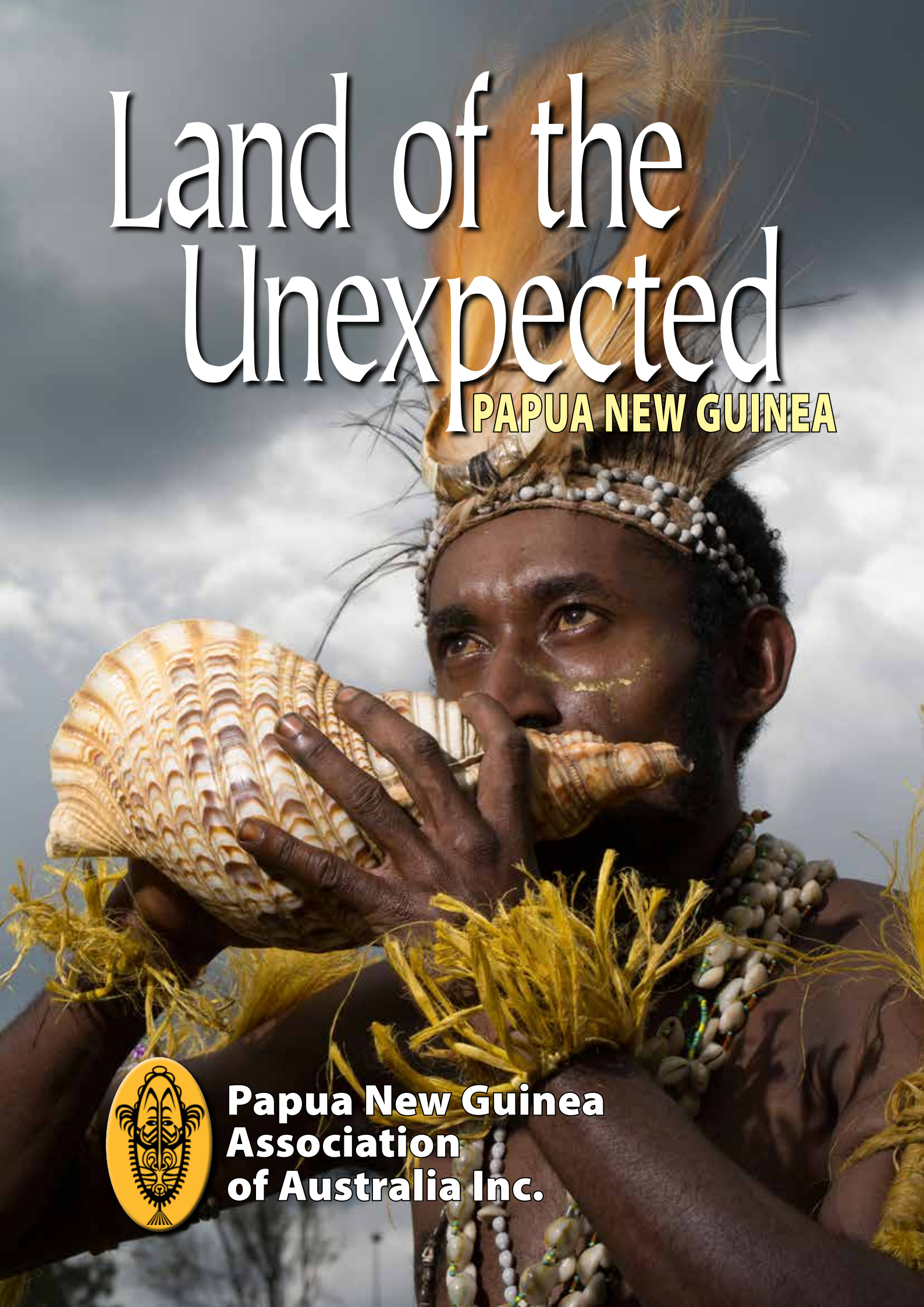
Land of the Unexpected
PAPUA NEW GUINEA
Papua New Guinea Association of Australia Inc.

National Motto & Emblem

Unity in Diversity

The emblem is a partially-stylised representation of the widespread bird-of-paradise (*Genus paradisaea)*, in display, head turned to its left, seated on the upturned grip of a horizontal kundu drum with the drum-head to the right side of the bird, from behind which a horizontal ceremonial spear projects with the head to the left of the bird.

National Flag

This is considered one of the most beautiful and spectacular country flags. It is divided diagonally into two triangular sections—half black and half red. Five stars depict the Southern Cross Constellation. On the upper part, a bird-of-paradise, locally known as a *Kumul*, appears in flight. The bird-of-paradise is the national symbol of Papua New Guinea. Black, red and yellow are the traditional colours most commonly used by the Papua New Guinea people in their traditional ceremonies. The flag was created by a Papua New Guinea schoolgirl, Susan Karike, and adopted in 1971—four years before official independence was proclaimed.

National Pledge of PNG

In 1995, on the occasion of the twentieth anniversary of PNG Independence, the Papua New Guinea National Pledge became a key element of the *National Identity Act*. It is often recited at primary schools and high schools before the commencement of classes each day, and at government-based organisations, including National Parliament, Provincial Assembly and Local Level Government Assembly on each sitting day. Whilst there is 'Freedom of Conscience, Thought and Religion', the Constitution recognises that Papua New Guinea is a Christian country through its Preamble and the National Pledge.

We the people of Papua New Guinea,
pledge ourselves, united in one nation.
We pay homage to our cultural heritage, the source of our strength.
We pledge to build a democratic society based on justice,
equality, respect and prosperity for our people.
We pledge to stand together as
—one people—one nation—one country.
God Bless Papua New Guinea.

National Anthem

O, arise all you sons of this land,
Let us sing of our joy to be free,
Praising God and rejoicing to be
Papua New Guinea.

Shout our name from the mountains to the seas
Papua New Guinea;
Let us raise our voices and proclaim
Papua New Guinea.

Now give thanks to the good Lord above
For His kindness, His wisdom and love
For this land of our fathers so free,
Papua New Guinea.

Shout again for the whole world to hear
Papua New Guinea;
We are independent and we're free
Papua New Guinea

Composed and written by Chief Inspector Thomas Shacklady, MBE (1917–2006) in 1975. Shacklady was bandmaster of the Royal Papua New Guinea Constabulary Band, having been appointed in 1964. Under his direction, the band toured Australia, New Zealand, United States of America and SE Asia, performing at the Edinburgh Military Tattoo in 1970.

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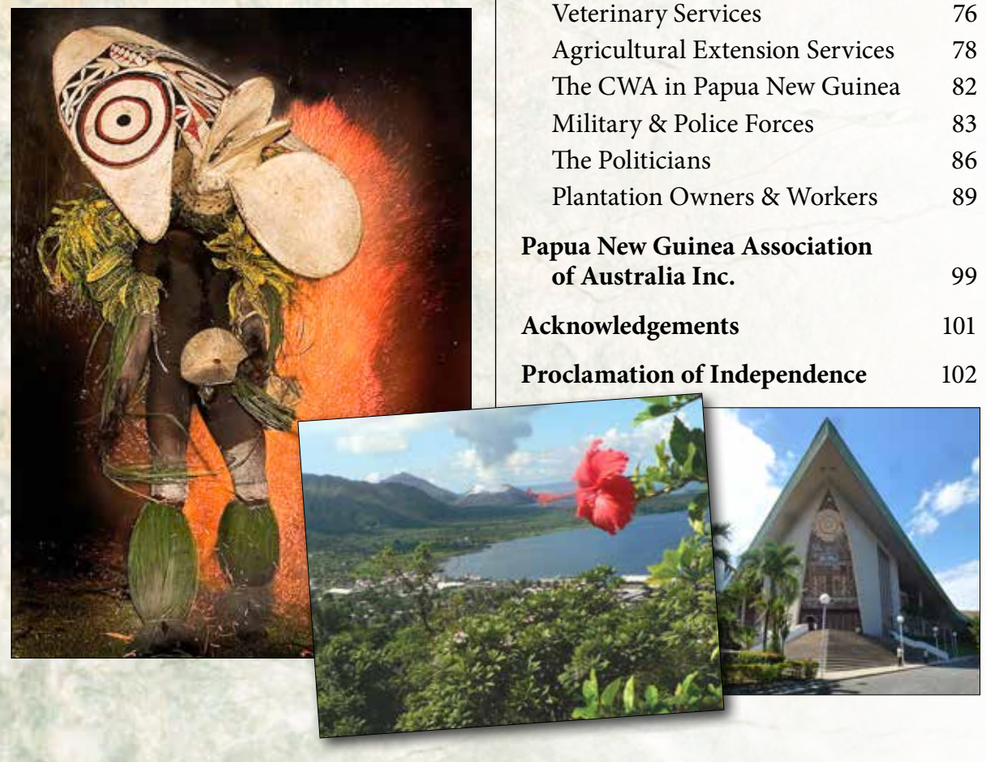


LAND OF THE UNEXPECTED
… with a million different journeys? Yes, Papua New Guinea truly is!

Former ABC Papua New Guinea and Pacific correspondent, Sean Dorney, questions in his book, *The Embarrassed Colonialist,* why Papua New Guineans know more about Australia than Australians know about Papua New Guinea. Few stories are reported in our Australian media, and what is published usually covers negative aspects about our interesting and complex neighbour.

PNG is a land of tremendous contrasts—of smiling people, mad keen rugby players and followers, complex cultural dynamics and displays, singing that is out of this world, scenery that is gobsmackingly stunning, incredible artefacts, opportunities for adventurous activities and delicious tropical fruits—all in a terrain that is carved by steep slopes and jagged peaks of mountain ranges, interspersed by fertile valleys and over a dozen active volcanoes—and in a country that is Australia's nearest neighbour, four kilometres away and only a few footsteps from our doors.

Many of the island names derive from early European explorers from as early as 1660 when French explorer, d'Entrecasteaux, sailed through the area. However, Australia's interest in PNG began in the late 1800s when Germany began claiming Pacific islands as its colonies. In 1884, after strong urging from Queensland, who were fearful of Germany's annexation of the island, the British proclaimed a protectorate over the Territory of Papua, then called British New Guinea (BNG).

Queensland's government (Australia did not come into being until 1901) was anxious about its defence and annexed Papua on behalf of an unconvinced British Government. The *Papua Act 1905* was an act passed by the parliament of Australia officially transferring the Territory of Papua from Britain to Australia.

After WWII when civilian government was resumed, the Territory of Papua and New Guinea was established by a union between the Australian-administered territories in 1949, and programs were developed to start Papua New Guinea on the road to becoming a sovereign nation. At that time few thought that independence would be achieved in 1975, just thirty years after the devastation of the Pacific War.

Australia shouldered its responsibilities as best it could, with limited resources and the ravages of two world wars, to take Papua New Guinea to a peaceful independence on 16 September 1975. This has been an exceptionally neighbourly act, of which we Australians should be rightfully proud and broadcasting to the world, and yet it is barely acknowledged in Australia.

Over the last twenty years Papua New Guinea has been one of the fastest-growing nations in the South Pacific. Reflecting on the close historical association between Australia and Papua New Guinea, there are over 10,000 Australians in PNG, and approximately the same number of PNG nationals in Australia. Many Australians who were born and grew up in PNG, married there or who spent their formative working life in PNG, and returned to Australia due to PNG Independence or its aftermath, experience a sense of displacement and a need to connect. Australia could foster this heritage more widely.

We hope this publication excites and entices you to learn more about this unique country, which truly is 'The Land of the Unexpected'.

ANDREA WILLIAMS
Papua New Guinea Association of Australia Inc.

An Overview of Papua New Guinea

The Independent State of Papua New Guinea is a sovereign state in Oceania that occupies the eastern half of the island of New Guinea and its offshore islands in Melanesia, a region of the south-western Pacific Ocean, north of Australia. The western half of New Guinea forms the Indonesian provinces of Papua and West Papua.

Capital City

Port Moresby is the capital and largest city of Papua New Guinea, and the largest city in the South Pacific outside of Australia and New Zealand. It is located on the shores of the Gulf of Papua, on the south-western coast of the Papuan Peninsula of the island of New Guinea. The city emerged as a trade centre in the second half of the 19th century, and is the main entry for international travellers.

Language

More than 850 distinct languages are spoken across 1,000 ethnic clans and 600 islands in Papua New Guinea. The official language is English with *Tok Pisin* (New Guinea Pidgin) spoken throughout the country. *Hiri Motu* is spoken across the southern regions of Papua. English is more prevalent in the larger cities.

Area & Population

At 462,840 sq.km, Papua New Guinea is the world's fifty-fourth largest country and the third largest island country. Including all its islands, it lies between latitudes 0° and 12°S, and longitudes 140° and 160°E, and has an exclusive economic zone of 2,402,288 sq.km. Its time zone is UTC+10, +11 (AEST), and the population is estimated at approximately 9,070,000 people at end of March 2021according to UN data.

Electricity

PNG has one of the lowest per capita consumption ratios of electricity in the world, and only 12.4 per cent of the people has access to on-grid electricity, skewed heavily in favour of urban areas. PNG has been unable to ensure electricity access for the majority of households and businesses, or reliable service for those few who do have access.

Media

Two daily newspapers, *The National* and the *Papua New Guinea Post-Courier*, publish in English. Community newspapers include *Wantok* and *Independent*.

TOP: Installing transmission lines in Kimbe, West New Britain

MIDDLE: A family using a mobile phone to access the internet in the Eastern Highlands

BOTTOM: Drying coffee beans

Radio

The state-run radio broadcasting service, National Broadcasting Corporation, operates three radio networks and about twenty provincial radio stations. Several commercial radio and community stations and international broadcasters are accessible for radio listeners in PNG.

Television

There are two free-to-air television networks, EM TV and Kundu 2, limited to larger population centres or areas where mine sites, or local community groups, have decided to redistribute the TV signals. Satellite and cable TV services are available as well as MMDS subscription television.

Telecommunications

The telecommunications system in Papua New Guinea is completely automatic, with international links to most countries in the world. The underlying technology making this possible is a network of solar-powered and hybrid-powered terrestrial microwave radio communication links. These repeater sites, renowned for their cutting edge, pioneering technologies in the early 1970s–80s, saw PNG lead the world with the first solar-powered microwave repeater network by then Italian manufacturer, supplier and contractor, Teletra.

This network is now backed up by an alternative satellite transmission system, operating through an earth station in Port Moresby. For subscribers beyond the reach of the exchanges, a high-frequency service exists, which they access by a radio call to an operator who connects them to the network. Mobile phones are everywhere but coverage can be limited.

Telephone & Internet

The telephone service uses Papua New Guinea's international country code 675 and a 7-digit numbering system with no area coding, but has domestic coverage area numbering for dialling. Combined fixed-line and mobile-cellular teledensity has increased in recent times with over 2.7 million lines accessible to users.

PNG uses advanced satellite communications and submarine cable systems for interconnectivity with international and domestic services. Collaboration between national and international telecommunications service providers enables this accessibility.

The Papua New Guinea Country code for its internet services domain is *(.pg)*. There are over 145,000 internet users, just over two per cent of the population. It has fixed broadband, mobile broadband and various internet hosts. There are also four internet service providers, however, services are slow and unreliable.

Commodities & Resources

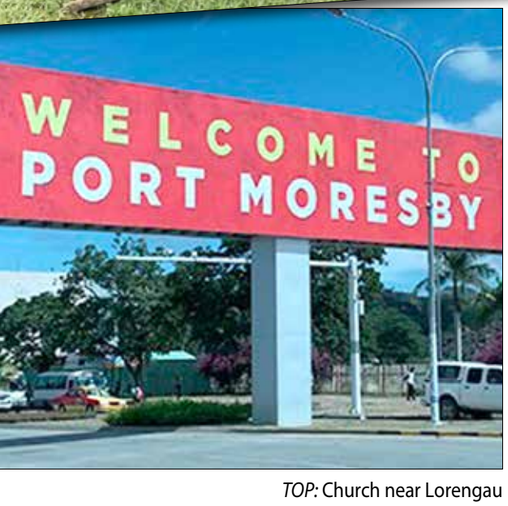
Major industries are copra crushing, palm oil processing, plywood production, wood chip production, mining of gold, silver and copper, crude oil production, petroleum refining, construction and tourism. The country's natural resources are gold, copper, silver, natural gas, timber, oil and fisheries.

The main agricultural products are coffee, cocoa, copra, palm kernels, tea, sugar, rubber, sweet potatoes, fruit, vegetables, vanilla, poultry, pork and shellfish.

Export commodities are oil, gold, copper ore, logs, palm oil, coffee, cocoa, crayfish and prawns. Export partners are Australia 31.5%, Japan 7%, China 6.2% (2011). The main imports are machinery and trading equipment, food and fuels.

In November 2018, Papua New Guinea hosted the Asia-Pacific Economic Co-Operation (APEC) Summit—APEC is made up of twenty-one economies in the Asia Pacific Region including Australia and Papua New Guinea, and ensures that goods, services, investment and people move easily across borders. Members facilitate this trade through faster customs procedures at borders; more favourable business climates behind the border; and aligning regulations and standards across the region. APEC works to help all residents of the Asia-Pacific participate in the growing economy, their members also implement initiatives to increase energy efficiency and promote sustainable management of forest and marine resources.

APEC Haus, designed by Jim Fitzpatrick Architects



TOP: Church near Lorengau

MIDDLE: Laying out shell money in East New Britain

BOTTOM: Welcome sign at Port Moresby Airport

Religion

The country is predominantly Christian and the courts, government and general society uphold a constitutional right to freedom of speech, thought and belief. There is no state religion, although the government openly partners with several Christian groups to provide services, and churches participate in local government bodies.

A large majority of Papua New Guineans identify themselves as members of a Christian church (ninety-six per cent in the 2000 census); however, many combine their Christian faith with traditional indigenous beliefs and practices. Other religions represented in the country include the Bahá'í faith, Hinduism and Islam.

Citizenship

The *Papua New Guinea Independence Act 1975* (PNG Independence Act) provided for the Independent State of Papua New Guinea to become an independent sovereign nation on Independence Day—16 September 1975. This new independent state was constituted by the former Australian Territories of Papua and New Guinea.

At Independence both Papua and New Guinea were united under the Constitution of the Independent State of Papua New Guinea. On this date most Papuans lost their former Australian citizenship when they became, by operation of the PNG Constitution, citizens of Papua New Guinea automatically.

Prior to the enactment of the *Australian Nationality and Citizenship Act 1948*, 26 January 1949, now called the *Australian Citizenship Act*, anyone born in Australia was considered a British subject. This extended to the Australian Territory of Papua, but those born in Papua after this date lost their Australian citizenship when PNG became independent in 1975.

On 4 August 2005, the High Court of Australia upheld the validity of Australian laws which provided that when Papua New Guinea became independent in 1975 its indigenous people who then became citizens of PNG ceased to be citizens of Australia.

Australians who were born in PNG prior to PNG Independence, and who have not kept birth certificates or naturalisation papers, are currently experiencing many challenges in proving their Australian citizenship.

People born in the Territory of New Guinea whose parents were Australian Citizens, had to ensure their children were naturalised as Australian citizens. If their parents had held Australian citizenship, a birth was likely to have been registered with Australian authorities on the 'Register of Australian Births Overseas' and an extract may be able to be located. These people born in New Guinea need to apply for a Naturalisation Certificate.

An amendment to the *Constitution and the Citizenship Act* in 2016 means that Dual Citizenship is now a reality for Papua New Guinea Citizens.

Visas

Australians can obtain a visa on entry to PNG although it is best applied for before leaving Australia. Papua New Guinea citizens have extensive delays in visa applications for Australia, and this imbalance causes much angst.

Currency

This is known as *kina* and *toea* (pronounced 'toya'). The kina is broken up into 100 toea. *Kina* derives from mother of pearl and *toea* derives from cowrie shell. Both names come from the valuable shell money that was used as currency prior to European influence. The exchange rate, as at June 2020, is 1 Australian dollar = 2.38 PNG kina.

Most ethnic groups in various regions of PNG continue to use shells of different types in their traditional culture ceremonies and festivities. These shells are an art object of value, stored in a variety of forms such as rings of wealth or necklaces, to display in the mode of exchange, recognition and relationships between people and individuals.

In 2014 Papua New Guinea moved away from a market-based exchange rate. With agriculture prices falling and the kina appreciating in the world market, the prices flowing through to farmers dropped, with a resultant dramatic impact on rural poverty in PNG. A more flexible exchange rate regime should help to take the pressure off currency reserves and improve the private sector's access to foreign exchange.

Bank South Pacific Head Office, Port Moresby

TOP: A village on Bougainville Island in the New Guinea Islands Region

MIDDLE: Aerial view of Madang town, capital of Madang Province

BOTTOM: National Parliament House, Port Moresby

Government Structure

Papua New Guinea is a constitutional monarchy. The Head of State is Her Majesty Queen Elizabeth II, represented in Papua New Guinea by a governor-general, who is elected directly by members of the National Parliament and performs mainly ceremonial functions. It is a member of the United Nations Organisation and of a number of regional bodies.

Members of the National Parliament are elected from eighty-nine single-member electorates and twenty-two regional electorates. Members from regional electorates also serve as provincial governors. Each province has its own provincial assembly and administration.

Papua New Guinea has three levels of government—national, provincial and local. The National Parliament is a 111-member unicameral legislature elected for five-year terms. The Prime Minister is appointed and dismissed by the Governor-General on the proposal of Parliament. The Cabinet—known as the National Executive Council or NEC—is appointed by the Governor-General on the recommendation of the Prime Minister. The Supreme Court, National Court, and local and village courts form an independent justice system.

For administrative purposes, Papua New Guinea is divided into administrative divisions called provinces. There are twenty-two provinces, including the autonomous region of Bougainville and the National Capital District. Each province in Papua New Guinea has one or more districts, and each district has one or more Local Level Government (LLG) areas. For census purposes, the LLG areas are subdivided into wards and those into census units.

There are four regions with twenty-two provinces:

Highlands Region: This includes an east-west zone of mountains with colder temperatures and some elevations in excess of 4,000 m. The region has seven provinces: Southern Highlands, Hela, Enga, Western Highlands, Simbu, Eastern Highlands and Jiwaka.

New Guinea Islands Region: Located in the north-east of PNG the New Guinea Islands comprise provinces in the Bismarck Archipelago and Solomon Islands Archipelago. Five provinces are included: East New Britain, West New Britain, New Ireland, Manus and the Autonomous Region of Bougainville.

Momase Region: In the north-east of the PNG mainland, Momase consists of four provinces: Madang, Morobe, East Sepik and West Sepik.

Papuan Region: This includes the National Capital District (Port Moresby), Central Province, Gulf Province, Milne Bay Province, Northern and Western Province.

People-to-People Links

Reflecting on the close historical association between Australia and Papua New Guinea, there are over 10,000 Australians in PNG at any time, and approximately the same number of PNG nationals in Australia. Several groups support the ongoing engagement with PNG.

Papua New Guinea Association of Australia Inc. (PNGAA) *(www.pngaa.org)*

Our two nations share an ongoing story that deeply connects them through history and people. The PNGAA works to strengthen the PNG-Australia relationship by fostering healthy conversations and development around identity, community, immigration, and the increasing importance of our shared futures in a rapidly shifting global landscape.

The volunteer management produces a quarterly journal, *PNG Kundu*, for members at a nominal subscription rate and facilitates the PNGAA Collection of documents, photographs, artefacts, etc. to preserve our heritage. It has produced two DVDs, *Walk Into Paradise* and *KIAP: Stories Behind the Medal* and several books, including *When the War Came: New Guinea Islands 1942*—personal stories of those who faced WWII on Australian territory and the sinking of *Montevideo Maru*, our greatest maritime disaster.

In 2014 it held a symposium at NSW Parliament to commemorate the ANZAC Centenary, and in 2018 it transported a container of chairs and tables to PNG.

The Association has held an art show, a book expo, speaking panels, film showings. The PNGAA engages our community of Australians and Papua New Guineans, joining with

Consul-General to PNG, Paul Murphy *(centre),* with PNGAA members at a meeting in New South Wales in 2019 to discuss the Australian Government's engagement with PNG

TOP: Display of PNG handcrafts at the PNGAA/CWA Seminar, 2019

MIDDLE: East New Britain QLD Community at Asia Pacific Triennial of Contemporary Art (APT9), 2019

BOTTOM: Participants at the Emerging Leaders Dialogue, Cairns, 2018

peoples of the Pacific in believing that the establishment of an interactive hub, a place of learning, cultural exchange and collaboration for groups engaging the Pacific Nations would enable knowledge, development and growth amongst our wider network and Australia's close neighbours. It welcomes any assistance to achieve this. PNGAA collaborates with other PNG focussed associations, in particular the Sydney Wantok Association, PNG Wantok Group Victoria, the PNGVR Ex-members Association and the PNG Chinese Association. Some of the Association's objectives include:

1. to strengthen the civil relationship between the peoples of Australia and Papua New Guinea;
2. to foster and encourage contact and friendship with Papua New Guineans and promote friendly association among members;
3. to foster and maintain an interest in contemporary and historical events in Papua New Guinea. (*https://pngaa.org/about/constitution/)*

Australia-Papua New Guinea Network

Amongst other groups, the Lowy Institute's Australia-Papua New Guinea Network plays a large part. This is an initiative to strengthen people-to-people links between the two countries, and to foster practical partnerships and sharing of knowledge between business, civil society, communities and academia. The network is run by the Lowy Institute for International Policy, in partnership with the National Research Institute of Papua New Guinea. Each year the network hosts its flagship event, the Emerging Leaders Dialogue. This draws together a diverse group of young and dynamic leaders from the two countries for a wide-ranging discussion on topical and relevant issues.

Participants are nominated to represent a range of experience, expertise and industry and society groups. Nominations are accepted throughout the year with the Dialogue meeting held in November or December. The insights of participants are documented in an outcomes paper, which is forwarded to the two countries' foreign ministers and is published on the network's website. In previous years, the dialogue has provided insight on topics including health, leadership, economic empowerment, art, politics and civil society.

Public Services in PNG

Transport

Aviation

Today, Air Niugini flies to all the main centres. It is supported into the smaller airfields by lighter aircraft run by small operators and missionary services, PNG Air, MAF and TropicAir. There are twenty-one airports with paved runways in PNG and over 550 with unpaved (grass) runways.

PNG is a country reliant upon air travel for transportation of both people and freight. Since the early 1930s, during the period that Papua was an Australian Territory and New Guinea was an Australian Mandated Territory, aircraft made it possible to open up the country.

Roads

Road development has been slow due to the rugged terrain of Papua New Guinea. A network of roads connects the northern coastal mainland towns of Madang and Lae with the major urban centres in the Highlands region. Few roads connect the provinces.

Public Transport

PMV (Public Motor Vehicle) travel in Papua New Guinea is an inexpensive way to travel regionally by road. PMVs are privately owned minivans and twenty-five-seater buses or open tray trucks. Women are advised against travelling alone on PMVs around Papua New Guinea.

PMVs can often be overloaded and unroadworthy. In June 2018 a paper recommended that tighter controls be developed. Those who can afford to maintain their vehicles properly provide an invaluable community service.

In 2015 a *Meri Seif* bus (women only) commenced operating in Port Moresby, and this has since expanded so that over 400 women and children use the service each day. This followed a survey showing that in 2014 eighty-two per cent of female PMV users felt unsafe while waiting for PMVs and seventy-nine per cent riding in them.

This high rate of violence keeps women home from work and children home from school. PMV stops at or near markets were known hot spots of sexual violence or sexual harassment. Female market vendors travelling after dusk are forced to use taxis to return home. Walking further distances than necessary places women and girls in a vulnerable position to experience unwanted sexual violence or harassment.

