of the fishing industry and the likely trends in this industry. The group took submissions from DPI as well as input from QFMA - ZAC via CYRAG representation.
In arriving at the preferred strategy, recognition was given to the following points:
• key CYPLUS visions, goals and principles regarding sustainability and protection of natural and cultural values as well as equity issues associated with community interests
• opportunities to increase economic return in under-utilised fisheries
• the desire to improve access to commercial fisheries by indigenous people and
• input by the QFMA via the ZAC representative.

DESIRED OUTCOMES
The desired outcomes for commercial fishing are:
12.1 Continued sustainable yields.
12.2 Improved indigenous access to commercial fisheries and continued access for traditional purposes.
12.3 Growth in the aquarium fishery.

ACTIONS REQUIRED
[KEY: (by whom); bold = lead agency]
Desired Outcome 12.1
Continued sustainable yields.
• Encourage liaison between the ZACs and MACs of the QFMA, the DPI and the Australian Fisheries Management Authority regarding catch limits and other management aspects including surveillance and enforcement (ZACs, MACs, DPI, Australian Fisheries Management Authority).
• Improve research and monitoring effort (DPI).
• Improve resourcing for surveillance, particularly in the Torres Strait (DPI).
• Implement local laws which complement fisheries legislation when this is appropriate to fisheries management (Local Government, DPI).
• Finalise and implement net designs which reduce habitat damage and capture of non-targeted species (DPI, QFMA, AFMA).
• Consider closures where commercial fishing interferes with local fish populations (DPI).

Desired Outcome 12.2
Improved indigenous access to commercial fisheries and continued access for traditional purposes.
• Investigate new options for indigenous commercial licences involving a range of species in a given geographic area (QFMA).
• Assist indigenous people to acquire existing commercial licences (QFMA).
• Allow use of commercial by-catch by indigenous communities (QFMA).

Desired Outcome 12.3
Growth in the aquarium fishery.
• Assess the development potential for more aquarium fish collection and facilitate growth if feasible (DPI).
CURRENT SITUATION
Cattle grazing occurs on approximately 11 million hectares, or more than half of Cape York Peninsula. There are some 50,000 hectares of improved pasture comprising both pastures on cleared areas and pastures which have been established by aerial seeding through standing trees. Total number of cattle is approximately 175,000 with an annual turnoff of approximately 21,000. The contribution to the GRP of the cattle industry in 1991 was $7.2 million. The industry currently employs slightly over 100 people within Cape York Peninsula. In addition, many properties are family run with the owners self-employed. Further development of the pastoral industry is constrained by:
• existing low cattle numbers
• the high costs of inputs
• uncertainty of tenure
• low carrying capacity
• poor animal husbandry
• the high cost of marketing cattle and
• an often poor market.

NEED FOR CHANGE
The current industry is providing poor economic returns and, in some cases, is not economically or ecologically sustainable. Contributing factors are:
• poor economic returns due to low cattle numbers (these have not fully recovered since the Brucellosis and Tuberculosis Eradication Campaign of the 1980s)
• lack of direction and feelings of insecurity by land holders due to uncertainty of tenure
• declining terms of trade due to increased costs and lower market prices and
• poor land practices leading to areas of land degradation.

HOW DECISIONS WERE REACHED
A range of scenarios were investigated and considered in the context of the CYPLUS economic vision. These included maintaining the current levels of cattle through a variety of growth scenarios based on 265,000 cattle (1995 Department of Lands report for CYPLUS Stage 1, based on area currently under lease and on an unimproved basis), 400,000 cattle (1995 report by Livestock and Property Management for the Cape York Land Council) and 1.5 million cattle (1992 report by the Department of Primary Industries). The scenario of 400,000 head was chosen because it:
• increases the economic return from the sector by 270% ($25.4 million) and employment by 250% (to 380 people)
• relies on existing wide community support from pastoralists and other stakeholders via the Cape York (Land Use) Heads of Agreement
• relies on existing road infrastructure
• involves a moderate increase in property investment from landholders to improve fencing and pastures
• supported by Country Type analysis of carrying capacity by the former Lands Department (1995)
• will enable existing lifestyles to be maintained
• is likely to have limited environmental impact and
• will facilitate multiple land use on properties.
DESIRED OUTCOMES
The desired outcomes for the pastoral industry are:

13.1 An increase in cattle numbers in keeping with the principles of ecologically sustainable development embodied in this Report which, on the basis of available information and according to some current assessments, would give an estimated total of 400,000 head

13.2 Broad economic development/new opportunities

13.3 Improved indigenous access to the pastoral industry

13.4 Effective control of exotic pests

13.5 Effective control of land degradation

13.6 Effective land use planning, co-ordination and management

13.7 Effective training

13.8 Effective infrastructure

ACTIONS REQUIRED

Desired outcome 13.1
An increase in cattle numbers in keeping with the principles of ecologically sustainable development embodied in this Report which, on the basis of available information and according to some current assessments, would give an estimated total of 400,000 head.

- Restock suitable vacant areas (Individual landholders).
- Undertake better stock control (Individual landholders).
- Increase stocking rates by improved animal husbandry and improved pasture (Individual landholders).
- Increase the use of fencing (Individual landholders).
- Increase the area of improved pasture to 80,000 hectares by undertaking planting, amongst existing timber, in areas which are suitable for pasture and do not degrade the area’s natural values (Individual landholders).

Desired outcome 13.2
Broad economic development/new opportunities.
- Identify areas/subjects where information accuracy and coverage from Stage 1 data is inadequate for regional planning purposes (DPI, DNR). This should include:
  - obtaining a realistic assessment of agricultural suitability
  - identifying potential expansion of land uses.
- Undertake research into improved animal husbandry techniques and the sustainability of improved pastures (DPI).
- Identify and utilise the opportunities for initiatives such as free range organic beef and land restoration (Individual landholders, DPI).
- Identify and promote the natural advantages that Cape York Peninsula has for the pastoral industry and use these to identify opportunities for further development (Individual landholders, DPI).
- Explore (with local, Queensland and Commonwealth governments) possible funding sources for concessional finance, opportunities for tax relief and the application of special zonal incentives (FNQ Network, CYPDA and relevant industry bodies).

Desired outcome 13.3
Improved indigenous access to the pastoral industry.
- Facilitate and encourage the involvement of indigenous people in the cattle industry (Balkanu, Traditional owners, DPI, ACC, CYLC,).
Desired outcome 13.4
Effective control of exotic pests (see also Strategy 2: Ecosystem Management).
• Develop fodder growing on Cape York Peninsula to reduce the need for imported fodder which introduces exotic diseases and pests (DPI, Individual landholders, DNR).

Desired outcome 13.5
Effective control of land degradation (see also Strategy 2: Ecosystem Management).
• Use existing cleared land for cropping (DNR, Individual landholders, DPI, DoE, ICM and Landcare committees).

Desired outcome 13.6
Effective land use planning, co-ordination and management (see also the 6.2 Framework for a Natural Resource Management Strategy, Strategy 30: Land Tenure, and Chapter 7: Making It Happen).
• Establish Cape York Property Plans (Individual landholders, DNR, DPI, DoE).
• Improve the security of land tenure for land holders (DNR, individual landholders, DPI).

Desired outcome 13.7
Effective training (see Strategy 19: Employment and Vocational Training).

Desired outcome 13.8
Effective infrastructure provision (see also Section 6.6: Infrastructure and Tenure).
• Develop a purpose-built live cattle export facility at Weipa (Livestock exporters).
• Upgrade key road links to Weipa and areas south (DMR).

STRATEGY 14
ECONOMIC: CROPPING AND HORTICULTURAL INDUSTRIES

CURRENT SITUATION
The industry is currently very small and is concentrated in the south east of the study area. The total area is made up of an estimated 5,000 hectares of cropping and horticulture in the south-east of Cape York Peninsula at Lakeland (3,000), Endeavour River Valley (1,000) and McIvor River Valley (1,000).

The contribution of cropping to the 1991 GRP was $2.1 million with peanuts being the dominant crop, occupying 78% of the broadacre cropping land, with a commercial value of approximately $2 million. The other main crops included maize, forage sorghum and navy beans. Maize was grown for grain over 305 hectares (23% of cropping area), and sorghum and navy beans each occupied 10 hectares. Peanuts and maize are marketed through facilities provided on the Atherton Tableland.

