

**INHERENT CONDITIONS LEADING TO ECONOMIC
VULNERABILITY OF SMALL STATES OF THE PACIFIC
REGION AND APPROPRIATE POLICY MEASURES TO
STRENGTHEN THEIR ECONOMIC RESILIENCE FOR
SUSTAINABLE DEVELOPMENT, WITH PARTICULAR
EMPHASIS ON PAPUA NEW GUINEA**

Michael Manning
Papua New Guinea Institute of National Affairs

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Abstract

Papua New Guinea is a small nation by international standards but dominates the Pacific Islands where it is by far the largest country in population, area and natural resources. It is a small, open economy reliant on mining and petroleum resources for its immediate wealth but also blessed with abundant agricultural potential, one of the largest forestry and fishery resources in the world and almost unlimited tourist potential. With all of this PNG has not been able to turn its windfall gains into solid and sustainable growth, it still relies on aid from its old colonial master Australia, the European Union and other donors to balance its budget. PNG's Human Development Indicators are among the worst in the world and have been declining; it has had a three Structural Adjustment Programmes between 1990-97.

Background



Papua New Guinea (PNG) is located in the southwest region of the Pacific Basin and lies to the north of Australia. It shares a land border with Indonesia through the island of New Guinea, the second largest in the world. The island is renowned for its rugged topography, particularly in the interior, which ranks as one of the most difficult terrains to access in the world. The total land area of PNG is 461,690 square kms which is a mixture of tropical forests, savannah grass plains, big rivers and deltas, swamps and lagoons, and numerous islands to the eastern part of the country. The larger islands in the country are New Britain, Bougainville, New Ireland, and Manus. A population of approximately 5.6 million speaks a total of 837 languages that have been documented so far (Waters et al, 1995).

PAPUA NEW GUINEA (in brief)

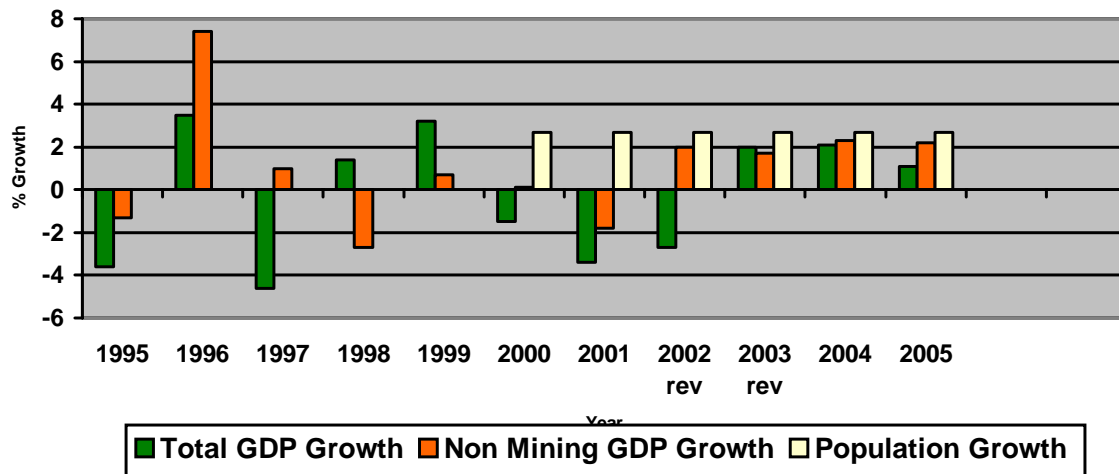
Independence:	September 16 1975
Capital:	Port Moresby (population: approx. 300,000)
Population:	Approx. 5.6 million, growing at 2.7%
Land area:	461,690 square kms
Religion:	Predominantly Christian
National Parliament:	Unicameral Chamber with 109 elected seats
Government structure:	One central government; 20 provinces & 297 LLG
Population distribution:	87% semi-substance farmers, 13% urban
Formal workforce:	Approx 200, 000

With its population of 5.6 million people it is the largest state in the Pacific Islands group and smaller only than Australia in the region. Because its population is larger than the rest of the Pacific Islands states people often tend exclude it from comparisons of the Pacific with the rest of the world. PNG is every bit as vulnerable to economic and natural

shocks as the rest of the Pacific. Probably the most significant constraint to Pacific Island States is their isolation. They range from 5.6 million down to around 1200 in population. Most of them are characterised by a very sparse population spread through a number of islands with very intermittent and expensive transport links with the outside world.