TOP: Air Niugini plane about to land

SECOND: A truck used as a PMV

THIRD: Transporting goods by banana boat

BOTTOM: Children from the East Sepik Province use the same water source to drink, bathe and wash clothes in

Public transport is, in general, disabled-unfriendly. Multiple steps, overloaded PMVs, lack of priority or preferential seating, narrow aisles and wet weather boarding locations contribute to the various challenges to be overcome.

Taxis and car hire are available in the main towns.

Water Transport

Cruises from Australia have visited many of the islands and more inaccessible places along the coast. People on the various islands visited are being diverted from their traditional gardens and fishing to create artefacts for tourists.

Canoes are widely used to transport people and goods in the ocean and along rivers. In some areas of PNG, particularly the Sepik River, motorised canoes and banana boats provide the main thoroughfare. Travelling by banana boat (dinghy) is an affordable way to island hop independently. Visitors need their own life jackets and safety equipment and should avoid overloaded boats and travelling in bad weather. As there is no easy public transport by sea between islands, and airfares are expensive, local people in some regions will use motorised banana boats and small coastal vessels which can become overloaded and dangerous.

Health

PNG is classified as a low middle-income country. Close to ninety percent of the population live in rural areas, and access to these widely scattered communities is often difficult, slow and expensive.

Violence against women and achieving gender equality remain major challenges. The country is a signatory to the World Health Organization's Millennium Development Declaration.

The major health problems currently affecting PNG according to the World Health Organization are:

- Communicable diseases, with malaria, tuberculosis, diarrhoeal diseases and acute respiratory disease the major causes of morbidity and mortality.
- A generalised HIV epidemic driven mainly by heterosexual transmission.

- Rates of infant and child mortality are high compared to other countries in the Asia Pacific region.
- Maternal mortality remains very high.

The reach of primary health services is inadequate everywhere, and severely limited outside urban areas owing to a shortage of trained professionals and appropriately resourced facilities. The quality and reach of health services directed towards women is a concern with only a third of women having access to modern contraceptive methods.

PNG is undergoing an epidemiological transition as the share of NCDs has been rising sharply, particularly for diabetes, heart disease, chronic kidney conditions, and tobacco and alcohol related illnesses—including cancer (especially oral cancer caused by chewing betel nut and tobacco). This is placing additional pressure on the health system, while the rising rates of tuberculosis and, in particular, outbreaks of multi-drug resistant and extensively drug-resistant strains, poses a serious public health challenge.

PNG currently has six health workers per 10,000 people (with 0.5 physicians per 10,000 people), which lies far below the expected level for PNG's income level.

Government expenditure on health in 2014 accounted for 9.5% of total government spending, with total health expenditure equating to 4.3% of GDP.

Water & Sanitation

Contaminated water and poor sanitation are a common cause of diarrhoea and dysentery. Diarrhoea is among the top reasons for hospitalisation of children and the most common cause of child death. Dysentery is also a leading contributor to child undernutrition. A critical constraint in the sector is a shortage of human resources such as specialised engineers and technicians to deliver increased output in water and sanitation.

A typical hospital ward in a major centre

TOP: A mother and baby at a health clinic, waiting for a vaccine

MIDDLE: Monitoring a maternity patient at the Kerema Hospital, Gulf Province

BOTTOM: A community health worker in a health centre in Terapo, Gulf Province

Unemployment of Young People in Urban Areas

This is one of the biggest development challenges faced by Papua New Guinea. A World Bank-supported project is helping youth in the capital of Port Moresby by providing training and employment opportunities.

Violence Against Women & Domestic Violence

Papua New Guinea ranks very low in all global indicators in advancing gender equality and elimination of violence against women.

Papua New Guinea has one of the lowest levels of women's representation in parliament and local governments. Cultural and systemic obstacles prevent women from participating in political life and holding public office.

Gender issues are gaining momentum and becoming important aspects of the country's changing political and national development priorities. Enhancing women's economic empowerment in PNG focuses on empowerment of women in the expanding informal economy.

A human rights and gender-responsive approach is encouraged to implement programmes seeking to redress discriminatory gender practices and empower those disadvantaged, allowing them to participate effectively.

There are five key messages which the people must acknowledge:

1. Equality: Men and women are equal. This is a constitutional right; this is a human right.

2. Consent: Consent means a woman's right over her body. When she says 'NO' it means 'NO' every time by everyone.

3. Harassment is wrong: Women and girls have a right to be safe in this city.

4. Stand together: Men and women, boys and girls must stand together to make a safe city.

5. A safe city is a great city: When Port Moresby is safe for women and girls it is great for everyone.

Sanap Wantaim (Stand Together)

In October 2016, UN Women PNG, supported by the Australian Government, and in partnership with the National Capital Commission of Port Moresby, launched a behaviour change campaign—SANAP WANTAIM: the new normal.

As the cornerstone to the Safe Cities Program, the solidarity campaign has been established to rally men and boys throughout Port Moresby to stand side by side with women and girls as partners and allies. The campaign seeks to make the city safe for women and girls and inspire awareness, advocacy to action. The campaign calls upon all people from all walks of life to conceive and implement activities that will embrace their role in making the city safe and drive the ambitious goals of the campaign.

Education

Primary Education

Education in Papua New Guinea is still not compulsory resulting in adult illiteracy rates remaining high. Elementary schooling takes two years at a local community school, where the medium of education is the local language. Following this introductory period, children aged nine to fourteen remain at the same community schools to complete their grades 3 to 8.

Middle Education

If their academic record at primary school is assessed as being suitable, then children may go on to a provincial high school for a period of two years. There the medium of education is English, *Tok Pisin* or *Motu* according to the region.

Children at Maiari Salvation Army Preschool in a new classroom in Porebada village, Central Province

TOP: De la Salle Secondary School, Bomana, Port Moresby

MIDDLE: Port Moresby International School

BOTTOM: Students from one of the primary schools in Arawa, Kieta District

Secondary Education

Students with academic ambition may apply to attend a national senior high school for a final period of two years. These urban institutions are few in number though, and competition to enter them is fierce.

Vocational Education

After completing middle school, students also have the opportunity of entering a variety of technical and vocational schools, and being trained in various disciplines according to their interest.

Tertiary Education

There are seven universities in Papua New Guinea, some of which are state funded while others are private or have religious affiliations. The Pacific Adventist College offers programs in accounting, business, education, secretarial skills and theology, and the University of Technology provides degrees in architecture, business, engineering and forestry.

The University of Papua New Guinea, founded in 1965, has faculties of medicine, pharmacy, health sciences, physical and natural sciences, law and business, humanities and social sciences.

The government commenced its flagship Tuition Fee-Free (TFF) policy in 2012, providing schools with subsidies to cover student fees and placing strict low ceilings on the fees that schools can charge. There is evidence that the policy has helped to lower education costs for parents and boost school enrolments. However, challenges such as low attendance rates, classroom overcrowding, poor teacher and education quality, and high costs for remote schools remain ongoing concerns.

Pupil-to-teacher (PTR) ratios have been high and rising as teacher recruitment has not kept pace with recent increases in school enrolment rates. This has led to a deterioration in the quality of education. In addition, the quality of teachers needs to be improved. Performance in literacy and numeracy is dire with a majority of students not achieving the basics at school. The share of classes from grade 3 to grade 8 with more than forty-five students has been rising steadily, with levels of crowding worst in the lower primary grades. The transition rate of students from grade 8 to grade 9 was forty-one per cent in 2012.

Flexible Open Distance Education (FODE) employees have not been provided with sustainable professional development opportunities despite the existence of a 'teacher in-service training policy'.

Children in PNG leave school for a number of reasons, including:

(i) parents pulling their children from school if they do not see their child learning due to poor quality instruction and school infrastructure;

(ii) children who are not learning are unlikely to do well on exams and be 'pushed out' of the system;

(iii) difficulties in accessing schools; and

(iv) economic circumstance due to ancillary costs (such as the cost of uniforms and books). Furthermore, as noted earlier, transition into tertiary and vocational education by those completing secondary school is severely constrained by the limited number of admissions available each year.

Too many school-aged children are not enrolled. Net enrolment rates in primary school have been lower than regional and peer country averages, and the situation is worse at the secondary level. Completion rates are low, with attrition between primary and secondary school higher among girls. Education outcomes are poor reflecting the low quality of services rendered. Graduates from secondary school and higher levels of education and training are ill prepared for the job market, with employers frequently complaining about the unpreparedness of graduates for the workforce, signalling a

One of the many campuses at the University of Papua New Guinea

TOP: PNG's James Marape, with students at Cherrybrook Technology High School (Sydney) at the launch of the PNGAus Initiative, 2019

MIDDLE: Australian and PNG students under the New Colombo Plan, Motupore Island, 2018

BOTTOM: Australia Awards recipients with Australia's Governor-General, Sir Peter Cosgrove, 2017

mismatch between what is being taught and the needs of employers.

PNGAus Partnership Secondary Schools Initiative

The initiative is providing exchange learning experiences in Papua New Guinea and Australia through school project collaboration and mentoring for students, teachers and school leaders. 150 students from twenty-four secondary schools across Papua New Guinea and Australia will participate. Students will learn about local cultures and work on joint projects during visits to East Sepik, East New Britain and Central Province.

The new initiative was launched in 2019 in Port Moresby by Australia's Minister for Foreign Affairs and Minister for Women, Senator the Honourable Marise Payne, and PNG's Minister for Education, the Honourable Joseph Yopyyopy, MP. It will target students in Years 9 and 11.

The partnership program will strengthen capabilities in areas such as science, technology, engineering and mathematics, English language, youth leadership and girls' education.

In collaboration with the National Department of Education, the initiative is working with twelve of PNG's highest performing schools**.** Each PNG school has been partnered with an Australian school from New South Wales, the Northern Territory, Queensland or Victoria.

https://png.embassy.gov.au/pmsb/1056.html

New Colombo Plan

Australian undergraduates have the opportunity to undertake study, research, work placements and internships in PNG with an aim to provide ongoing engagement in business and tertiary education.

Australia Awards

These provide opportunities for Papua New Guineans to study at Australian or regional universities supported by Australian scholarships. Applications are open to both public sector employees and individuals employed in the private sector or endorsed by other institutions, such as non-government organisations.

Papua New Guinea Industrial Sectors

Working the Land

In PNG, the most common form of leasehold dealing is through a state lease lasting a maximum of ninety-nine years. Much of the 'alienated' land belongs to the state.

Given the country's unique legal system, which recognises both customary and common (English) law land rights, the issue of customary land ownership and the specifics of boundaries are determined through the traditional mediation processes used by customary land owners. Customary land covers ninety-seven per cent of useable land in PNG.

Deforestation & Logging

PNG retains the largest tract of primary tropical forest remaining in the Asia-Pacific, but exploitation by logging companies and subsistence farmers has been extensive.

The government estimates that between 1977 and 2002, fifteen per cent of PNG's natural rainforest was cleared with eight per cent degraded to secondary forest. The country is now the second largest exporter of tropical hardwoods in the world and the world's ninth largest greenhouse gas emitter with respect to deforestation. But PNG's Forest Authority is attempting to implement more rigorous sustainability standards in an effort to gain access to western markets where uncertified forest products are prohibited.

Agriculture

The population is predominantly rural, with eighty-seven per cent living outside of urban areas—the third highest rate in the world in 2015. The prevailing socioeconomic structures range from hunting and gathering to slash-and-burn agriculture, subsistence farming and mariculture. Currently, eighty per cent of the population is directly or indirectly involved in agriculture. The agricultural sector accounts for approximately a quarter of PNG's GDP.

Papua New Guinea has fertile soils and favourable climate, which permits cultivation of a wide variety of cash crops particularly in the highlands, coastal and island regions.

Agriculture remains the principal economic activity, which provides livelihood for eighty-five per cent of the rural population who rely directly on subsistence farming for their basic needs, having only little contact with the formal economy.

Main agricultural exports of the country include cocoa, coffee, copra, palm oil, rubber and tea. Copra plantations

TOP: Truck carrying prepared logs

MIDDLE: A logger at work

BOTTOM: Coffee growing in the Eastern Highlands

have been cultivated since the late 19th century, originally by German colonialists. Plantations of rubber, cocoa, tea, coffee and palm oil developed as more land was explored and opened.

PNG faces many challenges to agricultural development, including poorly developed infrastructure, weak market signals and services, new pest and disease threats, poor product quality and pressure on land and renewable resources as a result of population increases and mining development.

Mining & Petroleum

The mining and petroleum industry in PNG is the mainstay of the economy and the two sectors contributed over 26% of the country's Gross Domestic Product in 2017, ahead of agriculture (18%). Apart from the direct contribution to economic growth, employment and investment, the industry makes a very significant contribution to the socio-economic development of the country through programs in health, education and training, law and justice, agriculture, infrastructure and business development in the communities and provinces that host the resource projects.

Resource development in PNG is unique in many areas and some of these initiatives have been adopted by overseas jurisdictions in recent times. Host communities are an integral part of all resource projects and some landowner business development companies are now amongst the largest domiciled companies in the country. Landowners and host provinces are usually equity holders in the projects along with the National Government. It has been standard practice for many years for resource projects to assist, sometimes very significantly, with social services in the wider community including a range of infrastructure such as roads, bridges, health, education and law and order facilities. The industry is the powerhouse for technical education and training in the country and the mature projects have workforces that are 95–97% Papua New Guinean.

Total export revenue from the petroleum and mining sectors rose to a record Kina 26.5 billion in 2017. LNG production for 2017 was 8.3 million tonnes and associated condensate production averaged nearly 30,000 barrels per day (bpd). Crude oil output dropped to just over 20,000 bpd.

Gold production was 61.8 tonnes and copper 100,400 tonnes for 2017. Nickel and cobalt production increased sharply to 35,800 tonnes and 3,400 tonnes respectively.

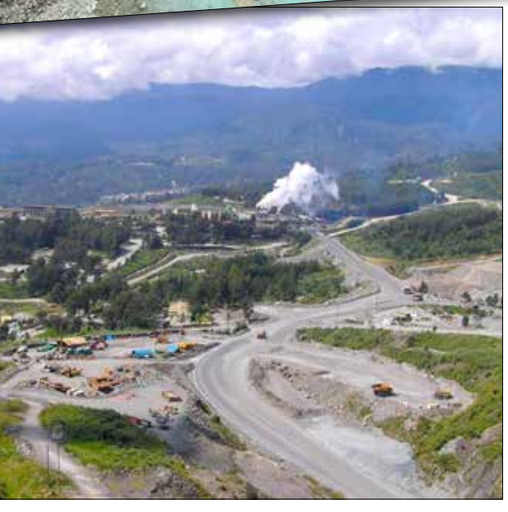
Gold & Base Metals—Mining History

Generally, it could be considered that it was the agricultural potential that attracted the Germans to what became German New Guinea (GNG), whereas it was the lure of gold that brought the first Europeans to what became British New Guinea (BNG). The latter were of mainly British stock being the descendents of early settlers in Australia and the waves of migrants that followed to seek their fortune in the eastern Australian colonies. Many had experienced life on the dozens of gold fields in Victoria, New South Wales and Queensland.

It was John MacGillivray, a naturalist on board Captain Owen Stanley's HMS *Rattlesnake* who noticed gold in the native pottery he examined at Redscar Bay north-west of Port Moresby in 1852. After the small gold field on the Laloki River, near Port Moresby, was exhausted following the 1878 rush there followed later discoveries in the islands off the eastern tip of the great island. In the 1890s miners flocked to the Louisiade Archipelago and in the period 1888-98 gold constituted 54% of the total value of exports from BNG *(Encyclopedia of PNG)*.

Subsequently, there were discoveries in what are now the Oro Province (the Yodda field declared in 1901) and Gulf Province (Lakekamu River). The old Laloki fields also contained copper and this was exploited in the 1920s. In GNG traces of gold were being found in many streams and rivers. However, it was only a few individuals who were able to win a small fortune in German times. It was not until the 1920s when large alluvial gold deposits were discovered in what is now Morobe Province. In 1926 a very large discovery was made at Edie Creek near Wau. In 1929 the Canadian company Placer commenced drilling operations in

Transporting gold dredges, cars and other cargo by plane



TOP: Hidden Valley Gold Mine, Morobe Province

MIDDLE: Panguna Mine on Bougainville Island

BOTTOM: Porgera Gold Mine, Enga Province

and around the Bulolo River bed. Such was the extent and richness of the alluvial surroundings of the Bulolo Valley floor that it was decided to recover the gold by way of giant dredges. These had to be flown in from the coast in an airlift never experienced anywhere else in the world at the time. Between 1931 and 1942 over 40,000 tonnes was flown into Bulolo—in one year the total amount of airfreight exceeded that of all the world's airfreight.

In the foreword to *Not a Poor Man's Field,* by Michael Waterhouse, Ross Garnaut writes:

FOR A PERIOD in the 1930s, New Guinea Goldfields and Bulolo Gold Dredging were amongst the most highly capitalised companies on the Sydney Stock Exchange.

The opportunity in the Wau and Bulolo Valleys was immense. But so was the challenge. To convert the alluvial gold in the creek and river beds into economic value required a feat of integrated technical and financial innovation and human leadership that had no near comparator in the first half century of the Australian Federation.

Small scale mining could only scratch the surface at Wau and Bulolo. Large scale mining could carry the immense overhead costs of getting equipment and supplies into the goldfields ... But large scale mining was easier said than done. After the alternatives had been exhausted, it was decided that air transport was the cost-effective way to shift huge dredges and quantities of supplies into the high country where the gold was found—at a time when global commercial aviation was in its infancy.

Waterhouse's meticulous research allows us to know that between 1931 and 1938, the mass of airfreight in New Guinea was larger than in any country on earth and half as large as the five largest countries combined—the United States, Canada, Germany, France and the United Kingdom.

In the early 1960s a CRA geologist, Ken Phillips, prospecting on the island of Bougainville noticed similar geology to areas in the Philippines where large copper deposits had been discovered. Australia, in its haste to ensure that the future independent PNG had an alternative to its agricultural exports, and pressed by CRA, insisted that the mine proceed at all costs. Thus, by 1969, what was to be one of the world's largest open-cut copper mines was under construction at Panguna and was commissioned in 1972, three years before Independence. Police riot squads were ordered in to quell large landowner protests. After twenty-seven years of operation landowners forced the closure of the mine and the PNG government ordered the army to assist police in attempts to reopen it. A bitter civil war ensued with thousands of deaths, both by violence and through sickness and other problems resulting from the Moresby-imposed blockade of the island whilst the war was fought. A very moving picture of the type of events experienced during the war was screened in Australian cinemas in 2012, *Mr Pip*. Much of it was filmed in Bougainville and contains some extraordinary acting by amateur PNGs.

From the 1960s and 70s onwards other significant mineral discoveries were exciting large mining companies. Some of these discoveries, unlike Bougainville, took years to prove up as being viable and develop into mines, and some are still exploration/feasibility targets after being evaluated by a succession of mineral companies.

After Bougainville, a large open-cut mine was established at Ok Tedi (gold and copper) in 1984 and then on Misima Island (gold) in Milne Bay Province in 1989 (now closed). The underground open-cut gold mine at Porgera in Enga Province followed closely behind Misima and commenced production in 1990. The gold mine on Lihir Island in the New Ireland Province was commissioned in 1997 and is now one of the largest gold mines in the world and its smaller brother on the neighbouring Simberi Island commenced production in 2008. Hidden Valley gold mine in the Morobe Province was brought into production the following year.

The Ramu nickel-cobalt mine, based on lateritic (soil) nickel deposits in Madang Province was a very significant first for PNG as it produced two new export minerals, nickel and cobalt. Since start up in 2012, this operation has steadily increased production and is scheduled for an expansion in the near future. Cobalt has become a very valuable byproduct metal as it is now used extensively in battery technology.

Ok Tedi Mine in the North Fly District, Western Province

TOP: Gold Processing Plant on Lihir Island

MIDDLE: Wafi-Golpu Project, Morobe Province

BOTTOM: The ExxonMobil Hides Gas Conditioning Plant, Hela Province

Today, there are seven operating medium to large open-cut and underground mines in PNG. Six of these mines are managed by global and regional companies including Newcrest Mining (Lihir) and St Barbara (Simberi) from Australia, Barrick Gold (Porgera) and K92 Mining (Kainantu) from Canada, MCC (Ramu) and Zijin Mining (also Porgera) from China, and Harmony Gold (Hidden Valley) from South Africa. The seventh project, Ok Tedi, the mature, large, open-cut gold and copper mine in the far northern region of Western Province near the border with Indonesia, is owned and operated by the PNG Government.

PNG hosts a number of undeveloped mineral resources which could be brought on stream as output declines at the mature operations. A huge copper-gold discovery at Frieda River in the West Sepik Province is still undeveloped some sixty years after its potential was realised. However, its remoteness and environmental concerns (after Bougainville and Ok Tedi lessons) are some of the problems it faces. In contrast, the Wafi-Golpu project, 65 km southwest of Lae in Morobe Province, is likely to be approved shortly. This deposit with a probable ore reserve of 200 m tonnes at 1.2% copper and 0.86 g/t gold will be developed in three stages as a massive block cave and will take nearly five years to reach first production.

Petroleum

People of the now Southern Highlands and Hela Provinces had been using oil from seeps for body decoration for thousands of years. It sometimes supplemented tigaso oil (obtained from trees), both of which were widely traded in the highlands.

Europeans first 'discovered' oil in Papua when two gold prospectors, McGowan and Swanson, noticed seeps near the Vailala River in present day Gulf Province in 1911. Seeps on the north coast in GNG were of sufficient interest for the German government to allocate 120,000 marks for scientific investigations near Aitape. This was increased to 500,000 marks and a drilling rig was reportedly en route from Germany when WWI broke out.

A number of small oil exploration companies prospected in both territories after the war, and Oil Search Limited was incorporated under the Companies Ordinance of Papua in 1930. It survived, listed on the Australian Stock Exchange, longer than any other company that had never discovered minerals or petroleum which led to production. Many early wells were drilled 'off-structure' and not considered as valid tests. This was because rigs used to be shipped or barged up rivers and then dragged inland as far as was practicable at the time.

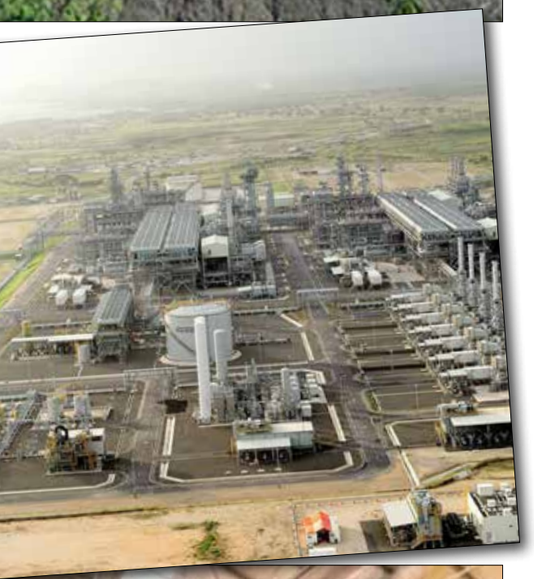
It was not until helicopters became available that otherwise inaccessible leads were drilled. The Puri wells in the then Gulf District led to the first discovery of black oil in the late 1950s. They were the first fully-helicopter supported drilling program in the world. As with Bulolo gold, PNG again was a leader in the use of aviation. The Puri oil flow ceased after a short period of testing. Other discoveries were of gas, a resource of no interest at the time. It was not until after the Vietnam war that heavy-lift, twin-rotor Vertol helicopters became available to carry heavy loads to the leads and prospects at the greater altitudes of the highlands. Specially designed 'heli-rigs' were constructed for this purpose and led to the discovery of the Kutubu oil fields in the Southern Highlands in 1984.

Appraisal drilling was followed by construction and finally, on 27 June, 1992, PNG's first oil exports commenced by way of a pipeline to the coast and an off-shore platform in the Gulf of Papua. Within a year or so production peaked at just over 150,000 barrels a day and then went into the predicted decline. Although a few more discoveries of black oil have been made and developed, all are in the general area of the Kutubu fields. All oil production is exported.

Meanwhile, the value of gas was becoming realised and when BP discovered the Hides gas field in 1987 it was determined that PNG was likely to become a large LNG producer and exporter. The discovery and appraisal wells were drilled from the top of the Hides Range at altitudes of 9,000 feet above sea-level, again with the use of Vertol helicopters. Oil Search was a partner with BP and decided to 'go-it-alone' and produce a small amount of gas which was used to fire generators and produce electricity which is transmitted by high voltage power lines, across the main range, to the Porgera gold mines. This was PNG's first petroleum project.

Despite its scores of years exploring in PNG BP left without proceeding to development and production of Hides gas for export. In the early years of this century a consortium, including Oil Search and led by ExxonMobil began to develop the field and the first LNG tanker left PNG from a terminal near Port Moresby where the gas is transported to by pipeline from the highlands and across the Gulf of Papua.

Kutubu Oil Field, Southern Highlands



TOP: The Elk-Antelope development
MIDDLE: PNG Liquefied Natural Gas Plant near Port Moresby
BOTTOM: Tuna processing

Despite the lack of success of on-going oil exploration large gas discoveries were made in areas further to the west of Kutubu and Hides even more remote from the coast. These are Juha and Pnyang in the Western Province and combined might have larger reserves than the 9 trillion cubic feet believed to be in the Hides' reservoir. These will no doubt be developed and connected to the Hides facilities in future years.

More recently, during the 1990s and early part of this century Interoil, a Canadian company, made a number of gas discoveries in the Gulf Province near the upper Purari River. Being too small to develop the resource itself Interoil was able to attract the French company Total. Total in turn took on Oil Search and ExxonMobil as partners. Two of the large gas fields, Elk and Antelope are likely to be developed in the near future with the first exports of LNG to commence by the mid-2020s.

Information courtesy of Chris Warrillow

Fishing Resources

With the largest fisheries zone in the Pacific, the Exclusive Economic Zone (EEZ—2.5 million sq.km), PNG has extensive and valuable fisheries resources, ranging from inland river fisheries, aquaculture and reef fisheries to large-scale deepwater tuna fisheries: more than 10,000 species of fish, molluscs and crustaceans live in PNG's waters. Small scale artisanal fishers tend to catch finfish, prawns, barramundi, lobsters and sea cucumbers.

In 2010, the country landed 750,000 tonnes of tuna—seventeen per cent of the world's catch—making it the third largest tuna industry in Asia. The tuna industry has evolved from licensed harvesting by international fishing vessels to now include in-country production and canning operations. PNG has an existing agreement with the EU to allow duty-free exportation of tuna to the region.

The Pacific Tuna Forum estimates that the value of the annual tuna catch in PNG is about US$1.3 billion, which could double to US$2.7 billion if the industry explored more value-added activities. However, it's difficult to prevent unlicensed fishing boats encroaching on PNG's EEZ.

Flora, Fauna and the Environment

The Independent State of Papua New Guinea (PNG) borders Indonesia by land and Australia, Micronesia, New Caledonia and the Solomon Islands by sea. The country occupies the eastern half of the West Pacific island of New Guinea, together with the smaller islands of New Britain, New Ireland and the Autonomous Region of Bougainville, and another six hundred or so smaller and mostly uninhabited islands and atolls.

Papua New Guinea's interior is carved up by the steep slopes and jagged peaks of mountain ranges, interspersed by fertile valleys and over a dozen active volcanoes, while tropical rainforests cover around seventy-five per cent of the country's surface.

The New Guinea Highlands, comprising the Owen Stanley Range, is a chain of mountains and river valleys, running the length of the mainland of New Guinea. In earlier history this mountainous chain divided the Australian territory of Papua and the Australian Mandated, and later Trust, Territory of New Guinea. The highest point of Papua New Guinea is Mount Wilhelm at 14,793 ft (4,509 m) and the lowest point is the Pacific Ocean.

Two major rivers are the Sepik River, which winds its way through lowland swamp plains to the northern coast, and the Fly River, which flows through one of the largest swamplands in the world on its way to the south coast of the island and the Gulf of Papua.