The total value of horticulture in 1991/92 was over $350,778 with the largest single contribution being bananas with a value of $247,000. Coffee occupied the largest area used for a single crop (48 hectares). Recent interest in horticulture at Weipa and Aurukun has resulted in plantings of a total of 600 Cashew trees on 6 hectares. The industry is currently constrained by:

• accurate identification of the potential areas available for cropping and horticulture
• absence of localised infrastructure to support production
• high costs of production
• absence of smaller parcels of land for cropping and horticulture
• lack of secure tenure and
• lack of suitable surface or groundwater for irrigation.
NEED FOR CHANGE
The current industry is a small contributor to the regional economy and is struggling to be economically and ecologically sustainable.

However, there appears to be considerable potential for ecologically sustainable development, particularly to service the local and export markets.

Such an expansion would help to provide the region with a more diversified economic base. In addition, the development of the industry by Aboriginal communities would provide localised employment opportunities, reduce the dependence on food imports, improve health and, by sales further afield, generate wealth.

HOW DECISIONS WERE REACHED
A range of potential scenarios was investigated for the cropping and horticulture industries from maintenance of the current situation through to growth based on small, moderate or large increases in area and output. These scenarios were developed following input from the Department of Primary Industries, farmers and the FNQ REDO. A Moderate increase in horticulture was considered the most appropriate model as it:

• increases the value of cropping and horticulture to $8 million per year with a resulting moderate increase in employment
• relies on existing road infrastructure
• involves a moderate increase in area and in property investment from landholders (to install farm irrigation dams)
• is supported by land suitability/capability analysis by the Department of Primary Industries (1995, 1996)
• enables existing lifestyles to be maintained and
• is likely to have limited environmental impact.

DESIRED OUTCOMES
The desired outcomes for the cropping and horticultural industries are:
14.1 Increase in area under crops/horticulture in keeping with the principles of ecologically sustainable development embodied in this Report which, on the basis of available information and according to some current estimates, would give an estimated total of 8,500 hectares.
14.2 Broad economic development/new opportunities.
14.3 Improved indigenous access to the cropping and horticultural industries.
14.4 Effective control of exotic pests.
14.5 Effective control of land degradation.
14.6 Effective land use planning, co-ordination and management.
14.7 Effective training.
14.8 Effective Infrastructure.

ACTIONS REQUIRED
[KEY: (by whom); bold = lead agency]
Desired outcome 14.1
Increase in area under crops/horticulture in keeping with the principles of ecologically sustainable development embodied in this Report, which, on the basis of available information and according to some current estimates, would give an estimated total of 8,500 hectares, based on:
• Develop areas under cropping (Individual landholders) to 8,500 hectares based on:
  - 5,000 hectares at Lakeland
- 1,500 hectares in the Endeavour River Valley
- 1,500 hectares in the McIvor River Valley
- 500 hectares in identified areas around Weipa
- in other areas which may be identified by a land suitability analysis.

Desired outcome 14.2
Broad economic development/new opportunities.
• Obtain a realistic assessment of cropping and horticultural suitability (including availability of surface water and ground water for irrigation) (DPI, DNR).
• Identify opportunities for new industries on Cape York Peninsula which may involve limited processing (FNQ Network). These may include:
  - land restoration
  - nurseries
  - native flowers and seeds
  - coconuts
  - tropical fruits
  - ti-tree farming.
• Identify the natural advantages that Cape York Peninsula has for the cropping and horticultural industries and use these to identify opportunities for further development (FNQ Network).
• Promote the recognition of crop/horticultural products from Cape York Peninsula (Industry organisations).
• Promote the development of community-based market gardens (Balkanu, traditional owners, DPI, ACC, CYLC).
• Explore (with local, Queensland and Commonwealth governments) possible funding sources for concessional finance, opportunities for tax relief and the application of special zonal incentives (FNQ Network, CYPDA and relevant industry bodies).

Desired outcome 14.3
Improved indigenous access to the cropping and horticultural industries
• Facilitate and encourage the involvement of indigenous people in the cropping and horticulture industries (Balkanu, traditional owners, DPI, DNR, ACC, CYLC,).

Desired outcome 14.4
• Effective control of exotic pests (see also Strategy 2: Ecosystem Management).
• Control weed movement from southern areas by development of fodder growing on Cape York Peninsula to reduce the need for imported fodder (Individual landholders).
• Increase customs and quarantine services to prevent entry of pests and diseases (AQIS).