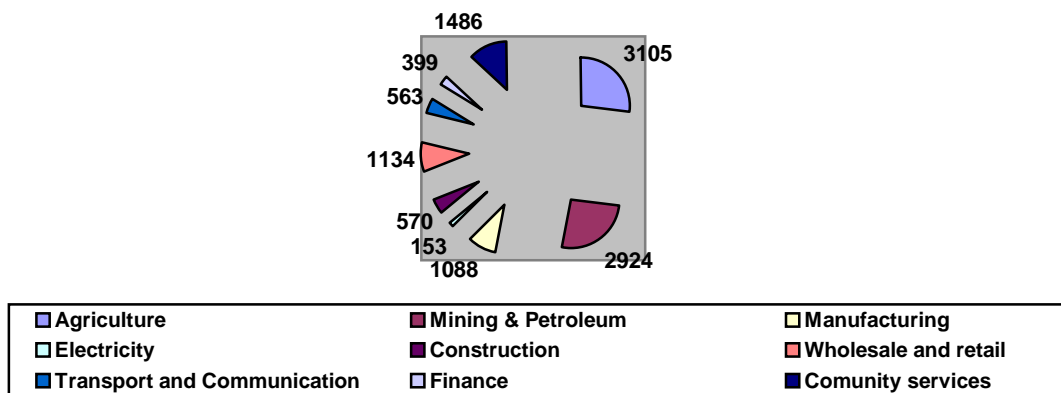
Papua New Guinea's growth pattern over the last ten years has been very unimpressive and it is even less impressive when compared with population growth. Per capita income has fallen after a steep rise during the early 1990s when mineral and petroleum incomes were at their peak. One of the important factors is that the mineral and petroleum income was not translated into sustainable development despite the fact that PNG has such strong potential in agriculture, forestry, fisheries and tourism. Up until 2003 it appeared that the mining and petroleum wealth would almost all finish down due to closure of existing projects as the resources were completed. The 2003 budget has encouraged further exploration and this will be discussed below.

Real GDP Growth 1995-2005



SOURCE: Bart Philemon, *Economic and Development Policies*; Department of Treasury 2003,

Estimated PNG Gross Domestic Product 2003 (Kina Million)



Source: Philemon, B; *Economic and Development Policies 2004*; Department of Treasury and Finance November 200

Not only does PNG have a very small domestic market but it is also extremely fragmented. There is no road link between Port Moresby, the capital and the main area of population in the Highlands. The Highlands themselves are characterised by some small to medium sized towns and thousands of small hamlets and villages, often not joined to the main centres by road and without telephones or electricity. There also hundreds of small islands which are accessible only by sea. Most of the country is effectively linked by expensive air and/or sea transport.

Transport infrastructure has all but collapsed and the major arterial road system is constantly being cut during heavy rain. Small airstrips and wharves are in similar condition. Despite calls for its repair and rehabilitation since at least 1998¹ the government has not been able to allocate sufficient funds to be able to resurrect it.

RESOURCE ENDOWMENT

Mining and Petroleum

Mining and Petroleum Exports as % of Total Exports 1995-2002 (K million)

Year	Crude Oil	Gold	Copper	Total Mineral and Petroleum	Total Exports	Minerals & Pet % Total
1986		398	156	561	975	56
1990		393	349	757	1049	72
1995	827.7	840	754	2435	3399	73
1996	1074	774	387	2244	3313	67
1997	852	718	259	1838	3059	60
1998	813	1228	396	2452	3687	67
1999	1382	1546	574	3524	4985	71
2000	1870	1950	595	4443	5741	77
2001	1889	2115	859	4895	6085	80

Source: Bank of Papua New Guinea; *Quarterly Economic Bulletin*; Various Issues, September 2003

During the 1990s PNG had an unprecedented flow of mineral and petroleum riches reaching as high as 80% of total export value and making up around 28% of GDP, at

¹ The government held an economic summit in 1998 and one of the resolutions was that there was to be no new infrastructure built until existing structures had been repaired. The same call has been made at every annual economic development forum since then.

times a higher proportion. The volume of exports is now declining as the projects reach the end of their lives. All but one of the existing projects are scheduled by 2011 but there may be some scope for expansion of some tenements and fields. In the 1980's PNG had a mining regime that was attractive to investors and there was considerable activity in both the mining and petroleum sectors with exploration levels reaching as high as \$US 230 million in 1990 before tailing off to a mere \$5-10m in 2000. In 2002 the government realised that its taxation regime was unattractive to investors and overhauled it with almost instantaneous results.

There were 15 new applications for mining exploration leases in 2003 compared with only 5 in 2002 and 13 have been reported by the end of February 2004 with more expected as the year goes on. There are also five existing prospects that have been re-activated and are expected to proceed to production in the next 2-3 years (Department of Mining 2004).

