Atherton Tablelands

Cairns Highlands Investment Environment

Tropical Northern Australia

(Photograph courtesy of Department of Primary Industries & Fisheries)

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Produced by Tablelands Futures Corporation
Tablelands Futures Corporation is a body with responsibility for facilitation of sustainable economic development across the Atherton Tablelands.

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(Lake Barrine - Photo: Whitelight Photography)

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This document is to provide an overview of the Atherton Tablelands region, the extensive highlands area rising above the Tropical North Queensland coastal strip with Cairns as the regional hub city. It is to provide relevant information for investors and those interested in establishing businesses.

This regional profile was commissioned by the Tablelands Futures Corporation and prepared from information collected by Kleinhardt Pty Ltd during February - March 2007. It is a snapshot based on available information at the time and does not claim to identify all relevant business and economic development activities.

Road distances from Cairns to Tablelands principal towns and major southern cities:

- to Mareeba: 61km
- to Malanda: 78km
- to Brisbane: 2110km
- to Atherton: 91km
- to Herberton: 110km
- to Sydney: 3390km
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EXECUTIVE OVERVIEW

There are signs of change across the Atherton Tablelands. The region has always been recognised for its beauty, the quality of its environment and abundant natural resources. Now these and other key assets are being combined with new ideas into businesses, industries, products, services and projects, with competitive advantage in the global economy.

There are seven basic elements that provide the foundations for these changes:

**Hinterland Position** - Like many other rich hinterlands to major population growth centres globally, the Atherton Tablelands has been ‘discovered’. Property prices are rising, there is strong demand for land and more properties are changing hands. The commitment to commence a $500 million upgrade to the Kuranda Range Road, the main access road from Cairns, is driving some of this development. Mining industry resurgence in and adjacent to the region is another factor. Another is the local, national and international aspiration to own a property where one can get away from the pressure of modern urban living to a beautiful, quiet place. Such places are becoming fewer and harder to find. Yet property median prices are still only some 80% of Brisbane prices.

**Tropical Expertise** - Northern Australia is perhaps the only advanced western economy located in the tropics. The products, systems, services, knowledge and expertise that have been developed by virtue of living in the tropics have value to the more than 40% of the world’s population who live in the tropical zone of the world. This is a huge market.

There are market opportunities in tropical science, knowledge, research and innovation. The region has the added advantage of close links to Asia and Micronesia. There are 150 years of relationships by virtue of easy access, family ties, business links, tourism and sharing living conditions. Both Tablelands and Cairns based businesses are beginning to penetrate these markets. It is early days, but the concept is rapidly gathering pace. Part of this is being led by enterprises with products based in the tropical agriculture of the Tablelands and others derived from expertise in managing the tropical environment and still others derived from the mega-diversity of the region’s natural environment.

**Water** – This is a key asset of the Tablelands, one which is in relative abundance. There seems to be water everywhere, from crater lakes, to an extensive network of clear streams and waterfalls, through to Tinaroo Dam, holding some two thirds the volume of Sydney Harbour in fresh water, distributed to farms through an extensive irrigation system. Each year the region experiences a summer Wet Season. In some years it is light, in others heavy and extensive, yet light or heavy, there is a Wet Season.

Tropical North Queensland generally accounts for 26% of Australia’s water runoff. Average rainfall ranges from 400 to over 4,000 millimeters. The Mitchell River Basin, which originates on the Tablelands, has a mean annual runoff of 22.9 million megalitres. This makes it the second largest in Australia, with the Murray-Darling Basin having a mean annual run-off of 23.8 million megalitres. Several options are currently being considered by government to further improve access to water resources for the region.
**Natural Environment** – The region is very beautiful, with rich varied soils, water and mega-diversity in terms of both natural flora and fauna and in growing conditions for agriculture. It is home to almost double the varieties of native plants than anywhere else in Australia. This provides the base for at least 40 different crops, plus grazing in the form of both beef and dairy industries.

Even the loss of a $50 million tobacco industry has not in the end damaged the value of agriculture. From 2000/01 to 2004/05, there was an estimated 40% increase in the value of production (to some A$146 million). This is a tribute to the resilience innovation and skills of the regional farming community and their support networks.

There have been three waves of response to the downturn in traditional industries. The first was to diversify in to different crops. The second has been to move up the value chain into value adding. The third wave is now emerging. This is to approach crops and the mega-diverse natural flora and fauna simply as biomass from which new products can be derived. These include pharmaceuticals, neutraceutucals, biofuels, fibres, resins and many other materials for 21st century, high technology industries. These are multi-trillion dollar industries and the region has the natural resources and emerging skills to participate.

The Malanda Dairy Farmers factory is for instance now extracting proteins from whey. This was previously a waste product that presented difficulties and added costs in its disposal.

**New Settlers** – The climate, natural diversity, recreation facilities, proximity to Cairns and at least so far, more affordable housing in a beautiful environment, is attracting an increasing number of ‘tree change’ settlers. These people are also bringing with them new skills and new ideas. There are already globally recognised businesses operating from the Atherton Tablelands as their base. These include bio-prospecting, environmental consulting and new technology for dehydration.

**Tourism** – The Cairns region attracts some 2.2 million visitors per year, but only some 500,000 as yet find their way to the Atherton Tablelands. Yet its scenic qualities and assets are remarkable. There is a need for better and more accommodation and commissionable experiences which will attract more tourism. In recent years there has been rapid expansion of high quality Bed and Breakfast properties. There is a need for larger scale investment in wilderness lodge type accommodation and 4 star properties with significant room numbers. New product is steadily developing, which will result in the region achieving ‘critical mass’ to justify accelerated development in the foreseeable future.

**Retirement infrastructure & Services** – The Tablelands have always attracted people to retire there. The mild climate, beauty and quiet, friendly country hospitality are attractive to retirees from around Australia and overseas. This is a growing market due to the ageing population both in Australia and in many developed countries. There are at least four retirement living projects currently under consideration for the area. These and no doubt others will open up new business opportunities for goods and services to support the increasingly important retirement sector on the Tablelands.

Lower property prices, a plethora of technology advances that increase the convenience and comfort of living in a tropical region, plus convenient access to an international airport all add to the attractiveness of the region as a place to retire.
WHY LOOK TO THE ATHERTON TABLELANDS

ACCELERATING CHANGE
The Atherton Tablelands has traditionally been described in terms of its natural beauty, high quality environment and the major agricultural industries at the core of its economy.

These are still key assets, but are now being re-assembled and combined with new ideas into industries, products and projects with competitive advantage in the 21st century global economy.

Real estate sales, ‘tree change’ settlers, major chains moving into key towns, mining boom projects, significant tourism projects, retirement village developments and support services, bio-technology based projects and on-farm value adding are all changing the face of this until recently, quiet and traditional part of regional Australia.

Many of the changes and trends are at an early stage and do not encompass the entire region. This emphasises the considerable scope and nature of the quickly evolving opportunities.

There are seven basic elements that constitute the raw ingredients for opportunities and support for existing and emerging industries:

- Hinterland Position
- Tropical Expertise
- Water
- Environment
- New Settlers
- Tourism
- Retirement

Each is discussed on the following pages, followed by industry sector details.

HINTERLAND POSITION
The Atherton Tablelands is strategically positioned above a major, fast growing population centre, with ready access to an international airport and sophisticated infrastructure.

The history of scenic hinterlands to major population centres globally has demonstrated they lag behind in terms of urban and secondary industry development until a critical point is reached with the regional population hub.
Then, as they are ‘discovered’ development escalates.

The Gold Coast, Sunshine Coast Hinterlands and Margaret River regions are Australian examples.

Cairns on the coastal strip is the Tropical North Queensland hub city. Its fortunes and the Atherton Tablelands have long been interdependent. This relationship was firmly forged in 1901, when the rail link between Cairns, Tablelands and further inland opened.

Current official population projections for Cairns city are for the population to increase from an estimated 133,590 in 2006 to 188,532 in the twenty years to 2026 – a cumulative increase of 70.8%. Cairns City is forecast to be in the top ten Local Government growth areas in the State. It is the only one in the top ten outside the South East corner of the State. (Source: Queensland’s Future Population 2006 Edition, Queensland Government Publication, Department of Local Government, Planning, Sport and Recreation).

Figures released by the Australian Bureau of Statistics (ABS) in February 2007, indicated that Cairns population had increased by 3.2% in the twelve months to June 2006. This was the fourth largest growth rate in the State of Queensland and ranked 8th across Australia.

The region is presently experiencing strong activity in commercial and domestic construction and continues to increase its tourism numbers against national trends to the contrary.

Tropical health and medicine capacities are to be increased, major research and development capacities are being added to James Cook University and the international education sector is growing strongly. These provide solid grounds to support development of products and services in the nature of ‘Tropical Expertise and Knowledge’. Cairns can provide the supporting institutions and a hubbing effect, while the Tablelands provides the ‘coal face’ where such products may be trialed and commercialised. Tablelands projects are emerging that are providing the base for a strong bio-based industry. More specific information and details can be sourced from Advance Cairns. www.advancecairns.com.au

Cairns provides the seaport and airport for the rich and diverse agricultural base of the Tablelands. Much of the Atherton Tablelands is between 30 and 90 minutes by road from Cairns International airport. To be able to live in a stunning rural location within this travelling time of an international airport is rare globally.

The Tablelands also serve as a gateway to Cape York Peninsula and the Gulf of Carpentaria. Six highways link the region to coastal and inland road systems, associated with the Peninsula Development road, Gulf Development Road, Kennedy, Palmerston and Rex Highways and the Kuranda Range Road.

A major upgrade of the Kuranda Range Road has been announced, with $500 million over five years to be spent. This project is expected to pass the final approval stages in the first half of 2007. It is expected to provide faster access to and from the Tablelands from Cairns, so opening up the opportunity to commute to work from the cooler climate of the highlands to Cairns city and to facilitate better market access for Tablelands products via road freight connections between Cairns port, the Tablelands, Gulf and Cape York. Research by developers indicates that already some 40% of land sales in the Mareeba Local Government Area are to families that intend to commute to work in Cairns.

Property reasonably close to the top of the range road is also being developed and offered for sale in anticipation of this trend escalating.

**TROPICAL EXPERTISE**

There are a range of major market opportunities for products and services based on expertise derived from living and working in the tropical zone of the world, where some half the world’s population lives.

The Queensland Government has identified opportunities in tropical science,
knowledge, research and innovation as key sources of competitive advantage for the State. It is a fundamental plank in the ‘Smart State’ Science, Knowledge and Innovation Strategy.

A Cooperative Framework on Tropical Science, Knowledge and Innovation was also signed in 2004, essentially between the Queensland, Northern Territory and Western Australian Governments, plus universities and various funding bodies.

Advance Cairns has been pursuing Tropical Expertise as a theme for Tropical North Queensland and promoting the region’s capacities in tropical expertise internationally, especially in Southern China.

Many of the countries in tropical zone of the world are experiencing strong growth. Millions of people are being lifted out of poverty through the phenomenon of globalisation. Those nations located in the Tropics and will increasingly seek products and services suitable to their tropical living conditions and especially those that will improve the quality of life.

Northern Australia is perhaps the only advanced economy located in the tropics, with sophisticated agriculture, design, education systems, health capabilities, environmental management skills, plus general technologies and tropical ‘know-how’. Over 40% of the world’s population live in the tropical zone of the world and are potential customers.

The point for the Atherton Tablelands is that it is a concept that has come of age. There is a groundswell of support and resources directed towards tangible outcomes. Tropical North Queensland has the opportunity to become an important portal for commercialisation and delivery of products and services falling into the category of ‘Tropical Expertise’. It does not ‘own’ the concept, but will be an important player for the following reasons:

- Cairns is the second most ‘tropical Asian city’ in Australia next to Darwin, very cosmopolitan and internationally focussed;
- The region has multicultural links into Asia and Micronesia going back to first white settlement and beyond. These are by virtue of family ties, business linkages and tourism;
- Consultants and business people from Tropical North Queensland are at home in tropical countries. They are not distracted by the novelty of the environment, they are generally comfortable with the cultures, the humidity and aware of the most likely materials involved;
- Tourism especially has contributed to an entrepreneurial business culture;
- It is a tropical region with front door links to Asia through the international airport. Direct flights to Hong Kong as a hub provide convenient access to Southern China;
- While research and R&D into tropical products may be done in many locations, the region is ideal for trials, showcasing, commercialisation and business flows;
- Tropical North Queensland has already become a portal for ‘the business of Tropical Expertise’.

On the Atherton Tablelands specifically, Tropical Expertise is a common thread underpinning many innovative new businesses and emerging projects, referred to under various sections which follow. The pace of application of this expertise is being added to by new settlers attracted to the area by virtue of its pristine environment. They bring new skills and see the environment as a support base for their business ideas, illustrated below.

The Global Studies Institute Australia is a well established educational field studies business headquartered on the Tablelands. It is focused on providing experimental learning/educational programs based on the Natural Sciences. Encompassing a clientele aimed at both overseas and national undergraduate students, it has also been active in the domestic post-graduate research market. Special programs involving overseas group students are also available and have previously consisted of ecotourism directed studies and Green
Globe accreditation with American, Japanese and Turkish student groups.

In addition to an extensive range of educational courses and customised education tour packages, GSI leads a yearly ‘Global Studies Getaway’ focused on delivering Conservation for Cultural Resources curriculum modules. Previous courses have been held in Turkey, Sri Lanka, Japan, Torres Straits/Cape York and the U.S. state of Utah.

In September 2007, a joint Australian and Turkish study group focused on incorporating endangered species into conservation/cultural initiatives will be held in Southern Turkey. A trial module of this study tour was recently completed in Far North Queensland with Education Queensland, Earthwatch and Queensland Parks and Wildlife Service.

The Institute is regularly represented at the US National Science Teachers Association conferences. At the 2006 show it attended, its trade booth was independently assessed as having attracted the attention of 12,000 of the 15,000 attendees. www.gsiaustralia.com

Biotropica Australia Pty Ltd specialises in management of wet and dry tropical ecosystems, with a major focus on linear infrastructure, particularly energy infrastructure. The firm is based in Malanda. It is a world leader in the field of tropical ecosystem restoration, developing environmental restoration techniques used across tropical Australia and the Asia-Pacific region.

Clients include major energy companies, property developers and government departments. www.biotropica.com.au

Sustainable Solutions is based in Yungaburra. It is a consultancy firm experienced at providing economically, environmentally and socially sustainable solutions for Australian and international projects. The Firm’s specialist expertise is particularly suited to managing projects in developing communities within tropical environments.

Services provided encompass:

- Project Management
- Stakeholder Engagement
- Community Development
- Mine Closure
- Environmental Training
- Rehabilitation
- Environmental and Social Auditing

Clients encompass the private sector, government and non-government agencies.

www.sustainsolutionsglobal.com

GEDO (Global Design Organisation) was initiated on the Tablelands, where it is based. In 2006, it organised and ran the ‘2006 Global Design Dialogues’ in Cairns, with Dr. David Suzuki as the keynote speaker. (www.globalecodesign.org)

The principal of the organisation is presently leading a design team to develop an innovative museum and conservancy at Price in Utah, to showcase the vast and extraordinary prehistoric fossils (primarily dinosaurs) of that region and to inject Price township with the opportunity for economic flow on effects.

WATER

(Tinaroo Spillway. Photo Courtesy Sunwater)

This is a topical subject and the Atherton Tablelands is in an enviable position. Unlike many parts of Australia and the world, it has regular rainfall and ability to capture major outflows during the seasonal wet season.

In common with the rest of Tropical North Queensland the ‘wet season’ during summer months, is fuelled by Monsoon and South East Trade wind activity. This is variable, with heavy rains typically expected anytime from late November to April, with lighter rains often falling in May
and June. May to September are typically fine and mild, with a hot dry build up to the wet season in October/November.