Desired outcome 14.5
Effective control of land degradation (see also Strategy 2: Ecosystem Management).
• Use existing cleared land for cropping and horticulture (Individual landholders).

Desired outcome 14.6
Effective land use planning, co-ordination and management (see also the 6.2 Framework for a Natural Resource Management Strategy, Strategy 30 Land Tenure, and Chapter 7 Making It Happen).
• Make smaller parcels of land available for cropping and horticulture in the areas identified above (see Strategy 30 also) (DNR, DPI).
• Improve security of land tenure for land holders (Individual landholders, DNR).
Desired outcome 14.7
Effective training (see Strategy 19: Employment and Vocational Training).

Desired outcome 14.8
Effective Infrastructure provision (see also Section 6.6: Infrastructure and Tenure).
- Investigate Weipa as a future export point for cropping and horticulture industries (FNQ Network, Industry bodies).
- Improve key roads around Cooktown, Lakeland and Weipa (DMR).

STRATEGY 15
ECONOMIC: AQUACULTURE INDUSTRY

CURRENT SITUATION
Aquaculture (including mariculture) is currently dominated by the cultivation of pearl oysters near the tip of Cape York and in Torres Strait. This industry began in the 1890s and at present there are 10 farms which represents half the number in Queensland. These operate on the northern and southern sides of Muralug Island, to the west of Albany Island and Turtle Head Island. The current value of production is estimated at between $5 and $10 million per year (about the same as the pastoral industry). Other forms of aquaculture practised in the region include farming of barramundi, crocodiles, and prawns. The industry is currently constrained by:

- lack of identification of the potential areas suitable for aquaculture
- lack of localised infrastructure to support production
- high cost of inputs and
- lack of oyster hatcheries.

NEED FOR CHANGE
The current industry is a small but valuable part of the region's economy which has problems of ecological sustainability in some sectors (i.e., over collecting of spats for pearl farms). However, the industry has considerable potential for growth associated with the world-wide increasing demand for fish and crustacean products; this growth may occur both in terms of large and small farms. Such an expansion would help to provide the region with:

- a more diversified economic base
- export revenue
- an alternative fisheries resource for local employment and consumption and
- employment and wealth generating opportunities for indigenous communities.

HOW DECISIONS WERE REACHED
A range of potential scenarios was investigated for the aquaculture industry from maintenance of the current situation through to growth based on moderate or large increases in area and output. A moderate increase in aquaculture is considered the most appropriate growth model for Cape York Peninsula as it:

- increases returns and employment in the sector
- relies on existing transport infrastructure
- involves a moderate increase in infrastructure (i.e., oyster hatchery)
- is supported by capability analysis by the Department of Primary Industries (1995)
- appears economically feasible
- enables existing lifestyles to be maintained and
- is likely to have limited environmental impact.
DESIRED OUTCOMES
The desired outcomes for the aquaculture industry are:
15.1 Moderate increase in production.
15.2 Broad economic development/new opportunities.
13.1 Improve indigenous access to the aquaculture industry.
15.1 Effective control of exotic pests.
15.2 Effective control of land degradation and reduction in water quality.
15.3 Effective land use planning, co-ordination and management.
15.4 Effective training.
15.5 Effective Infrastructure.
15.6 Effective land use planning, co-ordination and management.
15.7 Effective training.
15.8 Effective Infrastructure.

ACTIONS REQUIRED
[KEY: (by whom); bold = lead agency]
Desired outcome 15.1
Moderate increase in production.
• Increase production by initiating new land-based farms in the south-east and pearl farms along the east coast subject to suitability and ecological and social sustainability (Individual farmers).

Desired outcome 15.2
Broad economic development/new opportunities.
• Obtain a realistic assessment of aquaculture suitability (DPI).
• Identify opportunities for aquaculture using a range of freshwater and seawater species on Cape York Peninsula. These may involve limited processing (DPI).
• Promote recognition of aquaculture products from Cape York Peninsula (Industry associations).
• Facilitate and encourage the development of oyster hatcheries (Industry associations, DPI).
• Explore (with local, Queensland and Commonwealth governments) possible funding sources for concessional finance, opportunities for tax relief and the application of special zonal incentives (FNQ Network, CYPDA and relevant industry bodies).