Agriculture

PNG is much better off than most other small states in that it has abundant natural resources, approximately 30% of PNG's potential arable land mass which is of 138, 000 square kilometres is currently under cultivation (PNG Human Development Report 1999). Its geographic diversity, from Highlands at an altitude of around 3, 000 metres or higher to coastal lowlands means that it can grow almost any crop known to man. Despite this it is a small player in world terms in production of all of its cash crops which are oil palm, coffee, cocoa, copra/coconut oil, tea, rubber, vanilla and some minor crops. The majority of PNG's population have access to land and produce at least part of what they consume.

Fisheries

The fisheries potential of PNG is very large – the Exclusive Economic Zone, 2.4 million km² in extent and one of the largest in the Pacific region, is recognized as one of the most productive in the world for oceanic tunas and associated species; the wide coastal waters, reefs and lagoons, and the extensive riverine and inland waters are also moderately productive for a range of marine and freshwater resources. In most cases, the diverse range of resources is largely unexploited, and offers great potential for artisanal, commercial and industrial development.

Several estimates of the sustainable fisheries production of PNG have been made with one of these reproduced below. Some of these estimates appear high with the benefit of more recent information, notably in the case of the migratory tunas, where catches in adjacent areas have risen considerably, and more recent estimates of sustainable harvest of tuna might be as much as 100,000t lower. The current harvest levels for most of these resource groups represent only a fraction of the available potential.

Fish Resources of Papua New Guinea

Product/habitat type	Potential (t)
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Shore and reef sedentary species	2,000
Prawns, lobsters, crabs	3,000
Reef areas, bays	80,000
Estuarine	11,000
Coastal pelagics	58,000
Sharks, rays and sawfish	6,000
Tuna	355,000
Offshore pelagics	72,000
Offshore sharks and billfish	14,000
Offshore demersal finfish and crustacean	67,000
TOTAL	668,000

Source: Lewis, Tony; *Fisheries-a Key Economic Sector at the Crossroads*; INA, forthcoming

This could have an export value of as much as PNG Kina (K) one billion (\$US 300, 000) as against the maximum that has been realised of around K300 million.

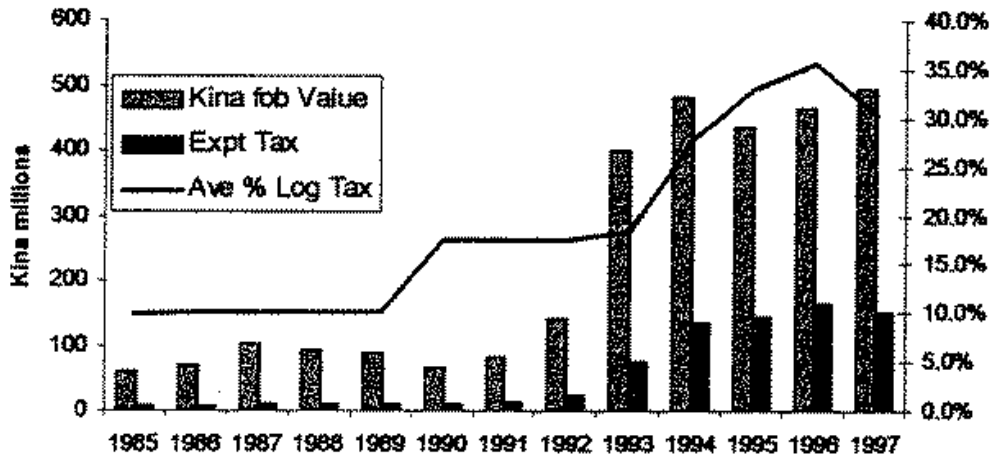
Forestry

Papua New Guinea had 30, 601 km² of forest in 2000², this has been reduced by 1,129km² over the previous 10 years due to intensive logging. It is one of the largest tropical hard wood forests remaining in the world today. There is an on-going dispute between the World Bank and the Government of PNG about the industry and there have been no new leases issued legally since 1999. The dispute has been about logging companies who have been operating outside the laws of PNG and there has been lasting damage to much of PNG's forest resources due to unscrupulous logging over the last twenty years. PNG legislation has allowed logging companies to negotiate directly with village landowners mostly to their detriment.

The forestry sector makes a major contribution to both national and income and employment. Total foreign exchange earnings from log exports compared to the log export tax paid is shown in Figure 1. The forest sector also employs about 7,500 people, representing approximately 4 percent of total formal employment.

² Much of this is inaccessible due to terrain.