Overall, Tropical North Queensland accounts for 26% of Australia’s water runoff. The headwaters and middle reaches of Australia’s second largest river system, the Mitchell River Basin (with major tributaries, the Palmer and Walsh) flow through Mareeba Shire on their way north-west to flow out into the Gulf of Carpentaria. The Mitchell River Basin has a mean annual runoff of 22.9 million megalitres, (just below the Murray Darling basin with 23.8 million megalitres)

The Local Government areas of Atherton and Eacham tend to be green all year, as are all the parts of the region reasonably close to the top of the mountain range close to the coast, including Kuranda, immediately above Cairns and Julatten above Port Douglas to the north of Cairns. Further west, the region falls into rain shadow and becomes drier and drier the further west one travels.

However much of the northern and drier areas of the Northern Tablelands are supplied irrigation water from Tinaroo Dam. This is referred to as the Mareeba-Dimbulah Irrigation system, covering almost 1,200 square kilometres.

Tinaroo Dam was completed in 1958 and created a lake 3/4 the size of Sydney Harbour, with a storage capacity of 407,000 megalitres and over 200 kilometres of shoreline. The irrigation system is supplied through 176 kilometres of mostly open channels, plus supplemented stream flows. Some 415 square kilometres of farmland are presently supplied water for irrigation.

There are some 200,000 megalitres available for allocation. There are about 40,000 megalitres in losses and 5,000 megalitres for downstream township supplies, leaving some 155,000 megalitres available to irrigators. This is fully allocated. However in a typical year only some 100,000 is used. With the introduction of water trading regimes, there is therefore up to 55,000 megalitres available for trading.

This may be achieved while still retaining water security by converting allocations from medium to high priority. High priority allocations provide guaranteed supply for the core amount required by the irrigator. The balance of the allocation may be traded if desired.

The most recent auction of allocation sold for $705 for 1,000 megalitres. This is for the allocation. In addition, Sunwater the agency responsible for management of the system, charges for storage of the allocation and delivery to farm. Meters are installed to measure water usage. Further details are available from Sunwater: www.sunwater.com.au

Tinaroo Dam incorporates a hydro power station, which became operational in 2004. It generates 1.6 megawatts. A further hydro system is supplied via the Barron River at the Barron Gorge.

El Nino weather pattern years do reduce the length of the wet season and overall rainfalls.
However water allocations have never been reduced as a result and although of concern, there is no comparison to the drought conditions experienced elsewhere.

The longer term predictions for the impact of climate change on the region are for more severe cyclone events, tending to impact further south than have been traditionally the case. Overall average rainfalls are predicted to be a little less but spread over a longer period of the year. Since the wet season presently produces flooding, this may be beneficial for agriculture.

The Queensland Government is presently undertaking a Water Strategy Project. About 40 options for improving and supplementing future water supplies for urban, domestic and industrial uses are being examined by the Department of Natural Resource Management and Water.

Water supply efficiency measures are likely to feature in the strategy to make more water available.

One option under consideration is one for a dam on the Walsh River, referred to as the Nullinga dam project in the headwaters of the Walsh River – part of the Mitchell River Basin. A large amount of research has been carried out previously and is a project favoured by many regional stakeholders. If undertaken, Nullinga Dam would hold 200,000 megalitres, with a reliable yield of some 50,000 megalitres – close to one third of the present irrigation system allocation.

Should it proceed, the project will cost in the order of $120 million and there may be scope for a public/private partnership investment opportunity.

The strategy report is due for submission to Cabinet and subsequent release in the first half of 2007. It is proposed to implement the Strategy by June 2008.
NATURAL ENVIRONMENT

The Atherton Tablelands is renowned for its climate, beauty, bio-diversity, rich soils and diverse range of crops. These underpin some of the emerging opportunities as well as supporting the traditional economic base.

Soil parent material includes volcanic, sedimentary and granitic rock.

This considerable range in elevation, rainfall and soil types has produced an incredibly diverse and beautiful region. This very diversity has often posed difficulties for the region in presenting its opportunities and attractions. There is simply so much diversity that it is difficult to portray without confusing target audiences and diluting the messages.

There is a prolific diversity in natural flora and fauna, ranging from tropical highland rainforests to dry tropical savannah. For instance there are almost double the varieties of native plants found here as compared to the whole State of Victoria.

This rich tropical biomass, largely unexplored, is providing the base for growing bio-prospecting activities in the search for new industrial compounds, pharmaceuticals and neutraceuticals. This activity is supported by scientific capacities of private enterprises, James Cook University, Department of Primary Industries and Fisheries and CSIRO, all with facilities in the region.

Water, soils and diverse growing conditions have supported development of a wide range of agricultural and horticultural cropping operations. The regions’ farmers and support services represent in most cases best international practice in farming in a tropical environment.

Visually the region is stunning. It encompasses a myriad of waterfalls, broad mountain vistas, clear mountain streams, crater lakes, National park and freehold pristine rainforests, popular and attractive villages such as Kuranda and Yungaburra oriented to tourism, rich outback savannah wetlands teeming with bird life, historic mining towns, limestone caves, rich farming vistas and stark outback scenery reminiscent of Cape York and Kakadu.

With its location adjacent to an international airport and within a region that is already a destination for some 2.2 million visitors per annum, it has
unrealised tourism potential. It has only an estimated 500,000 visitors per annum. This excludes Kuranda, at the top of the range above Cairns, which has some 1,000,000 visitors per annum. The region has not as yet been fully ‘discovered’ by tourism, (discussed below).

Tropical North Queensland is a ‘lifestyle’ region, which attracts Australian and international settlers seeking to establish businesses, retire and generally enjoy a tropical lifestyle.

The Tablelands is reminiscent of the Gold Coast, Sunshine Coast and Byron Bay Hinterlands. It has a surprisingly mild climate, justifying a fireplace in winter and less humidity in summer than the tropical coastal strip.

Lake Tinaroo, with its huge expanse of water provides close by, uncrowded opportunities for water sports, boating and fishing.

The green vistas, land availability and a choice of climate from lush and green to tropical savannah are attracting an increased pace of development, reflected in recent development applications, housing and land sales.

NEW SETTLERS

Apart from the usual economic flow on effects from increased regional consumption, new residents are the foundation for other emerging opportunities and economic advantage for the region.

There is quite strong anecdotal evidence from town planners, residents, real estate agents and businesses that the demographic of the Tablelands is changing – more than available statistics indicate.

There are new settlers from the immediate coastal areas, country Queensland, South East Queensland, interstate and international origins.

The climate, access to natural diversity, unspoil beauty, boating, proximity to Cairns, with its international airport, the wider tropical region and Great Barrier Reef, appeal to new settlers who are environmentally aware, educated and interested in sustainable development.

There is an emergence of new innovative businesses being generated by these people, based on a combination of the natural assets of the region and their particular fields of expertise. Examples are provided later in the document.

It is of interest to note that in a region of some 42,000 people, there are now some 9,000 business post office boxes.

Life style regions tend to attract creative people, who, although they may be a small proportion of the total population, produce profound effects throughout the fabric of the society and the regional economy. There are countless examples of this going back to the Renaissance in Europe and throughout history.

The effects and consequences in the context of the 21st century have been reported in a variety of reports and papers. One effect is the increasing tendency in a mobile world for knowledge based industries to ‘follow the talent’, as indicated in the following:

Increasingly the location of high technology firms is dictated by where there are high concentrations of creative capital. That is, firms are now following the talent as opposed to the converse. The key to identifying regions where there will be concentrations of high technology industries and dynamic growth outcomes is understanding how the creative class make their decisions on where to locate.
The decision parameters used by the creative class on where to locate are based on the characteristics of an area, that is its openness with regard to acceptance of social and cultural diversity, bohemian and alternative lifestyles and multi-culturalism, in conjunction with vibrant street culture, music scene, night life and open spaces. The indexes derived to measure these parameters accurately predict regions where the proliferation of high technology industries and economic growth are, and will, occur.


Apart from knowledge based industries, creative people also are of course traditionally engaged in the cultural, art and performance industry sectors. This is no longer just the province of small business. Estimates of value of this global industry place it as some US$381 BILLION. (Source: Queensland Smart State Creative Industries Strategy)

Tropical North Queensland is acknowledged as having the largest creative industry sector outside the South-East corner of the State. Total turnover in this region, is estimated at $280 million, as compared to tropical fruits, worth $300m; fishing, $200m and sugar $240m. The total turnover for Tropical North Queensland consists of:

- Visual Arts & Crafts $26m
- Photography $30m
- Architecture & Design $33m
- Performing Arts $64m
- Writing & Publishing $57m
- Film & Television $24m
- Advertising, Graphic Design & Marketing $46m

(Source: Cummings January 2007, The Ideas Economy)

About 40% pf the entities involved are located outside of Cairns, with particular concentrations on the Atherton Tablelands in Kuranda and Southern areas.

Apart from the intrinsic worth of these industries, the cultural depth and activities they produce for the region add to its attractiveness for professionals and creative people generally. It is a cumulative effect that supports the wider development of bio-based and other industries based on commercialisation of Tropical Expertise businesses, building new enterprises for the region.

**TOURISM**

Tourism on the Atherton Tablelands is under developed. When its natural assets and position is considered the potential is clear.

There have been and continue to be, a series of incremental developments addressing issues that led to the Atherton Tablelands under performing as a tourism destination. A 2003 study made the following comparisons between the overall region and the Atherton Tablelands:

<table>
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<tr>
<th>Tropical North Qld</th>
<th>Tablelands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.16 m. visitors p.a</td>
<td>520,000 p.a</td>
</tr>
<tr>
<td>1.36m (63%) domestic</td>
<td>406,000 (78%) domestic</td>
</tr>
<tr>
<td>Majority are from Qld</td>
<td>Majority are from Qld (Many from country Qld)</td>
</tr>
<tr>
<td>800,000 are international</td>
<td>114,000 international</td>
</tr>
<tr>
<td>Total value $2 billion</td>
<td>Total value $53.5m</td>
</tr>
</tbody>
</table>

(Source: TTNQ 2003 Tablelands Tourism Investment Strategy)

The Tablelands visitor numbers (above) exclude Kuranda ‘The Village in the Rainforest’, which reportedly now attracts approaching one million visitors per annum.

Kuranda is part of a closed loop that has contributed to lack of dispersal of visitors further across the Atherton Tablelands. The loop is created by Kuranda at the top of the Range and Tjapukai Aboriginal Cultural Park at the bottom, linked by Skyrail Rainforest Cableway and the Kuranda Scenic Railway.

A second barrier has been a lack of commissionable product across the Tablelands. This has reduced the region’s ability to attract the attention of the tourism industry marketing and distribution systems and so gain
recognition and penetration in potential target markets.

The third has been a lack of a suitable variety of accommodation types. Accommodation available has been confined to country hotel and motel style units.

Fourthly, there has not been sufficient awareness of what the region has to offer outside a domestic, local market. The word ‘Tablelands’ especially does not have a clear meaning, especially for international visitors.

What has been and is changing? There is quite a lot.

The region has adopted the marketing name ‘Cairns Highlands’. This associates it with Cairns and its international recognition and association with ‘Reef and Rainforest’, while ‘highlands’ tends to conjure up the images of misty mountains, cooler altitudes and the green mountain vistas that are a part of the Tablelands experience.

New commissionable experiences are steadily multiplying across the region.

These include an evolving ‘cluster’ of experiences along the Kennedy Highway between Kuranda and Mareeba, which assist in building a ‘trail’ across the Tablelands. These include:

- Jaques Coffee plantation
- Tichum Creek Coffee Farm
- De Brueys Boutique Wines - fruit winery
- Blazing Saddles – (a horse and quad bike riding experience) – re-located from Cairns
- Cairns Wildlife Safari Park (Large cats and other exotic animals)

More recently, the Australian Coffee Centre on Dimbulah Road, west of Mareeba and Yungaburra Mountain Spa Retreat are two of the latest tourism attractions to open. Both report market response has exceeded expectations.

These add to the broad range of natural assets and more established attractions, illustrated on the website for the Local Tourism Organisation, Tropical Tablelands Tourism (TTT):

www.athertontablelands.com

The Tablelands Futures Corporation website also provides a list of useful website links which provide a cross-section of tourism attractions and products across the region:

www.tablelandsfutures.com/tourism.html

The positioning recommended in 2003 for the region is:

Experiences based on nature, food/indulgence and a brand that is centred on the essence of ‘Natural and Indulgence’

(TTNQ 2003 Tablelands Tourism Investment Strategy)

This is emerging, especially with stronger offerings in food experiences and tours in a multitude of formal and less formal smaller, new products. This is in terms of both on-farm experiences and specialist food and drink product lines.

‘The Coffee Works’ in Mareeba has been a highly successful pioneer in the presentation of the food experiences available in the region. Now major regional coffee growers also have on farm experiences as part of their business.

The diversity of regional produce underpins the concept of presenting an emerging ‘regional cuisine’, both in tourism experiences and in the restaurants of the region.

Increased dispersal of visitors across Tropical North Queensland, beyond Cairns and the coastal strip is seen as a way of providing more depth and variety to regional product offerings. This is especially important in view of the increasing numbers of repeat visitors to the region. Visitor dispersal now has more emphasis in the strategies and direction for the both the Tropical North Queensland and State tourism authorities. This will add to the resources directed to marketing and developing ‘The Cairns Highlands’ as a tourism destination.

The Tablelands also form part to three major themed drive route developments.
‘The Great Tropical Drive’ is a $6 million dollar development and marketing project, encompassing a network of drive experiences from Townsville south of Cairns to Cooktown to the north. This is aimed at promoting drive tourism in the region and making visitors more aware of the array of options open to them.

(www.greattropicaldrive.com.au)

‘The Savannah Way’ is the outback adventure drive route connecting Cairns on the east coast with Broome on the west coast of the Australian continent. It has been under development since the late 1990’s and has now secured some half million dollars in funding under the Australian Government ‘Australian Tourism Development Program’, to take it to the next level of development in terms of product, themes and marketing.

(www.savannahway.com.au)

‘The Great Inland Way’, an alternative inland route between Sydney and Cairns, was formally launched in March 2007.

The route travels from Sydney to Cairns inland, from Sydney, inland New South Wales and Queensland to encompass Mt Garnet, Innot Hot Springs, Ravenshoe, Charters Towers, Atherton, Mareeba, Kuranda, Cairns Lakeland and Cooktown.

As to accommodation, there has been a steady development of boutique accommodation, often of a very high standard in the form of ‘bed and breakfast’, or secluded ‘mountain retreat cabins’, over a period of years. This has been especially across the southern Tablelands. A description of a selection of these can be found on the Bed and Breakfast and Farmstay Association of Far North Queensland website, under the heading ‘Tablelands’:

www.bnbnq.com.au

These do not provide the room volume and flexibility to significantly impact tourism industry development. The 2003 Strategy referred to above noted major gaps in infrastructure, including:

“A major lodge, with flexible accommodation suitable for a wide range of different customer bases”

As at March, 2007, the Atherton Shire Council had commenced approval process for a 4 to 5 star resort development at Tolga, on the site of ‘The Homestead’ an existing tourism attraction. The development will initially involve 40 accommodation units, with provision to expand to 200. The complex is to include a conference centre with capacity for 120 to 150 persons.

One of the issues facing the Tablelands has been that it is difficult to do it justice in a one day tour from Cairns. The area is large and there is so much to see and experience that one day tours tend to be rushed and less than satisfactory. Accommodation development is seen as a key in addressing this.

The 2003 Strategy also saw as a gap in infrastructure:

“The development and facilitation of an iconic walking experience (vis. Milford Track, Cradle Mountain, or Bay of Fires)

Since then, the Queensland State Government has spent $1.84 million on development of all weather walking tracks in the mega diverse rainforests of the southern ‘Misty Mountains area of the Tablelands. However, without development of at least modest accommodation nodes placed strategically, these tracks are not likely to attract significant volumes of visitors, as the destinations mentioned above do. There may be the opportunity for development of a ‘Cradle Mountain Lodge’ style development.

A major development in the same area, is the announcement that construction of the A$10 million MaMu Rainforest Canopy Walkway project will commence in 2007.

This project has been under development for some years and will be underwritten by the Queensland State Government. The Walkway will be located on the southern access road to the Tablelands, (the Palmerston Highway), at Crawford’s Lookout - already a popular stopping point for tourism visitors.

