IMPROVING URBAN DEVELOPMENT IN PAPUA NEW GUINEA
TABLE OF CONTENT

TABLE OF FIGURES........................................................................................................................ v
ACKNOWLEDGEMENTS .................................................................................................................. vii
ACRONYMS...................................................................................................................................... viii

1. INTRODUCTION ....................................................................................................................... 1
   1.1 What is an Urban Plan?.......................................................................................................... 1
   1.2 What is the State of Urban Policy in PNG? ....................................................................... 1
   1.3 Broad Aims of this Report ............................................................................................... 2
   1.4 Main Finding from Reviewing the NCD and Lae City Plans ........................................ 2
   1.5 Pillars for Effective Urban Development Plans ............................................................ 2
   1.6 Main Policy Lessons ......................................................................................................... 3
      1.6.1 Planning reform should bring the “real world” and the “planning
           system” closer together ............................................................................................... 4
      1.6.2 Who ‘owns’ the Urban Development Plan? ............................................................... 4
      1.6.3 Land is Money ........................................................................................................... 5
      1.6.4 Success of Private Projects ....................................................................................... 5
      1.6.5 Housing Needs .......................................................................................................... 5
      1.6.6 Informal Settlements ................................................................................................. 6
      1.6.7 Traditional Villages ................................................................................................... 6
      1.6.8 Access to Customary Land is required for Urban Expansion .................................. 6

2.0 THE PLANS REVIEWED: NCD AND LAE ................................................................. 7
   2.1 Port Moresby ................................................................................................................... 7
   2.2 Lae .................................................................................................................................. 9

3.0 MAIN FINDINGS FROM THE REVIEW OF NCD AND LAE CITY PLAN ...... 11
   3.1 Formal Housing ................................................................................................................ 11
      3.1.1 Private Housing ......................................................................................................... 11
      3.1.2 Affordable Housing .................................................................................................. 12
   3.2 Commercial Development .............................................................................................. 12
   3.3 Industrial Development ................................................................................................. 13
   3.4 Settlements ....................................................................................................................... 14
      3.4.1 Port Moresby ............................................................................................................ 14
      3.4.2 Lae .......................................................................................................................... 15
   3.5 Settlements Policy ............................................................................................................ 16
      3.5.1 Port Moresby ............................................................................................................ 16
      3.5.2 Lae .......................................................................................................................... 16
   3.6 Planning and Implementation of the Settlements Policy .................................................. 16
      3.6.1 Port Moresby ............................................................................................................ 16
      3.6.2 Lae .......................................................................................................................... 17
   3.7 Traditional Villages within Urban Areas ......................................................................... 17
      3.7.1 Port Moresby ............................................................................................................ 17
      3.7.2 Lae .......................................................................................................................... 18
   3.8 National Urban Policy on Traditional Villages ............................................................... 19
      3.8.1 Port Moresby ............................................................................................................ 19
      3.8.2 Lae .......................................................................................................................... 19
   3.9 Infrastructure and Services ............................................................................................. 20
      3.9.1 Roads ........................................................................................................................ 20
      3.9.2 Ports .......................................................................................................................... 20
      3.9.3 Power ....................................................................................................................... 21
      3.9.4 Water and Sewerage ............................................................................................... 21
3.10 Public Amenities ..................................................................................................... 21
3.11 Environment and Ecology ....................................................................................... 22
3.12 Land Tenure Security and Supply ........................................................................... 24
3.13 Governance Structure.............................................................................................. 24
  3.13.1 National Capital District Commission .................................................... 25
  3.13.2 Lae City and Morobe Provincial Administration .................................... 26
  3.13.3 Department of Lands and Physical Planning .......................................... 27
3.14 Planning Policy ....................................................................................................... 28
3.15 Residential Only — No Jobs and Services ............................................................. 29

4. POLICY LESSONS ....................................................................................................... 30
  4.1 Lack of Tools and Skills for Managing Urban Growth .......................................... 30
  4.2 Planning Process and Enforcement ......................................................................... 30
  4.3 Inadequate Land Tenure and Supply ...................................................................... 30
  4.4 Governance and Administrative Issues ................................................................... 31
  4.5 Financial and Funding Issues .................................................................................. 31
  4.6 Settlement Issues ..................................................................................................... 32
    4.6.1 Port Moresby ........................................................................................... 32
    4.6.2 Lae ........................................................................................................... 32
  4.7 Traditional Village Issues ....................................................................................... 32
    4.7.1 Port Moresby ........................................................................................... 32
    4.7.2 Lae ........................................................................................................... 33

5. RECOMMENDATIONS .............................................................................................. 34
  5.1 National Urban Design Guidelines ......................................................................... 34
  5.2 Governance environment should determine the type of plans and delivery vehicle34
  5.3 Public sector must build the facilities that the private sector cannot ................. 34
  5.4 Configure development authority to attract private capital ............................... 35
  5.5 Private Sector can fund and deliver most urban development ..................... 35
  5.6 Create strong champions for Urban Plans ....................................................... 36
  5.7 Complete the physical planning hierarchy for each major centre in PNG ......... 36

6. BIBLIOGRAPHY .......................................................................................................... 40

7. APPENDIX .................................................................................................................... 42
Appendix 1: Terms of Reference .................................................................................... 42
Appendix 2: Methodology ............................................................................................... 44
Appendix 3: Interviews ................................................................................................... 46
Appendix 4: List of Stakeholder Workshops ................................................................. 63
Appendix 5: Case Studies ............................................................................................... 68
Appendix 6: Survey Questionnaire ................................................................................. 88
Appendix 6.1 — Survey Questionnaire Response Analysis ........................................ 92
Appendix 7: Stakeholder Review on the draft report .................................................. 109
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>‘Pillars’ to support the Urban Development Plan and Implementation</td>
</tr>
<tr>
<td>2</td>
<td>High covenant settlement in Taurama Valley is an example of urban growth without formal titles and urban infrastructure</td>
</tr>
<tr>
<td>3</td>
<td>New boarding houses near Rainbow, NCD</td>
</tr>
<tr>
<td>4</td>
<td>Informal settlement on flood-prone land next to the Bumbu River</td>
</tr>
<tr>
<td>5</td>
<td>Independence Drive is one of many key roads in Lae in need of major repair</td>
</tr>
<tr>
<td>6</td>
<td>Modern Apartment Building in Port Moresby</td>
</tr>
<tr>
<td>7</td>
<td>New high density mixed use building in Lae developed by Nambawan Super has two levels of residential apartments and five levels of office space</td>
</tr>
<tr>
<td>8</td>
<td>Tatana Village on Tatana Island</td>
</tr>
<tr>
<td>9</td>
<td>Unitech and ‘Madang Block’ Settlement showing tremendous unplanned informal growth in 25 years</td>
</tr>
<tr>
<td>10</td>
<td>Unitech in Northern Lae in 1990</td>
</tr>
<tr>
<td>11</td>
<td>Heavy vehicular and pedestrian traffic in Lae demonstrates the need for planned circulation</td>
</tr>
<tr>
<td>12</td>
<td>Curtin Brothers have privately funded and developed a major new dry-dock at Motukea Shipyards</td>
</tr>
<tr>
<td>13</td>
<td>Investment in parks such as Voci Point Park in Lae City should be increased</td>
</tr>
<tr>
<td>14</td>
<td>Paul Walter, AIA Built Environment Committee, 31.01.2012</td>
</tr>
<tr>
<td>15</td>
<td>Location of Port Moresby case study projects</td>
</tr>
<tr>
<td>16</td>
<td>Guest house development in formerly single residential neighbourhoods is becoming common</td>
</tr>
<tr>
<td>17</td>
<td>Rainbow</td>
</tr>
<tr>
<td>18</td>
<td>Taurama Valley</td>
</tr>
<tr>
<td>19</td>
<td>Koki Village next to the Park</td>
</tr>
<tr>
<td>20</td>
<td>Recreational land at Koki has been rezoned to commercial</td>
</tr>
<tr>
<td>21</td>
<td>Koki Park</td>
</tr>
<tr>
<td>22</td>
<td>9 Mile Self Help Housing</td>
</tr>
<tr>
<td>23</td>
<td>Lae City case study projects</td>
</tr>
<tr>
<td>24</td>
<td>Former Lae Airport site</td>
</tr>
<tr>
<td>25</td>
<td>Malahang Industrial Estate</td>
</tr>
<tr>
<td>26</td>
<td>Awilunga Housing Estate</td>
</tr>
<tr>
<td>27</td>
<td>Lae Tidal Basin</td>
</tr>
</tbody>
</table>
Quotes from interviewed stakeholders

“Honest and reliable people will make it work and put the smile back on the common people.”

“I want to see Lae become a real city...”

“Everyone knows that if you care for something, you will protect it.”

“A beach front that is open, clean, attractive and inviting to stroll along and enjoy the breeze coming from the sea, have a cup of coffee or snack and be able to do so without fear of being mugged.”
ACKNOWLEDGEMENTS

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Paul Walter, Charles Yala and Simon Aleker
### ACRONYMS

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<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
</tr>
<tr>
<td>CPTED</td>
<td>Crime Prevention through Environmental Design</td>
</tr>
<tr>
<td>DLPP</td>
<td>Department of Lands and Physical Planning</td>
</tr>
<tr>
<td>GSP</td>
<td>Government Settlements Program</td>
</tr>
<tr>
<td>GoPNG</td>
<td>Government of Papua New Guinea</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>LDP</td>
<td>Local Development Plan</td>
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<td>LLG</td>
<td>Local Level Government</td>
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<td>LNG</td>
<td>Liquefied Natural Gas</td>
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<td>LNUDP</td>
<td>Lae-Nadzab Urban Development Plan</td>
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<tr>
<td>MKA</td>
<td>Motu Koitabu Assembly</td>
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<td>MPPB</td>
<td>Morobe Physical Planning Board</td>
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<tr>
<td>NCD</td>
<td>National Capital District</td>
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<tr>
<td>NCDC</td>
<td>National Capital District Commission</td>
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<tr>
<td>NCDUDP</td>
<td>National Capital District Urban Development Plan</td>
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<tr>
<td>NCDSSP</td>
<td>National Capital District Settlement Strategic Plan</td>
</tr>
<tr>
<td>NCV</td>
<td>No commercial value</td>
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<tr>
<td>NLDP</td>
<td>National Land Development Program</td>
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<td>NLDT</td>
<td>National Land Development Taskforce</td>
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<td>PGK</td>
<td>Papua New Guinea Kina</td>
</tr>
<tr>
<td>PNG</td>
<td>Papua New Guinea</td>
</tr>
<tr>
<td>PPB</td>
<td>Physical Planning Board</td>
</tr>
<tr>
<td>SOE</td>
<td>State Owned Enterprise(s)</td>
</tr>
<tr>
<td>SRDA</td>
<td>Special Residential Development Area(s)</td>
</tr>
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<td>UDP</td>
<td>Urban Development Plan</td>
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<td>UDSS</td>
<td>Urban Development Settlement Study</td>
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<td>UN</td>
<td>United Nations</td>
</tr>
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1. INTRODUCTION

This report on Improving Urban Planning in Papua New Guinea, which draws on lessons from the review of the NCD and Lae City plans, is important to guide the planning and development of cities, townships and growth centres across the country. The key point to note is that the report draws on the lessons on planning and development from the country’s two major cities — Port Moresby and Lae. The general perception is that both cities are dysfunctional. This report provides the reasons for the disorderly development from an analytical point of view. Lessons from this report will be useful for reviewing and updating legal and governance structure as well as the development of cities, towns and growth centres across the country.

1.1 What is an Urban Plan?

An urban plan is a legal document and mechanism which provides the framework for inhabitants to pursue their respective interests without interfering in those of others. The plan sets defined boundaries for the inhabitants to pursue their interests without encroachment. This is because urban areas are characterised by high population density, intensive human activities, high mobility, mass production, employment, and hives of business opportunities. In order for all habitats to enjoy life, the built environment must be organised in an orderly manner to accommodate different interest groups that dwell in a city.

Hence, urban plans are legal documents and essential instruments in describing and directing the future form and character of a place. The objective of the plan is to facilitate orderly urban development.

1.2 What is the State of Urban Policy in PNG?

In Papua New Guinea (PNG), cities and towns remain disorderly and dysfunctional. The appalling state of the two major cities; namely, Port Moresby and Lae, depicts the state of poor development. The notable problems are housing shortage, poor transport services, urban poverty, squatter settlements, environmental pollution, informal marketing, deteriorating infrastructure such as roads and sewerage, informal markets, high levels of unemployment, and a disproportionate provision of basic services such as health and education, sporting facilities and shopping centres. They are no longer safe cities for employment, enterprise development and raising families.

Since urban plans are fundamental to orderly urban development, it is assumed that there are some chronic problems with the urban planning process, the plans and their implementation in the context of Port Moresby and Lae. These obstacles are suspected of having reciprocal effects on urban planning related issues, such as the shortage of serviced land for urban expansion.

The Government of Papua New Guinea-initiated National Land Development Program (NLDP) contains a suite of reforms to improve the accessibility and availability of land for development purposes. Improving access to, and efficient use of, alienated land is one of the major components of this reform program. In this context, the effectiveness of urban planning
and implementation matters. At present, the planning, regulatory and administrative functions of urban planning and development appear not to be functioning. For instance, land is not always allocated and used in accordance with the plans.

1.3 Broad Aims of this Report

With the view to generate discussion useful for policy, the project to review the NCD and Lae City plans, was commissioned. The project’s broad aim is to draw lessons useful for policy from the review of planning, development and management of the NCD and Lae city development plans. Detail descriptions of the aims and objectives are contained in the Terms of Reference (TOR) in Appendix 1.

While reference is made to the supporting environment, the limitations of physical planning are also the limitations of this report. Whereas good planning can do much to produce good urban environments, a range of very important factors are outside it. Political, legal and economic environments lie beyond physical planning. Their importance is highlighted as this is beyond the scope of this report.

The purpose of the Urban Development Plan is to direct the growth of the city. This means it must both direct public spending and guide private development. In order to direct public spending it must direct projects such as road building. In order to guide private development it must have effective mechanisms of permission and prohibition of private construction projects.

1.4 Main Finding from Reviewing the NCD and Lae City Plans

The main finding from the review of the NCD and Lae city plans is that both city plans are technically competent, meaning that they are based on international planning principles. Unfortunately, both plans are unable to direct and coordinate actual development. The gap between the reality and the plan visions is hugely wide. Hence, the rest of the review document focused on understanding the drivers behind this widening gap. The recommendations provided at the end of this analysis aim to bring this gap together. In other words, the options and strategies provided are those intended to close the gap between the planning processes and the actual development. PNG needs a planning system and process that directs the real world, so that the planning system delivers the development of viable cities and townships.

1.5 Pillars for Effective Urban Development Plans

It is vital that urban development plans (UDPs) are well formulated, based on the best available evidence, analysis, community input and best planning practice. However, even the best formulated plans will begin to fail if they lack a governance context which supports them and enables them to be effectively implemented.

Hence, the urban development plans for both Port Moresby and Lae need strong ‘pillars’ which will support and allow them to be as effective as possible within the development environment of these cities.
The ‘Six Pillars’ that are recommended to support effective Urban Development Plans are:

1. **Land ownership** certainty, usage rights, titling and dealings.
2. **Planning responsibility** which is clearly defined with coordinated responsibilities for both planning and plan implementation.
3. **Funding availability**, sufficiency and certainty of timing, for planning and infrastructure delivery.
4. **Adequate resourcing and training** for assessment and enforcement personnel with appropriate delegations, but also appropriate oversight where discretionary decision making is involved.
5. **Sound governance** systems across all land dealings, planning and development activities.
6. **Investment confidence** will come if all of the above points are achieved.