Annual revenue from log exports



Source: *Asia-Pacific Forestry Outlook Study: Country Report-Papua New Guinea*; FAO 1997

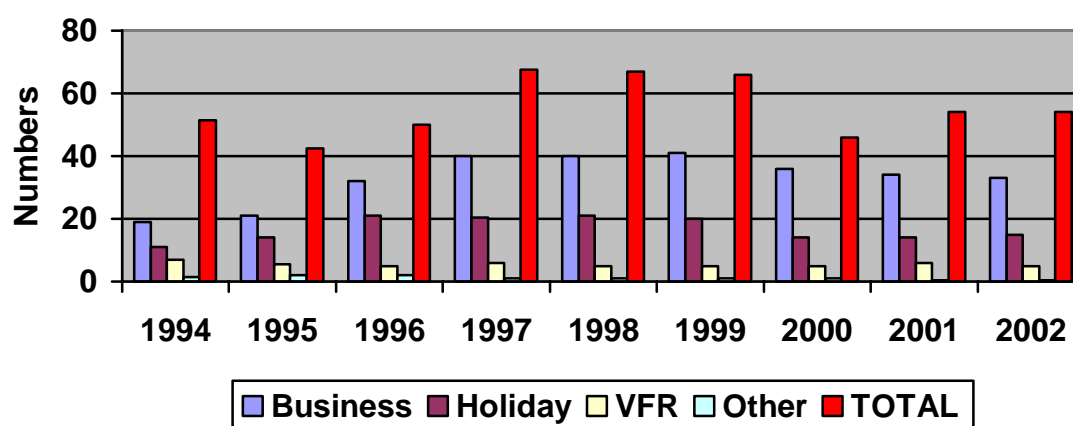
- Currently PNG's annual wood flow is some 8 million m³ (5 million m³ firewood (FAO estimate); 1.8 million log export; processed export 0.645 million m³, domestic industrial 0.2 million m³)
- Forestry and forest products is PNG's second largest industry. After 60 years, in terms of revenue generation and active forest management regimes only 3.7 million hectares of the PNG land base under active forest management regimes and only 65,000 hectares of plantations
- Even so, if allowed to operate efficiently, this small forest base is capable of producing a sustainable cut of 3.3 million m³ with a contribution of contribution of US\$270 million to PNG's GDP annually; with some US\$85 million paid in export taxes/levies and with landowners receiving some US\$20 million in direct payments
- The total value of manufactured forest products in 2002 was some US\$33 million and export logs some US\$100.

The industry is made up of various sectors, harvesting, sawn timber, plywood manufacture, veneer production, furniture making and forest plantation activities (PNGFIA)

Tourism

It is impossible to accurately estimate the potential value of tourism to PNG but Fiji, which is a smaller country without the broad range of diversity that PNG enjoys, receives around 400, 000 tourists per year spending roughly \$US 1, 000 per head. PNG tourist numbers have been declining due to problems of law and order and cost of transport and accommodation.

PNG Visitor Numbers 1994-2000 ('000)



SOURCE: Tourism Promotion Authority, 2001

ISSUES

Imports

Official statistics for imports to PNG are difficult to obtain³. Main food imports are rice 140, 000 tonnes (25.5/kg/head)⁴, wheat for flour, meat products, fish for canning, fuel and fuel products⁵. PNG does depend on imports for capital goods, fuel and some of its foodstuffs. For this reason it has to maintain adequate reserves to be able to pay for these imports, which means stimulating exports as well as maintaining a sustainable exchange rate regime.

Estimates of Imports as Proportion of GDP 2002-5

	2002	2003	2004	2005
GDP	10991	11630	12622	13251
Imports	4196	3713	3759	3704
Imports/GDP %	47	32	30	28

Source: B. Philemon; *Economic and Development Policies*; Port Moresby, November 2003

³ The last official statistics are for the early 1990s and the Bank of PNG no longer publishes these figures. The figures shown are Department of Treasury estimates.

⁴ Trukai Industries pers comm. February 2004

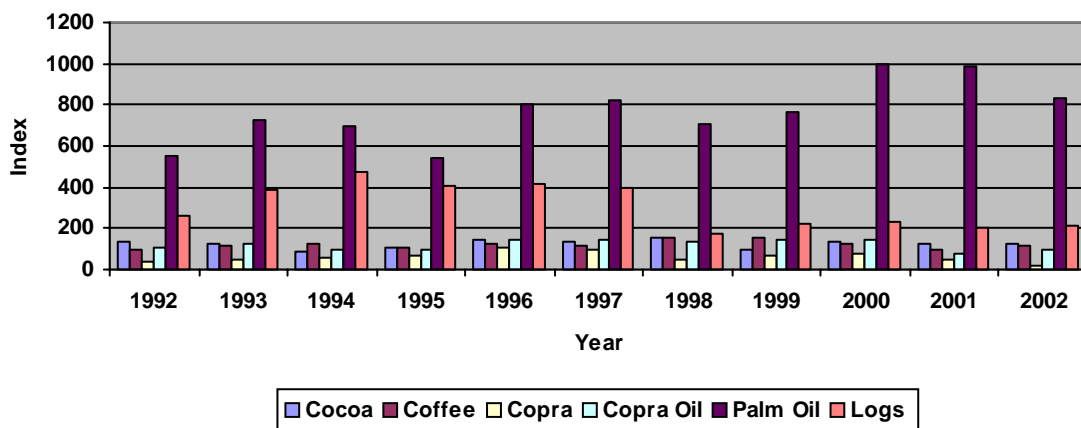
⁵ A new refinery is expected to be commissioned in mid-2004 using imported crude oil. The owner is carrying out an active drilling programme in PNG.