The attraction will feature 400 metres of elevated walkway up to 40 metres above the forest floor. It will provide an ‘up
close’ experience of the rich, diverse rainforest canopy at the same time as exhilarating views over the Wooroonooran National Park and its World Heritage Rainforest, gorges and crystal clear rapids.

Tree top walks globally have shown themselves to be very strong attractions and the combination of the canopy and stunning bird’s eye views will differentiate this particular walkway. It is expected to become an iconic ‘must see’ attraction with potential to impact visitor flows favouring the Atherton Tablelands.

The project is supported by the Indigenous Owners, the MaMu people, who will seek development of associated infrastructure involving interpretative centre, souvenir and restaurant facilities.

The Wooroonooran National Park is a key focus for another major project under development, only some 5 kilometres from the Walkway through the Park.

This is a proposed 220 room ‘Misty Mountains Wilderness Lodge’ at Mungalli Falls, adjacent to the Park, already approved by the Local Government.

The picturesque Mungalli Falls are located on a private freehold property of 157 hectares. The property has 360° views over the Tablelands, Mount Bartle Frer and the Wooroonooran National Park, with which it shares a border. The property owners have permits for access and activities in the Park, which includes the Misty Mountains walking trails.

In combination with the walking tracks, especially if connected to the Canopy Walkway project, the lodge could itself become an iconic development, lifting the overall tourism profile of the Tablelands.

(Further details: Michael Trout: 0412 183 194)

**Retirement Infrastructure & Services**

The well-documented and often discussed aging population in Australia and western developed countries has turned the provision of retirement infrastructure and services into big business.

The climate and quiet, friendly country environment are core reasons for retirees to select the Atherton Tablelands. The generally cooler, milder conditions, with less humidity than the coastal strip have considerable appeal, evidenced by the history of settlement on the Sunshine Coast and Gold Coast hinterlands. Retirees can choose the warmer drier northern Tablelands areas, or the higher southern areas with crisp winters, more rain and consequently green rolling hills.

There is a long history of retirees choosing the Atherton Tablelands, evidenced in part by population demographics set out later. While there have been a variety of sources two have predominated. One has been country northern Queensland, from Townsville in the south to Mount Isa in the west, in an arc of some 600 km radius. The second has been Cairns and near coastal strip residents.

Anecdotal reports suggest that this is changing, with the mix including more retirees from further afield in Australia and from overseas.

There are seven trends and factors that support this change and the view that Tablelands infrastructure and services oriented to retirement will experience strong and increasing demand over an extended time frame. These are:

- National & Global Demographics
- Tourism Discovery
- Technology Advances
- Hinterland Settlement Patterns
- Prices
- Mining Boom
Cairns Growth Rates

National & Global Demographics
The trend is to older populations in developed nations across the world, with increasing numbers of retirees as a proportion of population levels. This is the result of a combination of lower birth rates and longer life expectancy.

There are wide global implications flowing from this trend, which could not be reversed in the medium term even in the unlikely event that fertility rates increased almost immediately.

In Australia those aged 65 and over represented 8.4% of the population in 1955. In 2005 it was estimated at 13.1% and by 2025, projected to be 20.3%. (Source: ABS Australian Social Trends 2006).

Tourism Discovery
Of the 1,471,000 domestic visitors to Tropical North Queensland in 2006, 485,000 (33%) were between the ages 50 to 69.

Of these 218,000 (45%) arrived by private or company vehicle, including motor-homes. (Source: TTNQ Visitor Survey)

Accordingly a large proportion of regional visitors fall in the age groups immediately leading up to likely retirement age and the years immediately after.

There is an established trend for retirees to take the time to explore Australia. Many opt for caravan / mobile home rigs, now referred to as ‘grey nomads’.

An annual motor-home event, “Christmas in July” in Mareeba attracted 305 motor-homes in 2006, providing some idea of the popularity of the Atherton Tablelands with this type of traveller.

It has been suggested that a specialised van park development to cater for retirees in motor-homes would be an asset for the Tablelands. This would involve development of sites to especially cater for motor-homes and larger caravans. Each site would have its own storage facility, there would be substantial waste disposal facilities and a communal facility.

The sites would be offered for sale under strata title. This would provide ‘grey nomads’ with a permanent base when not touring. When touring, items not required could be securely stored and the site made available for casual letting, thus providing an additional source of income.

From the above, there is a market of at least 485,000 visitors to the region to whom the Tablelands could be marketed directly to as a place to retire. This is quite apart from the wider Australian and international market.

Technology Advances
Only fifty years ago, living in the tropics in Australia was considered as pioneering – remote, hot, wet, dangerous and prone to diseases. Now Tropical North Queensland is a ‘life-style’ region, widely seen as a desirable place to live.

Technological advances now taken for granted have all but eliminated the disadvantages and allowed the advantages to come to the fore.

These technology changes include; fast, economical jet aircraft, digitised communications and financial systems, faster transport systems, simple cheap electrical ceiling fans, air-conditioning, refrigeration, improved detergents and mould control systems, superior insecticides, control of dangerous tropical diseases and improved metrological services. All have impacted on the ease of living in the tropics. (Refer: Cairns 2020 – 2050 Business Research Manual December 2005 ISBN 0-646-45551-6, page 36 ‘Underlying Forces’ for further details).

It is still something of a frontier, but only in terms of its stage of development.

Hinterland Settlement Patterns
For those who would like to enjoy a cool, green rural environment for their retirement, available locations are running short in Australia. In some cases, cool favourable hinterland locations are at risk of being ‘loved to death’. The Atherton Tablelands is one of the few places left with ample space and the ‘room to breathe’ new settlers typically seek.
**Prices**
While Tableland real estate prices have been trending upwards in recent years, prices are still well below those in Cairns and Brisbane.

The Queensland Office of Economic and Statistical Research periodically conducts a survey of retail prices in Queensland across 48 centres and compared to Brisbane as the benchmark. Approximately 207 items are surveyed in the ‘basket’ of goods. The last survey was conducted in May 2006. *(Reference: Office of Economic and Statistical Research Index of Retail Prices in Queensland Regional Centres, May 2006. www.oesr.qld.gov.au ).*

The Index indicated that in Atherton, housing prices were 19.1% less than Brisbane, while those in Mareeba were 27.3% less than Brisbane. Cairns housing prices were shown as 6.6% higher than Brisbane.

**Mining Boom**
The resources boom extends to a resurgence in mining on and near the Atherton Tablelands, described elsewhere. Cairns city is also the base for a significant number of ‘fly in fly out’ mining industry employees.

These employees are well-paid and add to demand for real estate across the Tablelands. They are purchasing properties for a variety of reasons, including eventual retirement, according to anecdotal reports.

**Cairns Growth Rates**
The growth rates for Cairns noted earlier identify it as the only Local Government area outside the South East corner of the State in the top ten growth rate areas. This will increasingly impact on the Tablelands, as the long existing trend for coastal strip residents to seek the cooler, more equitable climate of the Tablelands as a place to retire.

**Current Projects**
There are at least four major retirement sector projects under consideration on the Tablelands as at April 2007.

**Atherton Fields** is one of these. It is a retirement living project proposal located on a 35ha property situated on southern outskirts of Atherton. The project has a development application currently before Atherton Council requesting Preliminary Approval to create a new master planned community.

The master plan provides for three precincts, Residential, Aged Care and Commercial, plus open spaces. These will provide a range of independent lifestyle living options and include a small commercial precinct. An aged care facility will incorporate a blend of self contained units, serviced and private rooms.

The complex will provide its residents with an array of passive and active recreational facilities.
AGRICULTURE BASED INDUSTRIES

GENERAL CONDITIONS

Innovation is strong across the Tablelands agricultural and associated industries, backed by the resilience and perseverance of its people. Much of the array of innovative activity is at the cutting edge of technology. In many cases it is a practical application of ‘Tropical Expertise’ derived from living and working in the tropics. It is possible to mention only illustrative examples in the material which follows.

Generally there have been three waves of response to traditional industry downturns, deregulation and commodity price squeezes.

The first was diversification into other crops, in particular tropical horticulture. The second has been value adding to the commodities produced. These second wave initiatives are still emerging and maturing. The third response is relatively recent and only now gathering momentum. This adopts the concept of the commercial exploitation of crops as ‘bio-factories’ in the fields of biotechnology, industrial, pharmaceutical, nutraceutical, renewable fibre, fuels and energy industries. This third wave is experiencing massive growth worldwide and may be the biggest opportunity area opening up to the Tablelands. (Ref: Gadek, Holden & Bítomsky (2005) Fostering Collaborative Regional Development in Biobased Industries RIRDC Paper).

The natural resource base on which this industry activity is founded is exceedingly strong. It would be difficult to find another region in the world with such a diversity of rich natural resources and infrastructure to support agriculture. The Atherton Tablelands has from earliest settlement provided the resource base that gave the city of Cairns much of its reason for existence.

The diversity encompasses average temperatures, rainfall, elevation, soils and natural eco-systems. The main climate influences are altitude and relative proximity to the Great Dividing Mountain Range rising from the coastal strip. Rainfall tends to increase and average temperature decreases moving from the north to south and from the west to the east. Topography tends to be flatter to the north and west, with rolling hills to the south and east.

Despite the severe difficulties faced by traditional crops over the past decade in particular, the region’s responses have generated a strong resurgence in agricultural activity. This is especially remarkable when it is remembered that the region lost a A$50 million tobacco industry and faced deregulation of the dairy industry as recently as 2000.

Available figures For the Dairy Industry indicate:

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Milk Production (Farm Gate Prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991/92</td>
<td>$32 m</td>
</tr>
<tr>
<td>1996/97</td>
<td>$49 m</td>
</tr>
<tr>
<td>1999/00</td>
<td>$52 m</td>
</tr>
<tr>
<td>2000/01</td>
<td>$33 m (deregulation)</td>
</tr>
<tr>
<td>2003/04</td>
<td>$44 m</td>
</tr>
</tbody>
</table>

There are innovative projects outlined later which indicate a strong future for the industry. Milk is now is short supply.

The Mareeba – Dimbulah Irrigation area, heavily impacted by the demise of tobacco has also demonstrated remarkable recovery.

A comparison of crop production values for the irrigation area, between ABS figures for 2000/01 compared to Department of Primary Industry and Fisheries estimates for 2004/05 indicate a 40% increase (to some A$146 million), despite the loss of tobacco.

The area of productive agricultural land suitable for cropping is extended north and west to Dimbulah due to the huge system of canals, pipelines and supplemented streams supplied with irrigation water from Tinaroo dam.
The following table reflects the variability of conditions:

<table>
<thead>
<tr>
<th>Area</th>
<th>Altitude (m)</th>
<th>Annual Rainfall (mm)</th>
<th>Av. Temperature Range (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mareeba</td>
<td>404</td>
<td>903</td>
<td>Jan. 34.22, July 25-10</td>
</tr>
<tr>
<td>Dimbulah</td>
<td>460</td>
<td>721</td>
<td>Jan. 36.21, July 26-8</td>
</tr>
<tr>
<td>Atherton</td>
<td>761</td>
<td>1308</td>
<td>Jan. 30.18, July 23-6</td>
</tr>
<tr>
<td>Malanda</td>
<td>738</td>
<td>1565</td>
<td>Jan. 28.17, July 22-5</td>
</tr>
<tr>
<td>Ravenshoe</td>
<td>920</td>
<td>842</td>
<td>Jan. 31.16, July 23-3</td>
</tr>
</tbody>
</table>

Soil type varies markedly from Atherton in the south to the Mareeba area in the north. Typical horticultural soil on the southern Tablelands is red, structured, high clay soil, with an acid-neutral pH, well drained with good fertility, derived from basalt.

Typical horticultural soil in the Mareeba / Dimbulah area is sandy loam to sandy clay loam over a red, structured, course sandy clay soil with a slightly acid pH, well drained, derived from granite, with inherent low fertility.

**CURRENT CROPS**

Details of crops grown on the Atherton Tablelands are provided in the chart which follows:  
(Estimates prepared by Department of Primary Industries and Fisheries)

Highlights drawn from some of the agricultural industries of the region are outlined below. Many of the industries are ‘quiet achievers’, with innovative plans for value adding that it has not been possible to include.

**LIVESTOCK**

The region supports significant cattle, dairy, pigs, goats and poultry industries.

**BEEF CATTLE**

Production is spread across 50,000 hectares of the region and draws upon the wider North Queensland region for...
stock for fattening and for sale through the Mareeba Sale Yards.

These have an annual throughput of some 45,000 head, with a value of some A$20 million, with variations due to industry conditions.

Better management systems, feed supplements, improved stock and use of motor bikes and helicopters for mustering have all contributed to gradual industry expansion sustained over an extended period, despite periodic industry setbacks.

Feedlot capacity has increased across the Tablelands, which now has four registered feedlot operations.

These developments have seen an increase in demand for fodder and feed production. Country south and west of Mount Garnet, not previously utilised for agriculture, is being developed to meet part of this demand.

A flow on effect for Mareeba township from its major sale yards is the range of businesses that supply general and specialist products and services for the cattle industry.

Deregulation of the Dairy Industry saw some 100 properties de-stocked of dairy herds. Many of these have now been taken up with generally low stocking levels of beef cattle.

The Department of Primary Industries and Fisheries Beef Extension Team (Kairi Research Station), estimate the Tablelands and wet coastal grazing industry has the potential to turn off 20,000 head of high quality (MSA grade) cattle annually. An emerging project aimed at achieving this potential identifies three required steps. These are development of:

- An MSA graded processing facility;
- A transparent supply chain that rewards quality;
- A recognisable quality local brand to support marketing.

There are existing processing facilities at Rocky Creek and Bones Knob.

**Dairy Industry**

The Tablelands Dairy Industry is unique in Australia. It is the only tropical dairy in Australia and one of the few globally.

The quality of the Tableland Co-op Dairy Farmers factory products has long been recognised by Tropical North Queensland consumers. They have shown particularly strong brand loyalty, in the face of supermarkets giving prominence to their in house brands.

Further confirmation of this quality came at the 2007 Australian Grand Champion Dairy Awards. The Co-op was voted the Grand Champion Dairy Product Award for its Whole White Milk product from 360 competitors.

As a consequence of industry deregulation, many farmers left the industry, herd size was reduced by some 20% and pastures were lost to other uses, (mostly hobby farms). It will reportedly take a further 3 – 5 years to re-build herd size.

Nevertheless, the factory has been maintaining a 3% annual growth rate in production after the initial drop post deregulation. Milk supplies are still limited, representing a constraint to value adding projects and meeting market demand. The factory currently processes about 90 million litres of milk per annum. However it has capacity for 160 million litres, representing a significant opportunity for new farm development.

The local industry is highly innovative and forward looking, with a variety of initiatives in place and underway that will see additional expansion of demand.

In response the loss of dairy pastures, the factory extended its catchment area for milk, now taking milk up to a radius of 300km from Malanda. This led to the development of significant dairy farming at Innot Hot Springs, previously not considered a dairying area.

The Coop initiated a project to extract protein from waste product, whey, which previously posed a disposal problem, with the project operational since October.
The proteins, such as lactoferrin and lactoperoxidase are used in the manufacture of nutraceuticals and cosmetics. This is now adding to factory revenues. The milk factory is now therefore a part of the biobased industries developing in the region, discussed later. It has installed a mozzarella cheese production line, which is generating export income.

The Coop has also identified an opportunity for high protein milk, which would attract a premium farm gate price. However to date it has not been able to test the protein levels in whole milk. A Joint Venture agreement has been entered into with Probiotic Ltd (www.probiotic.com.au), to undertake the science of tracking protein molecules using upfront chromatography.

There are two projects to increase production levels. These are referred to as the ‘Grow Malanda’ Project.

One is an ‘easy care’ system, linked to the Future Dairy project being undertaken at Camden University. (www.futuredairy.com.au).

This project includes robotic milking. It is anticipated that once proven, it will enable a property owner to run a 100 hectare dairy property and still work at another occupation off the property.