These are described as ‘pillars’ because if any one of them is lacking or ineffective, it affects the stability of the whole platform upon which the UDP and its implementation sits.

![Diagram of Urban Development Plan with pillars]

Figure 1: ‘Pillars’ to support the Urban Development Plan and Implementation.

**1.6 Main Policy Lessons**

In reality, both cities have seriously inadequate investment in infrastructure and much of the infrastructure that already exists is not maintained. The majority of private sector
Improving Urban Planning in Papua New Guinea

development has little regard for planning. In this sense, the formal planning system and the ‘real world’ are far apart.

The main lessons for policy from the review of the NCD and Lae city plans are:

1.6.1 Planning reform should bring the “real world” and the “planning system” closer together

Currently the land zoning system is relied on for planning and development. However, it is not a good tool to use as the main way to control the growth of cities because it fundamentally relies on prohibition. Prohibition, which requires enforcement, is very weak in PNG. It also requires separation of land uses whereas land uses tend to be highly mixed in developing cities. Further, the use of a parcel of land changes with evolution in the demand for its best use, hence the need to adjust land zoning as the main tool for controlling the growth of cities in PNG. The way forward is to subject the terms of a lease to an operative town plan.

Removing zoning as the main planning control would require a fundamental re-writing of a range of legislation. So the report recommendations will focus on reform that mitigates this weakness. This includes subjecting the leases to the operative town plans. Further, expanding permitted land uses with wider designation of ‘mixed-use’ development zoning, supported by good design guidelines that set out how to deal with land use conflicts and create good places, is encouraged.

1.6.2 Who ‘owns’ the Urban Development Plan?

Generally, the plans are created by the city administration. The plan is ‘owned’ by this organisation, although ideally it will capture the wider government intention. The primary legal framework for the administration of land development in PNG is the Physical Planning Act 1989 and the Land Act 1996. The Land Act 1996 controls the allocation of government land, which is now largely exhausted, with the majority of land within Port Moresby having been allocated through ministerial discretion. Most activity in this realm is now within the secondary market (developed Government land/Undeveloped Government land). The Planning Act 1989 controls the approval of developments through the appropriate Physical Planning Board.

However, there is no Act or policy in place to coordinate physical planning related departments in PNG:

- The Department of Lands and Physical Planning has only a weak stake in the Urban Development Plans, yet controls the allocation of land owned by the state;
- The funding of infrastructure tends to be at the national level and controlled by the Department of National Planning and Monitoring, the Department of Treasury or the Prime Minister’s Department, although none of these departments has a strong stake in the UDPs;
- The development of infrastructure is parked with the State-owned enterprises (water, sewerage and electricity) and Works Department (roads);
• There is no infrastructure developer funding mechanism or developer contribution scheme (like a tax credit scheme) for property development, and no link between private investment and delivery of the infrastructure envisaged in the UDP;
• There is no specialised administrative body responsible for land dealings on customary land. Customary land occupies 97% of the land in the country. Hence, urban expansion will unwillingly demand access to customary land;
• the delivery of planned urban growth requires skilled administration. However, there are no town planning degree programs available in PNG; and
• the city administrations tend to be poorly funded and there is a clear need for resources and skills in the office of the Chief Physical Planner, the Surveyor General’s Office (to establish control over the land data systems) and in the technical divisions of both city administrations.

1.6.3 Land is Money

The significant changes in land value that accompany titling, servicing and zoning of land can create ‘windfall’ increases in the value of land assets. Historically and globally this has been a magnet to corruption and organised crime. Strong probity protocols and transparent land dealings are always a feature of effective urban development and governance systems. PNG needs to be original and promote a transparent and accountable system.

1.6.4 Success of Private Projects

The success of private development such as Vision City and Harbour City in Port Moresby provide good examples of how large-scale private investment has successfully created urban projects in PNG. However, these projects are not cities in themselves. Worldwide, there are many other cities where there is strong private investment but a failure to invest in the public realm. Examples such as Jakarta, Lagos or Los Angeles tend to produce islands of amenity in privately controlled shopping malls, hotels and such, while the public realm remains uncared for, uncomfortable and sometimes dangerous. The same appears to be happening in Port Moresby and Lae.

The UDP should foster one-off private development, but in a way that makes sure it keys into a larger-scale plan that operates at the level of the metropolitan city, integrating and being open to the surrounding urban areas. Malahang in Lae is another good example of an urban development (see Appendix 5). However, the physical structure allows extension of streets only in one direction, rather than as an integrated urban grid.

1.6.5 Housing Needs

The private development of housing needs land supply. The state’s presence in the housing market appears to be ‘crowding’ out the private sector. The focus for government should be on increasing the supply of land, both on state and customary-owned land. At the family level, improving the home and creating a valuable asset should be encouraged. The policy emphasis must be on housing as an asset, not just a place for sleeping or shelter.
1.6.6 Informal Settlements

The growth and expansion of Internal Settlements must be seen as a major competitor to the planned development of the urban sector. The GoPNG established Office of Urbanisation-led pilot project of Taurama Valley has become a high class Informal Settlement. The inability of such agencies to deliver, such as was expected from the Office of Urbanisation, demonstrates deeper issues that need detailed analysis.

There are strong drivers behind the success of informal settlements. Hence, this will remain a major policy challenge for urban planning and development in PNG. One such issue is the mutation of state agencies from their mandated responsibilities (see s.4.4; the case of the Office of Urbanisation). The absence of clear government policy and the lack of clear focus by those entrusted to oversee implementation provide impetus to the rapid expansion of informal settlements.

1.6.7 Traditional Villages

Both Port Moresby and Lae, and in fact all cities and towns in PNG, have traditional villages. Protecting the integrity of the cultural ways of life in an increased urban context provides unique policy challenges.

1.6.8 Access to Customary Land is required for Urban Expansion

There have been significant efforts in both cities to achieve planned development on customary land. In Lae through the Ahi landowner projects and in Port Moresby through the Taurama Pilot Project. To date, neither project has been able to stop the informal development.

The rest of the report is organised as follows. Section 2 provides a review of the NCD and Lae City Plans. Section 3 provides an analysis of key principles that emerged from the review, followed by Section 4 with the policy lessons. Section 5 provides a set of recommendations.
2.0 THE PLANS REVIEWED: NCD AND LAE

The Urban Development Plan for each city has been in place for several years; for Port Moresby, the National Capital District Urban Development Plan 2006 (NCDUDP), and for Lae, the Lae-Nadzab Urban Development Plan 2005 (LNUDP). Overall, each plan is a competently prepared urban plan that follows international norms for town planning.

In the planning of many cities, a separation is made between the city strategy and the city plan. It is noted that no such distinction is made in the context of both Port Moresby and Lae. The strategy generally covers cross-sectoral matters: utilities, economic development, employment and demography. The plan focuses on spatial and physical development.

The NCDUDP is based on an exhaustive study, “Urban Development & Services Plan”, prepared by an American planning firm, Wilbur Smith Associates in 1996. The NCDUDP acknowledges its limitations, in particular the scarcity and age of the base data. It identifies the need for a more comprehensive and updated study by 2010. To date, this has not been completed. However, a number of Local Development Plans have been completed. These cover more than half of the NCD, including downtown Port Moresby. Another limitation of the plan is that it is contained strictly within the district boundary. The NCD city boundary is shared with the Central Province.

The LNUDP was prepared with fewer resources, both in terms of data and the technical breadth than the NCD plan. The plan was prepared by the Morobe Provincial Administration, with work completed by the Land Use Planning Advisor. This plan has well researched historical analysis, although it has only limited future plans and strategies. The main elements of the future plan are the identification of 14 urban centres, both established and proposed. To date, there is little evidence that this designation has led to any actual development. The Plan also identifies “Future Urban Development Areas” which are all the undeveloped non-customary land capable of development in the plan area. To date the LNUDP is not supported by any Local Development Plans or Subject Plans. A new Urban Development Plan is being prepared with support from JICA.

A serious weakness of each plan is the lack of any effective strategy or mechanism for the implementation of urban growth or urban extension. This issue may be considered to be a problem that lies outside of the plan rather than the failure of the plan itself. However, the successful and orderly growth of any city will be the result of effective operation of a range of agencies, such as the Department of Lands and Physical Planning, provincial governments, municipal authorities, utilities providers, efficient mobilisation of land under customary tenure, and an effective private property development sector.

2.1 Port Moresby

For several years Port Moresby has experienced rapid population growth rates. The estimated growth rate is more than 4% per annum and the total population estimates range from 500,000 to one million people. The city has also seen significant urban consolidation and extension. However, the city structures have not kept pace with the growth. The situation is
best characterised as urban growth without formal or proper land titles and urban infrastructure.

The fastest rate of growth of new housing in both Port Moresby and Lae is in the informal settlements. The growth of industrial and commercial developments largely relies on pre-existing roads and infrastructure, rather than establishing new public roads and streets for orderly growth.

In addition to conventional settlement and shanty growth, a new phenomenon has emerged of relatively high value homes being built on customary land without formal title and without services. These “middle to high covenant settlements” such as the one south of the Taurama Barracks appear to be developing in response to the great need for housing that is unsatisfied even among people with the capacity to pay.

There has been quite significant new industrial development in recent years north-west of Port Moresby along the corridor to the Exxon Mobil Liquefied Natural Gas (LNG) plant. These include significant expansion of Curtin Brothers’ Motukea Shipyard, the Avenell Engineering Systems industrial estate at Fairfax Harbour called “Ravuvu” and a cluster of new industrial and logistics developments around Atlas Steel near the junction of the Baruni Road and Napa Road. All these projects are taking place on green-field sites and in some cases on customary land. This is similar to the “middle to high covenant settlements” occurring without planned urban extension of streets and road systems and more importantly, on land without secure land titles for some of the developments.

There has also been quite significant urban renewal within the existing city frame, including many new residential apartment buildings in Port Moresby. These tend to be in established and desirable neighbourhoods (such as those close to town) and have largely corresponded with the activity created by the USD19 billion LNG project to the city’s north-west (the advent of this project saw a threefold increase in residential rents for secure apartments). This development has increased housing supply only at the highest price points.

There have also been major retail projects in the city, including Vision City Mega Mall at Waigani and Harbour City at Konedobu, the latter being a mixed residential, commercial office and retail development. These are successful modern facilities well located in strategic precincts in the city. Subsequent projects that are planned on nearby sites suggest these have had a catalyst effect on their precincts. However, each area lacks a proper precinct plan to integrate the project into its surroundings.
A new and distinctive contrast has been created in the cities with the relative success of high-end residential and commercial development projects within their boundaries which appear as islands intended to be approached only by car. There have been some improvements in the maintenance of public domain, with improved street sweeping and some new public art pieces at major gateways and roundabouts. However, these improvements in the public domain (footpaths, streetscape and public transport facilities) have not generally kept in step with these new developments.

The serious housing shortage has led to a range of informal and unplanned responses. Guest and boarding houses with ten or more rooms have become commonplace in many of the existing residential areas such as Boroko and Rainbow. All of the Traditional Villages are experiencing rapid growth and overcrowding. In many cases the Traditional Villages have become blurred with informal settlement-like growth patterns, while informal settlements themselves continue to grow intensively in both cities — Port Moresby and Lae. Many of the older informal settlements have been so long-established that their communities are moving into third generation inhabitants.

2.2 Lae

The city of Lae has become well known for its potholed roads. More recently there has been an ongoing program of maintenance, upgrade sealing funded by the national government. A major upgrade of the roads around the port (sealing and drainage) was also completed in the late 2000s with funds from Australian Aid.

On the other hand, Lae’s settlements have continued to grow steadily. There have been repeated ethnic clashes in Lae’s informal settlements. This has resulted in fairly large-scale migrations between the informal settlements as certain ethnic groups are pushed out of certain areas. These crises have resulted in informal settlement and camps being established on marginal land, such as highly flood-vulnerable river banks.

The formal residential development sector in Lae presents a different picture to Port Moresby. It has not had the same level of investment and development as Port Moresby in the past decade. The formal residential development has been marked by its absence. Easily the largest residential project in that period is the “Awilunga” Hornibrook’s site at 9-Mile with around 100 houses developed to house mine employees’ families.
Lae, however, continues to experience growth in the commercial and industrial sectors. Three main areas include the old industrial centre at the port, which has been spurred on by the road upgrades and the ongoing tidal basin project, the Lae-Nadzab Corridor which has also seen new industrial and commercial development, such as the fuel station/depot at the Wau Road intersection and the area to the East of the city around Malahang Industrial Estate together with the new Majestic Seafood processing plant and the Lae Biscuit Company plant. These modern facilities make the poor state of the surrounding road network all the more stark.

No commercial centre exists in Northern Lae near the University of Technology Campus. People in this area must travel into town to access services. This is despite the Urban Development Plan identifying a new urban centre near the campus.

There is a clear need to establish an urban structure in the east of the city and along the Nadzab corridor before land is developed thereby blocking potential links. This should include new transport linkages and an urban structure of street networks.

Figure 5: Independence Drive is one of many key roads in Lae in need of major repair.
IMPROVING URBAN PLANNING IN PAPUA NEW GUINEA

3.0 MAIN FINDINGS FROM THE REVIEW OF NCD AND LAE CITY PLAN

This section summarises the main findings under the thematic areas from the review of both city plans.

3.1 Formal Housing

The type and location of housing in a city should connect the residents to jobs and services. This can be achieved by either co-locating residents with jobs and services or by linking them via the transport system. The UDPs for Lae and NCD suggest a composite approach with new centres and intensification of housing around the existing centres. There is also some planned improvement of transport, although neither city has an integrated transport strategy.

3.1.1 Private Housing

Most owner-builder development outside the Traditional Villages and informal settlements is taking place in the established urban areas, in suburbs that were established before or shortly after independence. This secondary market includes a variety of strategies for intensification of use, such as dual or multiple occupancy and redevelopment of house sites as guest houses.

It is apparent that the majority of developments in this sector do not follow any formal planning application or approval process. This sector has far greater potential to improve housing supply. However, it lacks a supply of serviced sites for development.

There are a number of larger development companies established in PNG. These were established after realising the potential for civil and construction business opportunities within the country. These companies typically started with operations focusing on roads, subdivisions and airstrips. Many now have extended their operations into mining, bridge construction, dam construction, shipping, wharf construction, dockyard construction and operation, major infrastructure establishment, property development and building construction.

The main issue that faces large private corporations is acquiring the land to carry out developments. Some companies have an aim to develop large urban centres, in line with Urban Development Plans, incorporating the needs of the local area and following good urban design principles. To date, these developers have only operated at the upper level of the housing market, with houses and apartments typically costing in excess of PGK500,000.

There has been some activity in the more moderately priced housing options such as the Yumi Yet Real Estate project south of Gerehu. This is a large scale medium-density tenement housing project with one and two bedroom apartments for rent at PGK1,500 to PGK2,300 per month. This type of project is unusual in PNG but may become far more common.
3.1.2 Affordable Housing

In reality, housing affordability is at crisis levels in the cities. As a “rule of thumb” people can spend 30% percent of their income on housing. As an example, a reasonably senior manager working for a national corporation such as Ok Tedi Mining Company can afford a PGK360,000 house; a supervisor can afford a PGK250,000 house; and a “worker” can afford a PGK110,000 house.