Papua New Guinea has one of the richest natural resource endowments in the world, encompassing a wide array of geographic, ethnographic and natural resource diversity—resulting in an amazing variety of flora and fauna.

Plantlife

Thousands of plant species thrive in New Guinea, many in the island's forests. This extraordinary diversity has been brought about by the favourable soil types, the climate and species migration from other areas. Although almost eight out of ten of these plants are not found anywhere else in the world, the plant numbers are low compared to other tropical areas.

Trees & Forests

Stretching from the lowlands to altitudes beyond 3,000 m, forests show an enormous variety depending on their location. A walk through these forests is not just a journey

TOP: Highland Lace Tree Ferns *(Cyathea tomentossima)*, from the Highlands of PNG

MIDDLE: Sepik Blue Orchid *(Dendrobium lasianthera)*, national flower of PNG

BOTTOM: PNG's tree-kangaroo *(Dendrolagus goodfellowi)*

under the canopy, but also a trip in time, as some of the plants are more than 100 million years old.

The lowland forests of southern New Guinea are the home of more than 1,200 species of trees and about 2,000 species of ferns. Tracts of this kind of forest are most extensive on foothills and the lower slopes of mountains. Lowland rainforests are demanding ecosystems. They need at least 2,500 mm of rainfall per year, and they only show the greatest species diversity on well-drained sites.

In eastern New Guinea, *dipterocarps* (tall trees with two-winged fruit) can cover large areas, in elevations up to around 500 m. Beyond that point, *montane oak* may form dense forests on ridge crests and upper slopes. These trees, which account for a majority of the world's trade in tropical hardwoods, are scarce in the lowland forests. Their relative absence is therefore a blessing for the area's forests.

Climbing & Flowering Plants

Climbing plants, ninety per cent of which are tropical, comprise many types, including climbing palms (rattans), which can reach a length of 240 m; stranglers and epiphytes—a varied group including flowering plants, orchids and ferns.

The country is renowned for its many beautiful flowers, including their famous orchids. More than 3,200 species are unique to the country. The National Botanic Garden at Port Moresby has the largest collection of orchids in the Southern Hemisphere, with specimens collected from all over the different provinces, including the Sepik Blue Orchid *(Dendrobium lasianthera)*, the official national flower of Papua New Guinea.

The rainforests, jungles and chilly mountains of PNG provide orchids with an idyllic habitat in which to flourish. These incredible flowers are personified by their unique and sometimes bizarre shapes, their enchanting scents and beautiful colours, and they are found in abundance throughout PNG.

Many other flowering plants are also associated with PNG, including the colourful and prolific New Guinea Impatiens *(Impatiens hawkeri)*.

Wildlife

This comprises a large number of species of mammals, amphibians, reptiles, fish, birds and butterflies. As the world's largest and highest tropical island, New Guinea occupies less than one percent of the world's land surface, yet supports a high percentage of global biodiversity.

Mammals

Marsupials such as the tree-kangaroo, possums, wallabies and rodents dominate the mammal species. The *kangaroos* of New Guinea, highly varied in their ecology and behaviour, are closely related to the Australian kangaroos, and inhabit the open grasslands of New Guinea. However, the *tree-kangaroos* are different in appearance and behaviour. They have long, thick tails, which enable them to balance in trees, and large, strong forearms for gripping to trees.

The *cuscus*, closely related to the possums of Australia, have evolved in New Guinea, and are found throughout the island, along with many small possum species, including the sugar glider.

Placental mammals are solely represented by *rodents* and *bats*, and monotremes by *echidnas*.

The *wild boar* was introduced to New Guinea at least 6,000 years ago. It is abundant throughout the island, and more common in areas where humans grow sweet potato as their primary food source. The wild boar is a large forager, and disturbs the forest floor whilst looking for food.

The *domestic dog* was introduced to New Guinea about 2,000 years ago. There is also an endemic wild dog, the *New Guinea singing dog*, that is closely related to the Australian dingo—its name comes from the way these dogs harmonise during chorus howls. They live in the remote mountains, above human habitation level, and are the largest land predator.

Reptiles

These are represented by lizards, snakes, turtles and crocodiles. There are approximately two hundred described species of lizards in New Guinea. Of these, a majority are *skinks* with a smaller number of *geckos* and *agamids*. The largest lizard is the *crocodile monitor*. The snakes, approximately one hundred described species, show a much lower rate of endemism than most of New Guinea's fauna.

New Guinea freshwater crocodiles *(Crocodylus novaeguineae)*

TOP: The white-lipped tree frog *(Litoria infrafrenata)*, found in rainforests, mangroves and swamps

MIDDLE: Raggiana bird-of-paradise *(Paradisaea raggiana)*, national bird of Papua New Guinea

BOTTOM: Scalloped Grass Yellow butterfly *(Eurema alitha)*

Six species of New Guinea's turtles are marine, and all are found on other land masses. The fresh water turtles are represented by seven species, with three local to New Guinea. One species, *Parker's snake-necked turtle*, is restricted to the Fly River.

The *saltwater crocodile* is the largest reptile native to New Guinea, and is found in most of the rivers, except for those heavily disturbed by humans, or too small to accommodate the species. The other crocodile native to New Guinea, the *New Guinea crocodile*, is much smaller than the saltwater crocodile, and only lives in fresh water.

Amphibians

These consist of over 320 described species of frogs and toads. The most common type is the *wokan cannibal frog*, a small ground-dwelling frog found throughout New Guinea, and *tree frogs* are the most diverse family of frogs in New Guinea with over 100 species.

The *cane toad* was introduced from Australia in 1937 to control hawk moth larvae, which were eating sweet potato crops; they have since become common in non-forested areas.

Fish

New Guinea is within the Coral Triangle, the most species-rich marine region in the world. In addition to more than 600 species of corals (about seventy-six per cent of the total in the world), there are more than 2,200 species of reef fish (about thirty-seven per cent of the total in the world).

Different types of freshwater fish are the *rainbowfish*, *blue-eyes*, *gudgeons* and *gobies*, but there are also several species of *Old World silverside*, *grunters*, *glassfish*, *ariid catfish*, *eeltail catfish* and more. There are several large river systems in New Guinea, including the Fly, Sepik and Mamberamo, which all are rich in fish.

There are freshwater *crabs* and freshwater *shrimps* in New Guinea, but generally these are poorly known. There are more than twenty species of crayfish with by far the greatest diversity found in the Paniai Lakes.

Birds

The largest birds in New Guinea are the flightless *cassowaries*, with the southern cassowary and the northern cassowary reaching heights of 1.8 m (6 ft). The cassowary is one of the world's most dangerous birds, for it is capable of inflicting fatal injuries with its powerful legs and the dagger-like claw on its inner toe. It is known to have killed humans.

The *parrots* of New Guinea, as with Australia, are very diverse with forty-six species, a seventh of the world's total. The forty-five species of *pigeons*, including the three-crowned pigeons, the largest pigeons in the world, are a sixth of the world's total.

The passerines of New Guinea are mostly small, often colourful birds which mostly inhabit the forested regions. The best-known types are known collectively as *birds-of-paradise*. The males can be ornamented with bright, iridescent colours and modified, ornamental feathers such as tufts and wattles. Closely related are the *bowerbirds*, a group of twenty rather drab, stocky and short-plumed birds found in New Guinea and Australia.

Butterflies

The most well-known butterfly in PNG is the *Queen Alexandra's Birdwing*—the largest butterfly in the world, this rainforest-dwelling creature has an impressive wingspan of up to 30 cm. It is found in the Oro Province in the country's north. The females, which are much larger than the males, sport bright yellow abdomens contrasted against velvety black wings with splotches of cream. The males on the other hand have beautifully patterned wings of iridescent turquoise, gold, green and black.

While no other butterfly in PNG can compare in size, there are countless other species that are equally impressive in their beauty. The *Red Lacewing* earns its name from the exquisite lace-like patterns on its underwings. This species is found in forested regions of PNG such as along forest roads or even in the gardens of forest villages.

One of the most easily spotted butterflies is the *Scalloped Grass Yellow*. Despite its relatively small size, its bright wings—along with the habit of clustering in small groups on patches of damp sand or soil—make them readily recognisable.

Another beautiful butterfly is the *Clearwing Swallowtail*. While this butterfly is pretty to look at, it also has some unique characteristics, making it quite special. One such characteristic is its straight antennae as most other butterflies from this subfamily have recurved antennae. The female butterfly in this family also has an abdominal pouch, which projects post-fertilisation in order to stop her mating with other males. The male Clearwing Swallowtail is quite territorial and will establish territories, which he will patrol back and forth readily waiting for a female to come along.

Environmental Hazards

Located close to the Equator, PNG has a hot, humid tropical climate usually between 24 and 32 degrees Celsius. Hot and humid on the coast and plains, it becomes progressively cooler with increased altitude. The climate is influenced by the monsoon circulation—the wetter northwest monsoon occurs from December to April and the drier southeast monsoon from May to October. Much of the country has dense rainforests.

Rising ocean temperatures are damaging coral reefs and, in addition to bleaching, coral is under threat from ocean acidification and drowning, due to rising ocean levels reducing the amount of light reaching the corals. Malaria is also becoming more prevalent. Historically, malaria was limited to coastal regions, however, with a larger and migratory population, mosquitoes have adapted further into the highlands, endangering the lives of

TOP: A river in the rainforest at Mt Bosavi, Southern Highlands

MIDDLE: Aftermath of the 1994 eruption of Vulcan and Tavurvur in Rabaul

BOTTOM: The eruption of Mt Lamington in 1951

two million people who were previously not at risk. Numbers of birds, fish and other animals appear to be threatened, mainly due to hunting and habitat loss.

'Ring of Fire'

Due to its location along the Pacific 'Ring of Fire', Papua New Guinea has several volcanoes and is prone to earthquakes and tsunamis. Its most active volcano, Rabaul caldera, is situated on the island of New Britain. The Ring of Fire is a large series of volcanoes, many active, encircling the Pacific Ocean. The volcanoes coincide with the edges of one of the world's main tectonic plates (the Pacific Plate) containing over 450 volcanoes and home to approximately seventy-five per cent of the world's active volcanoes. Approximately ninety per cent of the world's earthquakes occur along the Ring of Fire—most recently, the devastating quakes in Chile, Japan and New Zealand.

Alongside beaches and coral reefs are active thermal regions with hot springs, bubbling mud pools, spouting geysers and volcanoes.

Volcanoes

With sixty-seven volcanoes in PNG the country has the most active volcanoes in the south-west Pacific. Thirty-six volcanoes are of concern to authorities with fifteen of these classified as active and twenty-one as dormant. Of these, eight active and four dormant are under active surveillance by staff of the Rabaul Vulcanological Observatory (RVO). Two of the RVO's staff were killed on 8 March 1979, whilst camped on Karkar Island monitoring an eruption. They were Australian Robin Cooke and his Tolai (Rabaul) assistant, Elias Ravian.

Only the Rabaul volcanoes are of any threat to major infrastructure. A major eruption commenced in 1994 from twin volcanoes, Tavurvur and Vulcan—Tavurvur has been the site of near persistent activity with eruptions until 2014. With the airstrip permanently closed and the town being regularly covered in metres deep ash, the East New Britain Provincial Capital and most major business and commerce moved to Kokopo. As time progresses businesses are moving back to Rabaul with its natural deepwater harbour formed from the calderas of two volcanoes. Very few deaths result from most PNG eruptions. However, huge inconvenience is regularly caused by mass evacuations of villagers from volcanic islands off the north coast such as Karkar, Manam and more recently Kadovar. After weeks, sometimes months and occasionally years these people return to their traditional lands since they have no land rights on the mainland.

One exception, in living memory, is an eruption on the mainland near present day Popondetta (Oro Province). In 1951, what was then considered to be an extinct volcano, Mount Lamington, an andesitic stratovolcano, suddenly came to life. Its pyroclastic explosion resulted in a huge cloud of superheated gases roaring down valleys at tremendous speed. Dozens of villages were destroyed as, too, was Higaturu, the Australian government headquarters station of the then Northern District. More than thirty Europeans (mostly Australians) on the station were killed along with thousands of Papuans (who were, at that time, also Australians). Over 3,000 bodies were counted, but that count only included adults. Thousands more lay buried under the ash and lava or were incinerated without trace. Some estimates of the total death toll exceed 13,000—surely Australia's greatest natural disaster.

Earthquakes

The region is home to several minor and major plates such as the Indo-Australian, Solomon Sea, North and South Bismarck Seas, Woodlark plates and Pacific plates. The area is amongst the world's most complicated areas in terms of tectonic setting and notorious for frequent earthquakes and volcanic eruptions. Most seismic events cause little damage and few injuries. This is due to a number of reasons, the main of which is the generally remote and sparsely-populated areas affected. People in such areas usually live in 'bush-material' houses which, should they collapse, do not often cause serious harm.

Earthquakes of magnitude 4–7 can be experienced in PNG (a Richter scale event of magnitude 9–9.5 will result in complete devastation for dozens of kilometres from an epicentre).

Looking across Simpson Bay at Mt Tavurvur from the Rabaul Observatory, October 1999

TOP: Some of the damage from the 2018 earthquake in the Hela Province

MIDDLE: Sissano Mission School after the tsunami wave in 1998

BOTTOM: Cyclone Guba, 2007

On 26 February 2018 a magnitude 7.5 occurred near Komo in the Hela Province, only a few kilometres from ExxonMobil's Hides Gas Field. It was followed by an after-shock of 6.8. At least 150 villagers were killed. The gas plant was not seriously damaged, but was closed for a couple of months disrupting the export of liquefied natural gas (LNG). Damage to buildings and infrastructure was significant, but the major catastrophic events took place to the south and south-west of Komo. On the rugged southern slopes and valleys draining many streams and rivers down towards the Strickland River massive landslides occurred. These swept away villages and, even more importantly, the many gardens relied on by the mainly subsistence farmers of the area.

Tsunamis

Usually caused by massive undersea earthquakes or eruptions, recent tsunamis experienced in PNG have been a secondary effect of such major events.

In August 1971 and again in 2007 Rabaul experienced two earthquakes of 8.1 creating tsunamis. An earlier tsunami (recorded by the Germans) was that of 13 March 1888. Waves of up to twelve-metres high were generated when the western slopes of the Ritter Island volcano (off the western tip of New Britain) collapsed into the sea.

On 17 July 1998 there was a magnitude 7 offshore earthquake near Aitape in the West Sepik Province. A tsunami crashed through the fairly densely-populated Sissano Lagoon destroying all surrounding villages and killing 1,650 people.

Cyclones

Tropical low depressions that can develop into cyclones usually originate well south and east of mainland PNG. Whilst usually heading further south-west some do occasionally take a more westerly track and hit the Louisiade Archipelago, notably Misima, Sudest and Rossel Islands in the Milne Bay Province.

In November 2007, Cyclone Guba left 149 dead, mainly in Milne Bay Province, and tracked into the Gulf of Papua bringing drenching rains and gale-force winds to Port Moresby. It also raised some concern for the Kutubu oil export platform, Kumul, and its crew located about forty kilometres offshore.

Papua New Guinea Culture

Papua New Guinea has complex cultural dynamics deeply rooted in tribal and ethnic identity, indigenous social institutions, and land. In the traditional cultures of PNG, culture is embodied in dress, dances, ceremonies, stories, songs, dramatic performances, and magic practices of a group. They are also in the taboos relating to status, gender, genealogy and the spirit world.

There are more separate tribal cultures with their associated art forms in Papua New Guinea than anywhere else in the world. From the spirit masks worn in initiation ceremonies and dance rituals and the big, basketweave shrouds donned by elders at that time, to the huge, supernatural representations on the gable ends of houses and the ancestral boards that ward off evil spirits, arts in PNG are evidence of the powerful beliefs of each different group.

Tribal fighting occasionally takes place today in some areas of the Highlands and weapons such as bows and arrows, together with spears, axes and shields, are still made with their original purpose in mind. There is a whole range of domestic items, different in each area, from string bags (*bilums*) to woven baskets, food hooks, knives, spoons and scrapers, all the tools required for hunting, fishing and agriculture, and all the means of making music and sounds, from flutes and bull-roarers to beaters, whistles and drums.

Wantok—Social Support

PNG has no official social support system but there is a strong 'Wantok' network, deriving from the phrase 'one talk' and meaning those who speak the same language. It is a system where people depend on, care for, and help each other in many aspects of society. The connections that this social construct refers to are complex and adaptive, and can therefore extend beyond kin and those who speak the same language, to friends, business colleagues, and close political allies. This affiliation and co-operation creates a social safety net for those who are members of a wantok group.

Rich oral history has ensured that ancient legends have been passed down through the generations. From remote villages to urban centres, customs are passionately maintained in elaborate rituals that accompany deaths, feasts, marriages, compensation ceremonies and initiation rites.

Experience a unique social system dominated by the

TOP: Wantoks sitting talking in Koje Village, near Tufi, Oro Province

MIDDLE: Asaro Mudmen of the PNG Highlands

BOTTOM: Duk-duks performing an initiation ceremony in Rabaul, East New Britain

'big men' (*bik man)* who continue to wield tremendous power and influence. Different regions have either patrilineal societies or matrilineal societies. In matrilineal societies, inheritances and lines of power are passed through the female side of the family (through the mother's brother) because a child will always know who their mother is, but may not always be aware of their father's identity. The land is therefore held by the women of the clan in their own clan boundaries, however, in terms of land allocation and issues requiring demarcation, the uncles usually make the decisions.

Each region has its own unique cultural identity and display, presentation or performances. PNG cultural shows and festivals throughout the country showcase distinct cultural highlights from each region.

Tribal Customs & Traditions

Initiation

The men of a clan go through a series of steps to be initiated as clan elders. The initiated are the next generation of clan members who will perform activities to honour the current crop of initiated men, thereby ensuring the survival of the clan's legacy including land ownership and cultural identity.

Each region has its own unique cultural identity, e.g. in East New Britain there are *Duk-duks* and *Tubuans;* in the Highlands the Asaro Mudmen.

Bride Price

Each region has its own traditional custom and ceremonies of paying a bride price from a man to a woman's family so she can be married. It is paid as a fee for her to live, work and support her husband in his land. If the husband predeceases her, she is entitled to resume her own life on her own land. A woman can return to her own land with her children and shell money but no craft works.

Death

Each region and cultural identity have their own practices for funerals and burials of the deceased. An example of this follows with the practice in East New Britain Province of the New Guinea Islands Region.

Following a church funeral service and burial, a *Minamai* is held. On this occasion the clan gathers to communally share the chewing of betelnut and then distribute shell money to acknowledge those who helped prepared the deceased for burial, to relatives of the deceased and to all those present at the *Minamai*. If a person accumulates enough shell money during their life it is believed that they will pass through to spirit heaven.

Chewing Betelnut (Buai)

This is a customary tradition, especially used at ceremonial occasions. It is also a practice of welcoming and farewelling people to homes and nowadays it's a form of relaxation or pastime activity at private or group gatherings as a sign of friendship and fellowship among people.

The Drums, Pipes & Harps

Communication, celebration and relaxation is built around the beating of drums and music—the *Kundu* and the larger *Garamut,* a hollowed-out log, are from New Britain. Each coastal clan has a '*Garamut*' call which is a copy of the cry of the clan's totem or animal that represents the spirit of the clan. This animal is held sacred and is to be preserved at all costs.

The residents of the Solomon Islands and Bougainville (North Solomons) mainly used bamboo to build their instruments. For example, bamboo pipes were combined in various lengths and with different diameters. These 'panpipes' were very popular. The principle of the panpipe is simple. Instead of providing each pipe with finger holes to allow the playing of different notes, single-tone pipes in different lengths were bound together. The longer the pipe was, the lower the tone would be. The pipes could be arranged either in a bundle or resembling a raft with one or two rows. The panpipe ensembles play surprisingly complex polyphonic music that is very unfamiliar to Western ears.

One of the most widespread traditional instruments used in PNG is the *susap* (Jews harp), a bamboo mouth harp commonly played for self-entertainment and sometimes in

Tribesmen playing the *kundu* at a Highland show in 2017

TOP: Villagers cooking a *mumu*

MIDDLE: Playing the *susap*—a bamboo mouth harp

BOTTOM: Yams for sale at the Goroka Market, Eastern Highlands

traditional courting rituals. In Papua New Guinea, the *susap* is considered to possess love-controlling magic that men can use to attract a woman's affections. It is also often used as a 'speech surrogate' to create the illusion of speech in a musical context. In this way, a man is able to 'say' things to a woman through the instrument's 'twanging' sound that might otherwise be considered inappropriate. If the magic has worked, the woman will be attracted to the man.

Food—Mumu

Traditional cooking is based on a '*mumu*', one of the world's oldest slow-cooked ground-oven meals using heated special stones. Foods such as pig, chicken and bananas along with root crops such as taro, sweet potato and yams are wrapped in banana leaves and cooked in the earth. Coastal groups also smoke fish on hot embers.

With a generally fertile environment, greens such as aibika, Chinese greens, cucumber, chokos (the green choko leaves cooked in coconut milk are delicious!) and avocados grow readily. A local favourite is *pit pit* (a variety of cane) cooked in coconut milk.

Coconuts are readily available and often used as flavouring especially in coastal areas. Don't expect to see crunchy apples or orange oranges, but fruit such as pineapples, mangoes, bananas, passionfruit and pawpaws are the best in the world!

Cooler climate vegetables (broccoli, strawberries, etc.) are successfully grown in the Highlands of PNG as are large plantations of coffee. PNG-grown nuts such as galip and okari are delicious, whilst betelnut (*buai*), mixed with lime to add 'pepper' and make red mouths whilst chewing, is an acquired taste.

Bilums

Bilums are the traditional hand-woven string bags that women and previously, some men, make out of plant fibres or commonly nowadays store-bought wool and nylon. Bilums are ubiquitous throughout the country and serve multiple purposes.

They are PNG's equivalent to the green bag, used to carry garden produce, sago from the swamps, firewood from the bush, food from the markets, and groceries from the shops; students use them to carry their school books; and they also make great handbags. In fact, women today match their bilums with their outfit for the day.

The classic image of a woman carrying heavy load of root crops like sweet potatoes, taro, yams and cassava in a bilum on her back, the strap across her forehead, typifies the productive labour of women in rural PNG.

As an important wealth item in the traditional exchange economy, bilums represent reciprocal links between different individuals, families, and clan groups. The production of bilums also provides an important source of income for women who make and sell them at markets throughout the country. They are one of the major items that make up the informal economic sector in PNG.

Bilums are unique expressions of social change and modernity. Over the years since independence, PNG women have creatively produced numerous innovations in bilum designs and motifs, many of which are personalised with names or symbols to reflect social or historical events, but not abandoning their traditional designs. Innovations also include using the weaving technique to produce high-fashion clothes. The country uniform worn by the PNG women athletes in the opening ceremony of the Commonwealth Games in Melbourne in 2006 was a collection of bilum dresses in stunningly beautiful and colourful designs.

One of the most important traditional uses of bilums, which is still widely practised today, is to carry infants. Grandmothers and aunties will busily make new bilums in anticipation of the arrival of a new baby in the family. Used like a hammock, hung from a house rafter, the suspended bilum provides a safe and cosy cocoon for a sleeping baby.

In *Tok Pisin*, one of the three official languages besides *Police Motu* and English and out of over 850 different languages, the word bilum also refers to the womb. This association between bilums and maternity has become a national icon, representing women's productive and reproductive role and status as mothers. Many civil society organisations in PNG like the National Council of Women and Business and Professional Women's Club of Port Moresby carry the symbol of bilum on their official crests. A drawing of a baby in a bilum is the

Bilums on display at one of the local markets

TOP: Three hand drums *(kundus)* from various areas

BOTTOM: Ancestral female mourning figure, Kambaramba village, Mid-Sepik River

symbol for the National Department of Health's Safe Motherhood program, which is a fundamental policy area for primary health care services.

Reprinted from an article by Jacinta Manua, PNG Deputy High Commissioner, *Una Voce*, December 2013

Artefacts in PNG

Literacy and governance, as we know it, was not known in PNG prior to European contact. Instead there was a strong visual feast of handmade objects for everyday use, spiritual connections and wellbeing—instruments of story-telling and retelling at its best, often in song and dance, ensuring that history and customs thrived and endured. These were all controlled by secure village systems of continuous cultural lore and artefacts manufactured within definite specific styles pertaining to individual clans and families.

Utensils used for digging included honed sticks; for fishing—spears, nets, hooks, shark caller rattles; for hunting—a variety of spears, bows and arrows, knives, woven bags; and there were cassowary leg bone daggers and cutting knives for wild bananas.

Items for food preparation and serving included bowls, dishes and platters of wood or clay, gourds, coconut cups and ladles and sometimes stone.

Carrying items included baskets and trays, and woven bags, which could be hung with carved suspension hooks to keep babies, perishables and valuables out of the reach of youngsters and animals.

Vessels were used for water storage, canoes for river transport and outriggers with sails and rudders for ocean sailing, plus tiny immature coconuts, carved into almost animal shapes to give mystical direction to seafarers.

Weapons were carried for survival—for hunting and fighting, included daggers of split obsidian, of bone and sharpened stone or shards of broken shell; traps and tools, adzes and axes, bows and arrows, spears and spear throwers, stone clubs, walking sticks with bark, woven and gourd body coverings.

Decorations for body adornment, and for homes and spirit houses included colourful bird feathers and bones, seashells, phallocrypt gourds, vegetable dyes, bark *(tapa)* cloth, grasses, ochres, charcoal and the lime from burnt and crushed seashells.

Instruments for communication, singing and dance included drums of all sorts—hand drums *(kundu)*, water drums and slit-gong *(garamut)* drums. There were also horns, whistles, long elaborately adorned bamboo flutes, bull-roarers, mud beaters, flutes, Jews harps and ocarinas; rattles of seeds and shell bound with grasses and hand-wrought tree bark and whistling spinning tops.

Wooden toys were handmade for play and instruction, miniatures of everything—from little birds and animals to tiny but operational seagoing canoes, all to ensure that children grew up familiar with using and recognising the value of all things, which were handmade and necessary for a useful and sometimes decorative life.

And then, the imposing spiritual representatives of masks and figures with elongated facial features, with their incredible powers over the life forces of birth and death, ritual and abundance, over safety, direction and health, over insight and farsightedness, those irresistible powers of the unknown, the gods.

And down the scale, but only somewhat, the ancestral images of human forebears—male and female masks and figures (lacking the elongation of their spiritual counterparts) along with their produce—sometimes truly fanciful and inspiring, often awesome and fearsome, and of course, there are the fascinating stories that go with them.

Artefacts—Past and Present

The original PNG artefacts, typically items made for a specific purpose and not for sale prior to 1960, are generally highly prized by collectors to this day and some command amazing prices on the world market. This is not so of items made more recently as they have all been, almost without exception, made for sale and resale. However, they too can be magnificent and very appealing.

Kumbumain spirit figure of the Lower Sepik, half-man/half-crocodile, in front of a small carved ancestral figure from Mindimit village, Sepik River *(left)*;
Two carved wooden spirit masks *(Mwai)* from Kanganaman Village, Mid Sepik River *(centre)*;
Wak spirit figure, Angoram Village, Lower Sepik River *(right)*

TOP: A Buka basketry tray, containing artefacts from various areas of PNG

MIDDLE: One of the Baining Fire Dancers, who perform at many of the country's festivals

BOTTOM: A spectacular Gogodala war canoe at the festival

There are many languages in Papua New Guinea, over 800, and as many distinct artistic styles of hand-worked artefacts and patterns, each item readily recognisable as belonging to a particular language group or people, or area.

It is doubtful that another country exists with such a wealth of artistic diversity as Papua New Guinea.