A second project is referred to as ‘the large herd group’, which is developing techniques for intensive and large scale dairy farming. A model business plan, with business analysis, financial model and site options has been developed. The document is entitled “North Queensland, Australia Large Herd Dairy Farming Opportunities”. (Further Details: Contact Rural & Regional Communities Officer, DPI&F ph: 617 4096 7704)

The Coop is aware of its particular opportunities for export into Asia, due to a taste differentiation described below. Currently there are trials into Hong Kong, where research is indicating that Australia packaging and container sizes are not suitable for the Asian market.

The taste advantage held by the Tableland industry is that its products have acceptable flavour characteristics for the Asian palate. It lacks a characteristic grassy after taste produced by most if not all Pacific Rim dairy industries, which is reportedly recognisable and offensive to the Asian palate.

Given the huge emerging Asian markets for dairy products this could be a significant advantage.

By virtue of its unique tropical location, the industry also has valuable tropical expertise. It has the particular knowledge necessary to run a dairy herd and produce quality products in the tropics. This knowledge has value to countries such as Vietnam which are seeking to create dairy industries. What is lacking is the product development to package this expertise and the market connections to create the business flows.

Linked to this opportunity is the industry’s development of industry training. The Ravenshoe School delivers a Certificate III in Agriculture, specifically oriented to dairying and beef production. It is aligned with the National Centre for Dairy Education Australia. (www.ncdea.edu.au).

The industry owns the rights to the training materials, which opens up the opportunity to extend the successful Cairns based education cluster to include tropical dairying expertise. A hub involving the Department of Primary Industries and Fisheries, James Cook University (JCU) and commercial partners is a concept considered worth pursuing.

In this respect, the development of a veterinary school unit of JCU on the Tablelands, oriented to large farm animal practice will be another important asset impacting this opportunity.

At current prices, the industry is judged viable, especially as the factory offers three year supply contracts which include a minimum price.

Apart from industry mainstream development, niche market innovation has been active.
The Mungalli Creek Dairy identified an opportunity for organic dairy products some years ago and developed a system for organic dairying practice. It has successfully launched a range of organic milk, yoghurt and cheese products into the retail market and has added tourism visitor facilities to the property.

In addition, milk from buffalos is now being produced and there is a concept for production of beers from milk, based on French research into the concept.

**POULTRY**

Table bird production and processing is a significant industry and major employer for the Tablelands.

The major table bird processor Steggles established a plant in Mareeba some years ago. Presently some 10 producers supply 5 million birds per year to the Mareeba plant for distribution throughout Tropical North Queensland, west to Mount Isa and south to Ayr. The plant employs 150 persons and is reportedly operating at capacity. It has doubled its output in recent years. (Source: Mareeba Chamber of Commerce 2006 Mareeba Moving Ahead).

**COFFEE**

Coffee was grown on the Tablelands in the early days of the last century, but did not survive due to world market conditions. In recent years there has been a resurgence, with growing conditions in the Mareeba – Dimbulah area found to be ideal for production of high quality bean.

Mechanical harvesting, pioneered on the by Jaques Coffee on the Tablelands, together with the attraction of new skills to the region have been key components in the re-establishment of the industry.

Annual regional production is presently some 300 tonnes. The rest of Queensland combined produces only 100 tonnes, while New South Wales, being the only other coffee producing State produces some 200 tonnes.

Global growth in demand is estimated to be 20% annually, resulting in a market growing faster than industry production.

Australia can only hope to compete in the gourmet sector of this total market, which is nevertheless huge. The world market price is around A$3kg, whereas Australia currently achieves A$10kg.

However as yet Australian coffee has not been sufficiently differentiated and identified with gourmet quality. This is a marketing task, as the quality and consumer appeal seems to be in place.

The US Specialty Coffee Association holds an annual show, attracting some 10,000 people. At this show in May 2006 Skybury Tablelands coffee was displayed and was voted the best coffee on display by consumers. Seventy firm trade enquiries were received.

Jaques Coffee has also been winning recognition. In 2006, it won two awards at the inaugural Australian Equal Bean Roaster Competition - the gold medal in the milk based category, silver in the filter/plunger category and bronze for organic expresso.

Those growing regions that are recognised as quality producers achieve substantial price differentials: i.e:

- Indonesian Sulowesi: A$150kg
- Jamaican Blue: A$76kg
- Hawaiian Kona: A$36kg

In the second case, some 2,000 tonnes are sold annually and in the third, 20,000 tonnes.

The existing Australian industry is therefore small, with good prospects, provided production growth keeps pace with market recognition and market positioning. Otherwise Australian growers will be faced with achieving only commodity prices – less than the cost of production.
PEANUTS

Peanuts are a traditional, long established crop for the Tablelands, involving some 100 to 110 farmers, plus another more recently established area south of Cooktown with six growers. Estimated current farm gate crop value is A$10 – A$12 million.

A range of varieties are grown, with shelling and grading operations undertaken at the Peanut Company of Australia’s (PCA) plant at Tolga. Final processing and packaging is undertaken in Kingaroy, a large peanut growing area and the home of the PCA in the South West of Queensland. (www.pca.com.au).

Industry prospects are strong and the PCA is presently encouraging crop expansion. China and the US have been the biggest peanut exporters globally. However China is now a net importer and the current US Farm Bill is predicted to produce a major decline in plantings in that country.

Australia has the opportunity to be positioned as the supplier of the highest quality peanuts in the world.

A new strain of peanuts which naturally substitute oleic fat acid for other less healthy fats has been developed. These provide an oil profile closer to olive oil than traditional peanuts and have 10 times the shelf life.

Australia is positioned to be the only supplier to be able to guarantee 100% high oleic peanuts.

The PCA is also undertaking research into the bio-functional ingredients of peanuts, with a view to neutraceutical and pharmaceutical product development. Argine, a natural amino acid in high concentrations in peanuts is of particular interest. Argine is reportedly more bio-available in peanuts than in pill or drug form. Medical practitioners are beginning to prescribe regular small amounts of natural peanuts for heart medication. Argine is apparently also useful in healing wounds and for healthy sex organs.

The PCA is also investigating the phytosterol family and value adding options for waste streams. It is moving into the bio-based industry sector.

TROPICAL HORTICULTURE

Diversification into a wide range of tropical horticultural crops was a ‘first wave’ response to traditional industry downturns and industry deregulation. The majority of significance are listed under ‘Current Crops’ on a previous page.

There are additional species grown which could be characterised as niche crops.

There have been a variety of constraints facing farmers, many being imbedded in the fruit and vegetable industry demand chain. There have been two positive recent developments in this regard.

The first is the establishment of a mandatory horticulture code (to commence in May 2007) to clarify and codify the relationships between producers and their wholesalers. The code should give producers more control over risk and how their produce is marketed. They will have the opportunity to trade on an agency or merchant basis and negotiate this with their wholesaler.

The ACCC (Australian Competition and Consumer Commission) will administer the code and has released a guide on its website.

www.accc.gov.au/content/index.phtml/itemId/778037

Secondly, in February 2007 Australian Air Express announced an increase in capacity for airfreight out of Cairns. One of seven Boeing 737-300 cargo aircraft will be based in Cairns and services increased from four to five flights per week. This will make some contribution to relieving the transport constraints faced by producers in getting their produce to southern markets.

Value adding is also occurring at various levels, with many low volume products emerging aimed at niche markets willing to pay for quality and novelty. Niche markets are not necessarily small.
Growing world affluence has seen an explosion in demand for high quality and different foods. For instance Over 38.8 million U.S. adults (or 18.3% of the population) agreed that they “try to eat gourmet food whenever they can,” with 12.0 million of these consumers strongly agreeing that they seek out gourmet foods. (Source: 2004 Simmons consumer survey, U.S.A). The French “gourmet” food market alone is worth some 3.2 billion Euros. (www.ethnicfoodshow.com/anglais/home.html)

Preliminary market testing of regional cuisine products has achieved positive responses internationally.

There is a largely untapped opportunity for the region to collaboratively market its niche gourmet products as a region into select target markets.

These activities also have an important flow on effect. They add to the depth and variety of food experiences available to regional visitors. Food experiences are a part of every holiday and Tropical North Queensland has the opportunity to evolve a distinctive tropical cuisine. This goes beyond enhancing the tourism industry and supporting small value adding enterprises. Visitors to the region can provide the vanguard of ambassadors for marketing Tropical North Queensland products into their home regions.

**Fruit Wineries**

Recent years has seen development of fruit wineries on the Atherton Tablelands and Tropical North Queensland generally. This has been in part a flow on from the search for diversification and value adding. The region does not generally have a favourable climate for the production of wine grapes, with the possible exception of the higher, drier parts of Herberton Shire.

At the same time there is a large tourism industry. Fruit wines present the opportunity to offer regional visitors a local wine experience and it is to this sector the wineries are primarily oriented. There are now some 8 operations in the region, providing a range of taste experiences. Those based on the Atherton Tablelands are:

- The Golden Drop Winery, Bibroohra
- De Brueys Boutique Wines, Mareeba
- Mount Uncle Distillery, Walkamin
- Sunset Ridge, Yungaburra

Traditionally fruit wines have been regarded as ‘novelty’ and niche products, not capable of competing with grape based wines. However, they are becoming increasingly sophisticated both locally and internationally, with some wineries pitting their fruit wines directly against grape wines with favourable responses from consumers. There has also been some market testing of fruit wines in Asia, where the Asian palate is less accustomed to grape wine and more accepting of fruit wines.

**Aquaculture**

Aquaculture on the Tablelands is directly supported by Department of Primary Industries & Fisheries aquaculture research and development operations based at Walkamin. The Department also has aquaculture focused operations in Cairns and Bribie Island, near Brisbane, which also provide industry support.

The Tablelands aquaculture industry is relatively small, with an estimated value of some A$1.5 million. Across the State, the value of aquaculture as a proportion of total fisheries production has been steadily rising. In 1997/98, aquaculture accounted for 15.5% of the gross value of fisheries production. By 2003/04, this had risen to 24%. (Reference: DPI&F website, fisheries section: [www.dpi.qld.gov.au](http://www.dpi.qld.gov.au))

Tablelands production is centred mainly on Barramundi and Redclaw freshwater crayfish production. These are the freshwater species which are most commercially established. Other freshwater species, including eels, silver perch, sleepy cod and jade perch also show aquaculture promise. (Further details can be found on the industry association website: [www.aquaculturequeensland.com/freshwater_fish.htm](http://www.aquaculturequeensland.com/freshwater_fish.htm))

Barramundi production has stabilised, with expansion and new investment probably slowing due to concerns due to imports.
Redclaw crayfish production across the State is still small, with only around 100 tonnes produced. This species is thought to have considerable export potential, with large markets in Europe and the US, which are traditionally accustomed to freshwater crayfish as a delicacy.

The industry is characterised by small producers without the capacity for export. What is required is development of a large scale farm or farms. Since Tropical North Queensland is the native territory of Redclaw, with them being endemic to the Walsh and Mitchell River catchments, it would seem that the western area of the Tablelands would be an attractive location for such a development.

**TIMBER**

The timber industry was a key industry for the Atherton Tablelands up until the protection of forests on public lands in 1989 under the World Heritage Convention.

Existing milling operations have until recently been small and based on resources available from private lands and salvaged timber.

There are now four developments at different stages leading to renewed interest in the industry.

Firstly, maturing plantations for Hoop Pine provided the basis for a major mill development in Ravenshoe, which has successfully established domestic and export markets for this resource.

Now extensive plantations of Caribbean Pine established during the 1970’s north of Kuranda are providing the basis for establishment of a new processing mill close to Mareeba. This will produce flow on effects in Mareeba township.

On Western Cape York, there are major hardwood resources suitable for structural, furniture and a number of other applications standing on bauxite mining lease areas.

This resource is presently pushed down and burnt. Now especially, with dwindling hardwood supplies and a major expansion in bauxite mining taking place, there is an opportunity to develop a significant timber processing industry with capacity to process at least 10,000 cubes per annum. The primary mill or mills are likely to be located near Weipa and / or Aurukun. However a recent feasibility study found that a secondary mill to produce T&G flooring and architectural mouldings would be best placed on the Northern Tablelands for ease of access to markets. (Source: Kleinhardt, 2006, Western Cape York Timber Salvage Project Feasibility Report, Western Cape Communities Coexistence Agreement Project).

Lastly, farm forestry is being pursued as a means to increase farm productivity, provide alternative incomes, retirement incomes and contribute to a healthy environment. This is a longer term approach to timber industry development, but is gathering momentum globally. A local organisation, the Network for Sustainable Development of Agriculture, is leading in the development of this approach. (www.nsda.org.au)

**FOLIAGE**

One of many niche production opportunities is production of native foliage for the florist trade. Yuruga Native Plant Nursery has identified an opportunity to cultivate Stenocapus, with two of its varieties known as forest lace and forest gem.

It is estimated that the opportunity is to build to an industry sector with A$20 million turnover over five to six years. This would require some 300 hectares under production, with a gross turnover rate of A$70,000 per hectare. Markets have been identified throughout Eastern Australia, plus export opportunities.

While the species can grow elsewhere, the Tablelands has the most suitable growing conditions. Being light, it has a freight advantage over heavier produce into southern markets.
BIOBASED INDUSTRIES

In a sense, farming has always been a biobased industry. The scope, nature and size of the opportunities for new biobased products and materials are rapidly expanding, as illustrated below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples of Products &amp; Markets</th>
<th>Market Indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopharmaceuticals</td>
<td>Vaccines, antibodies, anti-cancer agents</td>
<td>20% growth rate: US $160 billion world market by 2010</td>
</tr>
<tr>
<td>Nutraceuticals</td>
<td>Over the counter health-care products</td>
<td>6.1% growth rate: US $9.6 billion world market by 2008</td>
</tr>
<tr>
<td>Cosmeceuticals</td>
<td>Personal care products (skin, hair, anti-ageing)</td>
<td>US market alone for anti-ageing products US $30 billion by 2009</td>
</tr>
<tr>
<td>Biofuels</td>
<td>Ethanol, biodiesel – in transport, farming &amp; industrial processes</td>
<td>Queensland ethanol industry predicted to be worth up to A$1.5 billion by 2010</td>
</tr>
<tr>
<td>Bioenergy</td>
<td>Green electricity &amp; heating</td>
<td>In Australia biomass provided 64% of 'green power' generated in 2003/04</td>
</tr>
<tr>
<td>Biodegradable fibres</td>
<td>Automotive panels, housing, construction, textiles, all forms of plastics &amp; resins reinforcement</td>
<td>Us fibre market = US $1.4 billion in 2005 – 54% growth rate per annum</td>
</tr>
<tr>
<td>Biodegradable plastics</td>
<td>Automotive, electronics, construction, furniture</td>
<td>Australia alone imported A$3 billion polymers / products in 1999</td>
</tr>
<tr>
<td>Industrial</td>
<td>Chemicals, paints, dyes, enzymes, solvents, inks</td>
<td>World enzyme market 6.6% growth rate: Estimated US $5 billion by 2009</td>
</tr>
</tbody>
</table>

(Source: Adapted from Cairns 2020-2050 Business Research Manual 2005)

Biobased industries represent a major opportunity for the Atherton Tablelands, perhaps eclipsing all other areas referred to in this document. It’s combination of tropical mega-diversity, diverse growing conditions, land and water availability represent a rare resource globally.

A report by the US National Research Council on priorities for research and commercialisation for biobased industrial products begins with the statement:

‘Biological sciences are likely to make the same impact on the formation of new industries in the (present) century as physical and chemical sciences have had on industrial development throughout the (last) century…..’

(Reference: US NRC 2000)

Non-renewable fossil carbon resources have been providing the world with its energy, synthetic chemicals and other materials for industrial production. They have provided fuels, chemicals, plastics, paints, dyes, adhesives, textiles and a range of other products.

Their finite, non-renewable nature, rapidly increasing demand by developing nations and security risks to sufficient, ongoing supplies are leading to the search for alternatives. There is an explosion in development of often better products from renewable living plant matter. The approach is to think of plants as biofactories, or bioprocessors, as the building blocks for diverse products. This biobased industry thinking brings together local farming expertise, biosciences and Indigenous knowledge.

Market demand is being fueled by increasingly sophisticated consumers, seeking better health, improved quality of life, more natural products and who are concerned as to the future of the environment.
On the Atherton Tablelands, biobased industries blend with and become a manifestation of tropical expertise in view of the tropical techniques, type of biomass involved, applications and products being considered.