Houses in suburbs such as Gerehu are typically in the range PGK350,000 to PGK1,000,000. A small house and land package at 8 Mile (Port Moresby) is PGK650,000. Houses in most established suburbs are over PGK1,000,000. Further, citizens in formal salaried employment represent only a small minority, even in the urban areas. Furthermore, obligations to family and kin often means that salary is shared among many people, making the 30% “rule of thumb” even more difficult to achieve.

These figures make it clear that there is a gulf between the formal residential property market and most people’s reality. The consequence is the rapid growth of informal settlements on both state owned land (8 Mile and 9 Mile area in Port Moresby) and customary land (Taurama Valley and ATS (beside the Jacksons Airport) in Port Moresby).

Affordability is broadly a function of income and cost of construction. Affordable housing in general and especially housing for key workers in the public sector (police, teachers, doctors, lecturers and nurses) and the private sector is limited within both Port Moresby and Lae. The lack of affordable housing results in people seeking alternative options, such as single person hostel accommodation and settlement situations. Breaking the affordability crisis requires a multifaceted approach with a short, medium and long term strategy. Discussions on this lie beyond the purview of this report.

3.2 Commercial Development

The majority of new commercial buildings in both cities are the result of business houses developing premises for their own use. In some cases these developments are in partnership with a builder or developer.

There has been rapid growth in recent years in the cities and regional towns of general stores commonly called ‘Chinese Trade Stores’. These tend to occupy lightweight steel shed buildings and sell a wide range of products from rice and bully beef to shoes and brooms. They typically have a single secured entry. They tend not to have any type of display to the street front but rather have decorative painted advertisements of brands. These shops appear to be owner developed and occupied, rather than being developed by a professional property development company.

A different development model has also emerged in Port Moresby in recent years, comprising professionally developed commercial apartments occupied by retailers and smaller businesses. Examples are the new Steamships project at Gordons on Ahuia Street and the project to the north-west of the Erima roundabout. These projects consist of multi-storey concrete buildings with on-ground parking. They have multiple tenancies, including
competing or complementary offers and are operated as managed commercial estates with shared site security and other services.

Typically, development occurs on land on which a deal is struck between the developer and a party representing the customary landowners. Generally these projects have a set of common characteristics — they directly connect to the existing road, are single use, reflect the business of the developer, are mostly industrial, represent low investment in ‘bricks and mortar’, and are isolated and independent from neighbouring sites and city structures.

There has also been a variety of new commercial office buildings developed in recent years. These include the new ANZ office building at Harbour City (Curtin Brothers/ANZ Joint Venture) and the new Lands building developed by Lamana (Lamana/Nambawan Super Joint Venture). In Lae, the new Nambawan Super building is a mixed use building with office space at the lower levels and residential apartments on the upper levels (see Figure 7).

All these projects have been developed within the existing urban centres and conform to land uses identified in the UDP. None could be said to have a good street frontage and the address of all are dominated by fences and car parks. They clearly demonstrate the need for better design guidelines for such projects.

### 3.3 Industrial Development

The pattern that has emerged for industrial development in both cities is one of isolated parcels being developed without consideration for creating an integrated and connected urban structure. There is no doubt that if this pattern continues without effective physical planning and implementation, these “used up” sites will prevent the holistic integrated development of the two cities.

In the case of customary land, the industrial development that has occurred is characterised by the particular type of commercial deal that has led to the development.

Hence,

- the ad hoc pattern will compromise the ability to efficiently plan these areas of the city
- developments occur on prime sites first, meaning the prime sites for high value uses such as town centre development are being lost to lower value industrial uses. This means the future high value uses may be driven onto sub-optimal sites; and
- the affected communities often see little benefit from the development, or the benefits are concentrated in the hands of only a few people.
This pattern represents a simple, low risk property development model. These are almost exclusively industrial projects which result in the absence of more sophisticated development models. This development is hampering the emergence of a higher degree of property market specialisation and more diverse property offerings.

Overall, large scale industrial development has proceeded in both cities on large sites controlled by a single developer entity. Examples include:

- Motukea Shipyard;
- Ravuvu at Fairfax Harbour; and
- Majestic Seafood.

They tend to have an independent water and power supply and manage their own security and access.

Malahang Industrial Estate represents an alternative model where a government agency (Industrial Centres Development Corporation) has created an integrated precinct with numerous separate businesses co-located within a managed estate.

### 3.4 Settlements

A significant proportion of the residential population of Port Moresby and Lae cities live in informal settlements. Those settlements are characterised by unplanned and uncontrolled growth and occupy about half of the total residential land of both cities. As rural-urban migration escalates, informal settlement areas present significant challenges in the planning for city growth and management.

#### 3.4.1 Port Moresby

Informal housing areas covered 44.6% of the total residential land in 1995 as shown in the NCDUDP. According to its land projections, by 2015, additional land requirements will increase this proportion to 47.3% of the total residential land area in Port Moresby.

The NCDUDP data shows that the number of settlements has more than doubled from 1970 to 2006. The NCD Settlements Strategic Plan 2006 (NCDSSP) estimates that at least 40% of Port Moresby’s population live in settlements and without intervention, this figure would soon reach more than 50%. A later study, UNHabitat Urban Profile (2010), gives the figure of 45% of Port Moresby’s population living in settlements. The settlements classification presented in the NCDSSP comprises three categories: formal settlements, squatter settlements and Motu-Koitabu settlements.

Formal settlements are those on State lands, which were subjected to subdivision during the 1970s and 1980s. Here, allotments were created and land given. Houses would be built and expanded over time commensurate with family income growth. All other settlements on State land are categorised as squatter settlements. Settlements on customary land in Port Moresby are termed Motu-Koitabu settlements. In fact, the latter category should be classified as Traditional Villages.
The NCDSSP identifies a total number of 89 settlements under all three categories with informal settlements accounting for 70. The UDSS (1996) gives the number of total settlements as 74 with informal settlements at 48. Accordingly, the number of informal settlements has grown by more than 30% within the decade 1996 to 2006.

Informal settlements are characterised by their unplanned and uncontrolled growth, and lack of basic services. They are the places of residence for the majority of the rapidly growing rural-urban migrant populations attracted to the city. There are also growing middle-income and even high-income categories taking up residence in informal settlements as a result of an unaffordable and dysfunctional formal housing market. As much as 80–90% of the NCD population is involved in informal sector businesses (NCDUDP data) and, according to the NCDSSP, more than three-quarters of the settlement population is supported by this sector.

### 3.4.2 Lae

The LNUDP land use data shows that squatter settlements occupy 10.9% of the total built up land in the LNUDP area. This is more than the total formal residential land use and amounts to 6.8% of the total built up land. According to the LNUDP, much of the State land that is categorised as ‘vacant’ is also occupied by squatter settlements.

The main changes and areas of growth since the 1970s are outlined in the LNUDP. These include a major increase in informal settlements (squatter settlements) on customary land and on State land. In the absence of recent statistics, LNUDP provides an approximate figure of informal settlement population growth at the rate of several thousand per year. The Housing and Urban Form (2003) map in the LNUDP identifies 23 squatter settlements spread around Lae City.

The Government Settlements Program (GSP) was conducted through the National Housing Commission where subdivisions were created and basic services were provided. Policies administered in the settlements consisted of a three-pronged strategy: upgrading of existing settlements, establishment of resettlement sites where upgrading is not possible, and new settlement development on vacant land. However, subsequent to the handing over of these services to the NCDC in the 1980s, informal settlements were treated as normal residential areas and had to compete with the rest of the city for maintenance of existing services or provision of new services. The UDSS study points to the lack of clear or written policy from this time for over 15 years as the Government ceased administering settlements in the NCD.
3.5 Settlements Policy

There is no national policy statement similar to the 1973 White Paper that sets the overarching policy direction for informal settlement improvement in PNG urban centres. In the 1970s, settlements on State land were administered under the Government Settlement Program. The Settlements Policy followed was based on the 1973 White Paper ‘Self-Help Housing Settlements for Urban Areas’ and was applicable to all urban centres in PNG. It gave recognition to settlements and promoted their upgrade using the self-help approach.

3.5.1 Port Moresby

The UDSS study describes Government policies and programs conducted during this time and the subsequent decline of policy attention and assistance programs targeting informal settlements in Port Moresby.

After a lengthy inactive period, in 2006, the NCD presented its policy for settlements with the five years NCDSSP concurrently with the release of the current NCDUDP. At a fundamental level, it follows the self-help housing policy contained in the 1973 White Paper: upgrading, resettlement and new areas for settlements. As stated in the NCDSSP, the aim is ‘to incorporate settlements into the formal urban framework by properly sub-dividing and servicing them so that they become a recognised part of the NCD’. However, the implementation of the program has not yet taken place and is discussed in Recommendation 4.

3.5.2 Lae

From the 1970s onwards, development of formal settlements based on self-help housing has taken place at the three settlements of Taraka, Tensiti and Three Mile. Subsequent to this period, the only settlement policy that exists appears to be in the LNUDP and is discussed in Recommendation 4.

3.6 Planning and Implementation of the Settlements Policy

3.6.1 Port Moresby

Planning for settlements in the current NCDUDP is provided for in association with its NCDSSP. The Land Use Plan in the UDP refers to two types of land use categories for residential areas: Residential and Ancillary Use and High Density (self-help) Residential.

Existing settlements with the exception of the 8/9-Mile area are indicated as Transitional Housing (NCD Features). The 8/9-Mile area is zoned as High Density (self-help) Residential and is the only area for that specific land use.

The Transitional Housing and existing informal settlements are scattered throughout Port Moresby, unzoned, but lying within other zoned areas. It appears that the Transitional Housing categorisation was a temporary measure applicable until such time as the NCDSSP resolves and incorporates the informal settlements into the formal urban framework.
The Implementation Schedule presented in the NCDSSP was to be conducted between 2007 and 2011 and the Plan subjected to review at the end of 2011. It targeted converting the settlements shown as Transitional Housing in the UDP to formal housing through a process of upgrading or resettlement in line with the respective LDP for the area.

There is no single unit within the NCD responsible for conducting the Implementation Schedule. NCDC as a whole is responsible for the settlement improvement policy while various discrete internal sections within the NCDC are identified for its implementation.

To date, implementation has not progressed and settlements have continued to grow, uncontrolled and unmanaged. The treatment of settlements as Transitional Housing in the resolution of the settlement problem has not been effective. They continue to remain officially in a temporary state and have been so for over a long period of time. The planning process takes prolonged time and there is no certainty in terms of permanent status. This time consuming process prevents any service provision while discouraging the dwellers to make house improvements.

3.6.2 Lae

The LNUDP presents the strategy of planning for the future through planning for settlers (and for villagers) whose homes will be absorbed into the expanding urban area. The settlements policy is given as formalisation through self-help housing and upgrading programs with selective relocation, where necessary. Four priority squatter settlements in the Ahi villages to Busu River Local Planning Area have been identified for settlement improvement in terms of subdivision and upgrading and are intended to be completed in 10 years. There is no evidence of substantial progress on this proposed plan of action.

3.7 Traditional Villages within Urban Areas

Within Port Moresby and Lae, there are Traditional Villages of the original inhabitants of the land on which the city stands. As the original people of the land, their identity has special cultural significance among the diverse populations of the city. As customary landowners, they own 40% of the land in Port Moresby. Rural-urban migration and urban growth is causing significant pressures on the Traditional Villages and ways of life.

3.7.1 Port Moresby

The customary landowners of Port Moresby are the Motu-Koitabu people and seven Motu-Koitabu villages are identified in the NCDUDP. Estimates show the population of Motu-Koitabu people in Port Moresby to be 30,000 with around 15,000 living in the ‘big village’ of Hanuabada. The proportion of city land under customary ownership is 40% and as land pressure increases with urban growth there is much interest in the conversion of customary land for development. The existing land use classification of Traditional Villages used in the NCDUDP includes villages and associated uses such as clan or separate gardens, traditional dancing and community grounds, traditional cemeteries and spiritual sites.
The unique culture and traditions of the traditional people of Port Moresby and the strong identity it gives to the NCD is acknowledged in the NCDUDP. The NCDUDP presents as a key issue the threat to the cultural identity and traditional ways of life in the Traditional Villages due to population growth and the expansion of the urban built-up area.

The Port Moresby Traditional Villages are characterised by deteriorating environments with severe overcrowding and limited basic services that are provided (if at all) in a piecemeal manner. Water supply is intermittent, power is mostly informally connected, garbage collection is conducted infrequently and sewerage does not exist. The custom dictated patterns of housing layouts are being disrupted with disorderly development as rapid population growth takes place in the villages. The customary lands around the villages are encircled with other land uses and village boundaries are becoming indistinct as settlement growth surrounding the villages are expanding into customary lands.

Customary land mobilisation for urban development receives significant interest in planning but the Traditional Villages themselves receive scant attention. Village planning is non-existent and any development efforts in the villages are isolated attempts without integration within the overall urban development framework.

The Motu Koitabu Assembly (MKA) is a special authority that exists in the NCD to represent the interests of the Traditional Villages and associated customary lands. MKA councillors have responsibility for promoting development within the villages. In addition, there is special Motu Koitabu representation in the NCDC which has overarching planning powers over the whole of Port Moresby. However, the existing conflictive situation between the two entities appears to be hindering an integrated effort in the development of the villages within a citywide approach.

### 3.7.2 Lae

Ahi people are the customary landowners of the Lae city area. LNUDP identifies six major villages of the Ahi people, with most clustered in close proximity to the city centre on the eastern side. Towards the western section of the LNUDP there are three major villages of the Lei Womba customary landowners. Prior to European settlement, the local population lived in five villages between Bumbu and Busu rivers and they have continued to retain their separate identity through to the present day.
The Ahi lands surrounding their villages are subjected to pressures of urban growth and informal settlements arising from rural urban migration. The Ahi Land Mobilisation Policy (2001) is designed to assist the Ahi customary landowners to protect their land and use it for urban development so they can benefit from such development. However, its successful implementation is negligible, if any at all.

3.8 National Urban Policy on Traditional Villages

There is no national policy statement recognising the cultural significance of the Traditional Villages within the city context and setting the overarching policy direction for village development in a culturally appropriate context in PNG urban centres.

3.8.1 Port Moresby

In the NCDUDP Land Use Map, the Traditional Villages are indicated as a category under Proposed Land Use. Land uses or development consistent with Traditional Villages include cemeteries, community centres, open spaces, places of worship, primary or community schools and self-help housing. However, in spite of the cultural significance of the Traditional Villages, the zoned areas indicated for proposed land use for Traditional Villages do not cover all existing Traditional Villages in Port Moresby.

3.8.2 Lae

A key strategy presented in the LNUDP in planning for the future of Lae is to plan for traditional villagers (and settlers) whose homes will be absorbed into the expanding urban area. The bulk of Lae city’s expansion is planned in the Malahang Local Development Area on Ahi customary land and identified as the priority area for development. The area is in the Ahi LLG where two traditional villages, Kamkumun and Butibum exist. The villages are to be incorporated within the urban planning framework through village specific development plans. Initial action is planned for low-cost and self-help housing estates, with later inclusion of new community areas and the expansion of the Malahang Industrial Centre.