Information & photographs courtesy of Robin (Leahy) Hodgson

Sing-Sings & Cultural Festivals

A sing-sing is an expression of customary dance, music and ceremonial dress in a spectacular explosion of colour and sound. Excitement and anticipation fill the air, but it can be frightening, too. Leaves, beaten bark, woven thread and grass are all used for dress. White or red powder is often smeared across foreheads to provide protection from evil intent. Bird-of-paradise, cockatoo, crow, eagle and chook feathers sway, jig, bounce and bob in spectacular head-dresses, on tall frames and on long poles—the height of the headdress depends on the type of dance that is being decorated and the wearer's motive.

Another unique aspect of headdress is the mask. All dancers wear a mask—if a physical mask is not used, the mask is painted onto the dancer's face to draw the audience to an aspect of the choreography, to tell a story or to draw attention to the eye.

PNG cultural shows and festivals provide a rare opportunity to experience the tribal rituals of the people who populate Papua New Guinea. Festivals are an extravaganza of cultural dancing, ritual performance, story-telling and exchange—with a variety of arts and crafts on display. The main cultural festivals take place annually from June to November throughout the country.

Gogodala Canoe Festival

Balimo, Western Province—June

The Gogodala people from the Middle Fly District are well-known for their canoe building, artistic work and colourful feathery designs. The festival is an annual event held to signify the art of canoe carving, paddling and the people's connection with their clan spirits.

Madang Festival

Madang, Madang Province—June

This two-day event showcases the rich culture and fabulous diversity within this region, one of the most diverse in Papua New Guinea, with different tribal groups living in very different geographic settings, traditional colours, jewellery, clothing and traditions, There is a parade, a variety of sporting events, canoe racing, children's activities and a vast array of stalls selling tribal artefacts.

National Mask Festival & Warwagira

Kokopo, East New Britain—July

This promotes the unique mask cultures of the area, and is a cultural tribute to the people—the Tolai, Baining and Sulka. The first day includes the Kinavai, the arrival of the Tolai Tubuans at dawn. There are also spectacular fire dances from the Baining people of mainland East New Britain. In this night-time traditional dance, initiated young men perform harrowing dances through blazing fires amidst evocative chanting by their elders.

Sepik River Crocodile & Arts Festival

Ambunti, East Sepik—August

This is an annual three-day cultural celebration staged annually in the East Sepik Province. It highlights the importance of the crocodile and its cultural significance to the people of the Sepik River, home to some of the world's largest freshwater and saltwater crocodiles, which symbolise strength, power and manhood. Skin-cutting initiations continue in communities where men proudly wear scars cut into their skin during the rite of passage—these scars, resembling the back of a crocodile, run from the shoulder to the hip.

The National Mask Festival, Kokopo

TOP: Tribesmen at the Mt Hagen Show, Western Highlands

MIDDLE: Painted tribesmen at the Enga Cultural Show, Enga Province

BOTTOM: Dancers at the Goroka Show, Eastern Highlands, 2018

Mt Hagen Show

Mt Hagen, Western Highlands—August

First staged in 1964, for the purpose of promoting peace and sharing cultural experiences with the many different tribes from the Western Highlands Province, the show, held over two days, is one of the biggest sing-sings of the year. Villagers from all over the region come to showcase their costumes, music, dance and culture.

Enga Cultural Show

Enga—August

Held annually in Wabag Town over three days, this show pays tribute to the unique culture of Enga Province. It attracts a variety of tribes from all its districts, including the amazing Sili Muli dancers with their iconic black-painted faces and unique headdresses.

Goroka Show

Goroka, Eastern Highlands—September

This is the most famous tribal gathering and cultural event in Papua New Guinea. About 100 tribes arrive to show their music, dance and culture. This festival started in the mid-1950s from the initiative of the kiaps to stop fighting, but has now become an important tourist destination because it is one of a few opportunities to see the traditional tribal culture. The show also showcases produce from the province's agriculture and cottage industries especially coffee.

Hiri Moale Festival

Port Moresby, NCD—September

Timed to lead in to Independence celebrations, this is a re-enactment of the successful return from the Hiri Trade route, of the traditional canoes called *lagatois*, made by the original land owners of Port Moresby and surrounding villages. The Hiri Trade played a significant part in the lives of many Motuan people, as it was a trade expedition between the Motuans and the villagers along the Gulf of Papua coastline, with whom the Motuans traded clay pots for sago. The festival is not just a celebration and showcase of Motuan culture but involves other tribes whom the Motuans traded with throughout their history, which include the people of the Gulf, Mekeo, Hula and Koiari. The Hiri Hanenamo contest is a popular attraction at the festival, where young Motuan women vie to be crowned 'Hiri Queen', based on their knowledge and display of traditional Motuan culture.

Frangipani Festival

Rabaul, East New Britain—September

This festival celebrates the rebirth of Rabaul after the twin volcanic eruptions in 1937. Named after the frangipani flower, the town's signature bloom and the first plant to blossom in the midst of the ash, the festival brings together locals and former Rabaul residents in the spirit of renewal and to strengthen the partnerships in rebuilding one of Papua New Guinea's famous historical towns. Highlights include cultural sing-sings, including the incredible Baining Fire Dance and the Tolai Whip Dance, as well as rock bands, colourful float parades, spectacular fireworks and an exciting canoe race around the famous Beehives landmark in the Simpson Harbour.

Chocolate Festival

Buka, Bougainville—September

Cocoa farmers and producers of Bougainville meet in Buka to display their prized cocoa pods and beans. Chocolate-makers also make an appearance, exhibiting their products for chocolate fans, tasters and buyers. Other activities at the festival include chocolate-making process demonstrations, cultural performances, arts & crafts, live bands and children's games.

Dancers at the Bougainville Chocolate Festival

TOP: Karkar Island Bilum Festival, Madang Province

MIDDLE: Tribesmen playing the pipes at the Morobe Show in Lae, Morobe Province

BOTTOM: National Kenu & Kundu Festival, Alotau, Milne Bay Province

Karkar Island Bilum Festival

Karkar Island, Madang Province—October

Highlights of the festival include a bilum pageant, *sing-sings*, live string bands, displays of bilum weaving, artwork and Karkar Island artefacts. On display are traditional bilums that follow cultural and modern designs. Karkar Island is located thirty kilometres from the mainland and is home to about 70,000 people.

Morobe Show

Lae, Morobe Province—October

The show is hosted by the Morobe Provincial Agricultural Society and showcases the various agricultural, industrial and commercial features of the province. The event also showcases the incredible cultural variety of Morobe, home to Papua New Guinea's second largest city of Lae. On display are exhibitions of Papua New Guinea culture, agriculture, horticulture, livestock, commercial businesses, NGOs and school parades. Some of the highlights of the Morobe show over the years have been motorcycle stunts, traditional dress beauty pageants, and rodeo style events.

National Kenu & Kundu Festival

Alotau, Milne Bay Province—November

Canoes and Kundu drums are widely used in traditional ceremonies and rituals practised by Milne Bay people. As vessels of travel and enjoyment, they are meticulously crafted from special woods under strict customs to derive the best results. The canoes that feature at the festival include trade vessels and war canoes, crafted using the same techniques used thousands of years ago. Festival highlights include sing-sings, canoe races and the arrival of the war canoes.

Cultural dancing groups featured at the festival come from all over the Milne Bay Province, including some parts of the Papuan Region, creating a rich variety of performances. Prizes are given to winners of the canoe races who assemble a day earlier at Wagawaga Island to form a convoy before sailing to Alotau for the official opening ceremony. Other activities include arts and craft displays, string band competitions and traditional and contemporary drama performances.

Sport & Activities in PNG

Sport is an Important part of the Papua New Guinea national culture, with the nation participating at the Pacific Games, the Commonwealth Games, the Olympics, the Paralympics and the Youth Olympics. Port Moresby's sporting venues are world class following a recent upgrade to host the Pacific Games in 2015.

PNG competed at the 2018 Commonwealth Games at the Gold Coast, where Stephen Kari received a Gold Medal and Dika Toua and Morea Baru also received Silver Medals for weightlifting. PNG competitors participated in ten disciplines of sport at the games.

Rugby League

This is the national and most popular sport in PNG. The Papua New Guinea national rugby league team is known as the Kumuls (pronounced *Coomools*), a *Tok Pisin* word for a bird-of-paradise. The Kumuls have bested all other International Board countries except Australia.

The Papua New Guinea Hunters (PNG Hunters) are a professional rugby league football club based in PNG.

The annual Australian State of Origin matches are the most watched sporting event of the year.

PNG Prime Minister's XIII

This is a representative rugby league team comprising Papua New Guinean players from the Papua New Guinea National Rugby League, PNG Hunters and overseas clubs. The team is selected to play an annual fixture against the Australian Prime Minister's XIII in Papua New Guinea in the final weeks of the rugby league season.

Notable PNG Players

David Mead, captain of the PNG Kumuls in the 2017 Rugby League World Cup, has been playing rugby league at the highest level for a decade now.

Will Genia is a PNG-born Australian Rugby Union player. He became the seventy-eighth Test Captain of the Wallabies when he led the side against the United States at the 2011 Rugby World Cup.

Adrian Lam is a Papua New Guinean rugby league football coach and Papua New Guinea Kumul. He is one of only a few players to have played State of Origin for Queensland and for a country other than Australia. He is also the only player to be captain of a Queensland side and captain of a national team other than Australia.

TOP: Steven Kari winning his Gold Medal in the 2018 Commonwealth Games

MIDDLE: PNG Rugby League team in the 2017 World Cup

BOTTOM: Some of the PNG National Cricket Team in 2018

PNG Orchids

This is the women's national rugby league team and is administered by the Papua New Guinea Rugby Football League.

The Australian aid-backed Orchids played their first international competition against Australia's Jillaroos in 2017 and, following that, the Brisbane Broncos NRL women's team at Lang Park, just a week before the NRL Women's Premiership Season. Most Orchids players are survivors of gender violence and a woman would once have faced violent attack for violating cultural expectations if caught playing with a ball.

In the lead up to and during the Rugby League World Cup, the journey of this phenomenal group of women was filmed. This film is for rugby league fans, for sports fans, for feminists. But most of all it is for people who believe in the power sport has to drive social change.

Cricket

The Papua New Guinea national cricket team, nicknamed the Barramundis, is the team that represents the country of Papua New Guinea in international cricket. The team is organised by Cricket PNG, which has been an associate member of the International Cricket Council since 1973.

At the elite level, CPNG have three main national teams: the Barramundis (Men's), the Lewas (Women's) and the Garamuts (Under 19). In late October 2018 the Hebou PNG Barramundis finished the Hong Kong Tour by claiming the South China Cup, despite losing the final match to Hong Kong 35/45.

Australian Test legend Jason Gillespie was coaching the PNG Barramundis ahead of a ODI series against Scotland in late 2017.

Papua New Guinea is the strongest team in the ICCC East Asia-Pacific region, winning most ICC regional tournaments and having a similar record in the cricket tournament at the Pacific Games. Papua New Guinea holds the world record for the highest score in a one-day match, making 572/7 against New Caledonia in 2007.

Cricket was introduced in Papua New Guinea (PNG) by missionaries from the London Missionary Society in the early 1900s. Initially, matches were not always played with strict rules, with teams fielding over fifty players a common occurrence.

Forty-eight cricket pitches will be built and installed across Papua New Guinea over the next two years, which is expected to boost overall playing numbers by up to 30,000. The US$400,000 project will be paid for out of the 2015 Cricket World Cup Community Facility Fund, a joint legacy project by the ICC, Cricket Australia and New Zealand Cricket, in partnership with the Australian Government.

Netball

The PNG Netball Federation (PNGNF) was established in the 1960s and has become the largest women's sport in PNG, catering for more than 10,000 members, with countless more playing socially and in village competitions across the country

Outdoor Activities

Trekking

Magnificent trails and tributaries offer a range of intensities making this an ideal destination for trekking and bushwalking. Popular are the Kokoda Trail, the Lark Force Wilderness Track or an expedition to summit PNG's highest point, Mt Wilhelm (4,509 m).

Birds, Butterflies & Orchids

Touted widely as a birdwatcher's paradise with over thirty-eight varieties of birds-of-paradise, including famous endemic species such as the Raggiana and blue bird-of-paradise

Trekking the Kokoda Trail

TOP: Queen Alexandra's Bird-wing Butterfly *(Ornithoptera alexandrae)*

MIDDLE: Scuba diving amongst the coral reefs at Walindi Resort, Kimbe

BOTTOM: Marlin fishing in the Conflict Islands, Milne Bay Province

and rare finds including the fire-maned bowerbird. From tiny whistlers and the world's smallest parrot to giant flightless omnivores, and even the world's only poisonous bird species, the birdwatching options are as diverse as the culture.

Papua New Guinea's Queen Alexandra's Bird-wing, the world's largest butterfly, boasts a thirty-centimetre wingspan. Previously found in Oro Province, logging in PNG is remorselessly devouring this endangered butterfly's habitat.

And, for those into beautiful flowers, PNG represents the largest percentage of all known orchid species in the world with an estimated 3,000 types out of a total of some 30,000 known orchids throughout the world.

Scuba Diving

World-famous diving and an 'underwater photographer's paradise'—tourists enjoy a huge diversity of dive sites, including barrier reefs, coral walls and gardens, patch reefs, fringing reefs, seagrass beds, coral atolls, and wreck dive sites (ships, aircraft and submarines) teeming with underwater ecologies.

Fishing

PNG seas are littered with challenging catches such as marlin, sailfish, dogtooth tuna, yellowfin tuna, Spanish mackerel, mahi-mahi and plenty more. Bensbach Lodge, near the border of Irian Jaya, is famous for anglers after barramundi, and the waterways near Kandrian, West New Britain Province are famous for the Papuan Black and Spot Tail Bass. An annual game fishing tournament is held each year close to Easter.

Kayaking

With close to 600 different islands there's plenty to kayak throughout PNG's more remote and uninhabited islands—famous for stunning coastlines, colourful coral reefs, sea turtles, schools of playful dolphins and various fish jumping out of the water.

Surfing

PNG has the world's best surf waves and reef breaks with year-round action at Vanimo in West Sepik, Wewak, Madang and Kavieng.

PNG's Long Road to Freedom

European Discovery

Early settlement on the island of New Guinea took place over 40,000 years ago. When, in the 1960s, draining of the Wahgi Valley swamps began near Mount Hagen to make way for tea plantations, evidence of early agricultural practices was uncovered. It is possible that some of the early arrivals did indeed settle, and gave up a hunter-gatherer system in favour of gardening.

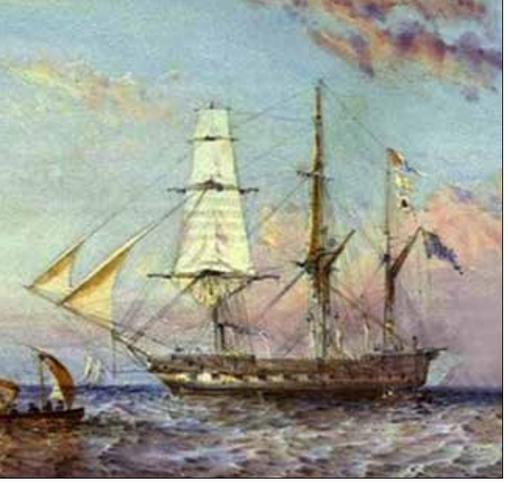
Beautifully carved stone mortars and pestles are often found in the highlands leading to some speculation that there may have been long forgotten crops such as maize.

New Guinea was first sighted by European sailors from Portugal (António de Abreu in 1512) and Spain during the first half of the 16th century on their quests to exploit the 'Spice Islands' (Molucca Islands) of present-day Indonesia. The Portuguese came from the west, via the Indian Ocean, but the Spanish tended to sail from their new colonies in South America on the other side of the Pacific.

The Portuguese governor of the Moluccas landed at Biak and/or on the Vogelkop or Birdshead Peninsula, at the western tip of New Guinea in 1526 and named the region as 'Ilhas dos Papuas', or islands of the fuzzy-hairs. In 1545 De Retes (Spanish) sailed along the north coast, and named the island 'Nueva Guinea' due to what he perceived to be its similarity to Guinea in Africa. Early 17th-century Dutch explorers began recording sightings of New Guinea with Janszoon sailing along the west and north coast in 1606. In the same year Torres (Spanish) sailed westwards through the straits, which now bear his name. Ten years later Dutchmen, Le Maire and Schouten, surveyed the north-east coast and noticed the freshet of the Sepik River. In 1660 the Dutch East India Company recognised the Sultan of Tidore's sovereignty over 'the Papuan Islands in general'.

The early recognition of the Sultan's claims led, in part, to Indonesia's later assertions that, what is now West Papua, was formerly part of the Dutch East Indies. Indonesia gained its independence after WWII. When the Dutch withdrew from its old East Indies' empire, it retained control over what was known as Netherlands New Guinea. It took an Indonesian invasion and United Nations intervention for the Dutch to hand over the territory. It was formally integrated with Indonesia in 1963.

The island was generally perceived to be of little



TOP: 'HMS *Rattlesnake*', by Sir Oswald Walters Brierly, 1853

MIDDLE: British annexation of south-east New Guinea in 1884

BOTTOM: Members of the Australian Naval & Military Expeditionary Force (AN&MEF) survey the scene during the occupation of German territory by Australian forces

attraction for European settlement until the 19th century, when Dutch missionaries settled on Mansinam Island in what is now the Indonesian Province of West Papua. It was not until 1842 that the British started to pay any real attention to that part of New Guinea, east of the Dutch-claimed half (not formalised until 1848 when the Netherlands Indies Government laid claim in the name of the Sultan of Tidore).

First HMS *Fly* surveyed the western part of the Gulf of Papua in 1841. In 1849 HMS *Rattlesnake* sailed along the south-eastern coast from where the main range was sighted and named the Owen Stanley Range. Exploration of the inland areas (of PNG) commenced in 1876 when the Italian explorer, D'Albertis, sailed 580 miles up the Fly River.

What is now PNG received the attention of many passing ships flying British, French, Dutch, German and even Russian flags. In fact, the Russian explorer, Miklouho-Maclay, lived in villages near present day Madang in 1871–72.

In 1874 the London Missionary Society's Rev. WG Lawes and his wife settled in Port Moresby (named by British naval officer, Captain John Moresby, after his father, in early 1873). However, as was often the case in those days, it was the lure of gold that attracted the first arrival of Europeans in numbers. Reports of a discovery on the Laloki River, inland from Port Moresby, brought the first wave.

German New Guinea

By 1883 the British colony of Queensland realised the strategic value of the island to its north in light of the growing interest from rival powers such as France and Germany (and, no doubt, still saw the possibility of cheap labour for its sugar plantations). Queensland's attempted annexation of south-eastern New Guinea was thwarted by the British Government, which frowned upon a colony acquiring a colony of its own.

Nevertheless, with the growing interest of Germany in the eastern half of the island, after the Dutch had incorporated the western half into their East Indies colonies, London made a move. Spurred on by combined pressure of their eastern Australian colonies, the Union Jack was raised in Port Moresby in 1884, and the south-east of the island proclaimed a British Protectorate. It was titled British New Guinea (BNG). The Germans also raised their flag in what they named Kaiser Wilhelmsland, being the eastern part of the island generally north of the main range and including the islands of the Bismarck Archipelago. In 1884 Britain assumed sovereignty over BNG.

The Germans initially allowed their portion of New Guinea to be governed by the private sector—the Neu Guinea Kompagnie (NGK), which established its first settlement at Finschhafen in 1885. It was in that year Dr Otto Finsch, of the German Trading and Plantation Company, took a whaleboat some thirty miles up the Sepik River. In 1887 the steamer *Samoa* travelled 380 miles up the Sepik. Of course, most accounts of the early exploration by the Germans are written in that language. The Germans acquired large areas of land for their copra plantations and, by today's standards, exploited the country quite ruthlessly.

Despite that, older New Guineans who later lived under Australian rule, often referred to the pre-WWI years as 'the good times of the past' *(gutpela taim bipo).* The road built on New Ireland from Kavieng to Namatanai is still named the Boluminski Highway, after a former NGK official who later became the administrator of New Ireland, and preferred to inspect his area of responsibility by horse-drawn carriage.

European (both German and English) names are still prevalent and officially recognised on PNG maps. This does not necessarily imply any fondness or respect for former colonial powers but rather, perhaps, the number of languages in the country. A high mountain, visible to people of half a dozen languages would have as many different names. A long river might be known by scores of different names along its course. Retaining the old European name has perhaps caused less friction than trying to rename with a 'local' name.

In 1899 the German Government relieved the NGK of its administrative powers and transferred the capital of German New Guinea to Herbertshohe (present day Kokopo) in Neu Pommern (New Britain).

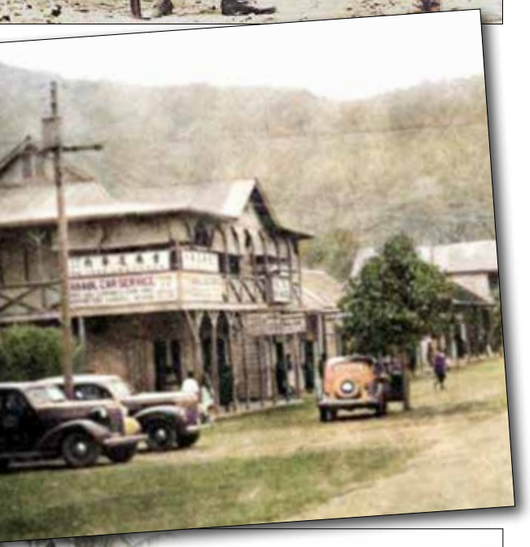
The islands of Bougainville and Buka were formally incorporated into German New Guinea in 1900, when an earlier agreement with Britain was ratified. This agreement recognised the latter's relinquishment of any claims to Samoa and Germany accepting Britain's control of other northern Solomon Islands to which it (Germany) had formerly laid claim.

In 1901, with the establishment of the Commonwealth of Australia as a nation, Britain transferred its sovereignty over BNG to Australia. In 1906 the Commonwealth Government passed the *Papua Act* and formally took possession naming its new acquisition as the Territory of Papua.

World War I

At the outbreak of World War I Australia, too, declared war on Germany and sent an expeditionary force to capture the German radio station on the island of New Britain. The Australian Naval and Military Expeditionary Force (AN&MEF) was created from 1,500 volunteers and on 13 September 1914 they landed at Rabaul and raised the Australian flag.

A party of naval reservists went inland to Bita Paka to take the Kokopo wireless station but ran into opposition. A short battle resulted in deaths and injuries on both sides and a German surrender. Australia thus took occupation of the radio station and nearby town



TOP: New Guinea local troops were trained by German reservists at drill, shortly before the arrival of Australian forces, WWI

MIDDLE: The main street of Rabaul, 1941

BOTTOM: Evacuating residents from Rabaul to a steamer on the north coast, in the face of the approaching Japanese

of Rabaul. Part of Australia's naval task force was the submarine, *AE1*. It was lost with all crew near the Duke of York Islands, close to Rabaul. The wreck was not found until 2018, when it was confirmed that it was not enemy action that caused the disaster but, probably, human error or mechanical fault.

Territory of New Guinea

The League of Nations, which was created after the war, gave Australia a mandate over former German New Guinea as part of the break-up of the old empire. The Mandated Territory of New Guinea remained under Australia's control until the Japanese invasion of World War II. However, its administration remained separate from that of Papua. It had its own Australian-appointed administrator, and was ruled with a firm hand adopted from the Germans and somewhat racist policies, maybe inherited from Queensland. Some of the best land in the territory had been acquired, by various means, by the Germans and became freehold plantations. This was the cause for growing resentment, especially in densely populated areas such as Rabaul on the Gazelle Peninsula.

On the other hand, Papua came under the somewhat benevolent leadership of Lieutenant-Governor Murray who was appointed in 1908, and remained in office until his death in Samarai in 1940. Murray ensured that the traditional landowners' rights were protected and very little land was allocated. Most land required by both government and private enterprise had to be first purchased from the Papuans by government and then leased to the private sector and missionaries. Many whites, especially planters and the directors of large trading companies (many of which had plantation interests) were opposed to Murray's policies.

Murray's policy of 'peaceful penetration' saw some epic exploration patrols. Some of these became the subject of what became bestsellers of the time as with Ivan F Champion's, *Across New Guinea from the Fly to the Sepik*, first published in 1931 and reprinted in 1966. Jack Hides wrote four books on his patrols into remote parts of (then) Papua which were very popular in the late 1930s.

World War II

The Fall of Rabaul

In January 1942, after three weeks of air bombardment, the town of Rabaul, provincial capital of New Britain—in the Australian Territory of New Guinea—was attacked by the Japanese from the sea, and overwhelming odds soon broke the defence. It was the first Australian town ever to be attacked—Japanese aircraft carriers and bombers were involved, the end result was devastation and many hundreds of Australian civilians and soldiers killed.

The Japanese made it a Pacific fortress from which they launched the Kokoda and Buna campaigns among many others, and the Battles of Midway and Coral Sea. Up to 300,000 Japanese were garrisoned there from 1942–45, and five airfields hosted 300 bombers and fighters.

The Japanese then entered Lae and Salamaua, two locations on Huon Gulf, unopposed in early March 1942. The Battle of the Coral Sea followed in May, when the Allies achieved a crucial strategic victory by turning the Japanese landing force back, thereby removing the threat to Port Moresby, for the time being.

Then, sadly, MS *Montevideo Maru*—a Japanese vessel transporting 845 members of the Australian 2/22nd Battalion, No. 1 Independent Company, and 208 civilian prisoners captured in New Britain—was torpedoed and sunk by the USS *Sturgeon* on 1 July, with the loss of 1,053 servicemen and civilians.

Courage, Endurance, Mateship & Sacrifice

The Kokoda Trail was a path that linked Owers' Corner, north-east of Port Moresby, and the small village of Wairopi, on the northern side of the Owen Stanley mountain range. It was connected to the settlements of Buna, Gona and Sanananda on the north coast.

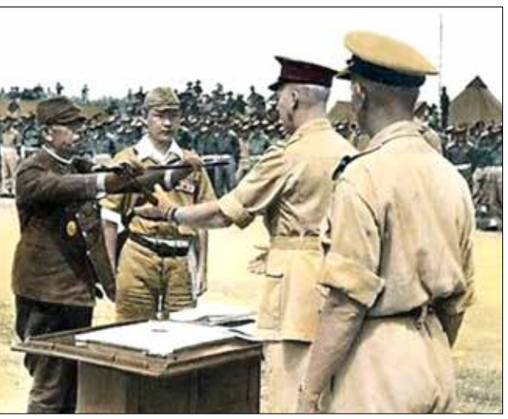
Having had their initial effort to capture Port Moresby by a seaborne landing disrupted by the Battle of the Coral Sea, the Japanese saw the Kokoda Trail as a means by which to advance on it overland. Troops of the South Seas Detachment began landing at Gona on 21 July 1942, intending initially just to test the feasibility of the Kokoda Trail as a route of advance, but a full-scale offensive soon developed.

The first fighting occurred between elements of the Papuan Infantry Battalion and the 39th Australian Infantry Battalion at Awala on 23 July 1942. Although steadily reinforced by the battalions of 30th and 21st Brigades, the Australian force was unable to hold back the Japanese. It was poorly equipped, had not yet developed effective jungle warfare tactics, and was fighting at the end of a very long and difficult supply line.

A number of desperate delaying actions were fought as the Australians withdrew along the trail. They finally stopped on 17 September at Imita Ridge, the last natural obstacle along the trail, a mere 8 km from the junction with the road to Port Moresby. The Japanese held the opposite ridge, 6 km distant at Ioribaiwa.

The tactical situation, however, had now swung in favour of the Australians. Their artillery at Owers' Corner was now in range and their supplies could be trucked most of the way forward; whereas Japanese supplies had to be carried all the way from the north coast.

As a result of severe losses suffered by the Japanese on Guadalcanal following the American landing there, the South Seas Detachment was ordered to withdraw to the north coast of Papua and establish a defensive position there.