Diversification and Market Thinness

Compared with other small states PNG has the potential to earn income from many different agricultural crops, forestry, fisheries and tourism. However it has a relatively small cash cropping sector which (except for oil palm) has virtually stagnated over the last twenty years. There has been a recent interest in vanilla brought about by high international prices and the fact that PNG can grow a high quality product⁶.

Nevertheless, due to the smallness and fragmented nature of its domestic market it has not been able to develop a significant manufacturing industry or increase the diversification of the economy by encouraging new crops or sustainable industry. Even the introduction of regional trading preference schemes within the Pacific, and preferential access to the European Union under the Lome and Cotonou agreements have not been enough to encourage significant processed exports.

Export Volume Indices (1980=100)



SOURCE: Bank of Papua New Guinea; *Quarterly Economic Bulletin*; December 2002

Manufacturing is confined to food processing of snack foods, steel fabrication, chemicals, salt, canneries for fish (domestic market protected, export market given incentives) and meat (protected), cement (clinker grinding, protected) and there are very few manufactured exports⁷.

Domestic Competition Policy

Like many other countries Papua New Guinea embarked upon a privatisation policy early in the 1990s and this policy has been half-heartedly pursued by successive governments. However there has been very little progress and only one major entity, a state owned

⁶ This is expected to be short lived as the price effect has been due to a cyclone and political upheaval on Madagascar, one of the world's largest producers and which is now back into production.

⁷ Export statistics are recorded by the Bank of Papua New Guinea but manufactured exports (excluding fish and timber) are not recorded.

commercial bank, has been privatised so far. As part of this policy there has been an attempt to introduce a competition policy and there is an Independent Consumer and Competition Commission set up to promote competition and protect consumers.

Like other small states PNG suffers from the fact that the market is so small that many quasi public enterprises are not large enough to attract more than one buyer and natural monopolies exist in areas of telecommunication, electricity, air transport, reticulated water supply and others. Competition and consumer service obligations policies are therefore very difficult to determine and there is no guarantee that a state regulator will be able to determine fair prices which also compel the entity to use best practices and newest technologies.

International Prices

PNG is a price taker for both its exports and imports and therefore highly vulnerable to the commodity cycles of its major export including oil, gold, copper, oil palm, coffee, cocoa, copra and spices. PNG imports much of its food with rice, canned mackerel and canned meat being the staple diet for urban dwellers. PNG is vulnerable to both international prices and exchange rates which affect the prices of these goods. Whilst the government has concentrated on import replacement this has not been very successful and often has resulted in domestic production of protected goods which add very little value to imported inputs (mackerel, meat, cement).

Uncertainty of Supply

PNG is large enough to warrant regular shipping to its major ports, however there is little competition because, paradoxically, the market is not large enough to attract a number of competing lines. Freight rates to and from PNG are much greater than for larger South East Asian countries such as Sri Lanka with which it competes for tropical tree crops. Smaller ports suffer more and ports served by coastal lines face very high transport costs due to low volumes and lack of competition. PNG does not allow overseas vessels to uplift cargos between domestic ports.

Size of Public Sector

Public Service as Proportion of Population-Selected States and Countries (Various dates)

Country/State	Population	Public Service	% Public Service/Popn
Australia	18, 769, 000	131, 711	0.7
PNG	5, 600, 000	70, 000	1.25
Fiji	810, 000	27, 658	3.4
Queensland	3, 585, 639	154, 305	4.3
Victoria	4, 612, 097	241, 170	5.2
South Australia	1, 458, 912	85, 576	5.9

Western Australia	1, 832, 008	115, 573	6.3
New South Wales	6,311, 168	430, 175	6.8
Malta	390, 000	47, 000	12

Source: Australian Bureau of Statistics, State websites, M. Reddy (Fiji), L. Brigugilo (Malta)

PNG has a relatively small public service as a proportion of its population compared with other countries and states, however it consumes nearly 61% of the total recurrent budget of the country and to that extent is far too large, especially when the government interest bill consumes another 25% of the budget leaving very little for other areas. The total public sector expenditure of PNG Kina (\$US 0.29) 4,532, 100, 000 is approximately 36% of GDP compared with Malta which is around 48% of GDP (Reserve Bank of Malta:131).