The Malahang Local Development Plan (Concept Plan) provides a detailed plan showing the village and garden expansion areas for the two villages, Kamkumun and Butibum, both of which are experiencing pressures of urban growth, being adjacent to the city centre. Local Development Plan priorities for Local Plan Areas set out detailed planning policies and programs for the area. In the Local Plan Area 3, which covers most Ahi villages, the emphasis is on integration as mixed-use areas. However, any recognition of the cultural significance of Traditional Villages is absent.
3.9 Infrastructure and Services

The National government is the main source of funding for planned public infrastructure works. The key infrastructure for urban sector, namely Water, Sewerage, Electricity, Sea and Air ports and Telecommunication are largely owned and controlled by the State through State Owned Enterprises (SOE).

3.9.1 Roads

With regard to roads, neither city has a properly developed Integrated Transport Plan. Until recently, there were no major new road projects in either city, since the completion of Port Moresby’s USD 80,000,000 Poreporena Freeway project. Finally, there has been a variety of maintenance and upgrade projects including the Nadzab Corridor, the Lae Port area upgrade and the upgrade of the road to the LNG plant, just outside of Port Moresby.

A set of new road projects and road upgrades have been announced for Port Moresby and are in the construction phase. In the case of Port Moresby, a number of these were intended to be in place in time for the 2015 Pacific Games. These projects broadly follow the framework established in the Urban Development Plan. However, in most cases, their detailed design does not adequately consider non-vehicular movement. Footpath and intersection design does not reflect the importance of walking as a means of transport. Nor does it consider the potential of bicycles as a means of low-cost transport. The Jacksons International Airport in Port Moresby has undergone major refurbishment and extension as part of the preparations for PNG hosting the Pacific Games in 2015 and the APEC meeting in 2018.

3.9.2 Ports

The placement and function of ports in the two cities have significant impact on land-use patterns and the transport system. At the time the two UDPs were prepared, there was no certain re-location site for Port Moresby’s Port, and the Lae Port expansion was identified but not certain. Both of these matters have now been resolved.

A substantial improvement and expansion of PNG’s busiest port, Lae, through the Lae Tidal Basin project has been completed in 2014. In late 2013, PNG Ports announced that the port facility in Port Moresby Town would shift to Motukea Island. The deal has been completed. This will significantly increase the capacity of the port. The move will also release a very strategic site for re-development of the current harbour land.
3.9.3 Power

Power is likely to be the subject of government restructure to assist in substantial additions to generation capacity, which are essential for new resources projects and necessary social development. Ultimately, PNG’s ageing transmission and distribution structure will require upgrade.

The Port Moresby system is currently supplied by the four hydro power stations at Rouna, Moitaka diesel power station and the privately owned Kanudi power station. Over the decades, the station’s generation output had slumped to below half its capacity while Port Moresby’s demand for electricity increased exponentially.

Electricity supply for Lae is provided by the Ramu hydro power station at Yonki in the Eastern Highlands Province. The thermal power stations in Lae are on standby and switch on when there are problems with the generation machines or transmission lines from the Ramu hydro station.

The new Taraka power station aims to reduce outage times or load shedding periods with the help of PNG Power Ltd’s other diesel power station at Milfordhaven Road, which has machines that are 20–30 years old.

3.9.4 Water and Sewerage

Port Moresby’s water and sewerage is managed by Eda Ranu, unlike Lae city and the rest of the country where it is managed by PNG Water Ltd. Rapid growth in population and urban expansion have exerted extreme pressure on both water and sewage systems in Port Moresby and Lae. Overall, the infrastructure and services within the two cities are inadequate and require major improvements. This will require major reforms into the regulatory and services functions of state owned enterprises.

3.10 Public Amenities

Public open space, including public streets and parks, are the primary structure of any city. This organising framework is absent in much of the new development in the two cities. Without effective management of urban design and implementation processes, commercial considerations become the only forces that shape the city. The roadways have no direct commercial value (NCV) because they cannot be sold or leased. Likewise the parks have NCV. Typically each developer will minimise any NCV uses on their land. This has played out in a variety of ways in both cities.

Considering land value optimisation of private land, the scale of a development determines what type of “public” facility it will develop. A single house lot developer is interested only in the land within its boundary. For a developer with enough land for say 30 houses, the street becomes important; 100 houses require a few streets and a bus stop; 5000 houses require a high school and a shopping centre car park, church, health centre and so on. The condition for the provision of the public amenities is stipulated in Section 81 of the Physical Planning Act 1986.
Therefore at each scale of development one would expect a developer to factor in these elements. That is because the cost of their construction can be spread across more houses and the value of each house is higher because these facilities being nearby makes the houses more attractive.

The smaller a site becomes, the more dependent the development becomes upon integration with the surrounds and other facilities. The developments beyond the Taurama Barracks (End of the World) are an example of the smallest scale perspective: sites appear to be sold ad hoc only for one or two houses. At this scale it is not even worthwhile investing in building a street. There is a critical scale where most of these elements can be expected within the project.

There has been a loss of existing open space and road easements. There are numerous examples of the loss of parks. Likewise, there has been significant encroachment onto road reserves. This becomes an issue as the city grows because the full width of an easement is important to support a variety of transport modes.

Various sites in both cities have recently changed from recreational to commercial in order to permit their redevelopement. Examples include the eastern part of the park at Gordons, Koki waterfront Park (next to the Koki Market) and, in Lae, the land to the north of the airport.

The redevelopment of the Gordons Park Land shows that there is demand for commercial and light industrial space. This is the largest open space in this part of the city. Its loss has meant that the city can no longer host public and sporting events on the same scale as before within this part of the city. The amenity of the city consists of having a range of public spaces and facilities to host a variety of public activities. Smaller spaces are suited to day to day recreation and tend to be more numerous and so are accessible to a greater proportion of the population.

3.11 Environment and Ecology

A study was conducted into the current situation in the Papua New Guinea (PNG) urban development sector regarding the protection of the urban environment, sustainable urban development and green infrastructure as part of the urban plan review. Details are contained in a separate report. However, the main findings are summarised in this section.

Urban development sector, regarding the protection of the urban environment, sustainable urban development and green infrastructure are interrelated concepts, and concern all levels of the planning, implementation, enforcement and compliance aspects of urban development.

The environment aspect was conducted for the Port Moresby and LNUDP areas, with case studies conducted for Taurama, Motukea Island and Lae. Findings from the study focused on
planning for environmental outcomes, implementation of planning documents, compliance and enforcement, and public participation. While PNG has an active planning system with effective planning and environmental management instruments, planning outcomes were not achieved due to structural or resourcing issues.

At the planning level, while planning instruments identified objectives for urban planning and sustainability, there was no commitment to these objectives within the plans. This hindered the implementation of the planning objectives. The consequences of this include inconsistency between proposed planning outcomes and approved developments. It was highlighted that in Lae, this issue has undermined attempts to sustainably plan urban development.

A number of the urban development plans (UDPs) and local development plans (LDPs) examined also failed to plan effectively for changing environmental or climatic conditions (e.g. sea level rise, increased flooding) and relied on outdated environmental data. This meant that planning objectives were not based on the most comprehensive and contemporary environmental information.

Implementation and enforcement of planning documents was of mixed effectiveness. The biggest limitations in these areas relate to communication and resourcing. Poor coordination between planning authorities and service providers, or between government departments, meant that in implementing planning outcomes, there was poor consideration for environmental interests, including protected areas, biodiversity, water quality and fisheries resources. It also led to planning conditions which could not be met by municipal service providers.

Similar difficulties in resourcing meant that decision-making authorities made decisions without adequate funding or skills. The capacity of planning authorities to deliver on sustainability outcomes is of key concern in terms of enforcing effective outcomes. Poor access to resources also means that municipal service providers are not always able to implement decisions on the ground.

Other enforcement and compliance issues are related to responses to breaches of planning laws. For example, many areas that are nominally set aside for environmental protection have been developed (either illegally or with approval) often prior to the completion of local planning mechanisms. While mechanisms exist under the Physical Planning Act 1989 for the removal of illegal development, these mechanisms are rarely used. There are no mechanisms to invalidate given approval, inconsistent with the provisions of the local planning instrument.

Public participation was readily available at a number of levels. However, in comparison to the Environment Act 2000 and the public participation mechanisms associated with environmental assessments, the Physical Planning Act 1989 lacks opportunities for public participation. Members of the public can participate in the preparation of UDPs and LDPs but not in the approvals assessment process. Even where public participation is available, it is often limited by the lack of easy access to relevant documents for public comment.
The administrative appeal measures under the current urban planning regime provide the public with only limited access to appeal decisions. Decision-making processes are often not published, making it difficult to challenge the final decision. This also limits the participation of the public, especially public interest groups.

### 3.12 Land Tenure Security and Supply

Land supply, transaction and land tenure security remain as perhaps the most significant hurdles to the orderly development of towns and cities in PNG. Extensive investigation and analysis has been conducted in this area in recent years, notably in the NRI Monograph 39: “Land Administration, Land Dispute Settlement and Customary Land Development” (February 2007). This publication made a set of 47 Recommendations out of 54, dealing with Land Administration, which are supported by this review. In March 2014 a paper, “Use of Land Leases as Collateral for Accessing Formal Sector Finance in Papua New Guinea”, NRI Issues Paper #07, which reviewed the relationship between land and the PNG banks, was launched. A key focus of this was the ability to create mortgages over land (collateralise) in PNG in order to support investment. These reports point out the importance of a sound land titling administration system for a viable land and property market.

The following points are relevant to the creation and implementation of urban plans in PNG within the context of land tenure security and supply:

- Confusion over titles exists on many sites, including multiple conflicting titles on individual sites; land titles are created by the Department of Lands and Physical Planning in a way that appears to contradict the UDP or land use zoning;
- allocation of state leases by the Land Board is not transparent and accountable. In fact, the Land Board exercises monopoly powers to the detriment of an effective land market;
- supply of state land is virtually exhausted, and the majority is now owned by private interests;
- mobilisation of customary land remains the only option for accommodating urban expansion; and
- the legal basis exists for customary land to be developed and transacted, using the Voluntary Customary Land Registration system, which is being promoted through the Government of PNG initiated National Land Development Program.

### 3.13 Governance Structure

The institutional structures that surround the administration of the two cities depict a fairly clear structure in the hierarchy from National to Local Governments. However, there is significant overlap and gaps in responsibility for many vital functions of municipal governance and maintenance. There is also a great mismatch between the vision in Urban Development Plans and the financial or institutional capacity to implement the plans.

Legal structures of NCDC and the Morobe Provincial Government and its connection with the Department of Lands and Physical Planning, relate to Physical Planning, which is a national function but being devolved to the provinces through the creation of the Provincial
Physical Planning Board. The legislative setting of Lae and Port Moresby city administrations are different from one another as set out below:

The administrative, financial, operational and implementation arm of the Government structure in PNG in general comprise:

- National departments and agencies;
- State-owned enterprises and commercial investments;
- Provincial Governments with their administrative framework;
- Local-level governments within the urban extent of the city;
- the Rural Local Level Governments outside city and town limits established according to districts in the provinces;
- Ward Councils, which are divided according to the population distribution in various villages of each constituency; and
- City and Town Authorities, which are also administrative functions of the government. In Port Moresby it is the NCD Commission.

3.13.1 National Capital District Commission

The main elements of the National Capital District Commission (NCDC) Legal Structure are as follows:

- The NCD Commission is operating under a legal structure which allows the Commission to have a Governor and the Board and the administrative structure that runs its administration;
- there are specific by-laws that allow the Commission to regulate its functions;
- in Physical Planning, the NCDC regulatory division of physical planning operates under the National Physical Planning Act 1989 (PP Act). Section 33 of the PP Act allows NCDC to establish its Board. Other operational and administrational aspects of the NCD Board are provided in the PP Act, Sections 34–43 (inclusive);
- coordination of work and constant process of consultation between NCDC and DLPP should allow free flow of information and mutual understanding between the two parties on matters of common interest. Unfortunately, this is not the case; and
- the NCDC Institutional structure is described below:
  o at the management level, there is a Deputy City Manager responsible for the Regulatory Division which manages the Physical Planning functions in NCDC; and
  o the Regulatory Section is divided into two units:
    ▪ Strategic Planning Unit, which is responsible for enforcement and technical compliance of Physical Planning standards; and
    ▪ Development Control Unit, which is responsible for the functions of the NCD Physical Planning Board and administration of the development assessment process.
  o The Chief Physical Planner is a member (advisor) of the NCD Physical Planning Board; and
  o functions of the NCDC Regulatory Section are funded by NCDC through an annual budget. Funding of special Physical Planning projects which are outside of the NCD budget can be requested through the NCDC Board.

Within Port Moresby the main issues for governance are as follows:
• The governing body is known as a commission but performs the same functions as a province;
• the functions of NCDC have not covered the Traditional Villages within the city boundaries. The devolution of some powers and responsibilities to the Motu-Koitabu Assembly (MKA) does not appear to have resulted in significant improvements in the planning or servicing of the Traditional Villages or Port Moresby;
• increasingly, squatters have been encouraged within the fringes of the city as a result of traditional villages renting out or selling land for cash through informal arrangements; The city exerts only weak influence over the population and these agreements. There are no rates collected for these areas and few services are provided;
• the Central Provincial Government with its provincial and administrative office in Port Moresby shares the same infrastructure services as NCD but does not share its budgetary allocations for urban infrastructure works;
• allocation of state owned land is vested in the National Land Board. The DLPP facilitates the operations of the National Land Board. This is where allocation of land outside of the plan occurs;
• the NCD structure is for planning and development control. However, there is no system for managing or facilitating development. This is one serious weakness; and
• there is a real need for a structured process for planning, development and administering of land titles at the national level. Achieving this goal will require structural changes to the overall system of land use planning, development and records management in the country.

3.13.2 Lae City and Morobe Provincial Administration

Within Lae the main issues surrounding governance relate to the current provincial and city government structure:

• Lae City has three districts (Lae, Naweb and Huon) and two Local-level Governments (Lae urban and Lae rural, Ahi) within the city boundaries;
• In Lae city there are three levels of Government functions which include:
  (i) Provincial Government and its administrative functions. Division of Lands (Senior Physical Planner) is under the Provincial functions;
  (ii) Lae Urban Local-level Government functions are in the city but have no direct budgetary support to the infrastructure of the city;
  (iii) Lae City Authority created under the Organic Law on Provincial and Local Level Government has administrative functions to govern the city through a Lord Mayor and a City administrator but its budget allocations are controlled by the Provincial Budgets Priority Committee. The City Authority has another Senior Physical planner with similar responsibilities as the Senior Physical Planner under (i);
  (iv) in addition to the two Senior Physical Planners under (i) and (iii), the State Department of Lands and Physical Planning has another Senior Physical Planner in Lae City who is also responsible for Physical Planning functions in the Momase Region. Thus, Lae City has three Senior Physical Planners without clear demarcation of their duties and responsibilities.
• Lae as the industrial hub of PNG draws interest from PNG as a whole, interest from the hinterland of PNG, maritime Islands of PNG, Morobe Province, and of course the residents of Lae city and Ahi Landowners. Although Lae plays a significant role as an industrial hub, limited financial support was provided by the National Government resulting in deteriorating infrastructure works in the city. Further, the competing
interests are one factor that undermines the orderly development of the city.

- The Morobe Legal Structure and the related issues are described below:
  - Morobe Provincial Government operates under the Organic Law on Provincial and Local Level Governments. The provincial government does not have a by-law on the Physical Planning functions in the Province and relies on the support of the National Department of Lands and Physical Planning (DLPP) to delegate these functions;
  - physical planning functions were delegated to the province in 1994. Morobe Provincial Physical Planning Board was functioning smoothly up to 2011 when the Board was suspended for non-compliance with statutory requirements; and
  - political interference in the operations of the Board was a catalyst for the non-compliance issues.