Desired outcome 15.3
Improve indigenous access to the aquaculture industry.
• Facilitate and encourage the development of aquaculture facilities in Aboriginal communities (Balkanu, Traditional owners, DPI, ACC, CYLC).

Desired outcome 15.4
Effective control of exotic pests (see Strategy 2: Ecosystem Management).

Desired outcome 15.5
Effective control of land degradation and reduction in water quality (see Strategy 2: Ecosystem Management).

Desired outcome 15.6
Effective planning, co-ordination and management (see also 6.2 Framework for a Natural Resource Management Strategy, Strategy 30: Land Tenure, and Chapter 7 Making it happen).
Desired outcome 15.7
Effective training (see Strategy 19: Employment and Vocational Training).

Desired outcome 15.8
Effective Infrastructure provision (see Section 6.6: Infrastructure).

- Identify new infrastructure needs, including the use of Weipa as an export point for aquaculture industry (FNQ Network, Industry bodies).

STRATEGY 16
ECONOMIC:
FOREST INDUSTRIES

CURRENT SITUATION
Previous and existing commercial forest use on Cape York Peninsula has focused on timber harvesting, seed collecting, sandalwood collecting and cutting of rough sawn timber for local use by communities and pastoral holdings. Timber harvesting has been concentrated on the production of sleepers, poles and building timbers with an estimated value of $300,000 per year. Approximately 200 kilograms of seed are commercially collected from Cape York Peninsula per year with an estimated value of $100,000. Most seed is exported to south-east Asian countries where it is grown as plantation timber. Small amounts of rough sawn timber are used on pastoral holdings and Aboriginal settlements for fencing and some construction purposes. The industry employs approximately 20 people on Cape York Peninsula. Further development is constrained by lack of:

- accurate identification of the resource
- accurate assessment of the sustainability of the resource
- knowledge of resource management needs
- the high costs of transport and fluctuating demand
- skills to enable local use of timber resources and
- management arrangements to facilitate use of timbers on mining leases and Aboriginal lands.

NEED FOR CHANGE
Historically the timber industry on Cape York Peninsula has focused on high volume, low value products (poles, sleepers) which provided low economic returns and may not have been operating on an ecologically sustainable basis. The industry has begun, and needs to continue, to move towards the production of low volume, high value products. Such an industry would help to provide the region with:

- a more diversified economic base
- local building materials to supply local needs (ie import substitution)
- employment opportunities
- opportunities for wealth generation in indigenous communities and
- export revenue.

HOW DECISIONS WERE REACHED
A range of potential scenarios was investigated for the forest industries based on maintenance of the current situation, moderate increase in timber and seed collecting, and large increase in timber and seed collecting. Pending a definite assessment on the timber and seed resource, the current situation was considered the appropriate level of resource use as it:

- maintains the existing value of forest products ($400,00 per annum)
- maintains employment (direct employment 20 people)
- relies on existing infrastructure
- will enable existing incomes and lifestyles to be maintained
• is likely to have limited environmental impact and
• is in accordance with the National Forest Policy Statement, particularly in regard to “avoiding activities which may significantly affect those areas of old-growth forest or wilderness that are likely to have high conservation value”.

DESIRED OUTCOMES
The desired outcomes for the forest industries are:
16.1 Sustainable use of forest resources.
16.2 Broad economic development/new opportunities.
16.3 Improve indigenous access to the forest industries.
16.4 Effective control of exotic pests.
16.5 Effective control of land degradation.
16.6 Effective land use planning, co-ordination and management.
16.7 Effective training.
16.8 Effective infrastructure.

ACTIONS REQUIRED
[KEY: (by whom); bold = lead agency]
Desired outcome 16.1
Sustainable use of forest resources.
• Undertake collection and use of salvage timber (see Glossary) from, for example, Special Bauxite Mining Leases. This corresponds to Department of Natural Resources - Timber Management Area A (DPI, DNR, Special Bauxite Mining Lease holders).
• Undertake timber harvesting at existing levels (2,000 m³ per year), subject to a sustainability assessment, based on the following Department of Natural Resources’ Timber Management Areas:
  - Timber Management Area B: Timber from Aboriginal lands (Balkanu, Traditional owners, DPI, ACC, CYLC, DNR).
  - Timber Management Area C: Timber from high value forests currently on pastoral leases (DNR, Individual landholders, DPI).
  - Timber Management Area D: Timber from low/moderate value forests on pastoral leases (DNR, Individual landholders, DPI).
• Undertake commercial seed collecting for agro-forestry purposes at existing levels of 200 kg per year (DPI, CSIRO, DNR, DoE).
• Undertake assessment of the sustainability of timber harvesting and seed collecting (see Desired Outcome 16.2) (DNR, DoE).