TOP: Raphael Oimbari, from Hanau Village, leads Australian soldier Private George Whittington along the track from Buna through Seremi Village to the main dressing station at Dobudura *(Photo by George Silk)*

MIDDLE: Australian soldiers at Sanananda during WWII

BOTTOM: Lieutenant General Adachi hands over his katana sword as a symbol of surrender of the Japanese 18th Army to Major-General Robertson of the Australian 6th Division

Australian troops of the 25th Brigade began to edge forward from Imita Ridge on 23 September; the Japanese withdrew from Ioribaiwa the next day. In the course of their retreat the Japanese fought delaying actions every bit as determined as those of the Australians.

Several difficult and costly battles were fought before the 16th and 25th Brigades crossed the Kumusi at Wairopi in mid-November heading for even more bitter fighting around the Japanese beachheads at Gona, Buna and Sanananda.

The Kokoda Trail fighting was some of the most desperate and vicious encountered by Australian troops in the Second World War. Approximately 625 Australians were killed along the Kokoda Trail and over 1,600 were wounded. Casualties due to sickness exceeded 4,000. Those Australians who died on the Trail are buried at the Bomana War Cemetery outside Port Moresby.

The story of Kokoda is one of courage, endurance, mateship and sacrifice. These qualities are declared on the Australian memorial erected at Isurava, the site of a major attack by the Japanese in the last days of August 1942, in which both sides suffered heavy casualties.

Breaking the Japanese Spell

The Battle of Milne Bay, 25 August–7 September 1942, was the first major battle in the war in the Pacific in which Allied troops decisively defeated Japanese land forces—Allied morale was boosted and Milne Bay was developed into a major base, which was used to mount subsequent operations in the region. The Japanese drive to conquer all of New Guinea had been decisively stopped, and the Allies recaptured Gona and Buna in late 1942. The campaign continued until the final surrender of the Japanese, with the loss of approximately 7,000 Australian soldiers, sailors and airmen.

Final Japanese Surrender in PNG

This came one month after VP Day, on 15 August 1945—it marked the end of the war against Japan in the Pacific and the end of World War II. However, as celebrations reverberated around the world, isolated groups of Japanese continued fighting in PNG.

In the Aitape-Wewak region, General Adachi of the Japanese XVIII Army had vowed to fight to the end. It was not until 13 September, almost a month after VP Day that he surrendered to Major General HCH Robertson, of the Australian 6th Division, at a ceremony at Cape Wom, near Wewak. By then General Adachi's once proud army of 100,000 men had been reduced to about 13,000. His men died on the battlefield, from disease and from starvation. Earlier the Japanese had defended Wewak with utmost heroism.

Several hundred 6th Division troops were present at the surrender ceremony, when General Adachi was ordered to hand over his sword. He appeared very taken aback before taking two paces to the rear, stopping for a few moments, then handing his sword to Major-General Robertson. General Adachi was escorted to the surrender table by two Australian Army military policemen.

The Aitape-Wewak campaign, along with the campaigns on Bougainville and New Britain, came in for considerable criticism from both Australian and Japanese officers, who found it difficult to understand why such aggressive actions should be fought as the war was ending.

Senior Australian officers, including General VAH Sturdee and Brigadier HH Hammer, referred to the 'military futility' of the campaigns. Japanese staff officers on Bougainville believed the campaigns were 'absolutely pointless', and that world prestige gained by Australia would not compensate for the loss of life and equipment. On the other hand, it was argued that the campaigns were justified as there was an obligation to liberate the people of PNG as quickly as possible from Japanese rule because, in many areas, Japanese occupation was creating terrible privation.

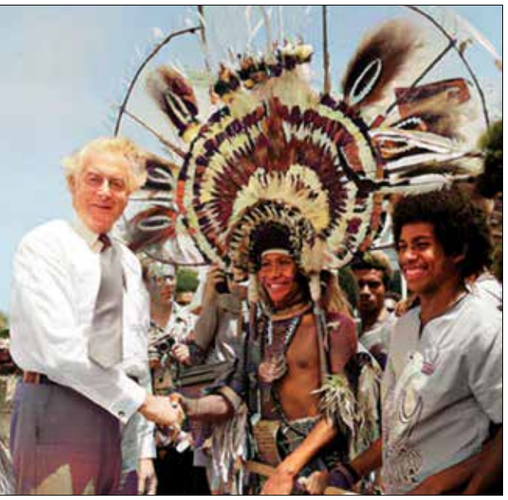
Territory of Papua & New Guinea

After the Japanese surrender in 1945, the *Papua-New Guinea Provisional Administration Act* was passed by Canberra. The following year civil administration was restored completely to Papua-New Guinea and a trustee agreement for New Guinea was approved by the General Assembly of the United Nations.

The joint administration of the Australian Territory of Papua and the Trust Territory of New Guinea (TP&NG) was formalised with the passing of the *Papua and New Guinea Act* in 1949. This Act also provided for a legislative council. Australia decided that the two territories, under one administration, should eventually be granted independence as one country.

The Labor Government, under Gough Whitlam, decided to accelerate the progress to independence despite the reluctance of many Papua New Guineans, especially the highlanders. Most Australians believed that it came too soon.

Canberra may also have been influenced after the Tolai people of the Rabaul area murdered the Australian District Commissioner, Jack Emanuel, in 1971. The Tolai had lost most of their prime land during German times, and they were also divided over the introduction of taxation imposed by the introduction of a local government system—a multi-racial one to which many objected. A number of riots took place in the 1960s and early 70s which had to be suppressed with heavy police intervention. The murder of Emanuel shocked all Europeans and many educated Papua New Guineans. He was awarded the George Cross, posthumously.



TOP: Sir John Guise receives the Australian Flag

MIDDLE: HRH Prince Charles at the Independence Day celebrations, 1975

BOTTOM: Australian PM, Gough Whitlam, at Independence Day celebrations in 1975

Papua New Guinea Independence

Elections in 1972 resulted in the formation of a ministry headed by Chief Minister Michael Somare, who pledged to lead the country to self-government and then to independence, and on 1 December 1973 Papua New Guinea became self-governing.

Prior to Independence, the status of the indigenous people of PNG differed as Papuans were regarded as Australian citizens—whereas New Guineans, who might have been considered as wards of the United Nations, were officially Australian Protected Persons (APP). With Independence Australia and PNG each passed legislation, which basically stripped Papuans of their Australian citizenship. Section 65 of the Constitution of PNG provided for any person born in the country before Independence having two grandparents who were born in the country to be an automatic citizen.

16 September 1975

Papua New Guinea achieved their independence on 16 September 1975, and became a constitutional monarchy with membership of the British Commonwealth, the thirty-seventh country to do so. The new country also joined the United Nations (UN) by way of Security Council Resolution 375 and General Assembly Resolution 3368.

Officiating at the main ceremony, held in Port Moresby, were His Royal Highness Prince Charles, Prince of Wales (representing Queen Elizabeth II, the British monarch); Sir John Kerr, Governor-General of Australia; Australian Prime Minister, Gough Whitlam; Sir John Guise, Governor-General Designate of Papua New Guinea and Michael Somare, who became the country's first Prime Minister.

When the Australian flag was lowered in Papua New Guinea on 15 September 1975, Sir John Guise noted that the Australian flag was being lowered, not torn down. His statement reflected the positive spirit in which the Independent State of Papua New Guinea was established—to the credit of both the leaders of Papua New Guinea and the Australian Government.

At one minute past midnight on 16 September 1975, the Proclamation of Independence was issued.

Looking to the Future

Papua New Guinea is the only country with which Australia actually shares a border—across the Torres Strait in Far North Queensland. Port Moresby, the capital city of Papua New Guinea, is located three hours' flying time north of Brisbane, and one and a half hours from Cairns.

Australian business visitors require a visa issued in advance by a Papua New Guinea consulate in Sydney, Brisbane or Cairns. The possession of a valid APEC Business Travel Card obviates the need for a visa.

There are very strong business connections between Queensland and Papua New Guinea, with regional Queensland business centres in Cairns, Townsville and Mackay.

Two-way merchandise trade between Australia and PNG was worth AU$6.3 billion in 2019–20 and total trade worth AU$6.7 billion in 2018. According to official Australian Government statistics major Australian exports to PNG are crude petroleum, civil engineering equipment and parts, meat and wheat. Major imports to Australia are gold, crude petroleum, coffee, silver and platinum.

Papua New Guinea is Australia's nineteenth-largest export destination in goods, and the eighteenth-largest source of imports into Australia. Goods destined for Australia comprise thirty per cent of Papua New Guinea's exports. Prior to the global pandemic and resulting financial upheaval, Australian investment in PNG was worth A$18 billion. This was about double Australian investment in Indonesia. The resource sector has traditionally been a focus of this investment, particularly gold mining and oil and gas. Australian investment has also been directed towards light manufacturing, infrastructure and service delivery.

Papua New Guinea's economy is heavily dependent on the resources sector, and since independence in 1975 the economy has experienced a roller coaster of economic growth and contraction.

From the mid-2000s, PNG experienced over a decade of comparatively robust economic growth, with expanding formal employment opportunities and strong growth in government expenditure and revenues. This economic performance was driven by high international prices for PNG's exports (including for agriculture), conservative fiscal policies and construction activity related to the liquefied natural gas project. Economic growth peaked in 2014 with the commencement of exports from the PNG LNG Project.

Economic development across the country has been uneven. National infrastructure is poor. Less than twenty per cent of the population is able to connect to the national electricity grid. Internet connectivity is similarly limited, and is expensive.

The Prime Minister of Papua New Guinea has announced a plan to connect eighty per cent of Papua New Guineans to the national power grid by 2030, a goal which has been supported by the Australian Prime Minister's announcement in November 2018 that Australia would contribute substantial funding to the electrification of Papua New Guinea.

The Australian Government funded the development of the Coral Sea Undersea Cable, a fibre-optic cable from Sydney to Port Moresby (with a branch line to Solomon Islands) to provide world-class communications capability to Papua New Guinea, which was completed at the end of 2019.

Papua New Guinea has very significant potential for developing its agricultural sector.

TOP: Port Moresby's central business district

MIDDLE: Laying the Coral Sea Cable, connecting Port Moresby, Honiara and Sydney

BOTTOM: Nivani, one of the largest civil construction companies in Papua New Guinea, East New Britain Province

Currently there is commercial export production of a number of crops including copra, cocoa, palm oil, timber and fish. Lack of road infrastructure is an impediment to growth of agriculture. The Papua New Guinea Government has announced a plan for national road development across the country, but this will take time to realise.

A wide range of banking and finance facilities are available throughout Papua New Guinea. The banking sector is serviced by three major banks—ANZ, Westpac and Bank South Pacific. Outside the major centres of Port Moresby and Lae, there are a range of other business centres scattered through Papua New Guinea's provinces, including Alotau, Goroka, Kavieng, Madang, Mount Hagen, Rabaul and Tari.

Growth will rebound in the future, as LNG production ramps up to nine-million tonnes. This will be supported by a turn-around in the construction sector, with sponsors of several major projects in mining, transport and utilities expected to give the green light to investment over the course of the year. Non-mining business investment is also expected to improve. Public demand through government sponsorship of infrastructure projects is also expected to add to growth.

Construction will very likely take off in the 2020s and strong sustained growth is forecast into that decade. Next decade, PNG can look forward to a different set of challenges, and that will be associated with managing a stronger economy.

Reprinted from an article by Frank Yourn, Executive Director at the Australia-PNG Business Council

Australia's interest in PNG's success will endure and even grow over the next forty years. Apart from its geographic proximity and consequent security relevance to Australia, PNG's growing population, the growth of its trade with Australia and with Australia's primary trading partners, its vast endowment of natural resources its agricultural potential and its expanding regional leadership ambitions mean it will be an important partner for Australia forever.

Remembering the Fallen

There were many who put their lives on the line during WWII—their achievements in Papua New Guinea were critical to victory in the Pacific War against the Japanese. These successes, and also the inevitable human price—about 150,000 Japanese soldiers died, nearly 12,000 allied soldiers were killed, and it's not certain how many Papua New Guineans died—are commemorated by official memorials across the country.

The most significant are the **Bita Paka War Cemetery** at Rabaul, which contains the Australian and Commonwealth graves of those killed during operations in New Britain and New Ireland during World War II, or who died while prisoners of war. The cemetery also contains World War I Australian and German graves of those killed during operations in the Occupation of German New Guinea, which were relocated to the cemetery; the **Milne Bay Memorial** at Alotau, commemorating the Battle of Milne Bay in 1942; the **Port Moresby Memorial** in Bomana War Cemetery, for those who gave their lives during the operations in Papua and who have no known grave; the **Isurava Memorial** on the Kokoda Trail; the **Coastwatchers' Memorial** at Madang; the **Popondetta Memorial** in the Northern Province, commemorating those who fought in the battles for Buna, Gona and Sanananda; the **Rabaul 1942-45 Memorial** honours all those who lost their lives in the air, on land and at sea in the defence of New Britain—it also features a cairn in remembrance of the torpedoed Japanese ship, MS *Montevideo Maru*; the **AIF Memorial** at Lae, commemorating battles in the Salamaua, Nadzab and Lae areas; the **Surrender Memorial** in Wewak; the **Wau Memorial** salutes the force composed of Australians and New Guinea Volunteer Riflemen (NGVR), who fought a desperate defensive battle against the Japanese who advanced from Salamaua in early 1943.

There are also many individual memorials, mostly put in place as the result of private effort and subscription. These include cities and towns throughout Australia and Papua New Guinea, along with a display at Westminster Abbey in London.

Rabaul and Montevideo Maru Memorial, Canberra

On 22 June 1942, after the Fall of Rabaul, arrested members of the Australian 2/22nd Battalion, No. 1 Independent Company, and civilian prisoners captured in New Britain, were ordered to board the MS *Montevideo Maru*—a Japanese passenger vessel used by the Imperial Japanese Navy during WWII as an auxiliary vessel transporting troops and provisions throughout South East Asia. Only the officers and a small number of civilians were left in the Malaguna Road camp. *Montevideo Maru* sailed unescorted for Hainan Island, keeping to the east of the Philippines in an effort to avoid Allied submarines.

On 1 July 1942, *Montevideo Maru* was spotted by the American submarine, USS *Sturgeon*, which manoeuvred into position and fired its torpedoes. The ship sank by the stern in as little as eleven minutes from their impact. Although the Japanese crew were ordered to abandon ship, it does not appear they made any attempt to assist the prisoners to do likewise. Of the eighty-eight Japanese guards and crew, only seventeen survived the sinking and subsequent march through the Philippine jungle.

While the exact number and identity of the more than 1,000 men aboard *Montevideo Maru* has never been confirmed, Japanese and Australian sources suggest an estimated 845 military personnel and up to 208 civilians lost their lives in the tragedy.

TOP: Bita Paka Cemetery at Rabaul
SECOND: Port Moresby Memorial
THIRD: Isurava Memorial, Kokoda Trail
BOTTOM: Rabaul and Montevideo Maru Memorial, Canberra ACT

The Rabaul and Montevideo Maru Society was established in 2009 to represent the interests of the families of the soldiers and civilians captured in Rabaul and the New Guinea Islands after the Japanese invasion in January 1942. The major objective of the society was to have a memorial erected in memory of those lost.

This objective was achieved when a memorial was unveiled at the Australian War Memorial on 1 July 2012—the seventieth anniversary of the sinking of the unmarked Japanese prison ship. The memorial is in the Australian War Memorial's award-winning Eastern Precinct, which commands views across the National Servicemen's Memorial and ANZAC Parade and positioned not far from the bronze sculpture of Sir Edward 'Weary' Dunlop.

The memorial was unveiled by Her Excellency Ms Quentin Bryce, AC, CVO, Governor-General of the Commonwealth of Australia, who gave the keynote address, and laid a wreath at the sculpture. She said that on one night in 1942 nearly twice as many Australians lost their lives as did in the ten years of the Vietnam War. The men who died will always be in the hearts and minds of their loved ones but now, in this special place, we have a tangible reminder of their story in the form of a splendid new memorial by the artist, James Parrett, whose sculpture brought together abstract form and concrete loss. Large sweeping curves conveyed the power of the sea and the magnitude of the tragedy.

The dedication of the Rabaul and Montevideo Maru Memorial, attended by 1,700 people—many in their eighties and nineties—brought families from all over Australia and Papua New Guinea together. It was a special time, which provided great comfort drawn from a shared tragedy.

Following this the Rabaul and Montevideo Maru Society was integrated into the Papua New Guinea Association of Australia Inc. (PNGAA).

In 2017, to commemorate the seventy-fifth anniversary, the PNGAA published *When the War Came: New Guinea Islands 1942*, a collection of personal stories of those who faced WWII on Australian territory and our greatest maritime disaster—the sinking of *Montevideo Maru*.

Building the Nation

Papua New Guinea is a fast-growing country and, as Australia's closest neighbour, it is in our best interests to help it develop and prosper into the future. Our two nations are connected through foreign investment and trade, aid and are working towards agreement on environmental and sustainability issues. However, numerous people and groups were responsible for helping to make Papua New Guinea the nation it is today—business people, shopkeepers, teachers, public servants, bank officers and many others. Obviously, there are too many to mention here, but we feature some who certainly were an integral part of history.

The Chinese

Chinese were a vital, and sometimes vibrant, part of New Guinea's history; perhaps closer to villagers than other non-natives. In the early years of the German Protectorate they provided much-needed services, but their relentless zeal to improve their position saw them challenge European commercial dominance with predictable results. The history of New Guinea would be the poorer without them.

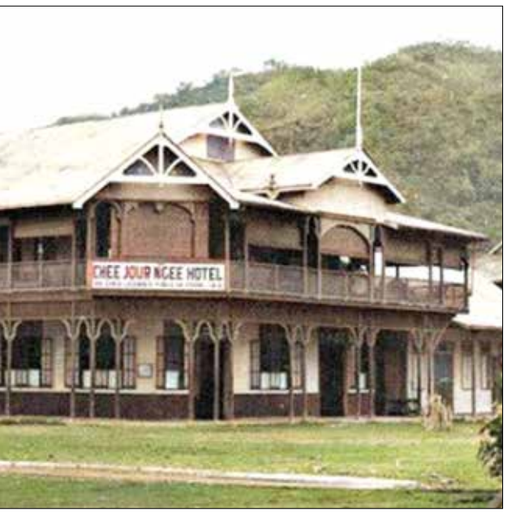
Needed—but not wanted, Chinese in Rabaul 1884–1960,
P Cahill, CopyRight Publishing Brisbane, 2012

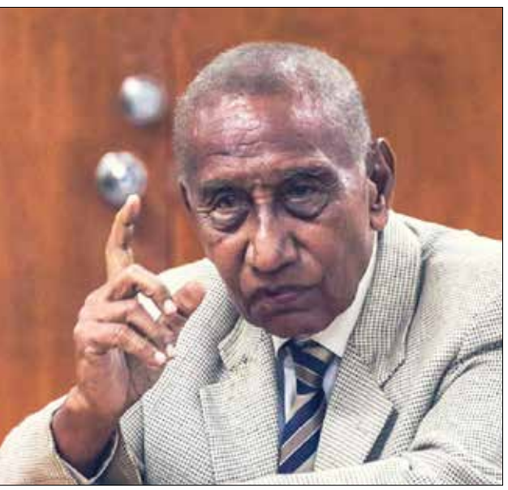
Early Migration to PNG

Taishan, Kaiping, Enping, and Heshan in the Pearl River Delta, are the four counties of south-western Guangdong Province, which were known as Sze Yap (now Wuyi). During the late 1800s to early 1900s, a large exodus of workers from the region occurred. It consisted mainly of men of working age, who sailed overseas via the port of Hong Kong and or the Malacca Straits to seek their fortune.

Most of the migrants from Kaiping and to a lesser extent, Taishan, headed for North America, Australia, New Zealand and Papua New Guinea. Some of these men returned home, but others never returned due to illness, misadventure or other reasons. The lucky ones went on to make a new life in their adopted homeland.

From 1885, the northern part of New Guinea, was under German administration, initially via a chartered company, Neu Guinea Kompagnie, then after 1900 by the German Imperial Government. They contracted Chinese and Malay workers to work in the plantations as 'coolie' labourers, cooks, and tradesmen. In the absence of workers' rights and high mortality rates, the Chinese formed their own associations to look after the welfare of members and newcomers. They





TOP: Platoon of German Reservists in German New Guinea, 1914

MIDDLE: Ah Chee's Cosmopolitan Hotel, Rabaul

BOTTOM: Sir Julius Chan, KBE, second Prime Minister of PNG (1980–82)

organised clubhouses for meetings and gave the members a place to stay whenever they came to Rabaul from the plantations. The Chinese and Malay workers made up significant numbers, and there were about twenty Chinese associations going during that period.

When their contracts expired, some of the workers chose to stay in New Guinea, and typically established trade stores and bought plantations. Wives, who had been left in China, were sent for; intrepid bachelors went back to China to seek a wife, one that would be resourceful enough to thrive in the tropics; others took local wives—they were all in for the long haul.

WWI & Citizenship Status

After WWI, under the League of Nations/United Nations the Territory of Papua and New Guinea became a Mandated Territory of Australia. The residency status of the remaining resident Chinese families was problematic for the administration. It was not until 1957 that the contentious matter of citizenship was resolved, and eligible Chinese were able to be naturalised. It is estimated that about 2,700 Chinese were eligible. Today, the matter is still contentious for some individuals, especially for those descendants with indigenous lineage.

As social attitudes changed, so too did various legal restrictions, such as property ownership, travel and residency within the Territory of PNG, voting, etc. To illustrate with a family anecdote: During the 1950s, the 'Rabaul Public Baths Reserve' did not allow entry to non-Europeans. A young Joe Chow and his mates, being the tearaways of their day, decided to protest clandestinely by dumping engine oil into the pool one night, taking care to avoid the local Tolai Police Patrol. Apparently, the club policy was amended to be more inclusive.

WWII & the POW Camps

WWII was a pivotal moment for everyone in New Guinea and the Chinese were no exception. The Japanese Imperial Forces took control of Rabaul in January 1942 and detained all the surviving citizens in various prisoner-of-war (POW) camps in the jungle for the rest of the war period. The POW camp at Ratongor held the Rabaul Chinese. Charles Dowson Bates, a kiap (patrol officer) later recalled in his memoirs:

Days after the war ended, I found some 1,500 Chinese people, men women, and children, living in a very confined space and tumble-down shacks, guarded by Japanese.

Those who escaped detention, took their chances in the jungles of the Bainings, New Ireland and Bougainville. In March 1943, a few Chinese families were evacuated to Australia by an American submarine, the USS *Gato*, off Teop beach, Bougainville. Captain Robert Foley's log of that rescue mission is a heartwarming record:

> ***29th March, 1943:*** *Clear of channel. Ships company helped our passengers to settle in. All were 'troupers' and quickly adopted by the ship's crew. The adoption was reciprocal. Typical example, one 10-month-old child would sleep nowhere but in the arms of a bearded torpedoman who manned the telephone at the forward tubes. They made a weird-looking picture.*
>
> *Brief impressions of Gato's incongruous family. The children—through a cycle of awe, apprehension, mischief, ravenous & unwilling to sleep. The mothers—distraught, then trustful. The nuns—benign and patient. The soldiers—'Haven't you some dirty jobs we can help you with?' and 'Is there any beer in Brisbane'. The Gato crew—clumsy but enthusiastic volunteer nursemaids.*

Mission Work

Christian missions and predominantly the Catholic missionaries have been a cultural force in PNG. From about 1910 many of the Rabaul-based Chinese were gradually converted to Catholicism and attended both the church schools in Rabaul. Later on, many of the early baby-boomer generation attended boarding schools in Australia—it was the beginning of a close bond.

Indeed, many of that generation and their families eventually moved from Papua New Guinea to live in Australia. Two motivating events prompted this second migration process: the uncertainty surrounding the leadup to PNG independence in 1975, and the eruption of Rabaul's volcano in September 1994.

Achievements

The path to success was slow for most families, occurring over generations. One of the successful ventures of the 1920s was Ah Chee's Cosmopolitan Hotel in Rabaul. It was one of tropical Rabaul's premier establishments and counted the dashing actor, Errol Flynn, as one of its guests. Ah Chee's son, Chin Hoi Meen, was a keen photographer, and also successful businessman of his time.

Another member of the Chinese community who has achieved prominence is Sir Julius Chan, KBE, who was the second Prime Minister of PNG (1980–82, 1994–97). His father was Chin Pak, who was born in Taishan, China, and was a trader with shipping interests in PNG; his mother was a *local* or indigenous woman from New Ireland.

In sport, brothers, David and Jackson Seeto, were inducted into PNG's Sports Hall of Fame in 2016. They represented PNG at two South Pacific Games during the 1960s. Jackson, an allrounder, first won a bronze medal in basketball at the first SPG in Suva, Fiji, and then later took the gold medal in weightlifting (featherweight class) in 1966, while David won a silver medal.

Today, a few of the descendants of the old PNG Chinese families still live and work in PNG. For example, James Pang, a businessman, philanthropist and hotelier. Byron Chan (Sir Julius' son), was the Member of Parliament for Namatanai, southern New Ireland (2002–17).

TOP: David & Jackson Seeto, with their sporting medals

MIDDLE: Missionary George Brown with a group of men on Woodlark Island, Milne Bay Province, 1890

BOTTOM: Methodist missionary, Rev. Thomas and Mrs Simpson with the mission boat on the wharf on New Hanover Island, before WWII

A new wave of migrant workers is filling the void as PNG develops, becoming more populated and urbanised, and as Australians are more reluctant to take up opportunities/risk there. Chin (James Chin, *Chinese Diaspora Studies, Vol. Two*, 2008) has categorised the newcomers into two groups: the south-east Asian Chinese, which includes those from Indonesia, Malaysia and Singapore; and the second being mainland Chinese and Taiwanese. The main occupations amongst all of these groups is trading and the timber industry. Although Chin's study was done some ten years ago, the trend continues, with an increasing presence of workers sponsored by Chinese government infrastructure projects.

Conclusion

Some of the descendants of the old PNG Chinese families have built successful businesses in PNG and proudly continue to call PNG home, although for the most part, they maintain close links to Australia due to the multiple education and investment opportunities there. The majority of families have migrated permanently to Australia and maintain a keen interest in the country of their birth and youth. Many of the community's Australian-born youths, like Dr Michelle Peate, a research fellow at Melbourne's Royal Women's Hospital, are making their mark in many different fields of endeavour in Australia.

Reprinted from an article by Patricia C Chow

The Missionaries

The first substantial missionary efforts did not occur until the late 19th century. In the 1880s and 1890s, missions of a variety of denominations arrived and began to work earnestly at converting the country to Christianity, which has had such a profound effect on Papua New Guinea that perhaps no traditional beliefs and practices remain unaffected by it.

Many early missionaries were insensitive to the cultural and religious rites and practices they found in PNG. They often destroyed, or persuaded their converts to destroy, artefacts, images and even the *haus tambaran*, the important spirit house in the village, because they were regarded as inappropriate in the light of the new faith. At the same time, the missionaries and certainly the churches have done a great deal to promote education, health, welfare and transport and may be regarded as the pioneers of PNG's contemporary infrastructure and social services. By crossing clan lines, they have also encouraged the people of PNG to think of themselves as one nation and have played a major role in this aspect of Independence.

London Missionary Society

In 1870 with increasing French influence in New Caledonia it was felt that the London Missionary Society (LMS) should expand its activities to Papua New Guinea, despite the fact that the climate was seen as harsh and the locals were viewed as 'savages'. Samuel Macfarlane set off on a fact-finding mission from North Queensland, Australia, with eight indigenous pastors and students. In June 1871 they landed at Hood Point, and discovered that a vast number of dialects were spoken, which were to cause problems for the establishment of the Papua missions. Darnley Island in the Torres Straits was initially used as the base, and indigenous teachers were left at various places to start work. The LMS was the only society able to provide both missionaries and indigenous teachers from various Polynesian islands.