- The Morobe institutional structure and the related issues are described below:
  - Morobe Physical Planning Board (MPPB) is under the Morobe Provincial Government Division of Lands. The boundary of Morobe Province extends beyond the Lae Town boundary. Most of the applications received relate to developments in Lae. Hence, there needs to be a Local Physical Planning Board established in Lae so the Provincial Board can be responsible for Provincial matters and offload the development applications for Lae to the Local Board; and
  - positioning of three senior Physical Planners in Lae is an advantage in development terms but administratively requires clear demarcation of duties and responsibilities to avoid duplication.

3.13.3 Department of Lands and Physical Planning

The Department of Lands and Physical Planning (DLPP) plays a crucial role in the administration and allocation of state-owned land in PNG. The institutional structure and the relevant issues to Urban Development Planning are described below:

- The functions of the DLPP were reviewed by the National Land Task Force in 2006. There were 47 Recommendations to improve the functions of DLPP. The National Land Development Program (NLDP), was established to coordinate the implementation of the related recommendations. The NLDP has meetings each month and considers important land related issues as well as coordinating its funding for NLDP projects through the National Budget parked within the Department of National Planning and Monitoring. Noticeably, almost all of the NLDT recommendations remain to be implemented;

- DLPP has more than 13 Acts (Laws and Regulations). Some of the Acts are interrelated to the main divisional Acts of DLPP. Those that require immediate review are; the Physical Planning Act, the Survey Act and Regulations, the Valuation Act and the Land Act. The review of the Physical Planning Act should cover the sustainable land use and environmental issues, disaster mitigation plans, regulatory aspects of the Act, the Urban Development Leases process and other issues of concern. The Land Act 1996 has not provided for the new land administration issues and is overdue for review. The Valuation Act 1967 has to be reviewed to address the current valuation processes;

- there is a need to provide for Strata Titles in all the relevant Acts and this also requires clear process for its adoption and application;

- the Department’s responsibility for effective administration of Physical Planning matters cuts across the Board and requires effective consultation processes to be introduced at various levels of planning. Unfortunately, the present structure, system and processes are dysfunctional;
• the budget for Physical Planning is part of DLPP and is prioritised according to DLPP priorities. Hence, the Physical Planning Division receives inadequate budget for its annual activities;

• DLPP has four core Divisions, namely Executive Management, Corporate Services, Alienated Lands Division and Customary Lands Division. The Physical Planning Division is one of the three sub-divisions under the Alienated Lands Division. It is noted that in many jurisdictions in the English speaking world, Physical Planning is often a separate state department. It is not subsumed into lands. For example, in New South Wales, Australia, the Department of Planning and Infrastructure stands as a separate ministry with responsibility for long-term planning and infrastructure development. In the United Kingdom, there is a high degree of devolution of power to the local level government. The national physical planning matters are administered by the Department for Communities and Local Government.

• The Office of Chief Physical Planner is understaffed and only a few of the current senior staff have relevant Physical Planning training and experience.

3.14 Planning Policy

Policy framework should guide physical planners to direct developers to achieve recommended standards. The Urban Development Plans and Local Development Plans are the primary guiding documents that relate to place-specific development assessment. The main control in these documents is land-use zoning. However, as discussed earlier, many developments are mixed-use and in many cases development zoning is ignored.

Most urban design considerations from site planning to city building are repeated in all the towns and cities of the country. However, the only design controls that exist tend to relate to engineering requirements and building code compliance. There are no controls or policies that relate to design quality and place-making.

The issues under the Policy Framework are described below:

• Standards in the Physical Planning Regulations 2007 (Revised) and guidelines in the Physical Planning Manual are not framed to replace the spatial policies that will guide developers to bring about environmentally friendly and harmonious and safer communities development in a well integrated framework in any built development of towns and cities in PNG;

• the Urban Development Plan is seen as a tool to guide and direct development initiatives to achieve a high standard of harmonious environments and safer communities. However its focus is on overarching urban structure and land use. It is not intended to give a complete policy framework for place-making and harmonious and safer communities;

• the regulatory requirements of the plot sizes, road widths, site coverage ratios and general sub-divisional guidelines are very generic. They do not represent a complete policy for creating good and safer urban environments;

• no local universities are currently offering the Physical Planning curriculum, such as Urban and Regional Planning. Consequently, there is a shortage of skilled professionals to operate the planning system.
3.15 Residential Only — No Jobs and Services

The increased demand for housing has led to a major focus on residential development by government policy, direct private sector investment and the informal sector, so that the residential developments are distinctively isolated from the main centers of work and service.

This is particularly true in the case of Port Moresby, where major residential buildings in suburbs such as Gerehu (formal), 8/9 Mile (informal), Waigani (formal) and Taurama (informal) were put up without schools, hospitals, jobs, banks and shops and sports fields. These services are concentrated in Waigani, Boroko and downtown. Hence, Port Moresby residents suffer from traffic congestion during peak hours, which results in school children arriving late in school, parents arriving late and leaving early from work, and additional demands on the family budget for transportation, such as bus and taxi services and fuel for family owned vehicles.

The urgent need to decentralise development of jobs, shopping centres, schools and related amenities commensurate with population growth within Gerehu, 8/9 Mile, Taurama and other population pressure centres within NCD is urgent.
4. POLICY LESSONS

The policy lessons from the success or otherwise of the Urban Development Plans in Port Moresby and Lae are complex and intertwined. These are summarised as follows:

4.1 Lack of Tools and Skills for Managing Urban Growth

The following are necessary tools and skills of urban growth that are missing:

- Lack of an urban design policy framework for PNG;
- inadequate design guidelines, codes and standards for the public domain, including street design;
- lack of a policy for Crime Prevention through Environmental Design (CPTED);
- too few skilled professionals in urban design and physical planning, including skilled assessors;
- lack of a local educational institution for developing the physical planning and township development skill set in PNG; and
- confusion exists between the function and content of the different level plans in the hierarchy: Urban Development Plan, Local Development Plan and Subject Area Plan. This relates to how much detail can or should be contained in each level of plan.

4.2 Planning Process and Enforcement

The planning process and enforcement system has the following weaknesses:

- Standard approach of development applications and approval processes in both cities do not generally follow the planning requirements as described in the Physical Planning Act 1989 and Regulation 2007 (revised);
- assessment of the development application and recommendations for approval in some instances has been considered dubious in extreme cases of rezoning of public open spaces;
- lack of technical committee in development assessment process to direct and guide the decisions of the Board through sound recommendations;
- the Board members of Physical Planning Boards or the PNG Appeals Tribunal need to maintain a high standard of integrity and to be seen as transparent in all their decision making. The system in its present form appears to be broken, dysfunctional and ineffective;
- there is a lack of high level third party oversight to ensure conformity of all the planning requirements and balance technical standards with transparent professional approaches of development applications;
- planning application refusals by the Physical Planning Board (PPB) can be appealed at the PNG Appeal Tribunal. However, between 2010 and 2013 PPB decisions have been overturned by the Tribunal while not being referred to the PPB for Board representation as prescribed in the Physical Planning Act 1989. This undermines the Integrity of the Physical Planning Appeals Board.

4.3 Inadequate Land Tenure and Supply

The supply of land with secure tenure is inadequate:
The supply of land with secure tenure is one of the biggest issues surrounding the ability for development to take place; the supply of State land is exhausted, and the majority is now in private hands; the future of urban expansion will inevitably be on land under customary tenure; titles are created by the Department of Lands and Physical Planning without regard to UDP or zoning. This process violates the provision of the Land Act 1996 which stipulates that “A State Lease shall not be granted that would be in contravention of zoning requirements”; and The 47 Recommendations of the National Land Development Taskforce (2007), dealing with Land Administration remain to be fully implemented.

4.4 Governance and Administrative Issues

The structure of governance and administration raises the following issues:

- Administration boundaries do not correspond with urban extent. This is true, particularly in the context of Lae;
- there is a general failure to effectively plan, administer and govern settlement areas and Traditional Villages in urban areas;
- there is a general failure of the relationship between the physical planning process and the land administration process. This is exemplified by the granting of State Leases for purposes that contravene zoning requirements in contravention of the Land Act 1996;
- Lae has three levels of government, each having a senior physical planner without a clear demarcation of their duties and responsibilities;
- Lae’s confused governance structure fails to support its highly strategic and layered role as the industrial hub of PNG and the service centre to the hinterland of PNG, maritime Islands of PNG, Provincial capital of Morobe and city residents and Ahi Landowners;
- DLPP has four core Divisions (Executive Management, Corporate Services, Alienated Lands Division and Customary Lands Division). The Physical Planning Division is only one section under the Alienated Lands Division. The Office of Chief Physical Planner is understaffed and only a few of the current senior staff have relevant Physical Planning training and experience; and
- The Office of Urbanization was established in 2003 to promote co-integration of Papua New Guineans from diverse cultural backgrounds in an urban context. Unfortunately, it appears to have mutated into unrelated responsibilities and functions such as urban planning and land development. Consequently, it lost control of major pilot projects across the country, including the famous Taurama Valley within NCD, which has become a high class informal settlement.

4.5 Financial and Funding Issues

Financial and funding issues include the following:

- The capital works budget for each city is inadequate for maintenance and rarely ever goes to new capital works;
- international donor and funding agencies tend to fund programs in one of three categories: Health, Education and National Road Infrastructure. Funding rarely supports urban projects or urban extension;
- no effective mechanism exists to capture ‘windfall’ land value increases or developer
contributions, either through tax or works in kind;
• the land allocation process tends to produce projects that are too small in size to fund significant urban extension or ‘public’ infrastructure. There is no ‘economies of scale’; and
• inadequate funding for planning and administrative functions in each city administration.

4.6 Settlement Issues

4.6.1 Port Moresby

Issues of settlement sector in Port Moresby include:

• Settlements have formal acceptance and recognition in the NCDUDP only in the 8/9 Mile area which is zoned under the High Density (self-help) land use category. Those living in all other settlements exist in an uncertain and temporary state in the Transitional Housing category; and
• the NCDSSP lacks the involvement of the affected people in the decision-making process. The sensitive nature of the issues dealt with in the plan requires the active engagement of the affected people throughout the process if the plan is to have any degree of success. For instance, those in all other settlement categories need to be reminded continuously that their residence is temporary and will not be compensated when asked to vacate for proper development.

4.6.2 Lae

Issues of settlement sector in Lae include:

• Settlements in only one Local Planning Area are targeted while there are many settlements spread around the city left unattended; and
• isolated action on one area means services provision to a large segment of the city population cannot be planned for and provided except in an ad hoc piecemeal manner.

4.7 Traditional Village Issues

4.7.1 Port Moresby

The Traditional Village issues in the context of Port Moresby include:

• The Traditional Villages are acknowledged in the NCDUDP, but they have no clear demarcation in the Land Use Map and therefore do not have formal recognition;
• the villages remain as isolated entities within the city structure lacking recognition for their cultural significance and their integration within the urban framework and city plans;
• incompatible land uses adjacent to Traditional Villages are resulting in the deterioration of the socio-cultural and physical environments of the villages;
• rapid urban growth of the city is causing overcrowding in the villages and creating migrant settlements as expansion takes place on adjacent customary lands. This gives rise to the disruption of the cultural life in the villages and to disorderly physical environments; and
• basic services are administered in a piecemeal manner and not integrated into the
overall city services provisions.

4.7.2 Lae

The Traditional Village issues in the context of Lae include:

- Only two villages of the six identified Ahi villages in the city area are targeted for action in the Malahang Local Development Plan (Concept Plan). The others are left unattended; and
- lack of strategy in planning policy to retain the cultural significance of the Traditional Villages.
5. RECOMMENDATIONS

Informed by the key findings and the policy lessons discussed in the preceding analysis, a set of key recommendations are discussed in this section.

5.1 National Urban Design Guidelines

There is a clear need for guidance in the processes of subdivision and urban design in PNG. A set of design guidelines would provide a clear direction for the processes of designing subdivisions, town centres, public facilities and streets. This should establish design principles covering building orientation toward streets, appropriate setbacks, servicing and deliveries, pedestrian access and car parking.

This will give private development companies an understanding of what is expected in the layout of developments, particularly in relation to the configuration of the public domain. It will also give the urban approval authorities an instrument to support better design outcomes. These guidelines should be simple and inexpensive to follow. They should prioritise the public domain and public interest in urban design.

5.2 Governance environment should determine the type of plans and delivery vehicle

The appropriate model for urban plans and implementing development agency should respond to the broader governance environment. Singapore is an example of centralised urban planning that has been carried through because there is a highly centralised and stable government. By contrast a city like Sydney is referred to as an “organic city”. This is a city of many separate projects that are the result of the economic and political context at the particular time.

PNG’s political environment is highly changeable, therefore long-term plans should be flexible and development agencies should be focused on single projects that are of manageable size and have realistic time-frames (5 years, not 20). While integration is very important and must be done on a city-scale, individual projects should not be split between agencies and departments.

Furthermore, clear planning and implementation responsibilities have to be determined. Redundant authority structures have to be reduced and only authorities with parliamentary mandate should be allowed to develop and implement UDPs.

5.3 Public sector must build the facilities that the private sector cannot

A set of projects vitally important to the growth of towns and cities will not be delivered unless the public sector delivers them. These are the elements that create the ‘skeleton’ of the city. Typically they occupy only a fraction of the urban area. However, they make possible the larger land uses of residential and commercial development. These are the:

- Trunk infrastructure and infrastructure networks;
- public facilities (markets, schools, hospitals and civic buildings);
• public transport (bus stops and bus lay-over areas); and
• public space (streets, parks and town squares).

In most cases, the immediate priority should be to build trunk roads and utility infrastructure first. This must happen “ahead of the wave” of private development to ensure that the city skeleton is in place ahead of individual buildings. The first stage of establishing roadways is relatively inexpensive and may proceed ahead of more costly elements such as utilities and civic infrastructure.

In addition, reforms to State Owned Enterprises (SOE) will be necessary. Water, Sewerage and Electricity are fundamental public infrastructure utilities for urban centres. Reforms in these SOE are critical for the orderly development of infrastructure. Reforms that separate regulation from the provision of services and enhance competition need to be undertaken in the SOEs.

5.4 Configure development authority to attract private capital

Typically a development authority is financed by the public sector in order to attract private capital. Certain impediments prevent private sector investment or drive private investment into undesirable patterns of development. The role of the authority is to create the circumstance where private capital is attracted into city-building in a way that creates good city growth (good public domain, safe and sociable streets and good connectivity).

The development authority should de-risk the development project by addressing concerns that cannot be easily handled by private sector actors. These include process approval risk, land tenure risk and funding headworks. The State gives long term vision and the private sector is able to meet the market. This system needs to be developed and promoted across the country.

Large scale private developments need supportive government. The role of government in facilitating large scale private development to proceed is to provide the legal frameworks, processes for secure tenure and effective transactions, and to lead in the funding and provision of the trunk infrastructure.

5.5 Private Sector can fund and deliver most urban development

Private capital and the private property development sector is the main engine of city-building. If the circumstances exist that allow a property market to flourish, supply will be stimulated to meet market demand. Housing and commercial buildings should be developed by private investment in a way that ‘meets the market’. Experimentation and innovation are rewarded in a competitive market.