Biobased does not necessarily mean high-tech and cutting edge biotechnology, although often involved. It also extends beyond the bio-industrial product streams (illustrated in the table at the beginning of this section) to a second industry stream based more in Agri-science.

This industry stream is illustrated in the following table:

![Diagram](image-url)

(Source: Gadek, Holden & Bitomsky, 2005 Fostering Collaborative Regional Development in Biobased Industries RIRDC Research Paper)

Another product range not mentioned in either stream above, lies in the development of products and services for environmental management and remediation. Consulting operations based on the Tablelands mentioned earlier have entered this field.

Apart from its mega-diversity, growing conditions and resources, the region has soft infrastructure in place to support industry growth. It has strong core competencies in the form of its farmers, skilled in the production of tropical crops, suppliers of equipment and services, technical expertise and engineering support.

The Department of Primary Industries and Fisheries (DPF&F) has long had a strong presence on the Atherton Tablelands and the wider Tropical North Queensland region.

It has a regional office, technical staff and research laboratory in Mareeba. It conducts research into fisheries and aquaculture at its Walkamin Research Station, has a forestry research and development station at Kairi, as well as a presence at Dimbulah and Malanda. The Queensland Forestry Research Institute also has an operation at the DPI&F facility in Walkamin.

BioNQ – Biobased Industries North Queensland has been formed as an industry cluster under the umbrella of the Cairns Region Economic Development Corporation, acknowledged internationally for the effectiveness of its cluster based economic development model. This is forming a base for industry participants to build collaboration and rapidly share knowledge. ([www.bionq.com.au](http://www.bionq.com.au)).

Generally research and development capacity is rapidly expanding in the region. There are current, major enhancements to publicly supported research and development capacity for biobased industries.

This is through entities such as the Australian Tropical Forest Institute (ATFI) ([www.jcu.edu.au/atfi](http://www.jcu.edu.au/atfi)): The Centre for Tropical Agri-Tech Research (CTAR).
together with enhanced DPI&F and Commonwealth Scientific and Industrial Research Organisation (CSIRO) activities.

There is also a considerable amount of research and development work being undertaken through private individuals and consortiums.

Underpinning a number of the projects underway is the concept of ‘CAPS’ (Commercial Agroforestry Production Systems). This is a concept originally devised by TBL Vision Pty Ltd and the CSIRO. It is for a cohesive sugar-fibre-timber system to drive diversification and resolve sugar industry issues.

It considers crops as input streams into major regional primary processing facilities, clustered around a sugar mill, which in turn would produce a range of materials as inputs to further value added products. A comprehensive report was prepared on products that may be produced from this system. This included a review of their potential and market conditions. (Kleinhardt / CSIRO Sustainable Ecosystems, 2005, Commercial Agroforestry Systems Project, Report to Regional Partnerships Program).

An illustrative summary of current projects and business activities follows. It is by no means exhaustive.

Farmacule Biollndustries Pty Limited is an Australian biotechnology company based in Brisbane, focused on developing the country’s first sustainable molecular farming industry. (www.farmacule.com).

Molecular farming involves growing crops to produce proteins, bioplastics and other products rather than traditional food or fibre.

The company plans to cost effectively mass produce these compounds in plants for various high value therapeutic, industrial, and diagnostic applications.

Farmacule projects are of interest to the Atherton Tablelands due to their use of tobacco and sugar cane as plant stock for molecular production.

In tobacco, the company has completed proof of concept for the controlled production of the high value protein, Vitronectin, in genetically modified tobacco. The technique uses the company’s patented INPACT genetic modification technology.

Another research project Farmacule will use its genetic modification technology to introduce a suite of genes expressing cellulose enzymes into sugar cane leaves and possibly stalks. Once activated, the enzymes will break down the cellulose sugars within the cane and possibly the bagasse also into glucose molecules. These can then be fermented into ethanol as a fuel additive. It is believed that this ethanol production can be achieved without affecting the sugar content of the cane.

In the case of tobacco, Farmacule plans to initially focus on high value proteins, capable of production in secure glasshouses. However eventually it intends to move to broadacre transgenic crops.

Mossman Sugar Mill already sources a proportion of its sugar cane from the Atherton Tablelands. With growing pressure on coastal agricultural land from urban development, the proportion sourced from the Tablelands is likely to increase.

The mill is involved in a number of innovative projects aimed at improving profitability.

One is to establish the world’s first low glycemic index (GI) sugar production plant. Low GI sugar has been shown to have health benefits, particularly in combating obesity and type 2 diabetes. The company’s research partner is the biotechnology company Horizon Science, which has recently attracted a $9 million investment to assist in research and commercialisation.

A Horizon Science subsidiary, Cocoa Australia Ltd is pioneering cocoa growing and processing in the Mossman area with a view to production of chocolate with health benefits. Apart from the sugar
required, there is potential connection to the Tablelands Dairy industry, with its taste advantage to the Asian palate. Preliminary market investigations indicated a very large potential market for confectionery into emerging Asian markets.

The mill is also the base for Australia’s first commercial cane separation plant, which will extract natural fibre and juice of high nutritional value. The company involved, Resis Australia plans to sell the products to fruit juice, bread, biscuit and confectionery manufacturers.

Another company, Kristevefourspace Ussy, is producing dietary fibre with assistance from the Mossman Mill. This is a joint venture between Australia and Japanese interests from Okinawa, following research work in Okinawa.

These projects head the mill in the direction of the concept of being a ‘bio-refinery’ rather than a traditional sugar mill concerned with food products.

Eco Biotics, based in Yungaburra is now well established in the rainforest bio prospecting field. This involves searching for naturally occurring compounds suitable for research and development of products for use in pharmaceuticals, nutraceuticals, cosmeceuticals and industrial enzymes. Their discoveries are sent to major international companies for research and proving. Full testing and research at times requires a significant volume of original material that may not be readily available and requires on the ground ‘tropical expertise’.

Yuruga Nursery at Walkamin is a major employer for the region and has spun off its research and development into a separate company – Clonal Solutions. The company has recently completed a laboratory for the application of cloning techniques it has developed. It is the only nursery in Australia with the technology to mass produce elite hybrid eucalypts, until recently thought impossible.

The company has the capability of producing sufficient trees to plant 12 to 15,000 hectares per annum. While the company has an initial domestic focus, it is confident it can outperform overseas producers, as it achieves a 98% strike rate, compared to 30 – 40% overseas. This means it can sell plants at something like one third the cost of Chinese production.

Discussions are now proceeding with commercial interests to clone other hardwood varieties not previously tissue cultured.

Bagasse Pots is another innovative operation, which converts bagasse waste from sugar mills into a range of biodegradable pots for plants aimed at the nursery and forestry trade. Being organic with added nutrient value, they support plant growth and reduce nursery fertilizer input costs.

South Edge Seeds This company specialises in the seed production for dairy and beef pastures, mine rehabilitation, urban and industrial uses. It specialises in seeds suitable for use in the tropical regions of the world. It has recently opened a A$2.6 million processing and storage plant capable of producing 40 tonnes of improved seed per week.

The state of the art plant removes the husk and coats the seed with an organic layer of talc or lime, forming a pellet which protects the seed and vastly improves handling characteristics. The procedure reduces volume by up to 75%, generating significant savings in storage, handling and transport. Seeding is more reliable, as the seed plus its coating considerably improves the ability to spread the seed accurately. Seed will not germinate until the protective coating is broken down by rainfall or irrigation. This minimizes the risk of burn off with premature germination.

The company has entered into an international marketing agreement with Seedmark, Australia’s largest pasture seed company. While Seedmark specialises in temperate areas, Southedge seeds will apply its particular...
tropical expertise to opening up export markets in equatorial regions globally.

The alliance is expected to lift sales by some 25% annually.

The sector on the Tablelands has some 50 to 60 seed growers, who will benefit from the increased production and wider markets.

**MaMu Native Plant Project**

A partnership has been forged between the Ma:Mu Aboriginal people of the Southern Tablelands, Local Government, James Cook University, TAFE and an Australian Government agency, to domesticate and commercialise selected wild plant species.

An initial hurdle was to establish intellectual property rights over the plant materials.

The project aims to produce cultivars for production of Australian native, or ‘bush foods as well as for environmental remediation, therapeutic and pharmaceutical product development.

The Traditional knowledge of the Ma:Mu people will be blended with cutting edge propagation and breeding techniques. The combined resulting knowledge will form the basis for training of Ma:Mu people to run the resulting enterprise.

**NIR Technology**

The Centre for Tropical Agri-Tech Research (CTAR), based in James Cook University, mentioned previously, is intended to be a key link between plant biotechnology research, sustainable agricultural practices and economic and educational expertise.

Agreements are also in place with various divisions within the Queensland Department of Primary Industries and Fisheries for collaborative projects. These include the Rapid Assessment Unit. This unit is investigating the application of non-invasive technologies for the inspection and assessment of the quality and safety of fruit and other crops. Scanners using infrared technology are capable of for instance rapidly assessing fruit for ripeness and sweetness. This is expected to lead to farmers being able to grade fruit more readily for quality and offer grades with ‘guaranteed sweetness’. Work is being undertaken with the Tablelands A$40 million avocado industry at present to commercially prove up this technology.

**Bio-refinery**

The projects and initiatives outlined, with other commercial in confidence projects, indicate a high level of biodiscovery activities in the region. The next step to build on this has been suggested to be development of an industrial scale fermentation and extraction plant.

The plant would support existing activities and be the foundation on which to attract major manufacturing and commercial R&D operations.

The region is a logical choice for location of such a plant due to:

- Ability to provide bio discovery services
- Ability to efficiently produce ‘bio masses’ for fermentation, especially from some of the fast growing or chemically complex tropical crops and plant species
- A first world lifestyle in the tropics
- International air links (Production output could be expected to have high value to weight ratios)

The bio-refinery could be either as part of an existing sugar milling operation, or as a ‘greenfield’ project. (Reference for biorefinery details: Cairns 2020-2050 Business Research Manual 2005, Research Note 22)
TOURISM MARKETS

EXISTING, TRADITIONAL MARKETS

Tourism visitation to the Atherton Tablelands is estimated to be in the order of 500,000 to 550,000 per annum. A significant proportion of these are thought to be friends and family visiting Tropical North Queensland residents of Cairns and the coastal strip. These tend to be day visitors.

For overnight and longer staying visitors, the Atherton Tablelands are traditionally also a popular destination for Townsville and country Queensland residents from the inland and drier parts of the broader North Queensland region.

However the Tablelands are also a popular destination for Cairns and the wider region residents for weekend and school holiday recreational visits. Tinaroo dam hosts boating pursuits including water skiing, fishing and cruising, with foreshore camping popular. There are some 500,000 additional visitors per annum thought to be in this category.

Current visitor accommodation stock is mainly hotel /motel style, with the more recent development of ‘bed and breakfast’ properties mentioned previously.

There has not to date been a definitive study of tourism numbers, segmentation and flows across the Tablelands region.

THE OPPORTUNITY

The Tropical North Queensland tourism industry has grown from a $1.7 billion to $2.5 billion industry over the past ten years. (Source: Tourism Tropical North Queensland). The Tablelands industry has not achieved anything like equivalent growth. In 2003, when the regional industry was estimated as worth $2 billion, the Tablelands industry value was estimated at $53.5 million. (Source: TTNQ 2003, Tablelands Tourism Investment Strategy Model).

The regional industry has now launched a new marketing campaign to underpin further growth and development. The campaign “Tropical North Queensland: Change Your Latitude” is backed by a $2 million Queensland State Government commitment to supplement industry contributions in targeting priority markets.

As noted earlier, the opportunity for the Tablelands, is the possession of very high value natural assets in the midst of a region which attracts some 2.2 million visitors per annum. Its’ rainforests are every bit as beautiful and mega-diverse as the Daintree on which the region’s reputation was first based. Rather than being the region ‘where the Rainforest meets the Reef’, the Tablelands is ‘Where the Rainforest meets the Outback’.

The Cairns region has a sophisticated tourism industry, well linked into the industry marketing and distribution systems.

The industry is also now more focused on achieving wider dispersal of visitors. This is firstly in recognition of there being increasing numbers of return visitors seeking new experiences. Secondly, there is a need to reduce pressure of visitor numbers on the Daintree region. Thirdly to retain its competitive edge, the industry recognises that it needs to continually pursue new and different experiences in keeping with market trends and preferences.

INDUSTRY BODIES

The regional tourism organisation is ‘Tourism Tropical North Queensland’ (TTNQ), which is linked into the region through a membership base of tourism enterprises and ‘sub-regional’ organisations, such as Tropical Tablelands Tourism (TTT) in the case of the Tablelands. (TTT website: [www.athertontablelands.com](http://www.athertontablelands.com)).

The role of TTNQ is primarily to market the region externally to attract visitors and optimise yield for the regional industry. More comprehensive data on market conditions can be obtained from that body. ([www.tropicalaustralia.com.au](http://www.tropicalaustralia.com.au)).
Contact for research and market insights is: research@tnq.org.au; Phone: 617 4015 1201

REGIONAL TOURISM
A major source of tourism data is the regular surveys conducted nationally of domestic and international visitors in Australia. The latest available for those figures are for the year ended December 2006, (as at April 2007). The following material is drawn from those survey results, as published by the Regional Tourism Organisation – TTNQ.

The surveys broadly indicated:

- International visitor numbers for 2006 remained steady (859,238), but visitor nights have increased by 5%;
- Domestic visitor numbers have increased by 26% to 1,575,000, while visitor nights increased by 9%.

Domestic Tourists
This domestic tourism figure compares to increases of 4.3% for Queensland overall and 5.2% for domestic visitors across Australia.

The average annual growth rate for domestic visitors to Tropical North Queensland (TNQ) between year ended December 2002 and year ended December 2006 is 5.5%. Visitor nights have grown at an average annual rate of 4.1% for the same period. In terms of annual average growth since 2002, The TNQ region has consistently out-performed growth for the State of Queensland and trends at the National level.

In the year ended December 2006, the markets which showed the largest growth were New South Wales, Brisbane and other interstate markets, including visitors originating from within the TNQ region – (See Table below). Intra-regional visitors, i.e. those from within TNQ, represent the largest source market, followed by other Queensland regions and Brisbane. New South Wales is also a significant market and contributes the largest number of visitor nights spent in TNQ, followed by Victoria.

Importantly for the Tablelands traditional market, 26% (409,500) of domestic visitors came to visit friends and relatives. The biggest proportion of these (some 140,000) came from within TNQ itself, followed by ‘Other’ Queensland, accounting for some 118,000.

<table>
<thead>
<tr>
<th>Origin</th>
<th>Sum of Visitors (000’s)</th>
<th>Sum of Visitor nights (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year ending December 2005</td>
<td>Year ending December 2006</td>
</tr>
<tr>
<td>New South Wales</td>
<td>215</td>
<td>271</td>
</tr>
<tr>
<td>Victoria</td>
<td>220</td>
<td>206</td>
</tr>
<tr>
<td>Other Australia</td>
<td>94</td>
<td>134</td>
</tr>
<tr>
<td>TNQ</td>
<td>359</td>
<td>379</td>
</tr>
<tr>
<td>Brisbane</td>
<td>159</td>
<td>257</td>
</tr>
<tr>
<td>Other QLD</td>
<td>206</td>
<td>327</td>
</tr>
<tr>
<td>Total</td>
<td>1,252</td>
<td>1,575</td>
</tr>
</tbody>
</table>

(Source: TTNQ, National Visitors Survey)

Domestic Demographics
Visitors to TNQ were aged between 25 and 44 and most likely to be travelling as a family with children, or alone, followed by those aged between 45 and 64 who are most likely to be travelling as a couple. The region is least popular with those aged 65 and over.
Dispersal

Regardless of the purpose of visit, most domestic visitors to TNQ during 2006 spent at least one night in Cairns. Douglas Shire was the second most popular destination for domestic visitors. The Southern region (encompassing the Johnston and Cardwell Shires), and the Tablelands attract a similar number of visitors.