REDUCING THE VULNERABILITY

There are those who advocate self sufficiency and the importance of import replacement. These people ignore the gains from trade and would eventually drive their country into poverty. The vulnerability of Small Island states can never be fully prevented, their economies and populations are too small to allow for a large manufacturing sector and they should pursue their comparative advantage by exporting raw or semi processed materials, tourism and the filling of niche markets. The best way that these small states can protect themselves from the bad times is by good economic management.

The overriding condition for the attainment of economic security in PNG is good governance, essentially this means good economic management, an ability to provide essential services and an ability to be able to react quickly to disasters of a natural or man made kind. Failure in any one of these areas will mean that the country, or parts of it, will always remain vulnerable to food shortages or any other form of shock such as civil unrest, volcano, earthquakes, tsunamis, drought, cyclones, etc.

We also need to distinguish between the needs of rural and urban dwellers and the ways that their needs are to be met. This is particularly important because of the rapid urban drift taking place in PNG which is unlikely to slow down despite the efforts of some politicians to halt or even reverse it⁸. Urban dwellers will mostly buy their food which can be either imported or locally grown whilst rural dwellers produce most of their own food.

Good economic management is essential to ensure that the country has the resources available to be able to develop the necessary infrastructure to be able to produce and distribute food and other goods throughout the country on a day to day basis. For a variety of reasons, mostly of a political nature, enduring good management has not

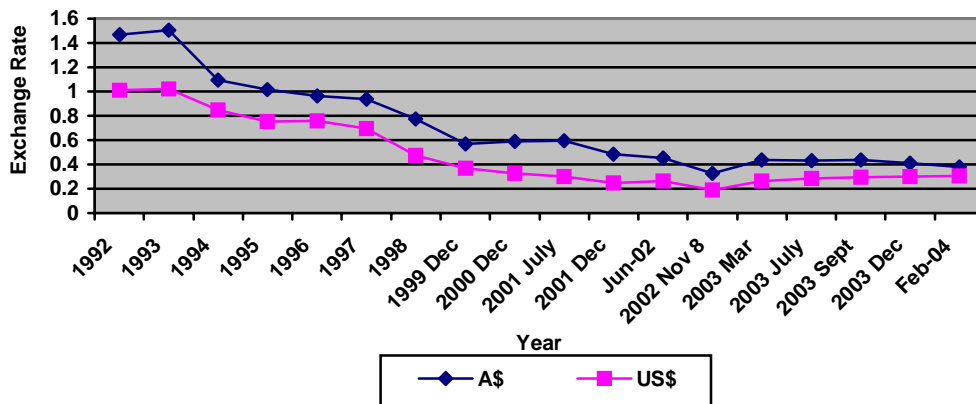
⁸ There have been Parliamentary Committees looking into the problems of urban land owners in Port Moresby and other centres to try and prevent the take-over of traditional land by outsiders. Various provincial governments have bulldozed squatter settlements to no avail.

happened in PNG for the last twenty years and the economy has lurched from crisis to crisis over the last decade⁹.

In hindsight it is clear that exchange rate policies pursued by previous governments have worked seriously against agricultural production and expansion¹⁰. Governments in PNG have endeavoured, without much success to re-establish a sound macro economic framework on which build the economy.

Macro policies that are vital to the attainment of financial and food security are an appropriate exchange rate and low rates of inflation. If a country consumes a significant proportion of imported food a rapid devaluation will make that more expensive and possibly induce short- term food shortages and starvation. In the longer term it will induce more production of domestically produced food and encourage import replacement industries, which is what has happened recently in PNG¹¹ as the exchange rate fell by about 40% before steadying over the last year.

Exchange Rates-1992-2004



Source: Bank Of Papua New Guinea: *Quarterly Economic Bulletin, Sept 2003*, PNG National 22/02/2004,

Related to the exchange rate is the level of inflation or price rises in the economy, particularly as this affects food prices. A large proportion of Papua New Guineans consume some imported food in their diet. Urban dwellers rely on this more than rural

⁹ In 1990 due to the closure of the Bougainville mine, in 1994 due to chronic mismanagement and in 1997-9 due to a combination of El Nino, cyclone Justine, severely depressed commodity prices and severe mismanagement

¹⁰ Other factors such as world prices, failing infrastructure , law and order and collapse of the extension services have also contributed to this.