However, catalyst projects are vitally important to stimulate investment and the first step sets the tone for what follows. It is important that the formulation of urban plans allows for flexibility because “projects trump plans”. Rigid plans can discourage investment, whereas effective plans can stimulate development.
If executed poorly, private projects can block and compromise surrounding sites. Borders of projects are very important, to allow extension and development of surrounding sites. This can be solved if the urban structure (streets and blocks) are created by a public agency, then the private sector can drive construction within an established framework. If private interests control larger scale sites (many urban blocks), it is important that the design preserves the broader interest by designing project borders to allow connections and access.

5.6 Create strong champions for Urban Plans

Urban Development Plans and Local Development Plans need strong champions to see them through. In order to be effective, these plans need to be both practical and to have leaders who have a strong sense of ownership. Therefore the plan-making process must have close involvement of the key stakeholders. The plans should realistically reflect the aspirations of the leaders, the communities they reside in and institutions. This can insure political buy-in and it can ensure the plans enter the ‘corporate memory’ of the major institutions involved in city-building.

The preparation of UDP’s must have a close involvement of strong champions who have a deep understanding of the basis of the plans and who are able to overcome obstacles to aid their implementation. The consultation strategy in the plan-making process must include a series of meetings at different stages of the project including inception and briefing, concept planning and plan finalisation.

5.7 Complete the physical planning hierarchy for each major centre in PNG

Physical plans require different inputs depending on the level they occupy in the hierarchy. If this plan-making process is conducted effectively it will avoid duplication. Complete and well-integrated plans will efficiently support the realisation of building and infrastructure projects.

Figure 14 presents the main areas of activity in the plan-making process. Design and commercial/economic elements should operate at all levels in the process of plan making. Engagement should be part of all the strategic levels. Public forums that are appropriate will depend on who is affected by the planning. The planners should view locals such as customary landowners and existing residents as “locality experts”.

Larger cities will tend to have a clearer distinction between the different planning tiers. Smaller centres may have overlap, or may use the Urban Development Plan to cover some functions that would be present in a Local Development Plan in a larger city. The content will naturally vary from place to place depending on the circumstance of the urban area. For example, an environmentally sensitive setting would lead to a greater emphasis on environmental protection. The most important purpose of the urban plan is to be as effective as possible to foster orderly high quality urban growth in the circumstances of the town or city.
5.8 A new approach to settlements

Under the present system, the administration of settlement areas is largely treated as being similar to any other part of the city, whereas the dynamics at work in the settlements are very different from the formal parts of the urban area. Historically, settlements have been thought about as a problem to be removed (including through settlement clearances) whereas, this almost always fails, or it simply shifts the problem elsewhere in the city. Furthermore, patterns are emerging where significant compensation has been paid for illegally occupied lands, creating an expectation that state compensation will be paid. The policy will bring a new mindset that on the one hand allows settlements to be planned as a vital and positive part of the city. On the other hand it should be publicly stated and enforced that no compensation will be paid to settlers.

To implement this new policy idea, a National Policy Statement for Settlements in PNG Urban Centres be prepared, and a Special Residential Development Areas (SRDA) for Settlement Improvement be incorporated into the Urban Development Plans and Local Development Plans.
Where SRDAs are created, a special set of conditions and resources, and administrative functions should come into play:

- A Special Land Use Area should be created as SRDA (Affordable Housing) to incorporate settlements into the planning framework;
- Existing settlement improvement in upgrading sites, resettlement sites and new settlement development areas for future populations need to be under SRDAs;
- SRDAs need to be integrated within the overall spatial planning of Port Moresby with close interconnection between the two scales of planning, UDP and LDP;
- SRDAs need to provide affordable housing programs for those unable to compete in the housing market that is beyond their levels of affordability;
- Special planning methods, codes and regulations need to be applicable in SRDAs;
- Housing programs in SRDAs should facilitate subdivision, issuing of individual titles;
- A Special Unit should be established as the key agency, with adequate settlement committee representation to plan, coordinate and implement physical development programs of SRDAs such as settlement upgrading programs;
- A participatory planning approach should be followed in SRDAs and;
- Community consultation needs to be at the forefront in the making of city plans, and city dwellers living in settlements need to be drawn into the city plans through their active participation.

5.9 A new approach to Traditional Villages within Urban Areas

Modernisation of villages must be an integral part of the urban development of PNG’s towns and cities. Under the present system, the administration of traditional village areas is largely treated as being similar to any other part of the city, whereas the dynamics at work in the Traditional Villages within urban areas are very different from the formal parts of the urban area.

A National Policy Statement for Traditional Villages within urban areas in PNG should be prepared. This should be supported by creating Special Residential Development Areas (SRDA) for Traditional Villages within urban areas. These are to be identified in the Urban Development Plans and Local Development Plans.

Where SRDAs for traditional villages are created, a special set of conditions and resources, and administrative functions should come into play as follows:

- The creation of Special Residential Development Areas for Traditional Villages;
- Traditional Villages to be recognized for their cultural significance and developed as a Special Residential Development Area (Traditional Villages) declared in the UDP;
- SRDAs to provide affordable housing programs for the city dwellers unable to compete in a housing market that is beyond their levels of affordability;
- Special planning methods, codes and regulations to be applicable in SRDAs (Traditional Villages) and
- Housing programs in SRDAs to facilitate subdivision, issuing of individual titles, provision of basic services and community development.
Special authority to manage SRDAs:

A Special Technical Unit to be established as the key agency, with adequate village representation to plan, coordinate and implement physical development programs of SRDAs such as village upgrading programs.

Participatory planning for village communities:

- A participatory planning approach to be followed in Special Residential Development Areas; and
- community consultation to be at the forefront in the making of city plans and communities living in Traditional Villages to be drawn into the city plans through their active participation.

5.10 Mobilise Customary Land

The new legal framework, Voluntary Customary Land Registration system, to facilitate access to land under customary tenure has been created to develop and transact on customary land; *Land Groups Incorporation (Amendment) Act* 1974 and *Land Registration (Customary Land) (Amendment) Act* 1981. However, an administrative framework is needed to independently administer these laws and the VCLR system to bring customary land into the formal markets. This problem is particularly acute because alienated land has an established administrative framework (albeit problematic), however this does not extend across customary land.

This administrative framework should cover the following areas:

- Technical and administrative support to form and operate ILGs;
- resolving roadblocks to funding of development projects on customary land;
- supporting governance of land transactions and development;
- fostering implementation of strategic urban plans for customary land; and
- fostering an effective Land Dispute Settlement process.

The establishment and functioning of competitive markets in customary land in PNG will overcome one of the most significant impediments to development of the nation.
6. BIBLIOGRAPHY


Puka, R., 2013. ‘Taurama Valley Urbanisation project, gone or forgotten?’, unpublished memo.


7. APPENDIX
Appendix 1: Terms of Reference

1. The Work

(a) Review critically the policies, programs, projects and schemes of current Urban Development Plans with particular reference to the achievements of prescribed objectives and targets, and pinpoint the shortcomings, in order to examine the present status of urban services.

(b) Suggest modification in the policies and strategies to address deficiencies with the view to improve urban facilities in Port Moresby and Lae.

(c) Assess the impact of urbanization on basic services, urban infrastructure and suggest strategies to upgrade urban infrastructure to keep pace with urban growth.

(d) Examine the existing regulatory framework, including governance measures in the city administrations and suggest ways to make it more people friendly.

(e) Review the existing urban land policies and land management practices and suggest measures to improve.

(f) Identify the linkage between urban planning and land administration systems and identify aspects of urban plans and planning processes in Port Moresby and Lae that can be improved to enable more land to be accessed and used for development.

(g) Review the existing mechanisms available for the protection of urban environment and related aspects, and suggest remedial measures.

(h) Suggest strategies for promoting sustainable urban development and green infrastructure investment.

(i) Suggest policies to be followed regarding new developments.

(j) Review the role and functions of the elected local bodies in urban governance and suggest measures to improve the functioning of urban local bodies.

(k) Suggest specific measures for strengthening the database on Urban Development.

(l) Examine the existing system for training and capacity building for urban planning and urban services management; corporations and urban officials and to suggest suitable plan for improvement in the system sensitizing them towards finding solutions to the civil problems.

(m) Examine the existing financial sources and assess investment requirements for the Urban Development Plans and suggest strategies to mobilize financial resources.

2. Duration of agreement

The work will be undertaken for 42 days between March and December 2013.

3. Deliverables

The deliverables anticipated under this agreement are as follows;

(a) A draft report containing the initial findings.
(b) Presentation of the initial findings to a key stakeholder’s workshop to be organised by the client at the National Research Institute Conference Centre.

(c) A final report to be submitted to the National Research Institute.

4. Performance by the Researcher

The deliverables must comply with the Scope of Work in as follows:

(a) The consultant should do a comprehensive investigation on the compliance level of the Lae and Port Moresby existing Urban Development Plans by searching the following information sources:

- Physical Planning Board Meeting Minutes;
- Development Control Regulations;
- Set Planning Procedures and Standards; and
- Port Moresby and Lae Urban Development Plans.

The following groups of people should be invited to the stakeholder consultation meetings both in Lae and Port Moresby:

- Planners, including the Deputy City Manager, Regulatory Services, for NCD and the Provincial Physical Planner and the City Planner for Lae;
- private and public developers;
- Chamber of Commerce and Industry;
- Real Estate companies;
- PNG Power;
- Eda Ranu for Port Moresby and PNG Water for Lae; and
- Telikom and other utility providers.

(b) Field visits should be undertaken to establish the level of compliance and influence by using the policies and lay-out designs of the Urban Plans. These plans can be accompanied by photographs of the project areas.

(c) Interviews should be conducted with the following groups of people to get their views on the quality of the plans and ease of implementation:

- Politicians from the two cities, Port Moresby and Lae;
- the City Managers for both Port Moresby and Lae;
- the Physical Planning staff;
- Lands advisers;
- Finance officers; and
- Land and property developers.

If the Researcher fails to meet the obligations as set out in this agreement, or the deliverable(s) are not of the required standard, the NRI may withhold payment (whole or part) and/or terminate the agreement.
Appendix 2: Methodology

The team has undertaken a careful process of methodology, which follows requirements as outlined in the Terms of Reference. This methodology has included the following key areas:

1. Investigation
2. Interviews
3. Stakeholder Workshops
4. Field Visits

This section outlines the extent of research and also highlights the limitations. All details of relevant records and evidence of the sources are included within the Appendices.

1. Investigation

The investigation of the issues has included the sourcing and research of the following information:

- National Physical Planning Board minutes.
  Source: Former Chief Physical Planner

  Planning Board minutes have been obtained from the meetings on the following dates:
  
  - 31 October 2011;
  - 3 May 2012;
  - 12 June 2012;
  - 22 August 2012;
  - 30 November 2012;
  - 1 February 2013; and
  - 27 March 2013.

  These minutes highlight the number of approvals or refusals that were made during the period and the reason why:

- Current and historical maps and aerial photographs.

  Historical maps of both Port Moresby and Lae illustrate patterns of change in terms of urban development.

- Current census information.

- Plans and policies
  Source: NCDC and Lae City Administration
  
  - NCD Urban Development Plan;
  - Lae-Nadzab Urban Development Plan;
  - National District Settlements Strategic Plan Physical Planning Manual;
  - Papua New Guinea Vision 2050 (2009) — produced by the National Strategic Plan Taskforce;
  - National Urbanisation Policy 2010–2030 (May 2010); and

- Discussion Papers
  Draft Issues Paper # 1 — Taurama Valley Urbanisation Project.
2. Interviews

Interviews have been a key part of investigating and understanding the issues for urban development planning. Interviews were conducted from the months of June, July and August with the following representatives from both the public and private sector.

Public Sector interviewees included representatives from City and Provincial Governments and key government departments.

Private Sector interviewees included representatives from large corporations operating within PNG and professional bodies such as the Real Estate Institute and development corporations.

Full summaries of the interviews are included within the Appendix.

3. Stakeholder Workshops and Consultation

Stakeholder consultation has been an integral part of the process. The workshops took place at the end of August and include:

- Private and public sector workshop events;
- public comment through social media and questionnaires; and
- questionnaires and social media methods.

Other consultation has taken the form of a project website, online questionnaire, Twitter and Facebook page.

The website which was set up was a static website to advise the public of the project. It contains a function for visitors to comment, along with a link to the questionnaire and a Facebook and Twitter page.

The Twitter and Facebook pages were set up in addition to the website, in order to provide further discussion about the issues of urban development in PNG.

The questionnaire was designed to ascertain the most important problems or issues that residents in Port Moresby, Lae and other parts of the country were facing, as well as their dreams; and respondents were invited to suggest solutions to help achieve these dreams.

Incorporated within the Appendix is:

- A template of the questionnaire;
- summary of the questionnaires — both quantitative and qualitative; and
- statistics from the Facebook and Twitter pages.

4. Fieldwork and Case Studies

The fieldwork element of the research focused on appropriate case study projects in both cities which illustrate the patterns of development occurring on the ground. These were selected to highlight and support a cross-section of issues.

The case studies chosen are a combination of projects which reveal successes, weaknesses, built projects and unbuilt projects, developed by both the public and private sector. Chapter 4 of the report is the section dedicated to the case study investigation.

5. Review and Commentary from Stakeholders

Comments were received from both private and public sector stakeholders on the draft findings which were published at the end of 2013. These comments are included within this Appendix.
Appendix 3: Interviews

Discussion on NCDC Planning Process: Paul Walter (PW), Charles Yala (CY), Justin Ondopa (JO).
Date: 6 June 2013

- Within the NCD, Planning Law and processes exist and are in place; however they are not applied in the real world. There is a need to find out what, in lieu of the development plan, is the real driver of development. That is one main aim of this project.
- Within the NCD administration, Physical planners have no status. The power for land development lies with Lands department, which is difficult to regulate.
- There was a push for 8/9-Mile to be regulated by the government through a deed of agreement to control aspects of development. Development occurs within the terms of the agreement, the developer reports to the Planners, and the development gets ‘ticked off’, or approved. This could be used for example to deliver a certain proportion of affordable housing, with a certain number of residential lots at a certain price. The layout, or master plan, is held in the deed of agreement.
- A significant problem is developments occurring with no amenities, as landowners and developers only want to use their land for development that affords the highest return, and amenities do not do this.
- Rainbow is a good example of development with no amenities — no school, shopping centre, market etc. Waigani also has no schools.
- Schools are the responsibility of NCDC, hence the desire for 8/9-Mile to be under NCDC control, so that infrastructure is put in place before development occurs.
- The UDP does guide the provision of amenities per 1000 head of population, for example, the number of schools.

Land Board:

- Previously there was land and physical planning with separate ministers. However, the Lands Minister was found to be allocating land based on personal bias.
- At the last Land Board meeting, 99 of 110 requests were exempted from the plan, displaying how the Land Board is not functioning effectively. As a result, an independent Appeal Board is required (similar to the NSW Land Environment Court.) This has occurred in both Lae and Rabaul, and resulted in the suspension of both boards.