In 1873 Port Moresby was discovered and a mission established. By 1874 Macfarlane supervised work in Papua, Rev. William Lawes was at Port Moresby, and work was also carried out in the Torres Straits Islands. The Torres Straits Mission was to last until 1915 when the Anglicans took over. Lawes, the senior missionary in the area, became the first permanent white resident of the New Guinea mainland, and indeed the late 19th and early 20th century was the pioneer period for the mission in Papua New Guinea.

Between 1877 and 1889 Murray Island in the Torres Straits was used as an LMS base, and the Papuan Gulf Native College was established to train indigenous teachers. Despite having the support of various chiefs, a number of these teachers were killed, and at times the missionaries were in danger. In 1884 south-east Papua New Guinea became a British Protectorate, and the missionaries were involved in organising the administration. By 1891 Kwato was the centre of the eastern mission. Work in Papua was divided with the Methodist Missionary Society of Australia and the Anglican Australian Board of Missions; the LMS served the southern coastline and stations inland from the coast.

The LMS undertaking in Papua was extensive in terms of area to be covered, and mission resources were limited. As well as the transfer of responsibility for the Torres Straits Islands to the Anglicans in 1915, in 1928 the Kwato property was finally transferred to the Kwato Extension Association. This was a body founded by the missionary, Charles Abel, which carried on industrial work independently from the mission. During the Second World War, many missionaries were evacuated from the island, and much of the coastal area was under Japanese military control. There were far-reaching social, economic and political changes after the war, such as increased transport links to the interior, a growing European expatriate population and a shift in population from the countryside to the towns.

From 1946, Australia administered Papua New Guinea as one unit, with self-government coming in 1973 and Independence in 1975. The church and the role of missions also changed in these postwar years, and the LMS instituted the New Advance program. By 1962 the work of the LMS became an autonomous church named Papua Eklesia, while the United Church in Papua New Guinea and the Solomon Islands was inaugurated in 1968.

TOP: Patrol Officer Bill Brown with police constables and village officials, Babangongo, Central Province, 1951

MIDDLE: Kiap Harry West shaking hands with a highlander, 1950s

BOTTOM: A group of cadet patrol officers are shown the Royal Papuan Constabulary police barracks at Sogeri, in the hills behind Port Moresby, 1950

The Kiaps

The Postwar Era

A tribute to those who followed in the tradition and footsteps of the pre-war 'outside' men in penetrating and establishing law and order in the primitive areas of Papua and New Guinea. Dame Rachel Cleland wrote – 'After all, when you saw a twenty-year old boy with perhaps five policemen keeping 30,000 warring tribesmen in happy harmony, you were just astounded at the thought, 'how does he do it!'

After World War II, when peace came to Papua New Guinea, many of the towns and other signs of development had been destroyed, native villages and gardens were devastated and plantations damaged or neglected. The job of reconstruction lay ahead, as well as the task of establishing good relations with the native people. There were primitive areas to be manned, and blank spots on the map that had to be brought under government control—places where cannibal warriors still practised all sorts of evil deeds.

Young Australian men, some not yet twenty years old, were selected and trained to serve in the Australian administration as patrol officers (kiaps) with the Department of District Services and Native Affairs (DDS & NA). This was a trail-blazer department, its kiaps manned the primitive areas or explored and opened up others, and when an area came under control, members from other departments and agencies, missionaries and commercial people moved in. Health was usually the next department into an area, then agriculture and education followed—and when outstations became towns, the police department sent in its European officers to handle police duties.

Until this happened, the kiap was the representative of all arms of government in his area. His main responsibility was law and order, he was given police powers as a member of the Native Constabulary and made a Magistrate of the Court of Native Affairs. He worked long hours and was on twenty-four-hour call, seven days a week. As well as district administration, familiarising himself with the people and the country, patrolling, court work and suchlike, the kiap needed a range of knowledge to be a 'Jack of all trades'. He had to plan and supervise the building of roads, bridges, houses, airstrips, wharves and hospitals and, as records had to be kept and reports written, he needed to be a competent clerical person. His ultimate aim was to build an orderly, prosperous and unified people living in peace and harmony, with independence from Australia the long-term goal. In the main the kiaps did not abuse the powers they held—pride gave them the integrity to handle their role and earn respect.

Reprinted from an article by Nancy Johnston, *Una Voce*, December 2003

Peter Ryan, the editor of *The Encyclopaedia of PNG*, wrote in the September 1995 issue of *Quadrant* magazine:

> *The enterprise, dedication, honesty and sheer bravery of the district staff, the 'kiaps' … were remarkable … the exploration and the pacification of millions were achieved at the cost of a few skirmishes. The law came, without which any general softening of life is impossible. In any event, I make no apology for this candid tribute to the kiaps, who wrote one of the most honourable pages in this country's history.*

During their tenure in Papua New Guinea, over 2,000 kiaps provided pacification, medical aid, and administration to some 11,920 villages in rugged and almost impenetrable terrain, and were required to collect a poll tax in remote villages from people who mostly had no money. These taxes were much resented by the village people, who had always been self-sufficient.

Only in 1963 were the last remote areas of PNG officially declared to be under government control, but by 1969 the wide-ranging powers of the kiap were being questioned, and petitions were being signed for their removal. Papua New Guinea became an independent nation in 1975, and the kiap system declined rapidly in influence.

Former kiap, Chris Viner-Smith, wrote in 2007:

IN MY EXPERIENCE, kiaps were often the first trickle of civilising stones down a remote mountainside and much followed in their wake. You had many important and difficult jobs to do, and you had to deal with native peoples whose respect and co-operation you needed. Consistency and fairness, not fear, were always the key to maintaining respect. It was frontline of civilisation in a dangerous place. Sadly, it broke the spirit of some.

These young men, these kiaps, were doing a tough job for Australia, though Australia had forgotten the frontier they walked. The world was a more peaceful place, at least in Micronesia. Conflicts were far away, in time or place. Australia had defended Kokoda, and retaken New Guinea and moved on.

But Papua and New Guinea had not moved on. It was still savage, backward and strange. Cargo cults had grown up after the war, as natives built mock aircraft and worshipped gods who never worked and never dropped food from the sky.

Then, as now, Australia was also sensitive about its relation with its neighbour, Indonesia, with its revolutionary communist government and all the dominoes Australia saw teetering in south-east Asia—and Micronesia. Yet within a decade, Australia would help Papua New Guinea take its infant steps as a fledgling democracy.

That's Australia's history. Our history. Honour is the respect we offer to the memory of glorious chapters in our history, no matter how few the number of people involved

TOP: Kiaps and appointed village officials (*luluais* and *tultuls*), 1950s

MIDDLE: Offices and accommodation for police being constructed by local indigenous men under the supervision of Australian kiaps in 1964

BOTTOM: Weekly parade and inspection at the May River Patrol Post, 1970

and no matter how secret or unspoken the events at the time. Honour is the wreath we lay at the feet of remembrance, a salute to courage. No kiap would put himself in the same class as a veteran of Kokoda, yet at the same time both share the remarkable heritage of being Australian and surviving against impossible odds to charge a new future for the world. That is worth remembering, respecting and honouring.

Reprinted from *Australia's Forgotten Frontier: The Unsung Police Who Held Our PNG Front Line*, Chris Viner-Smith, 2007

Police Overseas Service Medal

Christopher Viner-Smith was named in the 2015 Australia Day Honours list, with the citation: *The Medal of the Order of Australia in the General Division, for services to community history particularly through securing recognition for Patrol Officers in pre-independence Papua New Guinea.*

Chris said: 'I am certainly honoured to receive it and hope it opens a few more doors to Australia's understanding of the work done by the kiaps and indeed all of those Australians who served the government in developing TPNG.'

Many people were involved in securing the Police Overseas Service Medal (POSM) for Patrol Officers (Kiaps). Most notable amongst them are the Hon. Jason Clare, a minister in the then Labor Government, the Hon. Scott Morrison, a Liberal member of parliament, the Hon. Julia Gillard, the then Prime Minister, who recommended to the Queen that the criteria for the award of the medal be altered to include Kiaps and, of course, Her Majesty the Queen, who authorised the granting of this medal to us.

Several kiaps, including Mike Douglas, were also involved in securing the POSM for us and we thank them for their contribution. We are grateful to everyone who helped, but none of us would ever have received this medal without the tireless persistence and perseverance of Chris Viner-Smith.

Chris began his campaign for our medal in 2002, with a letter to the Hon. Dana Vale, Minister for Veterans Affairs, followed in 2003 by letters to the Hon. Chris Ellison, Minister for Justice and Customs, the Hon. Phillip Ruddock, Attorney General of Australia and the then Prime Minister John Howard.

Every year from 2004, Chris sent a series of letters and submissions to Prime Ministers John Howard and Kevin Rudd, various ministers and other Members of Parliament. Chris also met with various ministers, Members of Parliament, government agencies and NGOs in a monumental effort of extraordinary perseverance, to secure official recognition for us, but all to no avail.

Then, on 16 November 2009, Scott Morrison, MP, in the presence of several kiaps in the public gallery, rose in parliament to propose that kiaps be officially recognised.

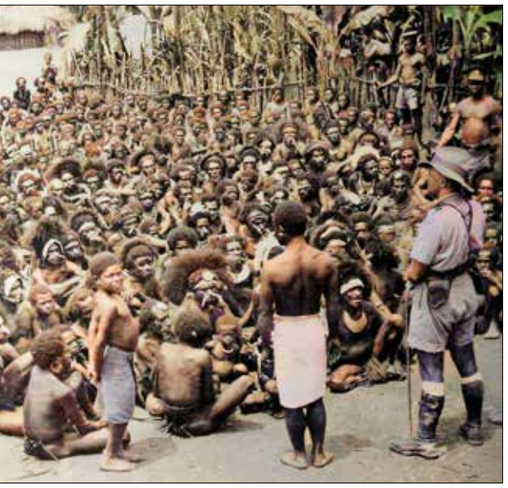
However, the Opposition rejected the Private Members Bill, and Chris then had to lobby the independents—Windsor, Oakeshott, Brandt and Wilkie and the Labor MP for Canberra, Brodtmann, who all supported him. Although the Bill was withdrawn there was enough support, especially from Canberra Labor Senator Lundy, to allow both sides to agree to seek a change to the POSM Letters Patent from the Queen and in 2013 we were granted our medal.

Those of us who have received the Police Overseas Service Medal owe it to Chris for his dedication, diligence and perseverance. His reward, justly deserved, is the Medal of the Order of Australia.

Thank you, and congratulations Chris Viner-Smith, OAM.

Reprinted from an article by Chips Mackellar in *Una Voce*, June 2015

Chris Viner-Smith and the Oriomo-Bituri Patrol leaving KIBULI Village, Western District, 1963



TOP: Raising the German flag at Mioko, East New Britain Province, 1884

MIDDLE: Patrol Officer Ian Skinner, with the help of his interpreter *(on left)* addresses an assembly of villagers, Eastern Highlands, 1939

BOTTOM: Patrol Officer Leigh Vial being carried by police across a river, 1939

Establishment of Government Stations

Compiled in 1964 by JK McCarthy, Director of Native Affairs, Konedobu, Papua, the following information records the establishment of government stations in New Guinea until the early 1960s.

1880s: Flag raised in 1884. New Guinea Company given sovereign rights in 1885. First administrator arrived Finschhafen. Stations established at Hatzfeldthafen and Madang and Sub-Station at Butaueng. First settlement on Tschirimoi Island, but soon moved to mainland. Stations established at Konstantinhafen, Matupi (later moved to Kerewara), Stephansort (Bogadjim) and Kelana.

1890s: Herbertshohe established as main station in Bismarck Archipelago. The business and administrative centre moved to Stephansort in 1891. The colony was divided into Eastern (Herbertshohe) and Western (Friedrich-Wilhelmshafen) Court Districts. The headquarters was moved to Madang in 1895. The German Government took over from New Guinea Company in 1899, and transferred the capital to Herbertshohe (Kokopo).

1900s: District of Nusa and station at Kavieng established, Finschhafen Station was re-established and Salamaua established as base for Huon Gulf Expedition. A police post was established at Toma along with stations at Namatanai, Kieta, Eitape and Bula. Police post established at Morobe and, in 1909, District Office transferred from Herbertshohe to Rabaul.

1910s: Central Government and Supreme Court transferred to Rabaul in 1910. Stations established at Manus, Angoram, Angrisshafen, Gasmata, Wewak and Lae, which had lapsed in 1914, was re-established.

1920s: Stations were established at Buka Passage, Buin, Marienberg and Ambunti. Districts of Rabaul, Talasea and Gasmata amalgamated with headquarters at Kokopo, Kavieng and Namatanai Districts were amalgamated.

1930s: ADO stationed at goldfields area at Wau, and Marienberg Station moved to Angoram. Station established at Kainantu in 1932 and a permanent base camp established at Otibanda and advance post at Finintegu. Base camps were also established at Kundiawa, Goromei and Bena Bena, with new posts at Tungu and Wakunai. Lae became a Sub-District Office in 1937 and stations were later established at Maprik, Gormis (Mt Hagen), Mai Mai and Bogia, with a base camp at Yapunda (Sepik).

The transfer of New Guinea Headquarters from Rabaul to Lae was commencing at the time of the occupation of Rabaul by the Japanese.

1940s: Goroka Station replaced Bena Bena in 1946, Minj, which was a base camp only until 1948–49, Wabag was taken over from the army, Kaiapit and Finschhafen were re-established and Mumeng established. Stations were established at Lumi, Pomio, Yangoru, Dreikikir, Telefomin. Henganofi, Wantoat and Wapenamanda.

1950s: Stations established at Kandrian (replacing Gasmata), Green River, Menyamya, Baluan, Vunadadir, Laiagam, Aiome, Chuave, Kompian, Boku, Kunua. Lofa, Watabung, Okapa, Kerowagi, Bundi, Karkar, May River, Gumine, Tabibuga, Tambul, Nuku, Cape Hoskins, Kalolo, Pindiu, Cape Gloucester, Gembogl, Kandep and Amanab.

1960s: A training centre was established at Finschhafen in 1861, and stations established at Karimui, Wonenara, Simbai, Hutjena, Porgera, Tinputz, Oksapmin, Kabwum, Lake Kopiago, Amboin, Aseki, Imonda, Hanahan, Lemankoa, Taskul, Subeli (Wuvulu), Kup, Obura, Pagwi, Wutung and Pagei.

John Keith McCarthy, CBE (1905–76), became a patrol officer in the Territory of New Guinea in 1927 and, at the start of World War II, he was an Assistant District Officer at Talasea. He helped evacuate civilians from Rabaul after the Japanese attack, and commanded local coastwatchers and ANGAU scouts, becoming Military Resident Commissioner of Sarawak. Following the war, he was appointed District Officer, before being promoted to District Commissioner of Madang in 1949, later holding the same role in Rabaul.
In 1951 he was appointed to the Legislative Council, and in 1955 he became Executive Officer of the Department of the Administrator, and was briefly Acting Administrator of Nauru in 1957. In 1960 he was appointed Director of Native Affairs, and following the 1964 elections, he became an official member of the new House of Assembly. He was awarded a CBE in the 1965 Queen's Birthday Honours, and retired from the civil service in 1967, returning to Australia in 1971.

Information courtesy of Murrough Benson

New Guinea Company Polizeitruppe, Friedrich-Wilhelmshafen, 1899

TOP: Some of the Kundiawa District Hospital wards, 1968

SECOND: Chimbu family enjoying their first meal in more than a fortnight after surgery for *pig bel* (gangrene of the bowel)—mum was inside resting

THIRD: Patients were often carried for days to reach hospital

BOTTOM: Bun nating (malnourished) pikininis being fed by relatives in the hospital grounds

Health Services

The Christian missionaries played a major role in providing health care in Papua New Guinea as far back as the second half of the 19th century. Countering the ravages of malaria was a major focus for many years. Many expatriate mission nurses were evacuated during World War II but they were amongst the first to return after the war and continue their invaluable work. The scope of this work gradually expanded, including introducing the concept of aid post orderlies delivering basic health services at a village level and, at some of the larger missions, establishing training programs for indigenous nurses.

With Australian administration of the two former territories of Papua and New Guinea being consolidated in 1945, Australia's role in the provision of health services throughout the country expanded significantly and quite rapidly. The 1960s in particular saw an influx of health care professionals from Australia in response to widespread newspaper advertising. These increased resources allowed a much broader scope of medical services to be delivered than had previously been possible under the missions, although they continued to play an important role in their local areas.

From the 1960s on there was a strong emphasis on education, both at the mission-based hospitals and at government institutions. There was widespread recognition of the need to ensure a well-trained indigenous health delivery workforce was available to take the nation smoothly beyond Independence.

Training of indigenous general nurses was undertaken at major centres. Another program introduced in the 1960s, and developed through the 1970s, was the midwifery training of selected qualified general nurses, modelled on the Australian curriculum and adapted for local conditions.

The University of Papua New Guinea (UPNG), set up under the Australian Administration, opened in 1966 and in 1970 established its Faculty of Medicine. For the first time, training of indigenous doctors could be undertaken locally, allowing the numbers to increase much more quickly than had been the case previously when the training had to be provided in Fiji.

As could be expected, the range of services provided at the major centres from the 1960s was the most comprehensive in the country. Even the smallest District hospitals, however, usually had two doctors, two midwives and two maternal and child health (MCH) nurses from Australia, supported by local nursing aides and other indigenous staff. Most Sub-District hospitals also had one expatriate doctor. A growing number of indigenous doctors could also be found at the District and Sub-District hospitals.

Government-employed nurses recruited from Australia were required to have either midwifery or maternal and child health (MCH) qualifications in addition to their general nurse training. The midwives worked in the hospitals while the MCH-qualified nurses were constantly conducting clinics in the villages, undertaking general health checks, vaccinating against diphtheria, tetanus, whooping cough and polio and giving talks on general hygiene and nutrition.

Village midwives, recommended by the MCH nurses, would spend a week at the hospital receiving instruction in how to recognise and manage problems associated with women in labour and ensure that good hygiene, the lack of which often led to problems, was practised.

While there was never any shortage of work at the hospitals, some doctors and nurses still made time to go on patrol. They would camp in the villages to bring health care to people in more remote areas who did not have ready access to the services provided in hospitals throughout the country. General health checks were undertaken, any child malnutrition identified and family planning introduced. Arrangements would be made to transfer to hospital those patients who could not be adequately treated on the spot.

Aid posts were expanded significantly under the Australian administration. At the hospital, Aid Post Orderlies were given training in diagnosis and first aid then supplied with a basic kit, including dressings, penicillin, fungal paint, hookworm medicine, etc. which they took back to their villages to administer as required. They would come back to the hospital about once a month to re-stock. If treatment of a patient was beyond their capabilities, they would either arrange for the patient to be carried into the hospital or send word to the hospital where the patient could be collected on the nearest road.

Clearly, Australia made a significant contribution to health care in PNG and can be rightly proud of the services and trained personnel that were handed over at Independence in 1975.

Information & photographs courtesy of Joy Benson

Graduating pupil midwives in Port Moresby, 1977

TOP: Village cattle, Lae, 1964

SECOND: Cattle at Baiyer River Station, Western Highlands

THIRD: Village pig, Alotau

BOTTOM: Preparing for cooking after pig kill, Western Highlands, 1961

Veterinary Services

There were no veterinary services in PNG before World War II. When the Department of Agriculture Stock and Fisheries was set up postwar it included a Division of Animal Industry (DAI) along with those of Agricultural Extension, Plant Industry and Fisheries. Before the end of the war in 1945 the Army's Directorate of Research and Civil Affairs began planning for the development of livestock industries in PNG. JK Murray, who became the first postwar administrator and WJ Granger, who was the first chief DAI, were members of that unit.

Cattle and pigs owned by settlers prewar had either been killed or eaten by occupying Japanese or Allied forces. Surviving animals had been surveyed for disease by an Australian Army Veterinary Survey Unit (AMVSU) in 1945. Because there was no control over animal imports before WWII several important diseases of cattle had also arrived and persisted in the remaining animals. The army unit also found that several exotic diseases had come to New Britain with horses imported by the Japanese army. These had been successfully controlled by some of the ninety-six veterinarians in the occupying Japanese army.

The Administration's policy postwar was to establish livestock industries, in part, to help reduce the cost of imported meat. Emphasis was given to developing a cattle industry. To encourage this the Minister for Territories, Paul Hasluck, introduced a freight subsidy scheme for breeding cattle brought to PNG from Australia. There was to be no repeat of importing animals from SE Asia as had happened when the Germans occupied part of the country before WWI. Areas of grassland, otherwise not used, were identified and acquired for leasing to cattle owners. A cadetship scheme for veterinary students was also established to encourage veterinarians to join the Territory of Papua and New Guinea administration.

The cattle industry developed in three ways. There were those enterprises based solely on the grazing of animals on pastoral leases. These were most successful in the Markham and Ramu valleys. Secondly, the prewar practice of grazing cattle in copra and rubber plantations was continued. Later, when funds from the Papua and New Guinea Development Bank became available, an effort was made to establish small herds of cattle at the village level. Stock for these small holders came from government livestock breeding stations placed strategically around the country and from private producers and the missions that also owned significant numbers of cattle. Overall, cattle numbers increased from about 3,000 in 1945 to about 160,000 in the late sixties. The great majority of these were beef cattle on grazing leases and most came from successful breeding. Dairy farms, supplying milk to expatriates, were established near Lae and Port Moresby.

PNG has had an extensive native pig population for many years, but its potential for contributing to the national economy and diet was not exploited by any of the pre-WWII administrations. Especially in the Highlands, pigs were kept as a source of prestige and usually eaten only on ceremonial occasions. When Development Bank funding became available, Papua New Guineans, who had previously admired and acquired apparently better pigs from expatriate owners, were enthusiastic about starting pig-growing enterprises. These were not uniformly successful, because of a combination of the poor nutrition available to them, and the impact of the parasites so common in the pig population.

There had also been chickens kept around villages for many years but, again, these contributed little to the local diet. After the war, several expatriate owners near major centres began importing day-old chicks from Australia, and producing birds for egg and meat production. Usually, these producers had to depend on imported feed for their birds so production costs were high. Properly fed, domestic poultry adapted well to the PNG environment.

What was the role of the vets in DAI? Initially, they devised the range of tests that needed to be applied to imported animals to restrict the further importation of animal disease. They planned, established and supervised government livestock stations. Later, as vets were appointed to major centres, they began the task of controlling and eradicating several existing diseases of cattle. Among these, contagious abortion (brucellosis) and tuberculosis were also of public health importance. These diseases, and cattle ticks, had originally come to New Guinea in cattle imported by the Germans and they persisted in many herds,

These programs were successful and cattle in PNG by the late sixties were probably healthier than their counterparts in Australia. There was a continuing threat, however, from the screw worm fly, a parasite not found in Australia. The pigs and chickens in the villages were generally unhealthy due to their burden of parasites. The identity and distribution of these parasites were investigated and recorded. These investigations identified parasites not in Australia but present, like the screw worm fly, in SE Asia. Anthrax, normally a severe disease of sheep and cattle, occurred in outbreak form, in pigs in the Highlands from time to time. These outbreaks were investigated and, after some research, vaccination programs introduced.

More than fifty vets worked In PNG before Independence. Most worked in the field, others in the diagnostic laboratory in Port Moresby. Some stayed for only one term of twenty-one months but many stayed on, enjoying the challenge of working in a unique environment and believing they were contributing to the country's development.

Information & photographs courtesy of John Egerton

TOP: Carriers were critical to the success of any patrol. Payment was often made in the form of stick tobacco or salt, particularly in more remote areas where opportunities to spend cash were very limited.

MIDDLE: The narrow tracks didn't allow much room for error

BOTTOM: Villagers always welcomed patrol teams with ample supplies of fresh food

Agricultural Extension Services

Agricultural development in Papua New Guinea until World War II revolved largely around expatriate-owned plantations. This focus changed after the war when Australia's administrative authority over both the former Mandated Territory of New Guinea and the Territory of Papua was consolidated, initially in 1945 under the *Papua New Guinea Provisional Administration Act* and then the *Papua New Guinea Act 1949*.

While plantations remained important contributors to agricultural output and the economy generally, the newly-formed Department of Agriculture, Stock and Fisheries (DASF) promoted a broad-ranging program of agricultural extension to develop the sector. Importantly, this program had particular focus on the inclusion of indigenous farmers, seen as essential to securing improved welfare of the population and the national interest of a future independent state. At the same time, it was important to ensure that the key elements of a traditionally subsistence society were preserved.

Australian-trained agricultural officers, known as *didiman* in *Tok Pisin*, along with local staff were central to the implementation of this new policy. Agricultural specialists from other countries also made important contributions to agricultural development but it was predominantly Australians and their local compatriots who delivered the frontline extension services. The extension staff worked in close cooperation with other DASF personnel, in particular those responsible for animal husbandry and health, to deliver the most effective support possible.

Didiman positions in PNG were advertised in Australian newspapers but the most effective form of recruitment proved to be visits by senior DASF staff to agricultural colleges and universities around Australia. Selection criteria included little evidence of racial prejudices, the ability to handle isolated conditions as well as bush skills and craft. A country upbringing was also considered favourably.

Formal induction courses of ten days were held at DASF Headquarters in Port Moresby in the 1950s but by the mid-1960s these had given way to a brief introduction at HQ followed by a period of learning on the job under the direction of more experienced officers. Pressure on staff numbers meant that it was not uncommon to be 'thrown in the deep end' and usually this approach worked out pretty well—and it was not unique to DASF, more often than not being the *modus operandi* across many departments and, indeed, the private sector. It was a wonderful environment in which to gain invaluable experience at a young age and the country benefitted from the enthusiasm that this experience generated amongst staff.

In 1949–50 DASF established a Staff Training School at Mageri, on the Sogeri Plateau behind Port Moresby. Formal training of indigenous staff began here in 1952. The Popondetta Agricultural Training Institute (PATI) opened in 1963, offering a two-year certificate course to PNG nationals. The first students were transferred here from Mageri which then became a specialist rubber-training school. In 1965, Vudal Agricultural College near Rabaul in East New Britain began, providing the first three-year agricultural diploma course in the country.

The *didiman's* prime responsibility was to work with local staff and the village people to introduce cash crops and/or livestock to traditional subsistence farmers. The major crops included copra (from coconuts), cocoa, coffee, rubber, oil palm and pyrethrum while beef cattle were the main livestock. The land holders did the work while the *Didiman* and their local staff provided the guidance. No pressure was applied to achieve a result if villagers lacked the willingness to participate. Once projects were established, regular follow up was required to ensure good husbandry and early-stage processing practices were implemented. Assistance with marketing the produce was also an important part of the support provided. Where crops were well established and production was relatively high, commercial buyers would purchase the produce. In less developed situations this role was performed by the *Didiman*.

Carriers needed to be very sure-footed—
and *didiman* were always glad to have their hands free to hold on!

TOP: Tobacco trials on agricultural extension station, Goroka, 1966

MIDDLE: First stage of coffee processing—pulping the cherries—Chimbu District, 1966

BOTTOM: Stage 2 of coffee processing—drying the pulped beans. PATI graduate looking on.

By the late 1960s, DASF was represented at almost 200 locations throughout the 'Territory' (as TPNG was commonly known at the time). Most agricultural stations or centres (smaller versions of the stations) had demonstration plots where farmer trainees lived for a year, learning the basics of producing the commodities relevant to their area. The idea was that they would take their new-found skills back to their villages and spread the word. At times, villagers would attend demonstrations in various aspects of crop production on the stations. On the larger stations, the *didiman* conducted trials to test crop varieties and alternative husbandry practices such as pruning. Nurseries at these centres also produced seeds and plant material, including trees for reafforestation, for distribution to village farmers.