Some 100,000 holiday visitors, 80,000 ‘VFR’ visitors and 20,000 ‘other’ (mostly visiting for business), spent at least one night in accommodation on the Tablelands.

International Tourists

For the 2006 year, international visitor numbers to Queensland increased by 2% and for Australia the increase was 1%.

For TNQ, reductions in visitor numbers from Japan and New Zealand were balanced by growth in visitors from most other markets. The following table summarises:

<table>
<thead>
<tr>
<th>Sum of Visitors (000’s)</th>
<th>Sum of Visitor nights (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year ending December 2005</td>
</tr>
<tr>
<td>New Zealand</td>
<td>52,139</td>
</tr>
<tr>
<td>Japan</td>
<td>249,958</td>
</tr>
<tr>
<td>China / Hong Kong</td>
<td>50,886</td>
</tr>
<tr>
<td>North America</td>
<td>114,384</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>162,017</td>
</tr>
<tr>
<td>Germany</td>
<td>45,640</td>
</tr>
<tr>
<td>Other Europe</td>
<td>115,658</td>
</tr>
<tr>
<td>Korea *</td>
<td>11,471</td>
</tr>
<tr>
<td>India *</td>
<td>7,817</td>
</tr>
<tr>
<td>Other Asia ^</td>
<td>n/a</td>
</tr>
<tr>
<td>Other Countries</td>
<td>46,156</td>
</tr>
<tr>
<td>TOTAL</td>
<td>857,477</td>
</tr>
</tbody>
</table>

Indications are that the lowered value of the Japanese yen against the AU$, and competition from cheaper South-East Asian destinations are the biggest contributors to the declining numbers from Japan. The TNQ region will also be impacted by reduced airline seat capacity out of Japan. A return to growth out of Japan is not forecast in the near future, however it is expected that the market will become more stable.

The loss in numbers from New Zealand may be an ongoing effect from Cyclone Larry last year and indications are that numbers will increase again during 2007. However an increasing number of out-bound low cost carriers will continue to create additional competition for the New Zealand market. The Gold Coast in particular has benefited significantly from direct flights ex New Zealand, with a 63% growth in numbers since 2003.

Dispersal

There is as yet not a great number of international visitors who spend a night or more in accommodation outside of Cairns. Douglas Shire is the most popular, with a little over 100,000 international visitors choosing to stay a night or more. Numbers staying on the Tablelands are in the order of only 10,000. A major barrier is thought to be the limited range and amount of accommodation types and standards.
MINING INDUSTRY
(The Mareeba Chamber of Commerce publication “Mareeba Moving Ahead – an economic snapshot (2006)” is acknowledged as the source of much of the following material)

The boom in mining across Australia extends to the Atherton Tablelands and near areas serviced by Tablelands businesses. The region is a popular location for mining staff to settle, either as employees of regional mining projects or as ‘fly in fly out’ employees of projects further afield, both in the broader North Queensland region and internationally in Micronesia and South Asia.

The Atherton Tablelands existing resident population is also a popular source of mining industry labour, due to the high proportion of residents with mechanical, machinery and engineering skills and aptitudes, due to the nature of base regional industries.

This is all adding to real estate demand and producing flow on effects for business and the economy of the Tablelands.

GOLD

Republic Gold is looking at recommencing mining in the district’s founding goldfield area – the Hodgkinson, north-west of Mareeba. Modern technology is capable of recovering gold, that was uneconomic for earlier gold miners. The deposits have an estimated resource of 600,000 oz of gold with identified reserves of about 300,000 oz. It is estimated that mining and processing could involve of the order of 200 jobs. The company is also evaluating deposits in the Tregoora area further north towards the Palmer River.

The company envisages a treatment facility in the Red Dome area with the size and scope of the operation to be determined by a study to be completed during 2006. If the project proceeds, it could involve the construction of 300-400,000 tonne ore processing mill to be on stream in 2008 and involve a workforce of the order of 120.

ZINC AND OTHER BASE METALS

Kagara Zinc is in the process of proving up high grade base metal resources in the Red Dome/ Mungana/ Walsh River areas with a view to it being the company’s next major developmental area (operations are currently based in Mount Garnet drawing on deposits in the Mount Garnet and the Balcooma /Dry River area further south) Apart from zinc, the Mareeba district deposits include copper, lead, gold and silver.

Apart from zinc, the Mareeba district deposits include copper, lead, gold and silver.

The company envisages a treatment facility in the Red Dome area with the size and scope of the operation to be determined by a study to be completed during 2006. If the project proceeds, it could involve the construction of 300-400,000 tonne ore processing mill to be on stream in 2008 and involve a workforce of the order of 120.

VITAL MINERALS is proposing to mine scheelite deposits north of Mount Carbine with an inferred resource of 13.9 million tonnes of ore containing 48,500 tones of Tungsten Trioxide. The company is in the early stages of a pre-feasibility study. Earliest date for commencement of development would be the last half of 2008. Eventual employment could be in the range of 150-300 with production of 4,000 tonnes of concentrate a year representing about 6-8% of the world market.

Queensland Ores Ltd has been looking into reopening mining at Wolfram Camp, 18 km from Dimbulah to target the minerals wolfram (tungsten ore) and molybdenite. The company is considering a 100,000 tonnes per annum operation at a capital cost of $8.5 million with an estimated value of product about $19 million per annum.

COPPER SULPHATE

Solomons Mines located north-west of Mungana, are manufacturing premium grade, free flowing, Copper Sulphate Pentahydrate for use in the North’s extensive and expanding zinc processing activities. The product also has a market as a stockfeed supplement and for fungicides and pesticides. The manufacturing operation is based on highly suitable copper deposits in the area. Production is expanding to meet strongly growing demand. The plant’s capacity is being expanded to produce 25 tonnes a day.
TIN
With the tin price back up to $12,000 a tonne, Braemar Minerals have established local tin buying arrangements with a number of smaller new mines coming on stream in the region, including the Chillagoe area.

PERLITE
Perlite mining is now well and truly established in the area north-west of Mungana with 5,000 tonnes a year being produced and transported to various niche markets in the south. Perlite is used to produce lightweight concretes and in steel production. World markets are believed to be over a million tonnes a year.

LIMESTONE
The extensive limestone deposits in the Chillagoe area and deposits in the Mount Molloy area have long provided the basis for production of lime for agricultural purposes, especially in the high rainfall farming areas along the coast. Mirriwinni Lime currently mines and processes about 14,000 tonnes a year from the two areas.

MARBLE
Cairns Marble is continuing to mine marble at Chillagoe at a rate of 4,000 tonnes a year for local and export markets.

In a new venture, Mirriwinni Lime has established a chipping, processing and bagging operation that turns 2nd grade blocks into decorative marble stones for market in the region and further south.

SLATE
River Gold State produces slate products including manufactured slate tiles at its quarry in the Palmer River area north of Mareeba.

COOK SHIRE
New and planned mining operations further north in Cook Shire include Bluestones $14.5 million Collingwood tin mine 30 km south of Cooktown being ramped up from the 4,329 tonnes of concentrate produced in June Quarter 2006. The Australian Gold Corporation Alice River Project is at a feasibility study stage with a projected start up end 2007 (25 employees). Dianne Copper Mining Corp is planning to re-open the Dianne Copper Deposit in the Palmer River area (feasibility is underway, projected start up end 2007 with 10 employees).

URANIUM DEPOSITS
Uranium exploration has been stimulated in Australia, with both major political parties re-assessing their uranium mining and nuclear power industry policies.

Also in Queensland, a Sustainable Minerals Institute (University of Queensland) report has concluded that uranium mining would not threaten the State's large coal mining industry.

The Georgetown area, west of the Tablelands has attracted the attention of two Canadian companies.

- Buffalo Gold, Canada, has announced it expects to accelerate exploration of its Qld uranium properties which are centered on Georgetown and include deposits at Maureen, North Maureen and Juntala; (www.buffalogold.ca)

- Mega Uranium Ltd another Canadian Company is involved in exploration in the Georgetown project area;

- Mega announced in April 2007 that the results of its high-resolution airborne magnetic radiometric survey identified numerous uranium anomalies. (www.megauranium.com/main)

Anecdotal reports from the region are of a general increase in exploration activity and interest in housing and land in the area.

The Tablelands, as a major service centre to the mining industry and dormitory region for mining staff, will benefit from the flow on effects of this activity.
POPULATION, WORKFORCE, SKILLS

POPULATION

Population estimates as at June 2005 for each of the four Local Government areas were:

<table>
<thead>
<tr>
<th>LGA</th>
<th>Est.–June 05</th>
<th>% Change Over Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherton</td>
<td>11,212</td>
<td>+1.8</td>
</tr>
<tr>
<td>Eacham</td>
<td>6,337</td>
<td>-1.2</td>
</tr>
<tr>
<td>Herberton</td>
<td>5,449</td>
<td>-1.2</td>
</tr>
<tr>
<td>Mareeba</td>
<td>18,850</td>
<td>+0.9</td>
</tr>
</tbody>
</table>

Later figures are not presently available. However anecdotal reports from Council officers and real estate sales offices indicate that growth has gathered pace since the last estimates were calculated. 2006 Census data will soon be released and should provide a better snapshot of the situation and may require some of the projections below to be revised.

Projections prepared by the Department of Local Government, Planning, Sport & Recreation indicate that population will be somewhere between the following, (being the high and low scenario projections):

<table>
<thead>
<tr>
<th>LGA</th>
<th>Year</th>
<th>Population Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherton</td>
<td>2011</td>
<td>11,890 – 12,339</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>12,364 – 13,451</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>12,868 – 14,598</td>
</tr>
<tr>
<td>Eacham</td>
<td>2011</td>
<td>6,407 – 6,497</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>6,429 – 6,607</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>6,420 – 6,740</td>
</tr>
<tr>
<td>Herberton</td>
<td>2011</td>
<td>5,477 – 5,540</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>5,512 – 5,539</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>5,573 – 5,991</td>
</tr>
<tr>
<td>Mareeba</td>
<td>2011</td>
<td>19,358 – 19,724</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>19,696 – 20,517</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>20,054 – 21,332</td>
</tr>
</tbody>
</table>

AGE DISTRIBUTION

All four Local Government Areas have populations with a higher median age than the overall Queensland figures. The difference between these regional and the Queensland figures is projected to increase. This is worth noting when it is considered that Australia overall is characterised by an ageing population.

When compared the Australian average, the age groups from 15 to 44 are under-represented as a proportion of the regional population.

<table>
<thead>
<tr>
<th>Region</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
</tr>
<tr>
<td>Queensland</td>
<td>35</td>
</tr>
<tr>
<td>Atherton</td>
<td>39</td>
</tr>
<tr>
<td>Eacham</td>
<td>40</td>
</tr>
<tr>
<td>Herberton</td>
<td>39</td>
</tr>
<tr>
<td>Mareeba</td>
<td>37</td>
</tr>
</tbody>
</table>

The smaller gap between Mareeba and the State figures may be due to its expected development as an industrial area and dormitory region for workers commuting to Cairns.

The impact of the general ageing of the population is demonstrated by the following graphs:
(The Source of all statistics on the previous page is September 2006 projections developed by the Planning Information & Forecasting Unit (PIFU) of the Dept. Local Government, Planning, Sport & Recreation).

**OCCUPATION**

The Australian Bureau of Statistics (ABS) publishes a ‘National Regional Profile’ Series. Information is collated from the census and other sources. The following information is derived from that series.

The occupation of employed persons, as percentage of total employed persons, as at 2001 was as follows: (Although workforce size may have increased, it is unlikely that the percentages will have varied dramatically in the intervening six years)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Atherton</th>
<th>Eacham</th>
<th>Herberton</th>
<th>Mareeba</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers &amp; Administrators</td>
<td>12.3</td>
<td>17.2</td>
<td>15.2</td>
<td>15.1</td>
<td>9.2</td>
</tr>
<tr>
<td>Professionals</td>
<td>14.2</td>
<td>14.3</td>
<td>12.5</td>
<td>12.6</td>
<td>18.2</td>
</tr>
<tr>
<td>Associate Professionals</td>
<td>12.7</td>
<td>11.6</td>
<td>10.0</td>
<td>10.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Tradespersons &amp; Related Workers</td>
<td>13.3</td>
<td>11.9</td>
<td>11.7</td>
<td>11.0</td>
<td>12.3</td>
</tr>
<tr>
<td>Advanced Clerical, Sales &amp; Service Workers</td>
<td>2.9</td>
<td>2.1</td>
<td>2.5</td>
<td>2.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Intermediate Clerical, Sales &amp; Service Workers</td>
<td>14.8</td>
<td>13.2</td>
<td>12.6</td>
<td>14.9</td>
<td>16.5</td>
</tr>
<tr>
<td>Intermediate production &amp; Transport Workers</td>
<td>7.9</td>
<td>8.2</td>
<td>11.2</td>
<td>8.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Elementary Clerical, Sales &amp; Service Workers</td>
<td>8.9</td>
<td>6.7</td>
<td>6.7</td>
<td>8.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Labourers &amp; Related Workers</td>
<td>10.3</td>
<td>12.1</td>
<td>14.3</td>
<td>14.0</td>
<td>8.6</td>
</tr>
<tr>
<td>Inadequately described or not stated</td>
<td>2.7</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**AVERAGE INCOME**

The same statistical series provides details of income. Figures provided apply to 2003, as follows:

<table>
<thead>
<tr>
<th>LGA</th>
<th>Average Taxable Income</th>
<th>Average Wage &amp; Salary Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherton</td>
<td>$33,240</td>
<td>$29,459</td>
</tr>
<tr>
<td>Eacham</td>
<td>$32,326</td>
<td>$29,317</td>
</tr>
<tr>
<td>Herberton</td>
<td>$32,342</td>
<td>$28,812</td>
</tr>
<tr>
<td>Mareeba</td>
<td>$32,414</td>
<td>$29,094</td>
</tr>
<tr>
<td>Australia</td>
<td>$40,829</td>
<td>$37,144</td>
</tr>
</tbody>
</table>

These lower than National averages are offset by the lower cost of housing in particular, referred to in a later section.

**QUALIFICATIONS**

The ABS also publishes a ‘Basic Community Profile’ series. The data is derived entirely from the census. These will soon be superceded by the 2006 census figures. However the following, being expressed as percentages of the population to which they apply would not be expected to alter greatly.