The Project:

- The focus of this project is to work out the real world system of development: if it is not driven by physical planning, and the ‘meat is growing without the bones’, why is this occurring and how can it be harnessed? Is it because of land allocation issues? Why is so much development now occurring on customary land?
- Taurama is a good example of rapid, out of control development occurring with no services in place. This is a new pattern of development (PW). This pattern falls under the working title of ‘High Covenant Informal Development’ (CY).
- There is a current piece of work being undertaken to discover who are the ‘dealers and hustlers’ in development in Taurama, with the aim of discovering if the planning process is simply too cumbersome, and that is the reason why it is not being applied. The current practice is to develop land first and retrospectively ask for both permission and land allocation: ‘Ask for forgiveness and not permission’. The approval process is too cumbersome and no buildings are removed due to lack of permission so the planning Act has no clout.
Bank Loans/Mortgages:
- The aforementioned pattern also impacts bank loans due to re-categorisation, with land changing from holding a single house to a block of units, without notifying the bank and subsequently paying the difference in land value on the mortgage.
- If the land value changes it is difficult for bank to enforce mortgage payment, as often the mortgage holders go bust, sell land and disappear and the banks can’t pursue the mortgage holder. The NRI is also undertaking a study into what the primary issues are with banks and land mortgages.

Infrastructure:
- 6 major infrastructure projects were identified as a direct result of the upcoming Pacific Games:
  - Gordons to 9-Mile corridor;
  - 4-lane upgrade at 6 Mile;
  - industrial area at Gordons;
  - Kookaburra flyover through Gordons; and
  - 9-Mile to Gerehu road (yet to be signed).

Much of this construction is being done by Chinese contractors, and implemented because of upcoming events such as the Pacific Games.

Markets:
- (CY) The way markets functioned have changed: markets used to be larger: Koki, Boroko, Gordons, Waigani and Gerehu. Over time, small markets emerged; e.g. in Rainbow and 6-Mile. Some of these are unwelcome, for example, in Rainbow, when someone tried to fence off the market, someone else removed the fence.
- A study has been done on markets at Gordons, Waigani and Rainbow (currently in draft).
- Most of these small markets feature problems such as lack of toilets and amenities, as well as security. To manage lack of toilets, residents charge the public to use toilets in their houses.
- Plans are being made that are not convenient for people, and so people are making their own way outside the plan. Markets are a good example of this: an alternative would be to promote small markets for every suburb and make it convenient. Betel nut trade is a good example. Wholesale trade occurs from within residential areas such as Gerehu, meaning that the residential area acts as a distribution centre.

Urban working class settlement pattern:
- A new pattern of development is a squatter settlement facilitated by the Urban Working Class. For example, one person secures a piece of land at 8-Mile. He plants a garden, builds a house etc. Over time, his family joins him and a settlement develops. Over time, the balance of ownership shifts and the original owner loses control. The result is a cluster settlement and ghettos of single tribes. Ethnic ghettos and wealth-based ghettos could result, and this would drive the development of gated communities.
- A cultural shift is occurring as people become more educated and better paid. This creates a demographic that rejects the traditional family home, and desires a lifestyle separate from family structure.

General commentary:
- PNG faces a market failure. The market exists to buy a product, but the product is not being supplied. In this case the product is land.
• POM infrastructure — the road network remains unchanged from the 1970s except for the Poreporena Freeway.
• Town boundary diagram grows rapidly till 1970s and then stops. The reason for this is the NCD is declared in the 1970s, and so the central boundary is declared. The city keeps expanding, but the town centre boundary remains fixed.

Political/Interest groups:
• Interest groups in POM:
  o Motukea assembly: any customary land development must be cleared by this assembly;
  o NCDC Assembly;
  o Port Moresby Capital city interest;
  o Motukea traditional landowners;
  o POM residents; and
  o expatriates.

NCD, Motukea and Central have conflicting assets and interests. The Pore-Napa plan will be a contentious example of this.

• Interest groups in Lae:
  o Huon Gulf and another two electorates in Lae. Each has members of parliament at district level;
  o Lae urban and Lae rural;
  o Lae as Morobe Provincial Capital; and
  o Lae as industrial capital of country.

• (CY) One overriding interest must be identified: is Lae a commercial, industrial or capital city? It requires its own commission status. Lae currently misses out on GST and must queue up with all other provinces for GST distribution. Commission status allows a city to collect money; however, Lae does not have commission status.

Development with Customary Landowners:
• Issue with customary landowners with previous consultation where they request payment in order to consult. Lihir (Londolovit Valley) landowners requested payment in order for the power company to provide power supply. If the development occurs in partnership with the landowners, they become advocates and the process is smooth. In Lihir, the landowners perceived that the mining industry was wanting to interfere with land, so it was unwelcome.

• CY: There are three conditions for development on customary land. This is an attempt to protect the integrity of the planning system but also respond to the real world.

• Section 81 to be applied to one development — the roads, services, war memorial etc. would be leased to the state free of charge, in order for the State to develop and maintain them. Justification to the landowners is that it increases land value for landowners. The alternative is to maintain low land value with no services. The typical landlord responsibilities over tenants is still retained by landlords, so information is still disseminated by landowners.

• A ceremony to handover customary land, no matter how small the piece of land, is currently required as there is no precedent, and there is a need to connect informal situations with formal procedures. Primarily this is the creation of evidence for later land claims (CY). This may be occurring in Taurama. What is unknown is, who the specific
Raphael Nagual (RN) Interview 2: The Planning Process
Date: 5 June 2013

- Anyone can develop land anywhere because the legislative process of Urban Development leases has changed. The state coordinates identification of sites, survey, and approvals.
- Urban development leases needs to be reviewed, and changed.
- The State no longer has the financial resources or the technical capacity to coordinate development post tender, so they’ve now engaged private developers.
- The State provided infrastructure from 1975 (close to independence) and finished early 90s. During this period, the National Housing Commission existed, plus World Bank funding contributed towards infrastructure projects. These were coordinated by National Housing Commission, and were quite successful. NHC had good administrative and technical structure, including strong key personnel. Gerehu and Waigani were the result of such efforts.
- When NHC merged with Housing Commission to form the Housing Corporation, the World Bank funding ceased. The Government was supposed to take over the coordination of development projects. However they were unable to sustain this. At this point most development stopped and now they rely on old housing commission stock. Summary: National Housing Commission + Department of Housing = National Housing Corporation. NHC were administering only, not building.
- Hohola, Waigani and Gerehu received some housing projects, but funding and politics led to a housing stall until recently. Now it’s picking up again due to a push from other departments such as the Department of Health.
- Projects with World Bank funding throughout the country are typically much more successful: Morata, 4-Mile, Garden Hill, 9-Mile ‘self-help settlement schemes’ are now complete. In this model, the World Bank provides services and infrastructure and allotments are released through Housing Commission for individuals to obtain and build on them. Housing standards are relaxed. Power, water and roads all exist. This model was successful in the past but most developments have regressed because they are now not being coordinated and administered. Settlement Committees have dissolved and projects are no longer self-sustaining. Upkeep of roads is supposed to be transferred to NCDC but funding has meant this hasn’t occurred. Sanitation is very poor. Water is provided through standpipes in several key locations. National Physical Planning Board — new applications for development in town are the main things being assessed — new development in town: extensions or improvements. DAs currently have guiding policies upon which applications are assessed. Technical requirements are used to assess applications and these are then presented to the board. However, there is limited technical know-how on the board. The NCD board is not complete yet as they still require more key members, such as a representative from the National Board. The difficulty is, there are not many resources in the Office of Chief Physical Planner. The staff don’t have the technical skills and are not in a position to give the correct advice. Administration level deals with non-conforming applications — reviewed by technical bodies. All are dependent on the judgement of the planner looking at the scheme. Section 81 of Physical Planning Act, signed with public
service utilities. It’s the abuse of the process which results in many projects not being properly assessed. (The Lae Board is still under suspension.)

- The Board is the approval authority for development applications and is supposed to receive advice from technical officers as to how the development is supposed to perform under various technical requirements. These requirements have regard to the Physical Planning Act and the Environmental Protection Act, although it is somewhat cursory.

- The Planning Officer has to present a planning brief to the board after the technical committee has reviewed and made a recommendation. The board then makes an informed decision.

- Papers are supposed to be given prior to the board meeting (2 days) for review however most are distributed at the meeting itself.

- The composition of both the national board and the NCD board are of current concern. The Morobe Board is still under suspension. It only held two meetings last year and two meetings this year, and is therefore not meeting the minimum requirement.

- If a DA doesn’t conform to the LDP or UDP, they go through discussions and consultations at the administrative level before it goes to the board. The development is reviewed against the Development Plan, and if development is non-compliant it should be refused. However there is provision for a ‘non-compliant development’ if adequately justified. It is then assessed by the technical committee and recommended (or not) to the board. However this is not preferable as it creates high level of inconsistency. In practice, the size and scale is considered, e.g. industrial in a residential area not allowed, but residential in an industrial area is better.

00:30:40

Raphael Nagual Interview 3: Surveying of Land
Date: 5 June 2013

- Chain and Compass — lowest level of survey 1. 2 and 3 are next levels. Technically identifying boundaries and forming the plan. And Level 1 is enough to register the land.

- Customary landowners could easily survey land, come up with a plan to then register it. However they are not following this process as they want to move quickly, and there are many procedures, and the more there are, the more likely they are to be stopped. Conflicts then come after.

Raphael Nagual/David Conn Interview 4: The Land Tenure Process
Date: 5 June 2013

- There needs to be a road network strategy for the next 50 years. There’s need for a proper strategy.

- The new roads which have been developed; that is, roads from 9-Mile, once those roads are in, it will open huge corridors of the city to be developed.

- Some development is starting to take place along these roads, and the location of some of this development is questionable. Is the plan leading this or are they opportunistic and ad hoc decisions which are being made?

- There should be a concerted road network for the next 50 years, to establish roads which will link up planned areas of development and growth across the city.
• Issues with Ela Beach — the road, the beach, and development along there. The suggestion of increasing road width along 4 lanes of traffic along the beach will destroy the one attractive natural resource in the city. It is a prime piece of land, constrained by the way it sits, due to orientation, but there is potential to make something of it.

Raphael Nagual/Ravu Frank Interview 4: NCD process
Date: 5 June 2013
• Road reserves have been eaten away by lots being sold off. This affects services also.
• Lands Department giving titles to individuals on road reserves, which is a problem.
• Issue of providing services to settlements — water and power. (See PNG Power state there is no budget for it and density not high enough).
• Informal settlements — ones that spring up on state land that is left as unsuitable for development, road reserves, high tops (can’t get services there).
• Formal settlements — self-help.
• Settlement White Paper in 1970s — Department of Housing transferred to NHC, when World Bank funds were gone, functions to NCDC, after certain projects took precedence, then transferred to certain members who then gave certain projects certain priority.
• Tax and GST was removed and this has had an impact on budgets.
• Annual budgets by NCDC published annually in national papers.
• Implementing division only, but find they are planning also.
• Capital works and maintenance — involved in big capital works, 8 big projects are incorporated.
• 6 are approved and ongoing:
  o 6-Mile to 7-Mile: existing road upgraded to 4 lanes;
  o industrial roads at back of SP: existing road upgrade to 4 lanes; and
  o Erima to 9-Mile: existing road upgrade to 4 lanes.
• Still to be signed:
  o New road from 9-Mile to Gerehu (still to be signed);
  o new road from Hanuabada to?; and
  o Kookaburra flyover — from airport.
• Funding is National Government funding. Currently being pushed by 2015 Pacific Games, and 2018 APEC.
• Work done to identify the projects with proposals with a set format submitted to the government, project and program budget.
• There were no priority projects identified, which is a problem.
• Department of Transport sponsored study done by Ove Arup — which was to justify the proposal for the construction of freeway.
• Construction in PNG is very expensive.

PW/RN/The Office of Urbanisation Discussion about the process
Date: 6 June 2013
• Only certain individuals are benefitting from the planning system.
Improving Urban Planning in Papua New Guinea

- Start with development processes, and then look at projects, identification of projects then sourcing of funds, development aspects, pattern of sustaining it over time, and whether it can be sustained by services.
- The policies that development is facing are the key thing.
- Development plan spatial arrangements and relationship with the policies.
- Ben Micah, NCDC are the key players. You need the support of the National Land organisation program and the Office of Urbanisation.
- There is a push for a National Urbanisation Plan. What is the missing link between the plan and getting it implemented? Where do all the parties fit into the Plan?
- The plan has to be useful. Need to connect the plan with the decision making process. Link between having the plan and getting it implemented.
- The key thing is to plan properly. Integrating different agencies, government bodies, etc. is essential. Then support of others.
- The question of zoning — and allowing of particular land uses — is this the right approach in PNG?
- Infrastructure is the first priority, then housing.
- Planned road from 9-Mile to Bootless Bay — no road hierarchy, land zoning just shown as residential — so no structure to planned development.
- LDP needs to be planned more and have more detail otherwise it will be filled potentially with settlements.
- Planning part: pickup, centreline of road survey, road design, costing.
- Landownership issues: title over the whole area.
- Land must be protected. Unity in clan must be solid so that the land is protected.
- Three ILGs have been created to cover the whole site.
- Issue with squatters: when someone moves into state land, people have some right of ownership if have stayed there for some time.
- Under the Physical Planning Act, NCDC should have taken full control of the site. There was confusion; they thought they didn’t have a part to play with the customary land. It is within the boundary of NCD, so they should have played their part.
- MKA and NCDC conflicts hinder the process.
- The establishment of a development authority would have been beneficial.
- NCD should assist in surveying of land and establishing boundaries.
- Need legal descriptions, zonings, and policy guidelines needed first before they can issue notices on unauthorized land developments.
- It is very difficult to establish the lots that exist, as the listing of lots is not organized properly.
- Everyone is meant to be equal under the ILG system. How it works in practice is different.
- Government pays for roads, and then manages. Standard allotments pay city council for services and land tax etc.
In Lae, the area between Unitech and town is all customary land. There have been no new housing developments since the 80s. It’s a major issue and need to find out why this is so.

JICA worker Alex Gowie had a vision with Unitech. They wanted to do a review and see what has been implemented. The plan is good, but is not being implemented. There aren’t enough resources to do this review. A brief was given to JICA, based on the plan Lae has and what it is experiencing.

The Lae plan is focused on areas for new urban growth, which is essentially an urban expansion plan.

Detailed review of the historical growth of the city and other plans. Lacking hierarchy of centres, infrastructure, specific projects and resolution of land tenure issues.

**Issues**

- Heavy settlement growth around West and East Taraka on state land, with very high growth rates.
- Between Independence Drive and Busu drive, there is a large amount of unplanned settlements with no roads.
- Both settlements were established in the 1960s, and both are very unsafe places to go into. It is too dangerous for planners to go out there to do inspections.
- Old Malahang Plantation — just opposite the Industrial Centre (Portion 351). This land has not been developed. Want a full subdivision, 23–32 hectares. There was an ILG formed.
- The ILG landowner is interested in full residential subdivision of lots and does not want to incorporate anything of no commercial value — e.g. open space, schools etc.
- Government cannot fund it, so whoever takes the land then funds the infrastructure. Previously it was government funded. Development of a UDL, the developer is responsible for infrastructure. This is now a problem also being applied to customary land.
- Enforcement of infrastructure building — developers build everything themselves. State freehold back to customary land.
- Under the UDL process, once granted, the developer has the infrastructure, government agency does an inspection and sites for commercial use etc. are transferred to the developer. All other land e.g. open space, schools etc. are transferred to Government.
- Only at the process of establishing the ILG. They would like to follow the process. No subdivision plan has been done. Only one consultation session was done, with about 6 landowners.
- Raising the money to undertake the planning process is a significant issue. Most villagers are unemployed, so working on a plan. They have connections with some nearby factories so there is a bit of money around. They have some idea of a developer that they might partner with. Capital is a big hurdle, and then understanding the planning processes is required. The UDL function is to protect the state.
Section 81. Service providers state that adequate provision of services to their satisfaction is necessary — before and after. Development scheme comes to Morobe Provincial Physical Planning Board, with plans at a certain scale, standard application fee, forms, planning proposal, and subdivision. The planner does a planning report (called Certificate Section 105), which states there are public utilities close by for new development, and includes Section 81 Agreement, plus lease covenant, to be transferred to the state. Officers are not currently exposed to this. They assess and the Planning Board makes a decision. The same plan then goes to the Building Board.