Much of the training was provided on the job in the field. The *didiman* and their team of local staff and farmer trainees would often go on 'patrol', camping out and moving from village to village helping the farmers. Patrols were also a feature of the support provided by other departments, most notably the *kiaps* of Native Affairs (later District Administration) and, to a lesser extent, public health doctors and nurses. Depending on the location, the demand for support and the nature of the work to be done, such patrols could last anything from just a few days to a number of weeks. There was an expectation when a *didiman* signed on that a significant part of their year would be spent on patrol.

Land settlement schemes were another way of promoting agricultural development amongst the indigenous population. Traditional land tenure was seen as a constraint in making available sufficient tracts of land for viable commercial cropping. Additionally, in some of the more heavily populated areas good arable land was in relatively short supply. A number of land settlement schemes were introduced whereby individual leasehold tenure was recognised. These schemes did indeed achieve the desired outcome of increased agricultural output, the most successful being the oil palm developments that started in West New Britain in the 1960s, subsequently spreading to other regions and are still generally flourishing today. *Didiman* were heavily involved in the development and ongoing supervision of these schemes.

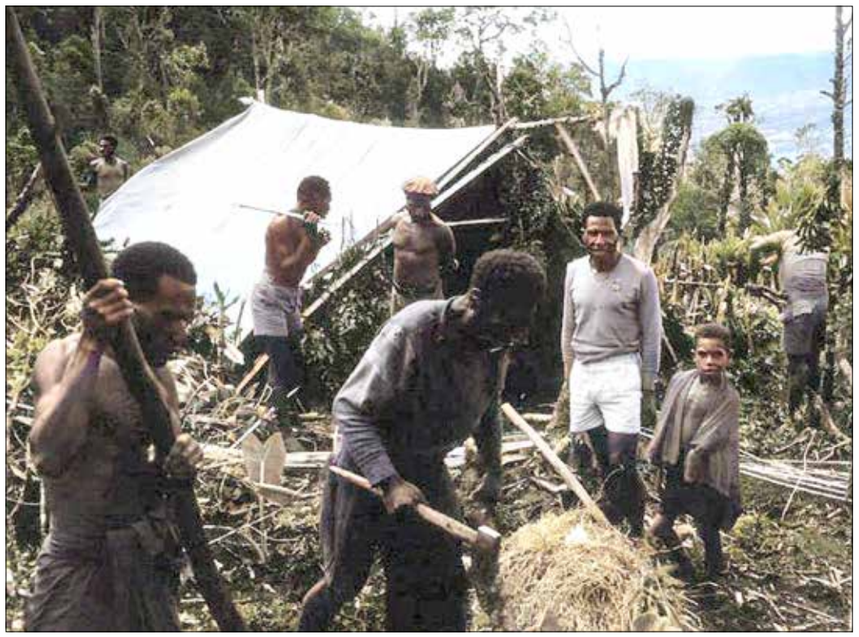
The limited availability of rural credit was another constraint on indigenous participation in expansion of the agricultural sector. This issue was addressed with the establishment in 1967 of the Papua and New Guinea Development Bank (known today as the National Development Bank). Formation of the Bank was a key recommendation of a report by the International Bank for Reconstruction and Development (IBRD, commonly known as the World Bank) commissioned by the Australian Government.

While the Development Bank's charter extended to commercial and industrial lending, and indeed these sectors together accounted for almost 69% (49.5 million *kina*) of the value of loans advanced in the first ten years of the Bank's operation, lending for agricultural purposes was very significant. In that period, loans for agricultural purposes totalled more than 22.4 million *kina* advanced to 10,246 borrowers of whom 9,966 were PNG nationals. Cattle accounted for 45% of the value of agricultural loans to PNG nationals, followed by oil palm with 22% of the total. *Didiman* acted as the bank's agents in the field for agricultural loans, submitting loan applications, undertaking regular progress reviews and following up on correspondence between the bank and its borrowers.

Like many other people in this incredibly diverse 'Land of the Unexpected', the *didiman* worked in a great range of environments, from the tropical lowlands to the temperate (and sometimes cooler) highland regions, experiencing the challenges of many different cultural practices. Adaptability was a key requirement

It is fair to say that the contribution of Australia to the advancement of the agricultural sector was very significant in the lead up to Independence, particularly in the post-World War II years.

Information & photographs courtesy of Murrough Benson



Setting up camp on patrol in the highlands

TOP: A lecture on women's health at the Madang CWA branch in 2015

MIDDLE: NGVR troops marching in Rabaul, prewar

BOTTOM: Some of the NGVR Vickers Platoon at Rabaul

The CWA in Papua New Guinea

In 1951, forty Australian expatriate women founded a branch of the Country Women's Association of Papua New Guinea (CWA) to help other expatriate women in need of friendship and help at a time when life could be lonely and difficult. Soon after, the Port Moresby Branch provided a rest room at the Ela Protestant Church hall in Douglas Street, and the first fundraising activity was serving morning teas, and filling the orders placed by business houses for sandwich lunches.

To meet the needs of the women, in 1958 the first CWA cottage was officially opened in Hunter Street, Port Moresby, and in 1968 was named 'The Doris Groves House', after the founding president. Many other cottages were opened throughout the country and, eventually, there were eighteen branches.

When established, the cottages provided a meeting place for branch members and a halfway house for women in transit—sometimes an outstation wife, living an isolated and lonely existence, came in to stay to enjoy the company of other women whilst her husband was on official field duties. The cottages provided clean accommodation at a nominal cost with the advantage of friendship from host members. However, in the period leading up to Independence, the membership dwindled and many branches were forced to close.

Besides assisting women and children in need of friendship in the early postwar years, a tremendous contribution was made to PNG by the tireless work of the association members, who certainly fulfilled the CWA aims to improve the welfare and conditions of life for women and children by drawing them together and fostering a community spirit.

Reprinted from an article, 'The CWA' by Nancy Johnston, *Una Voce*, June 1998

Each year, the Country Women's Association of New South Wales studies a different country, and Papua New Guinea was selected for 2019. Many functions were held throughout the year, including a seminar in Dubbo in February, at which members of the Papua New Guinea Association of Australia and other PNG organisations were featured participants. The CWA continues to use its network to promote and assist communities throughout the country.

Military & Police Forces

Within a short thirty-five-year period from 1940 to 1975, Papuans and New Guineans went from living under two orderly colonial administrations through invasion, war and self-government to Independence. An important group of the Papua New Guinean community, the police and soldiers, influenced this outcome, particularly during the first turbulent years of invasion and war. It is also an Australian story about the good use of available resources and how this helped the overall war effort. The military units mentioned below all hold fine military records, though they are much unheralded.

The links between the New Guinea Volunteer Rifles (NGVR), the Papuan Infantry Battalion (PIB), the Australian New Guinea Administrative Unit (ANGAU), the battalions of the New Guinea Infantry Battalion (NGIB) and the Pacific Islands Regiment (PIR) are many and strong. To speak about one, one should have an understanding about the others: and to speak of an Australian contribution, civil and or military, in the prosecution of the War in PNG, one must include the Papuan and New Guinean contribution, without which there may have been no victory in PNG.

Prior to the start of the Pacific War, Papua and New Guinea were administered separately—Papua being a Territory of Australia and New Guinea being a Mandated Territory administered by Australia under trust for the League of Nations. This changed when the Japanese invaded Rabaul and the New Guinea Islands in January 1942.

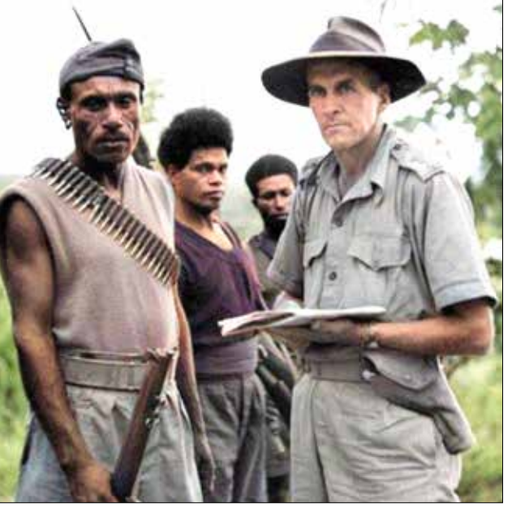
The population of Papua and New Guinea was estimated to be about 1.1 million, 300,000 in Papua and 800,000 in New Guinea at this time. Indispensable to the administrative structure to the population was the constabulary or native police forces, which numbered about 350 in Papua and 1000 in New Guinea. Members of these police forces were the right hand of every patrol officer as contact men, interpreters, and the enforcers of the law, skilled bushmen, recruiters and supervisors of patrol carrier lines. It was because of these men Australia succeeded in Papua New Guinea. The Papuan and New Guineans from the police forces served the military forces exceptionally well by their presence and capacity.

About the time Australia entered WWII in September 1939, a militia unit, the **New Guinea Volunteer Rifles (NGVR)**, was established in the Mandated Territory of New Guinea. With an establishment of twenty-three officers and 482 other ranks, subunits were established in Rabaul, Kokopo, Wau, Bulolo, Lae, Salamaua and Madang.

Although NGVR lost its eighty men at Rabaul when the Japanese invaded Rabaul, it remained the only Australian Military Unit facing the enemy in Lae/Salamaua/Wau/Bulolo/Markham area and Madang, from the start of the Pacific War until relieved and disbanded in September 1942.

The NGVR soldiers came from many walks of life. While some were too old to join the AIF, medically unfit or employed in restricted occupations, they fought well and did what they were asked to do. They also initiated the organising of New Guinean labour, which was to become a vital contributory feature to the success of the Allied campaign in the New Guinea archipelago.

The **Papuan Infantry Battalion (PIB)** was formed in the Territory of Papua in April 1940 with an establishment of seventy-seven Australians and 550 Papuan soldiers. PIB served in many New Guinea campaigns, with its soldiers becoming noted for their ferocity



TOP: An ANGAU officer briefing Sgt-Major Katue, from the PIB in 1942

MIDDLE: Members of the Papuan Infantry Battalion (PIB)

BOTTOM: PNGVR Mortar Platoon at the annual Mt Ambra Camp in 1965

and tenacity during the Kokoda, Salamaua-Lae, Ramu Valley-Finisterre Range, Bougainville and Aitape-Wewak campaigns.

The PIB along with the 1 New Guinea Infantry Battalion (1 NGIB) and 2 NGIB were amalgamated to form the **Pacific Islands Regiment (PIR)** in November 1944. The 3 NGIB and 4 NGIB joined PIR in 1945. PIR was disbanded in August 1946. Its casualties during the war amounted to thirty-two killed, fifteen missing, forty-two died from wounds, and twenty-five wounded. Personnel from the PIB received the following decorations: one Distinguished Service Order, three Military Crosses, fifteen Military Medals and three Mentions in Dispatches.

Another Militia Battalion, the 49th (AMF) was deployed between Port Moresby and Thursday Island for coastal defences, arriving in Port Moresby in March 1941.

The 2/22 Battalion, part of 23rd Brigade 8th Division arrived in Rabaul in March and April 1941. During 1941 other ancillary units were added—the force grew and became known as Lark Force. It totalled about 1400 men. The 1 Independent Company of 270 men, was deployed as a northern and eastern screen from Manus Island to Bougainville and New Caledonia.

The PNG Army command was reorganised on 9 April 1941 as the 8th Military District under Major General Morris, who arrived in Port Moresby on 19 May 1941.

In November 1941, the 39th and 53rd Militia Battalions were ordered to Port Moresby. They arrived 3 January 1942 joining with 49th Battalion and 13th Field Regiment to form the 30th Brigade of about 3,000 men.

By 23 January 1942 at the time of the Rabaul Japanese invasion, the 8th Military Area comprised about 5,000 men, 3,000 in Port Moresby, 1,400 in Rabaul including 80 NGVR, 270 spread across the islands north of Rabaul and 400 NGVR on the NG Mainland.

On 14 February 1942 civil administration ceased in Papua, and Major General Morris established the Papuan Administrative Unit (PAU) in Port Moresby, and the New Guinea Administrative Unit (NGAU) in Wau. On 10 April 1942 PAU and NGAU combined into the **Australian New Guinea Administrative Unit (ANGAU)**.

ANGAU superseded the civilian governments of Papua and New Guinea early in 1942 and administered the area until mid-1946. Throughout, arguably, the most turbulent four years in Papua New Guinea's history, ANGAU carried out the functions of the two prewar civilian governments, as well as marshalling and leading the native peoples of PNG in support of the Allied armed forces during the Pacific War. The Allies in their military campaigns relied on the Papua New Guinean people for its success—their carrier lines fed and armed Australian and American soldiers and carried their wounded. Labour lines constructed roads, bridges, bases and air fields; ANGAU's scouts and networks of informants in operational areas were the eyes, ears and often the spearhead of clashes with the enemy; and ANGAU brought rehabilitation from the chaos of war in reconquered areas. ANGAU's place in Australia and PNG's war history is deserving of far more recognition than it receives. It was a major influence in the Allied victory in Papua New Guinea.

In December 1942 ANGAU comprised about 550 including about 140 officers. This number expanded as PNG was re-occupied by the Allies culminating in mid-July 1945 when ANGAU numbered just over 2000 Australians including about 360 officers. During ANGAU's existence 2,478 men comprising about 935 Papuans and 1541 New Guineans served in the police services of which twenty-eight were killed in action, sixty-three others died on duty of other causes and won more than sixty medals for valour and distinguished service, an enviable record.

After the end of World War II, ANGAU was abolished and was replaced under the Papua New Guinea Provisional Administration Act (1945–46) by the combined government of Papua and Australian New Guinea.

NGVR was reformed as **Papua New Guinea Volunteer Rifles (PNGVR)** in 1950 and over the next two years elements were established in the main centres of PNG as an Australian CMF battalion. In 1964 PNGVR was fully integrated with Papuans, New Guineans and Chinese. When PNGVR was disbanded prior to Independence eighty per cent of members were Papua New Guineans with PNG officers and NCOs.

The PIR was also reformed in 1951 based at Taurama near Port Moresby. PIR was expanded to two battalions prior to Independence with 2 PIR based in Wewak. Naval and air force elements were added to make up the complement of the PNG Defence Force before Independence.

Postwar the police force's role and numbers expanded proportionately with the rate of the country's economy and development. The **Royal Papua New Guinea Constabulary (RPNGC)** has become a national police force and serves an important law and order role throughout the country.

From 1940 to 1975, Papuans and New Guineans went from living under two orderly colonial administrations through invasion, war and self-government to Independence. The police and soldiers played an important influence in the outcome of the war. After the war many of these men held high leadership positions up to Independence and beyond. NGVR, PIB, ANGAU, NGIB and PIR hold unheralded but envious military histories.

Information courtesy of Phil Ainsworth

TOP: Australian Prime Minster, John Howard and Sir Julius Chan, 1996

SECOND: Sir Michael Somare and Australian Prime Minister, Bob Hawke, 2009

THIRD: Former prime ministers, Sir Mekere Morauta and Peter O'Neill, 2013

BOTTOM: PNG Prime Minister James Marape and Sir Michael Somare, 2019

The Politicians

Papua New Guinea has had many politicians since the first general elections in 1964, through to the present day—including prime ministers Sir Julius Chan, Bill Skate, Sir Mekere Morauta, Peter O'Neill and James Marape. They all contributed to building the nation, however, the most famous and experienced has been Sir Michael Thomas Somare, GCL, GCMG, CH, CF, SSI, KSG, PC, who led PNG into independence from Australia in 1975, with a career that spanned five decades.

Michael Thomas Somare was born on April 9, 1936, in Rabaul, to Ludwig Somare Sana and Kambe Somare. He was the eldest of six siblings, and grew up in the village of Karau in East Sepik Province.

After the Japanese were driven from PNG, Somare's education continued and he completed his leaving certificate (accredited by the State of Victoria) in 1957. He was able to teach at primary and then secondary schools before returning to his alma mater, Sogeri High School, for further training in 1962–63 that qualified him as a teacher.

A transfer within the public service enabled him to become a radio broadcaster at Wewak, and in 1965, he attended the Administrative College at Waigani for further training. Somare resigned from the public service and in 1967 co-founded the Pangu Party. The following year, he was one of eight members of the new party to win election to the second House of Assembly.

The Pangu Party rejected overtures to join a coalition government, and Somare consequently became the first opposition leader in the fledgling house.

The 1972 election changed the political landscape, with Pangu joining the People's Progress Party, led by Julius Chan, to form a coalition government and Somare becoming chief minister. When self-government was granted in 1973, he became prime minister and played a key role in the transition to independence and adoption of a constitution.

Somare twice lost the prime ministership through votes of no-confidence—to Julius Chan in 1980 and to Paias Wingti in 1985. Still, he was the longest-serving elected politician in any Commonwealth country, having been a member of the PNG parliament from the time he was elected to the House of Assembly in 1968.

He stayed in parliament for forty-nine years, and was prime minister on three separate occasions over that time, holding the top post for seventeen years in total, over four terms. He also served as the Foreign Affairs Minister, Leader of the Opposition and the local Governor of East Sepik Province.

But Sir Michael's forty-nine years in PNG politics were not without controversy. In mid-2011, he was ousted from parliament, and the prime minister's post, after being out of the country for heart surgery in Singapore. He had been absent from parliament for four months with his illness, when disgruntled MPs joined with the Opposition to declare the prime ministerial position vacant, and he was replaced by Peter O'Neill, who was PNG's works minister and had defected to lead a minority government.

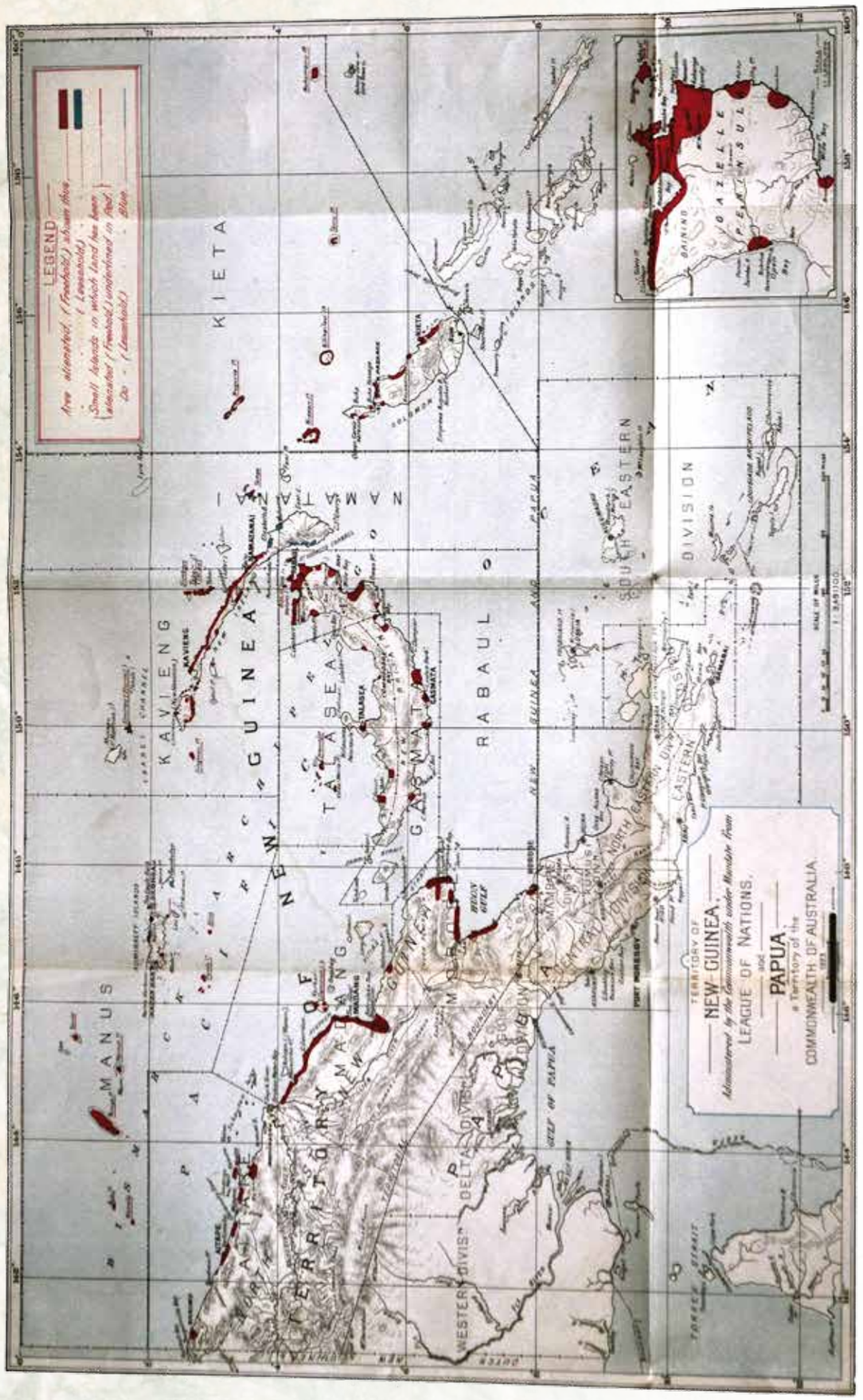
Four months later, the PNG Supreme Court ruled that the election of Mr O'Neill was unconstitutional, and called for Michael Somare to be reinstated. But Mr O'Neill still had the support of most MPs, leading to a months-long power struggle between the two men and constitutional crisis. Despite this, elections were held in mid-2012 and the people of his East Sepik Province voted Michael Somare back into parliament. Five years later, his political career finally came to an end when he retired.

'We progressed through many waves and changes in the world, we survived our own bad decisions,' he said in his last address to parliament in 2017. 'We have united at times when the world thought it was not possible to do so, we must be thankful and we must always count our blessings. I gave my best years to this country, by serving as a politician. I hope you will each find the grace to continue our dream for this country.'

He was knighted by Queen Elizabeth II in 1990, and sadly passed away in February 2021, aged eighty-four. People in Papua New Guinea knew Sir Michael affectionately as the 'Father of the Nation' and *'Papa Blo Kantri'*, and he is one of only two people in PNG to be given the official title of 'Grand Chief'.

Partially sourced from the ABC and SMH News Services

Michael Somare celebrating PNG's Independence, 1975



Territory of New Guinea Alienated Lands, 1921

Plantation Owners & Workers

Coconut oil had been used in tropical regions for hundreds of years and, by the late 19th century, it attracted the attention of European traders as demand was quickly increasing for edible oils and oils for soapmaking. New areas were sought for coconut oil production, preferably coastal areas which favoured growing conditions and to support the necessary export for trade.

The coconut industry is the oldest agricultural industry in Papua New Guinea. It is the fourth largest commodity in PNG after oil palm, coffee and cocoa.[1] By 2020 it covered over 200,000 hectares of land and generated revenues of about K70m.

The German Neu Guinea Kompagnie (NGK) established many coconut plantations during its control over north-eastern New Guinea and adjacent islands after 1884. The guaranteed supply of tropical goods, especially copra for coconut oil, was vital to the Fatherland. Germany was trying to keep pace with the expanding British Empire. These plantations contributed significant profits to the NGK and indeed revenue to the German government. Whilst they did not venture far into the hinterland, large areas of prime arable coastal land were acquired for the purpose, often with little regard to any impacts on the local populations. What might have appeared to be unused wasteland to Europeans may well have been essential to subsistence farmers who required large areas for the purposes of hunting and gathering and previously gardened area to lie fallow for a number of years.

On the other hand, the British had many colonies around the world from which to obtain tropical goods, including Queensland. It was because of the latter's sugar industry that Australia always resisted any attempts to promote sugar as a crop in PNG. Apart from missionary zeal, it was the discovery of gold, more than anything else, which led to early white settlements in British New Guinea (BNG)/Papua. However, with other European powers showing interest in New Guinea and other parts of the south-west Pacific, there grew an air of apprehension in the Australian colonies. So it was the colonists' perception of the possible need to take pre-emptive action to defend themselves that led to British New Guinea being annexed.

Britain was initially reluctant to acquire yet another colony at the time (or allow any of its colonies to acquire a colony!). The UK did not want an additional overseas expense on its treasury. In fact, Queensland, New South Wales and Victoria contributed most of the finance required for BNG's early years. After 1901, with Australia's continuing reluctance to bear the cost of administering Papua, a 'Grandchild of the Empire' (Inglis, 1912), the Territory was expected to be self-sufficient and pay to its own way. Thus, European settlement and the establishment of plantations were encouraged, especially when the first gold fields appeared to have been depleted.

Early in the 20th century attempts were made to attract more European settlement in Papua. At least two 'promotional' publications were made available in the UK and Australia (Victoria, 1909 and Inglis, 1912).

Labour was essential for the successful growth of most tropical crops. Where sources of local labour were limited, outsiders were recruited—young men from other districts who were perceived to be, and were in fact, mostly primitive and prone to be somewhat disorderly unless strict discipline was imposed. The Germans allowed plantation managers

TOP: Madang Meiro Plantation
(Photo Geoff Learmonth)

MIDDLE: Coconut trees grow to 30–35 m and produce 80–100 nuts per year

BOTTOM: Climbing a coconut tree, Meiro Plantation, Madang
(Photo Geoff Learmonth)

to mete out punishment. Canings, even floggings, were not uncommon, especially in light of any government intervention being unlikely due to the remoteness of many of the plantations.

A New Order

During and after WWI the Australian Military forces ruled New Guinea from 1914 until 9 May 1921. When the Australian civilian government, under the Commonwealth of Australia, assumed a mandate from the League of Nations to govern the former German territory, corporal punishment was banned. It also followed the completion of a Royal Commission of inquiry into such actions where one missionary who gave evidence stated: 'today's natives understand their rights only too well and will report any unjust punishment to the kiap'.

Following the 1919 Paris Peace Conference and the Treaty of Versailles, which provided for the division of German territorial possessions, an Expropriation Board to deal with German Companies and German settlers' assets was also set up. This resulted in many German settlers being stripped of their assets although they were not politically active in WWI. The Expropriation Board allocated land to many returning WWI soldiers under the Soldier Settlement Scheme.

In contrast to the north coast and islands of eastern New Guinea, the Papuan lowlands, especially west of Port Moresby, consisted of vast areas of swamp and river deltas. This, combined with Lieutenant Governor Murray's policy of peaceful penetration, and the protection of native lands, led to comparatively much smaller areas of land being alienated for plantation purposes. In fact, it became well-nigh impossible to obtain freehold land in post-BNG Papua. Land was either customarily owned or acquired by the government and leased to private enterprise.

The map, on page 88, from Australia's first annual report to the League of Nations (Commonwealth of Australia, 1921–22), shows the coastal lands, which were held as freehold by the private sector and missionaries and inherited from the Germans when Australia took over responsibility for the Mandated Territory. Although many plantations in both territories were along isolated coastal and islands areas, accessible by boat, large areas of the more densely populated Gazelle Peninsula of New Britain were alienated. The fertile soil of the Gazelle Peninsula, together with the beautiful harbour, attracted early pioneering planters, one of whom was the notable Queen Emma from Samoa, along with her family.