Desired outcome 16.2
Broad economic development/new opportunities.
• Obtain an accurate assessment of both timber and seed resources including:
  - the extent of the resource
  - the rate of growth of the resource
  - sustainable harvesting cycle
  - impact on ecosystems of resource use
  - social impacts of resource use.
This could be undertaken as part of a Comprehensive Regional Assessment (DNR, DPI).
• Identify potential for expansion of forestry (DNR).
• Identify the impacts on indigenous groups of existing and proposed land uses, including the growth in demand for didgeridoos (ATSIC, DNR, DPI, ACC).
• Identify opportunities for new industries on Cape York Peninsula which may involve limited processing, including:
  - plantation forestry based on local species (DNR, DPI)
- high quality timber products e.g. benchtops of Cooktown ironwood (Industry organisations)
- land restoration and reafforestation e.g. of mined areas with native timber species (DNR, DPI, DoE).

- Promote the recognition of timbers products from Cape York Peninsula (DPI, Industry organisations).
- Explore (with local, Queensland and Commonwealth governments) possible funding sources for concessional finance, opportunities for tax relief and the application of special zonal incentives (FNQ Network, CYPDA and relevant industry bodies).

Desired outcome 16.3
Improve indigenous access to the forest industries
- Facilitate and encourage the involvement of indigenous people in forest industries (Traditional owners, DPI, ACC, CYLC, Balkanu).

Desired outcome 16.4
Effective control of exotic pests (see also Strategy 2: Ecosystem Management).
- Develop effective codes of practice to reduce the introduction of biological pests into resource areas (DNR, DPI, DoE).

Desired outcome 16.5
Effective control of land degradation (see also Strategy 2: Ecosystem Management).
- Undertake assessment of land degradation risk prior to undertaking logging (DNR, DPI).

Desired outcome 16.6
Effective land use planning, co-ordination and management (see also the 6.2 Framework for a Natural Resource Management Strategy, Strategy 30: Land Tenure, and Chapter 7 Making it happen).
- Facilitate multiple use of timber areas by:
  - undertaking collection of salvage timber from areas proposed for clearing e.g. on Special Bauxite Mining Leases (Individual mining companies, DPI, DNR)
  - allowing grazing on Timber Management Areas where this does not conflict with resource management (Pastoral industry, DPI, DNR)
  - developing cooperative management arrangements with indigenous people for timber use (ACC, traditional owners, Balkanu, CYLC, DPI, DNR).
- Investigate the use and management of timber resources on pastoral leases and Aboriginal lands using management options proposed by the DNR Paper for Cypress Pine Areas in Central Queensland (DNR, ACC, traditional owners, Balkanu, CYLC, Pastoral/grazers association, individual landholders, DPI).
- Enable the sustainable selective harvesting of native species that are planted in non-plantation situations, without land clearing, on leasehold lands (individual landholders, DNR, DPI).
- Undertake forest resource utilisation in keeping with the National Forest Policy Statement, i.e. avoid those activities that may significantly affect those areas of old-growth or wilderness that are likely to have high conservation value (DNR, DPI).
- Undertake forest area management planning. This should include identification of vegetation, details of natural features, identification and measures to protect areas of natural value and fire management regimes (DNR, DPI).
- Develop and regulate use of forest products to ensure that the forest industry on Cape York Peninsula is based on small volumes of products with a high value which are harvested on a local scale (DNR, DPI, Forest products industry).
• Identify fire management needs across ecosystems (DNR, DPI, DoE).

Desired outcome 16.7
Effective training (see Strategy 19: Employment and Vocational Training).

Desired outcome 16.8
Effective Infrastructure provision (see also Section 6.6: Infrastructure and Tenure).
• Identify new infrastructure needs, including the use of Weipa as an export point for forest products (FNQ Network, Industry bodies).