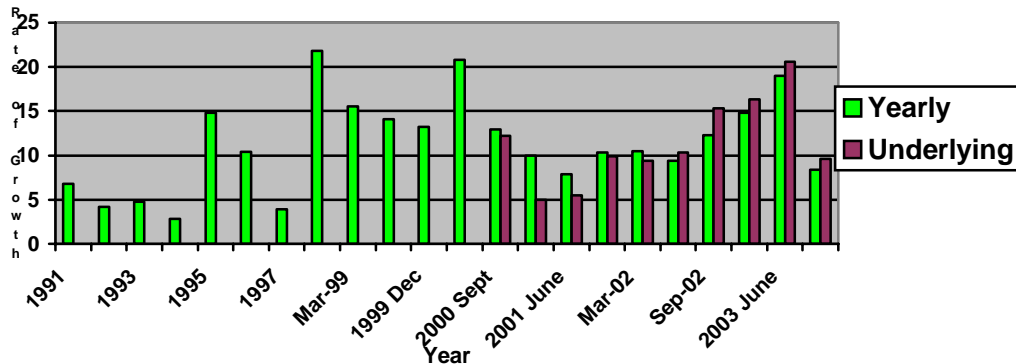
¹¹ There are no statistics available on production of food for domestic consumption, however anecdotal evidence is that production at local markets outside Port Moresby has increased dramatically. There has also been a very significant reduction in rice imports as the exchange rate has fallen.

dwellers because they do not have access to gardening space. In Port Moresby this is compounded by the lack of supply of good cheap locally produced foodstuffs despite the dramatic increase in gardening of agriculturally barren hills around the city.

PNG cannot avoid imported inflation because it is too small to have an effect on world prices and the rapid increase in the price of imported goods will also induce substitution of domestically produced food for imports. There is no need for legislation or government action because market forces will encourage this to happen. Most domestically produced foods are annual crops and it can be expected that production will increase quite rapidly as prices of imports rise. There will always be lags in this process and this may cause some short term hardship to those who were close to the poverty line when the external shock takes place.

Perhaps the most important goal of any government in PNG might be the ability to be able to react to crisis with its own resources. This relies heavily on good economic management and the ability to accumulate prudent levels of reserves with a growing economy that is able to obtain and repay loans for such purposes. To date PNG has been very lucky that the international community has responded quickly and effectively to a number of natural disasters over the years. As other parts of the world become more chronically dependent on this type of assistance it is only reasonable that PNG organise itself to be able to exploit its abundant resources effectively.

PNG Inflation Growth 1991-2003



Source: Bank of Papua New Guinea; *Quarterly Economic Bulletin*, various copies, National Statistics Bureau, *Consumer Price Index*, September 2003, Department of Treasury; *Economic and Development Policies 2003*.

In addition to the government's economic problems, it introduced a drastic reform of the administration in 1997 that transferred responsibility for the provision of basic services, particularly infrastructure and agriculture to Local Level Governments (LLGs). It did not transfer the necessary trained manpower or financial resources to enable these LLGs to

be able to plan and provide these services¹². The result has been an almost complete collapse of rural feeder roads and failure of agricultural extension services as well as a sever reduction in the availability of health and education services.

MICRO POLICIES

Although PNG should not be blindly aiming for self sufficiency there are a number of things that it should be doing to enable the expansion of its sustainable industries and to become more efficient and therefore more competitive with imports. As agriculture has the greatest potential and provides a livelihood for around 87% of Papua New Guineans it has been emphasised in this paper. Some of the suggested policies can also dramatically increase the **sustainable** production of forestry and fishery resources as well as encourage the growth of tourism. There are also industry specific policies which have not been canvassed here.

Infrastructure.

The most essential factor in making Papua New Guinea's agriculture sector more efficient is the restoration of infrastructure and the ability to get produce to market and market goods to villages and hamlets. Because of the failure of the provincial reforms to work properly there are no reliable estimates of the amount of road that has been allowed to fall into disrepair in PNG. The main trunk roads of Papua and the Highlands Highway continue to receive regular publicity with highways leading out of Port Moresby becoming impassable every time it rains.

Feeder roads in most provinces have been allowed to deteriorate to the extent that they are passable by four wheel drive vehicle or not at all. It is safe to say that about half of all the feeder roads in the country are now impassable to any vehicle carrying significant loads. Airstrips, navigation aids and small wharves have suffered the same fate due to lack of funding and maintenance. This means that many people can never get produce to market or access food if there is a problem.

Law and Order

Law and order is a major problem which is closely associated with the breakdown of infrastructure. It affects transport because farmers are held up on the road and their produce is stolen, this is reflected in lower prices and therefore reduced incentive to produce.

It is reflected in the closure of local trade store outlets because the operator carries no insurance and a robbery often puts him/her out of business. The fear for their own and their family's safety is another factor that causes them to close down. This means that staples like rice, tinned goods, sugar and salt are not available with the resultant effect on

¹² This has been the theme of several regional development forums and varies in severity between provinces

nutrition. It also means there is no incentive to produce a surplus for cash because there is nothing to buy with the cash.