Perhaps the fact that native labourers and villagers were treated with some amount of respect is reflected in the assistance many rendered to their *mastas* after the Japanese invaded in 1941. Generally speaking, and with few exceptions, Australian plantation managers and government officers who remained after the invasion and 'took to the hills' could rely on their loyalty. These men could not have achieved as much as they did as coastwatchers without the assistance of loyal natives. It can be assumed from this that mutual respect, even affection, promoted this loyalty. Paul Mason of Inus Plantation, Bougainville, is one such example. (Feldt, *The Coast Watchers*, 1946, p.261)

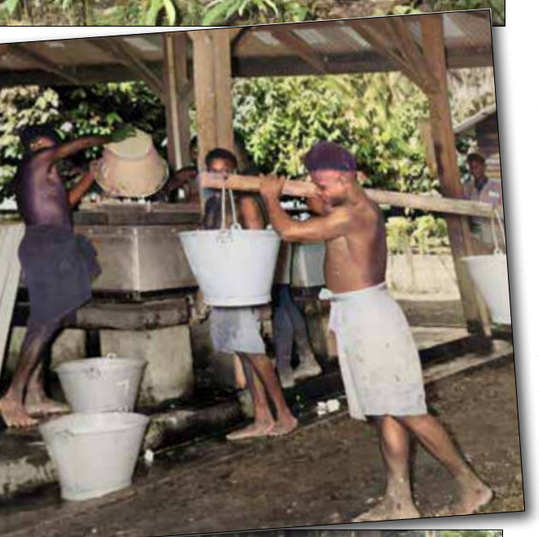
And it was often the plantations that housed and fed escaping civilians and soldiers following the Japanese occupation in the Pacific War. One example was Gladys Baker of Langu Plantation, Garove Island, Witu Islands. A former WWI nurse, Gladys transported medical and food supplies on her pinnace 100 kms to the New Britain mainland, to assist with the men escaping down the north coast of New Britain. 214 people later escaped to Australia from Garove Island on the MV *Lakatoi* after killing plantation cattle and loading up with plantation supplies for the trip.

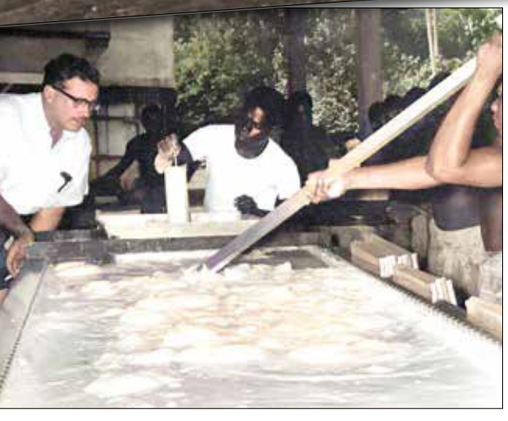
After WWII local Tolai men had little desire or need to work on these plantations and so labour was imported from other parts of the Territory of New Guinea—especially from the Sepik District, which had relatively large numbers of young men easily accessed, for recruitment purposes, from along the mighty river. Some of these would desert the plantations, or decline repatriation, to seek other work in the larger towns. Thus began what was to become 'the squatter problem' in urban areas of PNG.

As in German New Guinea, Papua initially relied heavily on copra (coconut plantations). In later years cocoa became an important plantation crop in what became the Trust Territory of New Guinea. However, it failed as such when tried on (Australian) soldier-settler blocks in the Northern District of Papua (Howlett, 1965). Rubber was more suited to the southern coastal areas and eventually this export crop exceeded copra in Papua. However, other crops such as sisal/hemp, coffee (Robusta), cotton and tobacco were trialled with some initial success but were, eventually, doomed. Price fluctuations of tropical commodities such as copra and rubber hit smaller plantations particularly hard and many ventures in Papua failed as a result.

World War II hit the plantation industries hard, especially in New Guinea and the islands where many land-battles were fought and heavy bombing caused enormous damage. Neglect during the war-years also contributed to the need for major re-investment after peace was restored.

Post-WWII also saw the opening-up of the Highlands. This in turn led to a new source of labour to replace the coastal workers who seized the opportunity to operate small-holder plantations themselves, selling their produce to ready buyers. However, the Highlands also offered ideal conditions for coffee (Arabica). Land was made available for leasing to Australian settlers and companies. PNG became a large exporter of world-





TOP: Tapping a very old rubber tree, towering over the nearby cocoa tree—the latex flows into the cup near the ground, to be collected for processing in the plantation rubber factory

MIDDLE: Carrying the liquid latex into the factory for processing

BOTTOM: Mixing the acid and latex at Aropa Plantation with Robin Mackay, early 1960s *(Photos Jan Grose née Mackay)*

class coffee from the late 1950s onwards. Periphery small-holder blocks owned by local people benefitted from selling their produce to the plantations. In later years coffee buyers plied the Highlands Highway and byways vying for purchasing opportunities.

The altitude, rainfall patterns and cloud cover which some parts of the Highlands experienced were perfect for tea growing. Large areas of unpopulated swampland in the Wahgi Valley of the Western Highlands was purchased by the Administration and leased to tea planters who drained the land and commenced growing in the late 1960s–early 70s. Highlands' labour was recruited closer to, and worked closer to, home. As was the case with coffee a large part of the workforce, being pickers, was female—something very new and exciting for PNG.

Cocoa plantations spread across the entire country, in fourteen out of twenty-two provinces, with East New Britain, Bougainville, East Sepik, Madang, Morobe, West New Britain and New Ireland being the major producers. Cocoa is often interplanted amongst copra or uses *Leucaena glauca* as a shade tree. The National Institute and Research Institute in New Britain has long supported research and advisory services for cocoa, and the Cocoa Board of PNG fosters innovative farming practices supporting the livelihoods of Papua New Guineans.

Cocoa bean production in Papua New Guinea has reached over forty-thousand tons and the economic contribution is estimated at over K300 million. Papua New Guinea's cocoa production was seriously affected by an outbreak of cocoa pod borer in 2008 and it has struggled to recover.

However, PNG cocoa has earned a world reputation of being one of the finest quality cocoa producers being rated by the International Cocoa Organisation (ICCO) as having a *'90% fine or flavour status'*. PNG cocoa is a great product that produces excellent fine flavour chocolate and has much potential for growth.

It was grown in conditions including high humidity, abundant rainfall and at altitudes of up to 800 metres however Australian and PNG researchers have introduced the historically coastal crop to the Highlands of PNG and trials growing at 1600 m are proving to be quite successful.

There are currently eighteen cocoa clones previously developed by the Cocoa Board of Papua New Guinea. These are high-performing, easily managed and moderately resistant to pest and diseases. These clones have been distributed to farmers across PNG.

With upcoming demand expected to exceed supply according to the International Cocoa Organisation (ICCO), the future for Papua New Guinean cocoa looks promising.

After Independence in 1975 another 'new' crop, which thrived in a small band of latitude either side of the equator, was introduced and resulted in large estates being created—oil palm. Thousands of hectares of virgin jungle in relatively sparsely populated areas of lowlands in West New Britain and Northern (Oro) Districts (later Provinces) were acquired by the State and leased to overseas companies. Ownership and management practices were also new, dictated by the economies of scale.

The Highland Labour Scheme (HLS)

With the exploration of the Highlands in the mid-1930s and just prior to WWII, the Australian Administration, aware of over-rapid introduction to new socioeconomic systems and disease, was initially reluctant to allow Highlanders out of their generally malaria-free high valleys. However, once civilian administration had been resumed following WWII and the Papua and New Guinea Act 1949 united the two territories into the Territory of Papua and New Guinea, it was decided that these dense populations must be exposed to coastal areas, the monetary economy and wider progress. First, as a trial, the large gold mining operations at Wau were allowed to recruit men from the Eastern Highlands. However, prior to taking recruits to coastal areas there began a campaign for the immunisation of the Highlanders against tuberculosis. Anti-malaria drugs were also required to be administered to the plantation labourers.

The Administration's HLS was put in place to both regulate and facilitate recruitment. By mid-1951 over 200,000 Highlanders had been vaccinated and over 8,500 young men had left the Eastern Highlands and Chimbu to work on coastal and islands plantations (Sinclair, 2016). Serving a two-year contract, and with most of their wages withheld until repatriation to ensure they returned home with some wages, the returning labourers amazed their fellow-Highlanders with both their tales of the salt water and large towns, but also boasting comparatively untold wealth with their collections of pots and pans, axes, bush knives, clothes, sun-glasses, guitars and other trade-store artefacts.

After coffee was introduced into the Highlands many of the people became small-holder farmers and, as with their coastal brothers before them, became less willing to work as labourers away from home. The last frontiers of Papua (Last Papua) was being 'opened-up' by this time and tens of thousands of Southern Highlanders (Southern Highlands District—SHD) offered their services. On occasions there was minor brawling amongst them in their eagerness to be the ones to board government-chartered aircraft returning to Mt Hagen, after discharging much needed freight into the SHD outstations. Kiaps kept a tally and recorded names and the police maintained order on the airstrips as the human cargo was despatched! After a day or two in the government barracks, administered by the HLS, these men were then flown from Hagen to their work-place destinations.

TOP: The house at Makurapau Plantation, Gazelle Peninsula, New Britain, showing Ted Fulton and daughter, Elizabeth, 1958

SECOND: Cocoa pods are cut to extract the beans which are then fermented before being dried

THIRD: After the war, the copra was sundried on Makurapau, later it was kiln dried

BOTTOM: Annual conference of the Planters Association, Rabaul 1954

(Photos above from Elizabeth Fulton Thurston)

Life on a Plantation

Plantation workers were usually accommodated in dormitory-style longhouses. The different clans were housed separately and their living and cooking areas were part of a compound beyond the work areas. Because single men were accustomed to living in the men's longhouses in the villages from where they came, the adjustment to the living arrangements on a plantation was not too difficult.

There were government regulations regarding the provision of health care, food and clothing which had to be adhered to. Inspections were carried out by Department of Labour officers: however, anyone who has witnessed the contrast between the recruits sent out and the returning labourers, would generally be impressed by the change in physique. Planters in remote locations would plant fruit including pineapple, pawpaw, bananas along walking paths on the plantation that workers could help themselves to. A healthy regular diet and good medical care worked wonders. Plantations had a *haus sik* or small 'sick bay' well equipped by the planters or plantation managers to cope with accidents and emergencies. Most of the planters held a medical certificate, which was invaluable given their remoteness from hospitals and towns. The plantation manager dealt with the sick line every morning following the 6 o'clock bell for plantation workers to be allocated their day's work.

During their downtime, the workers could purchase items from a trade store either on the plantation or nearby. For those working near the coast, swimming and fishing provided recreation. On Makurapau Plantation,[2] past Kokopo, East New Britain, Ted Fulton created a large football field which was also used for sing-sings. After work and on weekends, the men would form teams and play matches. Sing-sings were held at Makurapau on special occasions and holidays. A pig would be roasted and a *mumu* prepared of local vegetables. (*No Turning Back*, ETW Fulton, Pandanus, ANU, 2005).

Many of the Australian soldiers who returned to their holdings after WWII, or acquired existing ones, struggled to establish a working, viable plantation. Building materials were in short supply and were salvaged or obtained from the disposal of army huts.

> *Like everything else in New Britain, the re-establishment of plantations was slow and uncertain. Four years of jungle growth had strangled the land and palms had been decimated by bombing or cut down by Japanese troops. Local labour was impossible to find and it was doubtful that recruits would come from other areas after the upheavals of war. In addition, the world price of copra was down to 26 pounds a ton which made the cost of clearing the jungle and replanting coconuts not viable.*
>
> *(Fulton, No Turning Back)*

The expatriate women who came to plantations in PNG after WWII, needed to have a pioneering spirit and great resilience: life was not easy and most items were in short supply—improvisation was the order of the day! Life became easier when the trading companies like Carpenters and Burns Philp re-established their stores and shipping services. These trading companies owned plantations in PNG and the Solomon Islands and employed European managers who helped develop the copra industry.

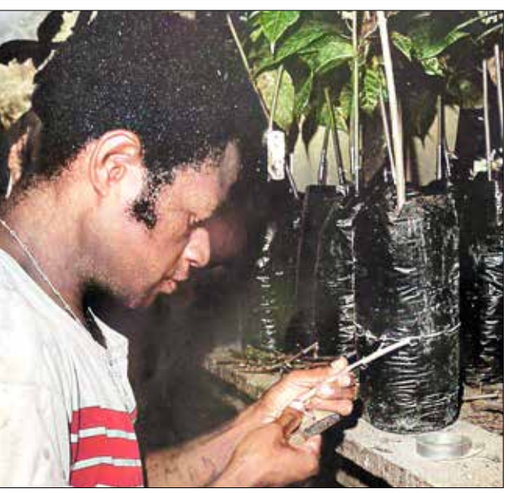
In 1949 The Planters Association of New Guinea was formed to protect the interests of planters in matters of government administration and marketing. It was very active and representatives attended conferences in Australia with other Commonwealth governments and manufacturers. An important relationship was established between the planters and the Minister for Territories in Canberra.

As civilian life returned to normal in post-war New Guinea, the planters and their families who had access to a club found it a morale boosting meeting place to share social and sporting activities. Tennis and cricket matches were a highlight of the calendar and the children found the club a great place to make friends since most were doing correspondence in isolation.

Plantation Redistribution Scheme (PRS)

Just twenty-five years after WWII, in the early 1970s, government policy was to encourage rapid localisation of the Public Service. Following WWII equipment and supplies had been hard to come by and yet rebuilding was paramount. Whilst recovery was slow, development was urged. A 1961 visit from a United Nations' team added unnecessary pressure. TPNG's first university had only commenced lessons in 1966 (less than twenty years after civilian administration was re-established), and that was a preliminary year of studies before actual degree courses commenced in 1967.

Government services began to deteriorate and law and order became an issue in larger towns, whilst tribal fighting resumed and increased, especially in the Highlands. Many Australians and other expatriates left as self-government approached. These included plantation staff with the exodus exacerbated by fear of violence and take-over of properties by former land owners. Further, there was the fear of expropriation by the future PNG Government with the possibility of low valuations being used for compensation purposes. In fact, in September 1974, the House of Assembly passed the Land Acquisition Bill, which enabled such. When Independence came there were some 1,000 –1,200 Australian-owned plantations designated for acquisition under the PRS. Between ten and fifteen per cent of these were mission-owned (Sinclair).



TOP: A village grower selling wet cocoa beans in baskets to a dealer for export

MIDDLE: High-yielding cloned cocoa, Vunapau Plantation, Keravat, *c.*1980

BOTTOM: Patience is required for budding cocoa, Lowlands Experimental Agricultural Station, Keravat

When the PRS came into effect it was no surprise that the first eight plantations taken over were all on the Gazelle Peninsula. Two Highlands companies (Bena in the Eastern Highland District and Wurup, Western Highland District) were the first coffee plantations to be acquired. By 1979 sixty-eight expatriate-owned plantations had been acquired and re-distributed to local people, most of them Highlands coffee plantations (Sinclair).

Production declined, quality standards dropped and large areas were neglected. This was due to lack of both experience and the work-ethic required to operate on a commercial basis, rather than as a cash-supplement to subsistence farming. A few years after PNG Independence from Australia the scheme was formally wound up in March, 1980 (Sinclair).

Changing Times and Practices

After Independence Papua New Guinea was no longer restrained from introducing sugar as a possible commercial crop. In 1977 PNG decided to allow a sugar plantation to be developed. It had long been known that ideal conditions for sugar production did exist in many areas. In fact, the Queensland sugar industry's most productive variety of sugar cane came from New Guinea. Other varieties, particularly a variety of strains found in the Western and Sepik Districts, were sought by an American expedition undertaken in 1928 to search for and gather such (Brandes, 1928).

26,000 hectares of land, a cattle ranch, in the malaria-ridden unpopulated Ramu Valley were inherited from its departing owners. The newly-created (1979) Ramu Sugar company commenced planting some 7,000 hectares with sugar cane. The majority of the land remained dedicated to cattle grazing and is managed by the sugar company. It produces some thirty per cent of PNG's beef.

The most successful and largest of plantations in the former Territory of Papua were the rubber estates on the Sogeri Plateau east of Port Moresby and in the hills behind Galley Reach, north-west of Port Moresby. The former, after initially being left to decline were, for the most part, razed and turned to cattle grazing. However, Galley Reach rubber had a new lease of life. Acquired from expatriate owners (mostly Company) under the PLS most of the Galley Reach estates (totalling over 2,200 hectares), along with some copra plantations along the beach at nearby Hisiu, remained neglected for ten years. In 1983 a Belgium company, listed on the Euronext in Brussels, was granted a 99-year lease over the properties. The Societe Internationale de Plantations et de Finance (SIPEF NV), which also had plantations in Indonesia and the Ivory Coast, brought the plantations back into production. SIPEF also owns Hargy Palm Oil in West New Britain.

Successive governments have promoted plantation expansion reaffirming the important role of plantations and foreign capital in that growth.

In Conclusion

Papua New Guinea's economy comprises two parts, subsistence and market sectors, although this distinction is softened by smallholder cash crops. About seventy-five per cent of the population relies on the subsistence economy.

Australian pioneering planters in Papua New Guinea had tenacity and commitment that comes with optimism. These men, together with their wives and families were brave, adventurous, independent and, of necessity, self-reliant. A sense of humour was imperative. They had to survive and thrive in extraordinary and remote living conditions. To establish a thriving plantation was testament to their resourceful and enterprising spirit.

Many had fought in Papua New Guinea in WWII. They provided private funding (and often took large mortgages) so they could put down their own roots, with efforts to re-build, to grow and to develop a country they believed in and in which they had a great allegiance to. They supported and participated with their local communities, forming enduring bonds.

Those who followed also shared that adventurous spirit. As in every career there were some who were unsuited to this life, but they would not last long. Planters and their families had to be self-sufficient as tinned supplies would reach these outlying plantations every three months, and often longer. Expatriate children were educated by correspondence. Communication was by scheduled calls on two-way radio. Limited electricity was available via generators. Copra driers would burn all night—always a fire risk. The health and well-being of the family, the workers and even their extended families, often relied on the planter and his wife.

Plantations kept extended areas of land viable and large numbers of people employed. Significant work occurred after WWII to rebuild plantations and thereby rebuild and contribute to the PNG economy.

Over 150 indentured labour could be employed on a plantation. As a result, local land owners and labourers were introduced to and became part of the cash economy learning about new agriculture products and techniques required to manage and market the products. The number of small plot holders remain substantial and contribute overall to the current economy.

Many plantations were geographically isolated prior to PNG Independence but, as populations expanded and roads and infrastructure improved, access to towns became easier. A number of coastal plantations are still only accessed by boat.

TOP: Sun drying cocoa beans—note sliding roof and hot air furnace to ensure cocoa is properly dried

SECOND: Langu Plantation House, late 1950s, Witu Islands

THIRD: Peter, Andrea and Margaret Coote at a sing-sing on Langu Plantation, Witu Islands, late 1950s

BOTTOM: Cocoa trees interplanted amongst coconut palms, Gazelle Peninsula

The larger plantations and estates are held by large, often multinational, companies and are highly mechanised.

The excesses in America's and Africa's colonial pasts were not a part of Papua New Guinea's plantation history.

Agriculture accounts for twenty-five per cent of PNG's GDP and supports eighty per cent of the population.

The agriculture and the plantation economy remains important to Papua New Guinea.

ENDNOTES

1 Did you know? Every part of a coconut tree, the nut, the wood and the leaves, is useful. The large leaves are often thatched for rooves or walls and can be made into baskets. The backbone of the leaves can be used to make brooms. Husks provide the coir fibre used for doormats, brushes, in particle board or for twine and various other items. The hard shell can be burned for fuel or made into artefacts. Dried half coconut shells have often been used to polish timber floors.

Inside the hard shell, coconut water is a great thirst quencher, milk and cream is made from crushing the white meat, and the white meat is used for eating and cooking. Copra, the dried meat, produces coconut oil. Unopened flower buds, producing coconut sap, can be used for alcoholic drinks.

The heart of palm, a delicacy which is occasionally used in salads, is found inside the growing tip in the upper trunk of the tree. Harvesting it involves cutting the tree down and kills the tree. The trunk of the tree can be used for building and furniture and the roots into twine and a medicine for dysentery.

2 Makurapau plantation is on the Gazelle Peninsula past Kokopo. It was bought by Ted Fulton in 1947 and replanted after the war which had ravaged it. The coconut trees shade the cocoa trees. Most of the cocoa was bought by Cadbury and MacRobertsons and later Terry's and Rowntrees in England. Ted employed 120 labourers from different regions of PNG and they were on contract for a specific time. The tribes had separate accommodation, and sing sings and football were a frequent form of recreation and entertainment.

Information courtesy of Chris Warrillow, Andrea Williams, Elizabeth Fulton Thurston & Phil Ainsworth; Photographs courtesy of Elizabeth Fulton Thurston, Jan Grose née McKay, Margie Lindsay née Dennis, Chris Prior, Geoff Learmonth & Andrea Williams née Coote

Papua New Guinea Association of Australia Inc.

Papua New Guinea and Australia share an ongoing story that deeply connects them through history and people—and, in 1951 the Retired Officers' Association of Papua New Guinea (ROAPNG), was established and formally constituted.

The original association owed its genesis to the concerns of retired officers who had served in the separate pre-WWII public services of the Australian administered Territories of Papua and of New Guinea and the postwar combined public service of both territories. The ROAPNG was incorporated under the NSW Associations Incorporation Act of 1984 in March 1996.

Their concerns related to the maintenance of superannuation entitlements and retirement benefits of both themselves and their dependents. However, in the following years, the associate membership base was broadened to include 'former residents of Papua New Guinea or other persons subscribing to the objectives of the association', and the objectives widened to include 'friendly association of members, encouragement of contact and friendship with Papua New Guineans', and much more.

These amendments were agreed upon by the members and, on 16 December 2002, the name was formally changed and registered as the **PAPUA NEW GUINEA ASSOCIATION OF AUSTRALIA Inc**.

Since then, the role of the association has progressively developed to include activities such as supporting projects in PNG; working to strengthen the civil relationship between Australia and PNG to ensure the solid foundation built when Australia developed Papua New Guinea to become an independent nation is long recognised; as well as facilitating communication, interaction and education about Papua New Guinea.

The PNGAA aims to preserve historical and cultural materials related to Papua New Guinea with the PNGAA Collection, which grew from an idea of Mr Doug Parrish, former president of the association, and evolved over the years through the dedication and expertise of Dr Peter Cahill. From a modest assortment, the PNGAA Collection is now a fast-growing compilation including photographs and writings about the two world wars, patrol reports, oil and gold mining, family photographs and diaries, and a definitive collection of material relating to the Australian New Guinea Administrative Unit (ANGAU) and its functions. The

PNGAA wishes to ensure the collection is readily available worldwide to our members, researchers or those simply interested in the rich history of Australia's relations with Papua New Guinea.

We foster healthy conversations and development around identity, community, immigration and the increasing importance of our shared futures in a rapidly shifting global landscape. We produce a quarterly journal, *PNG Kundu* (formerly *Una Voce*) for our members, CDs—*Walk Into Paradise: Collector's Edition* (2007) and *Kiap: Stories Behind the Medal* (2014)—and books, including the out-of-print *Tales of Papua New Guinea* (2001) and *When the War Came: New Guinea Islands 1942*, published in 2017 to commemorate the 75th Anniversary of the Fall of Rabaul and the sinking of the *Montevideo Maru*.

Papua New Guinea is now one of the fastest growing nations in the South Pacific, and one of PNGAA's visions is to see the establishment of an interactive hub in Australia—a place of learning, cultural exchange and collaboration for community groups engaging the Pacific Nations.

This hub would enable knowledge, development and growth amongst our wider network and Australia's close neighbours—and recognise Australia's important role in developing PNG to become an independent nation on 16 September 1975, an achievement of which both countries should be proud.

The PNGAA is a volunteer organisation rooted in building a real-life network by welcoming people to investigate the story of Papua New Guinea and Australia so that connections between our two peoples can flourish through understanding. With the advent of information technologies and social media we are now closer than ever to our geographic neighbours and opportunities are there to make our friendship a better and more lasting one so that all our peoples may benefit.

You can be a part of this by sharing your story with us so that the association can continue to compile and digitise the rich history of the region, and to ensure that the relationship between Australians and Papua New Guineans is remembered.

We encourage you to explore and become actively involved with PNGAA, so that we can all tell this story together.

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Front Cover Photograph: Man with conch shell horn, Goroka Show, Eastern Highlands Province, Papua New Guinea, 2016, © Chris Willson

Back Cover Photograph: One of the Huli Wigmen of Tari, Hela Province, © Max Uechtritz

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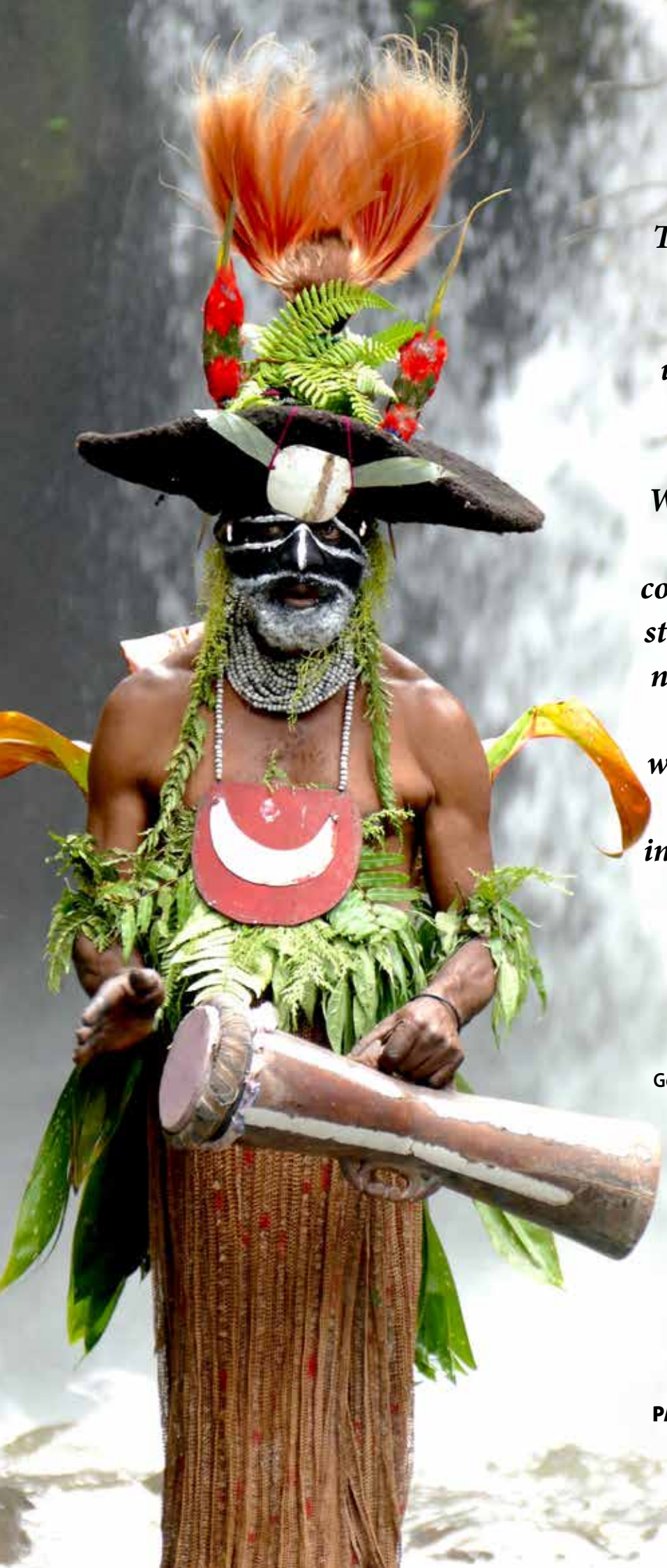
ANDREA WILLIAMS
Papua New Guinea Association of Australia Inc.



Papua New Guinea
is now independent.
The Constitution of the
Independent State of
Papua New Guinea,
under which all power
rests with the people,
is now in effect.
We have at this point in
time broken with our
colonial past and we now
stand as an independent
nation in our own right.
Let us unite,
with the Almighty God's
guidance and help,
in working together for a
future as a
strong and free
country.

Proclamation of Independence
by Sir John Guise,
Governor-General of Papua New Guinea,
16 September 1975

PAPUA NEW GUINEA ASSOCIATION
OF AUSTRALIA Inc.