<table>
<thead>
<tr>
<th>Non-School Qualification (Persons 15yrs &amp; over)</th>
<th>Atherton</th>
<th>Eacham</th>
<th>Herberton</th>
<th>Mareeba</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate Degree</td>
<td>0.97%</td>
<td>1.35%</td>
<td>0.52%</td>
<td>0.65%</td>
<td>1.82%</td>
</tr>
<tr>
<td>Graduate Diploma &amp; Graduate Certificate</td>
<td>0.90%</td>
<td>1.48%</td>
<td>0.70%</td>
<td>0.74%</td>
<td>1.37%</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>6.75%</td>
<td>7.14%</td>
<td>4.42%</td>
<td>5.13%</td>
<td>9.74%</td>
</tr>
<tr>
<td>Advanced Diploma &amp; Diploma</td>
<td>5.24%</td>
<td>5.29%</td>
<td>3.63%</td>
<td>4.28%</td>
<td>6.00%</td>
</tr>
<tr>
<td>Certificate</td>
<td>16.71%</td>
<td>16.62%</td>
<td>13.28%</td>
<td>14.41%</td>
<td>15.77%</td>
</tr>
<tr>
<td>Not Stated</td>
<td>10.78%</td>
<td>12.19%</td>
<td>16.18%</td>
<td>15.52%</td>
<td>11.46%</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>58.63%</td>
<td>55.91%</td>
<td>61.25%</td>
<td>59.25%</td>
<td>53.84%</td>
</tr>
<tr>
<td>Total Persons</td>
<td>8,216</td>
<td>4,650</td>
<td>3,825</td>
<td>14,046</td>
<td>14,856,774</td>
</tr>
</tbody>
</table>
## Non-School Qualification – Field of Study (Persons 15yrs & over)

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Atherton</th>
<th>Eacham</th>
<th>Herberton</th>
<th>Mareeba</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural &amp; Physical Sciences</td>
<td>1.06%</td>
<td>1.25%</td>
<td>0.70%</td>
<td>0.81%</td>
<td>1.29%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>0.19%</td>
<td>0.32%</td>
<td>0.26%</td>
<td>0.15%</td>
<td>1.03%</td>
</tr>
<tr>
<td>Engineering &amp; Related Technologies</td>
<td>8.75%</td>
<td>9.58%</td>
<td>7.37%</td>
<td>7.30%</td>
<td>8.55%</td>
</tr>
<tr>
<td>Architecture &amp; Building</td>
<td>3.42%</td>
<td>2.86%</td>
<td>2.64%</td>
<td>2.60%</td>
<td>2.73%</td>
</tr>
<tr>
<td>Architecture, Environmental &amp; Related Studies</td>
<td>1.67%</td>
<td>1.93%</td>
<td>0.94%</td>
<td>1.48%</td>
<td>0.94%</td>
</tr>
<tr>
<td>Health</td>
<td>4.56%</td>
<td>4.45%</td>
<td>3.03%</td>
<td>3.12%</td>
<td>3.98%</td>
</tr>
<tr>
<td>Education</td>
<td>4.27%</td>
<td>4.81%</td>
<td>3.82%</td>
<td>2.90%</td>
<td>3.42%</td>
</tr>
<tr>
<td>Management &amp; Commerce</td>
<td>3.92%</td>
<td>3.95%</td>
<td>2.77%</td>
<td>3.52%</td>
<td>7.09%</td>
</tr>
<tr>
<td>Society &amp; Culture</td>
<td>1.97%</td>
<td>2.23%</td>
<td>1.88%</td>
<td>2.27%</td>
<td>3.78%</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>0.67%</td>
<td>0.84%</td>
<td>0.41%</td>
<td>0.73%</td>
<td>1.34%</td>
</tr>
<tr>
<td>Food, Hospitality &amp; Personal Services</td>
<td>2.06%</td>
<td>1.95%</td>
<td>1.36%</td>
<td>1.79%</td>
<td>2.14%</td>
</tr>
<tr>
<td>Mixed Field Programs</td>
<td>0.03%</td>
<td>0.13%</td>
<td>0.0%</td>
<td>0.02%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Field of Study inadequately described</td>
<td>0.29%</td>
<td>0.56%</td>
<td>0.15%</td>
<td>0.39%</td>
<td>0.39%</td>
</tr>
<tr>
<td>Not stated</td>
<td>8.51%</td>
<td>9.24%</td>
<td>13.34%</td>
<td>13.58%</td>
<td>9.33%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>58.62%</td>
<td>55.88%</td>
<td>61.29%</td>
<td>59.26%</td>
<td>53.84%</td>
</tr>
<tr>
<td><strong>Total Persons</strong></td>
<td>8,217</td>
<td>4,653</td>
<td>3,823</td>
<td>14,044</td>
<td>14,856,774</td>
</tr>
</tbody>
</table>

## INDUSTRY OF WORKFORCE

The same ABS series provides details of the industry in which people work. The following excludes overseas visitors:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Atherton</th>
<th>Eacham</th>
<th>Herberton</th>
<th>Mareeba</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry &amp; Fishing</td>
<td>12.94%</td>
<td>19.59%</td>
<td>17.35%</td>
<td>18.45%</td>
<td>3.98%</td>
</tr>
<tr>
<td>Mining</td>
<td>1.15%</td>
<td>0.94%</td>
<td>1.62%</td>
<td>0.99%</td>
<td>0.91%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.66%</td>
<td>8.79%</td>
<td>8.51%</td>
<td>6.36%</td>
<td>12.17%</td>
</tr>
<tr>
<td>Electricity, Gas &amp; Water Supply</td>
<td>1.46%</td>
<td>0.65%</td>
<td>0.21%</td>
<td>0.88%</td>
<td>0.73%</td>
</tr>
<tr>
<td>Construction</td>
<td>6.05%</td>
<td>7.69%</td>
<td>7.02%</td>
<td>6.06%</td>
<td>6.73%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>4.14%</td>
<td>3.23%</td>
<td>2.83%</td>
<td>3.72%</td>
<td>5.27%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>19.06%</td>
<td>12.06%</td>
<td>13.23%</td>
<td>14.48%</td>
<td>14.60%</td>
</tr>
<tr>
<td>Accommodation, Cafes &amp; Restaurants</td>
<td>4.21%</td>
<td>6.54%</td>
<td>5.06%</td>
<td>5.45%</td>
<td>4.94%</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>3.1%</td>
<td>3.35%</td>
<td>2.97%</td>
<td>4.85%</td>
<td>4.29%</td>
</tr>
<tr>
<td>Communication Services</td>
<td>0.56%</td>
<td>1.02%</td>
<td>1.35%</td>
<td>0.86%</td>
<td>1.79%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>1.50%</td>
<td>1.35%</td>
<td>0.81%</td>
<td>1.25%</td>
<td>3.76%</td>
</tr>
<tr>
<td>Property &amp; Business Services</td>
<td>7.15%</td>
<td>4.91%</td>
<td>4.32%</td>
<td>5.93%</td>
<td>11.09%</td>
</tr>
<tr>
<td>Govt. Administration &amp; Defence</td>
<td>3.74%</td>
<td>3.84%</td>
<td>4.79%</td>
<td>4.38%</td>
<td>4.46%</td>
</tr>
<tr>
<td>Education</td>
<td>8.94%</td>
<td>9.53%</td>
<td>11.54%</td>
<td>7.40%</td>
<td>7.17%</td>
</tr>
<tr>
<td>Health &amp; Community Services</td>
<td>9.95%</td>
<td>8.30%</td>
<td>9.58%</td>
<td>9.29%</td>
<td>9.71%</td>
</tr>
<tr>
<td>Cultural &amp; Recreational Services</td>
<td>1.48%</td>
<td>1.92%</td>
<td>0.81%</td>
<td>2.57%</td>
<td>2.44%</td>
</tr>
<tr>
<td>Personal &amp; Other Services</td>
<td>5.12%</td>
<td>3.51%</td>
<td>3.71%</td>
<td>4.21%</td>
<td>3.62%</td>
</tr>
<tr>
<td>Non-classifiable economic units</td>
<td>0.40%</td>
<td>0.12%</td>
<td>0.67%</td>
<td>0.39%</td>
<td>0.52%</td>
</tr>
<tr>
<td>Not stated</td>
<td>2.35%</td>
<td>2.61%</td>
<td>3.51%</td>
<td>2.39%</td>
<td>1.74%</td>
</tr>
<tr>
<td><strong>Total Persons</strong></td>
<td>4,250</td>
<td>2,445</td>
<td>1,481</td>
<td>7,045</td>
<td>8,298,606</td>
</tr>
</tbody>
</table>
PROPERTY & INDUSTRY

GENERAL CONDITIONS

Being a very large area with diverse conditions across so many parameters, property and industry development across the region is not surprisingly, uneven.

There are also some constraints on development due to conflict between retention of good agricultural land and pressures for urban and industry development.

Eacham Shire for instance is experiencing strong demand for urban and rural residential lots, which are in short supply.

Land zoned as future industrial and residential is owned by farming interests reluctant to release the land. Council is therefore presently undertaking residential development on land it owns itself to meet demand. These allotments will be auctioned.

Since industry deregulation, dairy properties have been changing hands to 'life style' settlers, who are under utilizing the land so far as agriculture is concerned. A similar trend has been occurring in Mareeba Shire, with ex tobacco farms taken up by 'life style' settlers. Some properties are also being sold to corporate schemes for forestry development.

Rising house prices in Cairns and the prospect of the upgrade of the Kuranda Range Road are supporting demand along the Kennedy highway from and including Kuranda to Mareeba.

Steady expansion of the Lotus Glen prison at Ariga has supported property development particularly in Tolga, while general demand seems to be building for property encompassing the high scenic values of the southern Tablelands generally. The drivers of this demand are increased mining activity, coastal residents wanting a 'weekender' or future retirement property, together with southern investors and 'tree change settlers'.

Mareeba is experiencing shortages in rental stocks, which is attracting southern investment due to lower capital costs and strong demand driving rental rates.

HOUSE PRICES

The Atherton Tablelands are as yet still an outpost for lower median house prices compared to major urban centres.

Spatial price index figures compare housing prices to Brisbane, taken as 100%. These indicate the comparative position of the Tablelands as at May 2006:

<table>
<thead>
<tr>
<th>Centre</th>
<th>Index Number</th>
<th>% Difference to Brisbane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brisbane</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Gold Coast</td>
<td>122.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Sunshine Coast</td>
<td>110.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Cairns</td>
<td>106.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Atherton</td>
<td>80.9</td>
<td>-19.1</td>
</tr>
<tr>
<td>Mareeba</td>
<td>72.7</td>
<td>-27.3</td>
</tr>
</tbody>
</table>

(Source: Office of Economic & Statistical Research, May 2006, Index of Retail Prices in Queensland Regional Centres)

The series does not include figures for Eacham and Herberton.

Median house prices for all four Local Government areas are increasing rapidly:

<table>
<thead>
<tr>
<th>Year</th>
<th>Atherton</th>
<th>Eacham</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median Price($)</td>
<td>No. Sales</td>
</tr>
<tr>
<td>2006</td>
<td>258,250</td>
<td>212</td>
</tr>
<tr>
<td>2005</td>
<td>205,000</td>
<td>211</td>
</tr>
<tr>
<td>2004</td>
<td>165,000</td>
<td>262</td>
</tr>
<tr>
<td>2003</td>
<td>135,000</td>
<td>230</td>
</tr>
<tr>
<td>2002</td>
<td>122,500</td>
<td>163</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Herbon</th>
<th>Mareeba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median Price($)</td>
<td>No. Sales</td>
</tr>
<tr>
<td>2006</td>
<td>175,000</td>
<td>81</td>
</tr>
<tr>
<td>2005</td>
<td>120,000</td>
<td>81</td>
</tr>
<tr>
<td>2004</td>
<td>90,000</td>
<td>91</td>
</tr>
<tr>
<td>2003</td>
<td>78,000</td>
<td>91</td>
</tr>
<tr>
<td>2002</td>
<td>70,000</td>
<td>66</td>
</tr>
</tbody>
</table>
**LAND DEVELOPMENT**

‘Land Development Pipeline Data’ shows fluctuations year to year in the rate of development, but an overall trend to strong growth, given the constraints indicated in the introduction. Median land prices have consistently risen each year in all four Local Government Areas, while Mareeba and Atherton indicate strong increases in the rate of land development, as illustrated below:

<table>
<thead>
<tr>
<th>Year to Sept.</th>
<th>Lot Approval</th>
<th>Lot Production</th>
<th>Lot Registration</th>
<th>Lot Consumption</th>
<th>Median value Land Sales</th>
<th>Volume of Land Sales</th>
<th>Dwelling Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atherton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>7</td>
<td>6</td>
<td>16</td>
<td>55</td>
<td>$37,800</td>
<td>24</td>
<td>57</td>
</tr>
<tr>
<td>2002</td>
<td>45</td>
<td>2</td>
<td>23</td>
<td>54</td>
<td>$39,700</td>
<td>25</td>
<td>87</td>
</tr>
<tr>
<td>2003</td>
<td>90</td>
<td>38</td>
<td>31</td>
<td>49</td>
<td>$44,000</td>
<td>48</td>
<td>61</td>
</tr>
<tr>
<td>2004</td>
<td>221</td>
<td>114</td>
<td>116</td>
<td>73</td>
<td>$58,600</td>
<td>95</td>
<td>78</td>
</tr>
<tr>
<td>2005</td>
<td>179</td>
<td>182</td>
<td>193</td>
<td>104</td>
<td>$77,600</td>
<td>74</td>
<td>126</td>
</tr>
<tr>
<td>2006</td>
<td>127</td>
<td>128</td>
<td>156</td>
<td>108</td>
<td>$90,400</td>
<td>96</td>
<td>135</td>
</tr>
<tr>
<td>Eacham</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>7</td>
<td>9</td>
<td>13</td>
<td>27</td>
<td>$50,100</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>2002</td>
<td>20</td>
<td>11</td>
<td>11</td>
<td>32</td>
<td>$57,900</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>2003</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>17</td>
<td>$48,300</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>2004</td>
<td>11</td>
<td>29</td>
<td>20</td>
<td>13</td>
<td>$42,600</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>2005</td>
<td>115</td>
<td>9</td>
<td>6</td>
<td>21</td>
<td>$65,100</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>2006</td>
<td>37</td>
<td>34</td>
<td>9</td>
<td>25</td>
<td>$79,100</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Herberton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>31</td>
<td>$22,000</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>2002</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>29</td>
<td>$22,000</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>2003</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>18</td>
<td>$20,000</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>2004</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>23</td>
<td>$27,300</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>2005</td>
<td>45</td>
<td>4</td>
<td>2</td>
<td>32</td>
<td>$28,300</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>2006</td>
<td>20</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>$42,900</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>Mareeba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>33</td>
<td>29</td>
<td>46</td>
<td>51</td>
<td>$48,400</td>
<td>13</td>
<td>57</td>
</tr>
<tr>
<td>2002</td>
<td>24</td>
<td>19</td>
<td>24</td>
<td>74</td>
<td>$41,100</td>
<td>13</td>
<td>74</td>
</tr>
<tr>
<td>2003</td>
<td>104</td>
<td>22</td>
<td>48</td>
<td>58</td>
<td>$41,900</td>
<td>13</td>
<td>73</td>
</tr>
<tr>
<td>2004</td>
<td>214</td>
<td>18</td>
<td>52</td>
<td>78</td>
<td>$43,600</td>
<td>36</td>
<td>87</td>
</tr>
<tr>
<td>2005</td>
<td>207</td>
<td>126</td>
<td>119</td>
<td>97</td>
<td>$59,300</td>
<td>37</td>
<td>114</td>
</tr>
<tr>
<td>2006</td>
<td>470</td>
<td>137</td>
<td>171</td>
<td>132</td>
<td>$65,200</td>
<td>68</td>
<td>150</td>
</tr>
</tbody>
</table>

(Source: Planning Information and Forecasting Unity, Dept. Local Government, Planning, Sport & Recreation [www.lgp.gov.au/pifu])

Anecdotal reports are that the pace of development for Atherton and Mareeba has increased significantly since production of the above figures.

**ALLOTMENT SIZE**

The lot sizes tend to be larger than in major urban centres. Lot registrations by size for the year ending September 2006, were for instance:

<table>
<thead>
<tr>
<th>Shire</th>
<th>Lot Registration By Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>650-800m²</td>
</tr>
<tr>
<td>Atherton</td>
<td>7.1%</td>
</tr>
<tr>
<td>Eacham</td>
<td>0%</td>
</tr>
<tr>
<td>Herberton</td>
<td>0%</td>
</tr>
<tr>
<td>Mareeba</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

(Source: As above- PIFU)
COMMERCIAL DEVELOPMENTS
There have been a number of key developments announced that will underpin activity and jobs in the short term and provide the foundations for further development over the longer term.

These are apart from the strong developments in retirement living projects (referred to elsewhere), that will see flow on effects for support services and skill requirements, so reinforcing the importance of the ‘retirement sector’ across the Tablelands.

Silo Site Development
The site of old silos in the Atherton CBD is to be re-developed into a shopping centre under a development plan worth some $13 million. The proposal is for a 2,700m² IGA supermarket, 1,000m² of specialty shops and some 250 car parking places.

There has reportedly been interest from national chain operators not presently operating in Atherton in the specialty shop space. The centre is likely to employ some 140 people, represents a doubling of the size of the existing IGA store and an increase in their staff numbers from 75 to some 115.

Target Country
A 1,300m² Target Country store development has been announced for Mareeba CBD. This will be the first store opened by the chain on the Tablelands and will be located in a re-furbished existing retail premises.

At 1,300m² the store is at the upper end of Country target stores in size and consequently the range of stock that will be offered.

Justice Precinct
The Queensland Government is to construct a facility to provide a new police station, court house and watch house in Mareeba. It is expected to be complete in 2009, with a budget of $16 million.

Hostel & Apartment Complex
Council approval has been given for a $20 million development incorporating a 150 bed backpacker hostel and 63 apartments in Mareeba township. The development would be on vacant land on the approaches from Cairns.