Most importantly, the wholesale destruction of cash crops and food gardens during tribal fighting means that people are reluctant to grow anything and have a powerful incentive to move to the urban areas where they will rely on imported foods.

There is no short term solution to the law and order problem but it requires a commitment to introduce preventative short and long term measures.

Research

It is difficult to emphasise the on-going importance of research in PNG. It is equally important for cash and food crops, forestry and fisheries. This is because PNG has its own set of agronomic and farming systems, forests and fishery. What is applicable in Asia or Australia will not necessarily be applicable in PNG for cultural as well as physical resource reasons (soil structure, climatic conditions etc).

The most important area of research that PNG needs to concentrate on is farming systems. This means the way that both mono culture and combinations of crops are cultivated. The reason why this is so important is the level of population growth in the country. Population is growing at 2.7% gives a population doubling time of around twenty five years. Papua New Guinea's traditional subsistence farming system has evolved over thousands of years with a population that was more or less in line with what nature could sustain.

The system and the natural resources that sustain that system can not be expected to cope with a population that has probably trebled during the last century and looks set to more than treble in the current century. PNG has to research better and more affordable methods of producing more food on existing land for consumption as well as for sale. This means better soil conservation, better fertilising and mulching, better rotation methods and better varieties.

Agricultural research is a long term and risky business but the benefits are enormous when discoveries are made. Papua New Guinea has one of the best oil palm yields in the world due to a pollinating midge discovered at Dami in West New Britain. The potential gains from the discovery of pheromones to attack scapanes in the coconut has enormous potential and breeding research at all of our research stations in cash crops and food crops has the potential to increase yields and reduce the cost of production.

It is also important to emphasise the importance of post harvest research, both into down stream processing and processing and storage. Papua New Guinea can produce abundant traditional food crops and fish but we cannot store most of them successfully for long periods of time. It is this which makes rice and other imported staples more attractive. If we could readily store traditional crops in a manner which made its preparation easy and convenient we could expect a quantum change in the mix between imported and

domestically produced food. Similarly the many attempts to provide storage facilities for fisheries over the years have all failed.

There is a disproportionate emphasis research into crops and more attention needs to be given to livestock and production of feed crops. There is also a great need to increase research into land use and soil types so recommendations for specific crops and agricultural activities can be made on the basis of the best use of available land.

Extension

There are those who argue that Papua New Guinea needs no more research because the greatest return for a given expenditure would come from improvement of farming systems using existing knowledge. This argument points out the alarming decline in effective agricultural extension since independence despite the many reforms that have taken place. The responsibility for extension has been removed from the national government and given to provinces and ultimately to LLGs.

At the same time the delivery of extension for cash crops and fisheries has been transferred from the government to semi-corporatised bodies with varying degrees of success. This has meant the demise of the all-purpose generalist extension officer with the resultant decline of extension in mixed farming methods. The solution is to make the decentralised services work better.

Land

One of the greatest perceived obstacles to progress in PNG is the availability of land with secure title and tenure. An attempt by the government and the World Bank to reverse this situation in the period prior to the 1997 election was hijacked by people who deliberately distorted the methods and motives of the programme.

To enable better farming methods and investment of time and money into traditional land there needs to be a national land registration system as proposed by the World Bank. This would free up peri-urban and rural land for development and allow landowners to get some benefit from it. The registration drive has been deliberately distorted by politicians and others which will make it a slow and difficult policy to introduce.

The recently announced New Britain Palm Development Ltd project in West New Britain has broken new ground in the use of customary land for large scale agricultural projects. This project is about 15, 000 hectares on customary land using a lease-lease back system and with a number of safeguards for future generations and income generating features for the existing generation. There is at least one other company looking at a similar project in the Ramu valley. This has enormous potential for future agricultural development because of the potential to establish nucleus estates in conjunction with traditional landowners.

RESILIENCE

Papua New Guinea has been extremely lucky during the three crises that it faced in the 1990s. The international community and especially Australia have come to its assistance on all three occasions and provided much needed financial aid. The three events were supposed to be accompanied by World Bank/IMF Structural Adjustment Programmes. However there has not been a significant improvement in the structure of PNG's economy and it remains critically vulnerable to internal and external shocks that can and will occur.

There have been many attempts to reform the economy, the administration and the government. Largely these have failed due to a lack of political commitment. There are many reasons for this (Manning et al) but if the country is to reduce its level of vulnerability it has to find answers to its political and corruption problems which are the cause of such misallocation of resources.

PNG will only increase its resilience when it reforms its economic management and gets its government debt under control. With a strong and growing economy a country can afford short term borrowing to tide it over the difficult times whether they be externally or internally generated. PNG has been able to resist these in the past by resorting to the international community and its friends. These may always be there but no country should rely on outside assistance when it can build a strategy to ensure its own resilience.

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