Backpacker accommodation development is of particular significance, in view of the large tropical horticulture industry in the Mareeba - Dimbulah Irrigation area, which relies on casual labour at harvest time for the wide variety of crops.

Village Centre
Julatten is an area on the northern fringes of the Tablelands. It is generally green and picturesque, located some 30 minutes from Port Douglas on the coast.

There is strong demand for land particularly from people with jobs in Port Douglas and the township of Mossman, also within 30 minutes drive, on the coastal strip.

Preliminary approval has been given for development of a ‘village centre’ adjacent to the local primary school. The centre will reportedly include a small convenience store, fuel sales, accommodation, café / restaurant and specialty shops. There is presently only a small combined fuel sales and local store in the region. If it proceeds the development is likely to underpin further urban development.

INDUSTRIAL DEVELOPMENT
The regional plan for Far North Queensland for the period 2000-2010, envisaged Mareeba Local Government area developing as an industrial centre to service the broader region, in part due to the availability of industrial zoned land and due to its relative proximity to the regional hub of Cairns. Flow on effects of this development were expected to be urban settlement of other areas of the Tablelands. This scenario now appears to be gathering pace.

Industrial Park
Mareeba Council has purchased 180ha of land, which is being developed over time.
into an industrial estate. The following page provides an overview of the size of the development and possible staged releases of land.

The development is some 3 kilometres form the town centre. Each stage is being released fully serviced (with underground power, phone, sewerage, water, sealed road access).

Stage 1A is complete and all lots sold. The type of purchasers for all Stage1A lots were:

<table>
<thead>
<tr>
<th>Lots</th>
<th>Purchaser Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Transport company (new to Mareeba)</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Engineering / fabrication workshop (expansion of existing business)</td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td>Shed to be constructed &amp; leased to tenants (tenants new to Mareeba)</td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>Contractor to mining (new to Mareeba)</td>
</tr>
<tr>
<td>9</td>
<td>Builder / demolition business (expansion of existing business)</td>
</tr>
<tr>
<td>10 &amp; 11</td>
<td>Shed to be constructed &amp; leased (Mareeba businessman)</td>
</tr>
<tr>
<td>15 to 18</td>
<td>Cane harvesting business (expansion of existing business)</td>
</tr>
</tbody>
</table>

Stage 1B is under development and expressions of interest / deposits made for the following:

<table>
<thead>
<tr>
<th>Lots</th>
<th>Interested Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 &amp; 27</td>
<td>Engineering / fabrication workshop (further expansion of above)</td>
</tr>
<tr>
<td>33 &amp; 40</td>
<td>Mareeba businessman</td>
</tr>
<tr>
<td>47</td>
<td>International fruit drying &amp; export business</td>
</tr>
<tr>
<td>48</td>
<td>Cane harvesting business</td>
</tr>
</tbody>
</table>

Standards blocks are 2178m² but block 47 is 17,070m² and block 48, 13,380m²

Regional Airport
The Mareeba aerodrome was an advance base for allied bombers during World War II. It is located south of Mareeba on the Kennedy Highway, linking Mareeba, Atherton and generally the southern and northern areas of the Tablelands.

The runway is 1505 metres in length with a width of 30 metres. Future plans include strengthening of the runway pavement and lengthening to 1800 metres as a longer term objective, as traffic requirements dictate.

Over recent years the facility has seen increasing numbers of operators establish a base there. It now supports a range of general aviation businesses which service clients across Northern Australia and Papua New Guinea. It presents some competitive advantages compared to other locations:

- proximity to Micronesia and Southern Asia,
- Stable business & political environment;
- Elevation of some 400 metres above sea level;
- Clearer skies especially during the wet season;
- Lower costs than Cairns;
- Lower housing costs for staff;
- Less crowded airspace than Cairns

In 2006, redevelopment work was completed to make new sites available on previously undeveloped airport land at the south-western end of the runway. Development included a new sealed taxiway and apron connecting to the new lease sites, connection of services, access road extension and development of internal service roads.

The first release of four sites have all been leased. Six further sites have been approved for development and due for release in the second half of 2007. Expressions of interest for all these have been received.

The aerodrome is a day-night facility, with a new lighting system recently installed to provide high quality service for 24 hour access.
INFRASTRUCTURE & SERVICES

There is the usual range of infrastructure and services available that could be expected in a significant Australian region. Items of particular note, not already mentioned are summarised.

COUNCILS

The four Local Government Authorities (LGA’s) covering the Atherton Tablelands each provide the usual services of LGA’s. The three southern most LGA’s (Atherton, Eacham, Herberton), are engaged in a process to achieve closer cooperation and collaboration, with the aim of improving efficiency. This may include generally offering joint services.

The process is one approved by the Local Government Association of Queensland and referred to as the “Size, Shape and Sustainability” initiative. The four Council websites covering the whole region are:

www.athertonsc.qld.gov.au
www.mareeba.qld.gov.au
www.herberton.qld.gov.au
www.eachamshire.qld.gov.au

HEALTH

Public Hospitals provide health services at Mareeba and Atherton, and offer dental, mental health, counselling, gynaecological, surgical and other medical services. Access to Cairns Base Hospital is provided by way of helicopter or ambulance transfer for urgent cases.

There are small hospital/clinics and private medical clinics in Herberton, Ravenshoe, Malanda, Millaa Millaa, Dimbulah and Chillagoe (serviced by the Royal Flying Doctor Service). There is a specialist surgeon and a physician based in Atherton.

Private medical practitioners, dental and optometrist services are established in major centres. Private pathology firms operate in Atherton and Mareeba, and there are private X-ray and scanning practitioners in Atherton.

Health support groups, palliative care, counselling, disability services, Blue Nursing services and Meals on Wheels operate. The Ambulance Service has bases across the Tablelands.

Atherton operates a rural doctors training program in partnership with James Cook University. This provides year 2 to 6 students with practical experience and exposure to rural community practice. As such it contributes to attracting graduates to rural areas. The students are placed in Atherton, Mareeba Hospitals and private practice.

Specialist care such as coronary and oncology is provided only in Cairns or Townsville.

EDUCATION AND TRAINING

There are kindergarten, child care, family day care, playgroups, after school care and vacation care facilities in major centres across the Tablelands.

Primary and secondary state, private and Catholic parish schools serve the needs of children and youth across the Tablelands. The majority of the schools are at or above the mean performance criteria established across the State. The Atherton State Primary School has been rated the 8th most gifted and talented program centre in Queensland. In addition the local Atherton State High School, is recognised as one of the top four schools in Queensland and has a track record of producing high school graduates with an OP scores of 1.

The James Cook University campus is located at Smithfield, at the base of a major range road to the Tablelands. As such it is relatively easy for Tablelands students to access. TAFE facilities are located at Mareeba and Atherton with options for flexible delivery at other centres.

The Australian Agricultural College Corporation has a major campus in Mareeba. The campus offers training in
conservation and land management, production horticulture and agriculture.

The Mountains Institute at Ravenshoe provides a training facility in the southern Tablelands and a number of private service providers deliver training and employment related services across the region.

There are public libraries in Mareeba, Kuranda, Dimbulah, Atherton, Herberton, Ravenshoe and Chillagoe.

**TRANSPORT/ROADS**

The Tablelands are well served by a comprehensive network of sealed primary and secondary roads. The basis for the quality of this network was laid during World War II, when the region was a major base for troops fighting in Papua New Guinea and the Pacific Islands.

The region sits as a cross-roads and link between the coastal strip, western Queensland, the Gulf of Carpentaria and Cape York.

There are four significant road links between the Tablelands and the coast.

The **Palmerston Highway** in the south links the region to Innisfail and the Bruce Highway to Brisbane.

The **Gillies Highway** is the next link moving north along the coast, linking from Gordonvale. This is a route used mainly by local residents and light transport.

The **Kuranda Range Road** (which becomes the Kennedy Highway at the top of the Range) links with the coast at Smithfield the north side of Cairns. This is a major arterial route between Cairns, Kuranda and the Tablelands. A $500 million upgrade is to commence in 2007.

The **Rex Range Road** provides a link to the northern most areas of the Tablelands from the Captain Cook Highway, north of Port Douglas and just south of Mossman. This links to the inland access road to Cooktown and Cape York. It is also a supply line for harvested sugar to the Mossman sugar mill.

Three development roads provide links to the inland and north. These are:

- Peninsula Development Road,
- Gulf Development Road,
- Burke development Road

There are also links to the west through the Herberton – Petford road, which provides quite a unique tourism experience of early settlement and mining as well as a heavy transport link.

There is not any public transport, but private bus services provide a service between the Tablelands and the coast and the region has a number of private regular courier transport services.

**UTILITIES**

**Telecommunications**

Australia has the modern, reliable communication system demanded of today’s business environment. Telecommunications investment in Australia is among the highest in the developed world.

Current telecommunication delivery mechanisms offered in the Far North Queensland region include:

- Fibre
- XDSL
- Standard Copper
- Wireless/radio
- Microwave
- Satellite technology

Current voice and data communication products include:

- Outbound voice (normal telephone traffic)
- Inbound voice (use of 1800/1300 phone numbers)
- Data services (data links between sites/locations)
- Mobile phones
- Internet
- Other telecommunication services (e.g. Satellite, pay TV)

Data link delivery mechanisms available include:

- Frame relay (standard service)
- ISDN
- Ethernet (office based)
The provision of the fibre link into customer sites allows the supply of a variety of different services including:

- Voice, Video & conferencing links
- All transmission mediums

For further information on telecommunications visit the Telstra Country Wide website. Not all the above services are available at all locations on the Atherton Tablelands. [www.telstra.com/countrywide](http://www.telstra.com/countrywide)

**Water**

As noted elsewhere, water supplies are a strength of the region. Water for urban and industrial purposes is supplied to downstream centres from Lake Tinaroo, while others in the southern areas rely on various sources supplied by the regions network of water courses.

**Electricity/Energy**

The region is connected to the Queensland State electricity grid. The major regional electricity supplier is Ergon Energy. With deregulation of the electricity industry, individual business premises that use more than 200 MWh per annum of electricity can now choose to buy through the contestable energy market.

A proportion of the electricity used is generated locally through three hydro systems:

<table>
<thead>
<tr>
<th>Location</th>
<th>Capacity (Megawatts)</th>
<th>Greenhouse Emissions Saved (Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barron Gorge</td>
<td>60</td>
<td>260,000</td>
</tr>
<tr>
<td>Kareeya</td>
<td>84</td>
<td>540,000</td>
</tr>
<tr>
<td>Koombaloomba</td>
<td>7</td>
<td>20,000</td>
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More recently Stanwell Corporation, a major energy generating company in the region, has expanded its generation capacity with the commissioning of wind turbines at ‘Windy Hill’, near the town of Ravenshoe. The wind farm currently has a generating capacity of 12 megawatts, sufficient to power some 3,500 homes, saving 25,000 tonnes of Greenhouse Gas emissions annually.

There is now consideration of another wind generation project at Archer Point, on the coast between Cairns and Cooktown.

The price of electricity is determined by charges set by the Minister with responsibility for Energy in the Tariff Schedule. Charges for electricity are calculated pro rata based on the number of days power is supplied.

Australia has abundant energy resources, with consequently one of the lowest electricity costs in the World.

Further information on local electricity supply and tariffs can be found at [www.ergon.com.au](http://www.ergon.com.au)

**Gas**

Origin Energy is the only regional distributor of natural gas through distribution mains owned by Envestra. LPG and gas is distributed to the regions via numerous retailers including, Boral, Elgas and Vantage Gas.

(Source: The Australian Gas Association)

**Other**

There are waste management transfer stations and waste disposal facilities at Springmount in Mareeba Shire. There is reticulated sewerage in Mareeba, Atherton and Yungaburra, while other centres rely on septic and other self contained systems.

**GOVERNMENT SERVICES**

There is a full range of government services available across the Tablelands. Some agencies are based in Cairns, but provide dedicated resources to the region. For instance the Far North Queensland Area Consultative Committee is based in Cairns, but has two officers based on the Tablelands. This is the Australian Government agency primarily responsible for linking government assistance for regional economic development with regional needs.

Centrelink (employment services), has offices in Atherton and Mareeba.
Medicare (public health insurance) has an office in Atherton.

The Department of Primary Industries and Fisheries has a substantial presence and facilities across the region. These include offices and research and library facilities in Mareeba, aquaculture and forestry research at Walkamin, Southedge Research Station and Kairi Research Station.

The Department of Natural Resources and Mines similarly has a major presence, with facilities in Atherton, Georgetown and Mareeba. Its regional office for Mines is located in Mareeba.

Other services available include family support services, housing and accommodation services, multicultural support services, welfare services and youth support.

**SECURITY SERVICES**

Police, State Emergency Services (SES), and the Fire and Rescue Service have a presence across the Tablelands, with core facilities in Atherton and Mareeba. Private security firms also provide protective surveillance. There is Community Policing through Community Consultative Committee’s and Neighbourhood Watch.

**AGED AND RESPITE CARE**

Mareeba, Atherton and Malanda have aged care facilities with respite centres at Mareeba, Mt Molloy, Malanda, Herberton and Atherton. Aged accommodation such as retirement homes and villages are already available, but will expand significantly according to current projects under consideration.

**INDUSTRY**

A variety of industries have been described elsewhere in this document.

Generally many of the region’s industries have rely upon or have evolved from the considerable depth and diversity of skills, services and products in place to provide expert support for the region’s agricultural and mining industries.

Engineering capability includes design and manufacture of food processing equipment and systems.

Nurseries and associated operations rely on the region’s diversity and excellent range of growing conditions and have become a major industry, producing significant export income for the regional economy.

Facilities include engineering works, construction, mechanical and electrical enterprises, IT providers, general retail and specialist suppliers of irrigation and other farming systems and equipment.

Significant processing infrastructure encompasses two major, modern timber mills, smaller traditional timber mills, rock quarries, stock feed production, beef abattoirs, Steggles chicken factory, fruit wineries, the Malanda dairy factory, horticultural and vegetable packing sheds, tea processing, a sugar mill at Ariga, boutique food processing and fruit dehydration, drying and packaging operations.

**ENVIRONMENT & CULTURAL ASSETS**

The region has a network of very high quality National Parks and Reserves.

These include three crater lakes, ‘Misty Mountains’ and other walking tracks, Mareeba Wetland Foundation Wildlife Reserve, Barron Falls, Playtypus Park, Halloran’s Hill lookout, Mt Hypipanee National Park, Hasties Swamp, Danbull State Forest, Land for Wildlife corridors on private properties and the foreshores of Lake Tinaroo. The full list is very extensive.

Cultural assets are also extensive and include sites acknowledging the region’s role in World War II and pioneering history. These include Rocky Creek War Memorial Park, various galleries, Hou Wang Chinese Temple, Atherton Shire Foyer Art Gallery, the old Atherton Post Office Gallery, Mareeba Heritage Museum, Great Northern Tin Mine at Herberton and limestone caves, minerals and mining history at Chillagoe to the west of the Tablelands.
Interpretive and information centres are located in all major locations.

**SOCIAL INFRASTRUCTURE**

Social and recreation infrastructure and services include various sporting and other clubs, sporting grounds, show grounds, halls, skate ramps, playgrounds, public parks, Tinaroo recreation camp, Genazzano and Rose Gums Conference Centres, restaurants / cafes, racecourse, rodeo grounds, variety of camp grounds such as Barabadine Camp and Black Gully Camp, Kuranda Amphitheatre, Atherton and Mareeba swimming pools, swimming clubs, football, soccer, cricket, hockey, ten pin bowling, athletics, gymnastics and martial arts.

**BUSINESS SERVICES**

The region is serviced by a variety of accountants, lawyers, insurance brokers and others, located in most town centres across the Tablelands.

Virtually all major Australian banks have branches in Atherton and Mareeba, while the Westpac bank additionally has a branch in Malanda and the National Australia bank has additional branches in Malanda and Ravenshoe.

Suncorp, a major insurance and banking enterprise has branches in Atherton and Mareeba.

There are also a variety of small to medium sized meeting and conference venues across the region.