Subdivision takes place, approval granted a UDL, then they go through the process to get the UDL through land administration. Once the UDL is issued, a survey must be done within 6 months to then register the land. Within 12 months they must carry out infrastructure services, then obtain completion certificate. Titles are not to be issued without the completion certificates. In Lae though, titles are being issued without completion certificates being issued and without services being in place. The former Lae airport is a prime example. Once the survey is done they can obtain individual titles. They can then sue the state for issuing titles. Air Nuigini is taking the City Authority to court, stating that the state agency issued the titles without provision of infrastructure services. Section 81 under UDL process is to protect the state. Services in this case are the responsibility of the developer. The bank was willing to grant funding to complete the works but can’t without titles. The completion certificate is needed to get titles. The completion certificate is issued with conditions that they had to complete the works. A contract was drawn up to accept the conditions. At 8-Mile, subdivision of land took place and then the services were not completed and the developer disappeared. There is no infrastructure.

There is concern that the plan is not complete. The policies need to be integrated. There are no LDPs identified within the Lae-Nadzab UDP.

PW RN Mike Quinn Lae UDP and Projects
Date: 17 July 2013
• Compartmentalise the issues.
• The current Lae plan is due to expire in 2015. JICA are talking about funding a Japanese group to undertake the next Lae Urban Development plan.
• A pretty good plan, but implementation is negligible.
• If there is no willingness and funding, it will achieve nothing.
• A Malahang Development plan has also been commissioned. This need to be undertaken to allow development of this area, to a plan, so everything can be adequately taken care of. This is the biggest area closest to Lae, and where development should be prioritized.
• The Malahang Industrial Centre was part of the plan, but was independent.
• The Malahang Plantation sits adjacent to this.
• The concept of the ICDC was funded by the government and AusAid originally and set up an industrial estate. Revenue from first project would fund the next project.
• Low cost areas of accommodation — the cost of land, and development costs, then become out of reach.
• There is no new residential development in Lae.
A detailed development plan was done — Ahi Land Ownership Program was done, and no ILGs were in place originally. The idea was to establish a land trust, get seed capital, start development on a parcel of land, sell the blocks, and then move on to the next area.

This would also allow the chance to remove the shanty towns and put more permanent housing in place, with house and land packages.

It’s not a question of affordability necessarily, it is the fact that there are not enough housing products. A number of people living in the shanty towns are earning a good income, but there is no available housing.

A basic house would be around K250,000. A serviced block would be around K300,000.

If there is a title on the land, the bank will give a mortgage, and may want a letter of confirmation from the employer.

Not many apartment buildings being built in Lae. Issues are that areas which are best suited often are not served.

The Raunwara area would be most suitable for apartment buildings.

Some effort to consolidate sites.

Other issues are that there is no strata title in PNG, which is good for developers who want to develop, own and lease. This has a bearing on people’s willingness to feel they own their property rather than only leasing it. Proper strata title legislation would help the issue of home ownership. It would be better for developers to sell units and would streamline the process for potential individuals to buy units rather than rent them.

Residential returns are expected gross in order of 17–20%.

Banks are not providing long term loans. A 10, 15 or 20 year loan is what you would expect, with a 20–30% deposit. A higher return is needed due to the short length of loan.

POM has had its own issues in relation to lending — particular policies come out, and then they are applied nationwide. This then hinders development in areas in Lae.

One of most significant issues is administration of the area that the plan encompasses. Lae is only a small area, and the council district wards and other areas, makes implementation difficult.

The creation of a new urban commission, similar to the NCDC, an administrative system under the one plan. It would not have own Governor like NCDC. It would remove the local level government and replace it with an urban commission, which would take care of everything, like a Metropolitan City Government. There is a need to create an administrative system which covers the whole area which would deal with planning administration along with servicing waste etc.

The planning board was never funded properly because the powers were delegated from the national physical planning board to Morobe Provincial Board. Morobe Provincial Board didn’t want to spend money. People realized that this was the case and there was no enforcement, and this has been occurring for about 10 years.

Enforcement under the National Planning Board was implemented through fines and pulling down illegal structures and this had an influence on people and the willingness to follow the processes.

There is currently no consequence for not following the Planning or Building Act — a light telling off, but approval still given.
Buyer beware when purchasing a property. The REI helps in assessing the condition of properties.

Zoning of land in relation to Independence Park: The Physical Planning Board has power to influence. Minister awarded title illegally. PPB has the power to change the zoning.

Minister created a new title to commercial, which was inconsistent with zoning and awarded it to the developer.

The old airport: UDLs were issued and no one has complied with the titles. A number of the properties have been sold.

The planning board has no substance; it is corrupt and is manipulated by the provincial governor. The commission comprises appointed members, not elected members — people who want to see the right thing happen.

Under the rules for Provincial Government there is meant to be a representative from Lae Chamber of Commerce. The Governor went in and appointed someone who was not a member of the Chamber of Commerce.

JICA have been offered the task to do the Lae-Nadzab Urban Development Plan. A team has been over to assess the project.

There have been reviews of Lae city boundary over the years but this often gets left out as being too hard.

The problem is that incorporating a plan for Nadzab cuts into two rural local government areas — Nawab and Moppa — and who looks after the town services. There would be problems rating the land and servicing.

Rates are collected and they are then obliged to provide services. The rural councils are not geared up to collect rates.

Lae City Commission — the Lord Mayor drew up a draft Act to work along NCDC lines but the Chief Secretary has rejected it. Most don’t want a NCDC system.

Determining where the Lae city boundary would end is a key issue.

The Speaker was City Manager, also briefly Lord Mayor in 90s. He was on the nominated board when council was suspended.

Prior to the Provincial Government, the city council was operating really well, as grants were coming from Provincial Government. It collected land rates and had grants for roads and schools from the structure of the National Government. When the Provincial Government came in, they removed the grants.

The organization has forgotten what its real role is. The current local level election process uses the national electoral roll. The problem with this is that half of the people living in Lae on the electoral roll are not paying rates. More than 50% of voting people have no stake in council because they are not paying rates.

There are only 6 wards in the council. When they get in they are making decisions not geared around roads, street lighting etc. Grants are being given to private investment instead.
• What has been proposed is the formation of an electoral roll based on rate payers, with arrangement for legitimate family members etc.

• Another problem in PNG is that the larger rate payers in urban councils are non-citizens e.g. expatriates, and election rules at the moment mean you can only be on the electoral roll if you are a citizen. There is a push to change this. There is an acknowledgement that this is a problem.

• Most of the housing is non-formal and growing. There is an incentive to formalize. When formal centres were first done under the Department of Urban Development, some were built by the housing commission. There were low cost blocks of land (self-help), with certain conditions; within a certain period, one had to build a building and get it valued, so that one could build a reasonable house. It still came under the Building Board, but with the understanding that it was a low cost development area. A committee was established.

• Council has a ward system now, and could develop a settlement committee. Paying a rate annually would get people onto the electoral roll. Legitimate settlers would be formalized and made stakeholders in the process. PNG nationals who have gone through this process are proud of their homes and happy to be part of the system.

PW/RN (City Government) Lae UDP and Projects
Date: 18 July 2013

• Lae Airport should be included and the land has been subdivided. There are about 24 allotments and they are looking for potential developers in a public/private partnership. Container storage and Roebuck are currently occupying some land on a short term basis.

• Are developers coming with a concept — or does the council have an idea of uses?

• The land was originally supposed to be classified as light industrial uses, so they are looking around that line. So far no one has come up with anything better, so they are working along that line and waiting.

• Portion 63: a large portion of land (up near the lake). It is currently being used as a housing estate by the city council. It is a prime area for re-development, something along the lines of Vision City.

• The Lae-Nadzab corridor is one of the few places where development can take place.

• The city boundary goes as far as 5-Mile. The jurisdiction is a relatively small area, which poses a lot of constraints.

• The city government should extend the city boundary out to Nadzab or 12-Mile, and beyond Malahang and to the river. There is a large amount of customary land.

• The Tidal Basin project — jointly funded by the National Government and ADB. The City Authority has never been involved. It cannot exist in isolation, but for some reason the city government has been left out, which is inexplicable.

• Municipal services: the budget has been radically cut, which has affected rubbish collection and road maintenance.

• Government grants do not come regularly, but are ad hoc, so there is a reliance on City funding. Revenue source is from land tax, trading licences and garbage collection. This is not enough to fund the services. GST is dealt with by the Provincial Government.
• One of the major problems is the City Dump, which has gone beyond its life span. There is another site at 4-Mile, the state land swamp. They have tried to acquire the land, so the dump can relocate there. Discussions are still at the initial stages.

• Garbage collection is an issue; people need stickers to have rubbish collected. People are not paying to get garbage removed.

• Lae has very limited powers, even though an industrial capital, Lae City council makes laws but just is like all the other, rural areas.

• A structure which is more like NCDC is more appropriate, along with an expanded city boundary.

• The main roads and streets are the responsibility of the Works Department. The Provincial Government is responsible for funding and City Government for carrying out the work.

• The Council has about 300 employees, paid by the city council, from the internal revenue. About 15 or so of the top management are paid by the Morobe Provincial Government.

• Most development has to go through to the Joint District Planning and Budget Priorities Committee (JDPBPC).

• Lae City Council — the Lord Mayor is part of the JDPBC.

• There is no hierarchy of the government structure. Lae City Council is not classified by an Act of parliament.

• Former IPA building — Nambawan Super, Lae Builders are contractor. The rental is too high. Apartments at top level and commercial below. The building has changed the face of Lae. It was finished in May 2013 when the Building Board approved the occupancy.

• The road in front is the national government’s responsibility, but the part of the road has not been touched. The City Council was not involved, the reason for which is not known.

• Lae City needs to be supported, approvals need to be given and funded. More recognition is needed.

• The city is being marginalized and undermined by other projects which take precedence.

00:46:20

PW/RN Lae Projects
Date: 19 July 2013

Settlements

• There are a number of settlements in Lae, and there is a pattern of the settlements growing next to traditional villages, due to a need for expansion. Butaabnan Village has settlements around it. Kumad is a covenant area, with settlements along Lae-Nadzab corridor.

• Bumbu: there is a long term settlement along China town road, up near Malahang, 200m x 1km. It is mostly Sepiks who live there.

• Along the Boundary road, across from formal residential settlement: this has residential formal development and to northern side of the cul-de-sac is the Boundary Road settlement. Close by is the Boundary Road Police Barracks settlement.
Residential Developments

- Hornibrook’s development at 10-Mile to support the Morobe Mining operation: There is a school next door and a supermarket/retail outlet which Hornibrook operates available to the general public along with residents.

PW/RN Lae Development market issues
Date: 19 July 2013

- Why are there so few residential projects coming on board in Lae? There is very little resistance due to the planning system. Issues seems to be:
  o Lack of a development sector;
  o land factor — there’s not much land for residential developments in the town;
  o funding;
  o infrastructure; and
  o land cost and final price point and affordability.

PW/RN Lae Settlements and Violence
Date: 19 July 2013

- Newspaper article 19–21 July — the death in a settlement area of Bundi below Unitech.
- Highlander groups have lived and worked together to protect each others interests.
- The settlements are concentrations of particular Highland groups, so in case of any problems, they are there en masse.
- There is a geographic element to the violence that is occurring.
- In the downstream area of the Bumbu River — there were plastic tents set up of displaced people. This happened two months earlier with an incident between different groups.
- A big problem is that a lot of settlements are on customary land and the landowners have a very short term view of collecting rent. There is no organizational, corporate or physical structure to organize. It is also about lifestyle. There is very little employment and people need to get money in some other way. So the more people that come in, the more rent the landowners can get. Along with this increase in people is an increase in anti-social behaviour.
- The tenant may refuse to pay, and landowners lose control and then the settlers live rent free.
- This potentially will happen with Ahi landowners also.
- With lack of subdivision taking place, it is difficult to work out who is on which land and so organization is a major problem.
PW/RN Health Issues
Date: 19 July 2013

- Health issues and international funding possibilities include World Bank, ADB and AusAid.
- Funding of Tidal Basin is an AIDS fighting initiative with ADB. The intention is to develop a framework to draw a relationship between orderly urban growth and HIV, which will allow the city to secure funding for head works from donor agencies as capital for orderly development.
- The level of funding for infrastructure is very difficult to get from government sources, hence the need to look to international donor agencies. However, in the first instance it is necessary to ensure that landowners have some ownership rights on the land. Identify those ownership rights first, then can get funding.
- The current systems mean that customary land cannot be released.
- In terms of securing proper titles on customary land, groups such as the Ahi landowners are able to help with this issue.
- The landowner groups really need education about the process, and to understand the importance of public infrastructure and utilities.

PW RN Rainbow Estate, Port Moresby
Date: 19 July 2013

- The central part of the site has not been developed because too steep.
- There is only one road access point from Waigani Drive. There is a Stop and Shop supermarket on the northern side and a Mobil service station on the south, which has developed on land not zoned for commercial use, and these have not been properly planned and there is poor market.
- Markets have also developed, and are spilling into the road reserve of Waigani Drive. There is a resulting issue with traffic congestion and the successful functioning of the commercial centre.
- Buses and heavy traffic on Waigani Drive means it is impossible to get out of the estate.
- The project was developed to satisfy residential needs only. There is no open space, or school (or community school) or shops within the site.
- No consideration given to traffic flow, so there is congestion on one street going in.

PW/RN Loss of Public Open Space
Date: 19 July 2013

- Discussion about the issue of loss of open space to private development in both cities.
- There are numerous examples where parks have been rezoned.
- Koki Village: About 4 years ago, low lying and reclaimed, it was developed for parkland and public utility zone. No title was issued under City Authority. It was left as public utility and then zoned as public open space. As there was no title issued, a developer was
interested and a planning application was made to re-zone to commercial. There was public outcry and it currently remains undeveloped.

- It never was used as a park as it was low-lying, though it was identified as open space due to lack of open space elsewhere. Koki market is a classic example of space identified as space on the side, where no control mechanism is in place and markets just develop. There are no enforcement guidelines for vending and informal trading, where there might be issues with flow of traffic or pedestrians. City rangers go around and remove people, but they will just return. There needs to be a better mechanism in place.

- Koki market is owned by NCDC and a new market building has been funded recently by AusAid.

- Koki Village is not a traditional village. It started with people coming from Marshall Lagoon for employment purposes. It was a safe place to live above the sea, so it developed on that basis. Just a few people arrived, and then more people followed.

00:13:44

PW/Team/Justin McGann — Motukea Island
Date: 26 August 2013

- The industrial site accessed by an existing causeway now totals 183.00 hectares; a significant percentage of which has been reclaimed and where a dry dock with a capacity to accommodate panamax vessels of 70,000 tonnes to an overall length of 260 metres is under construction.

- Some 65.00 hectares of the complex has been sold to the State and PNG Ports Corporation Limited will now relocate from “Downtown Moresby” to Motukea and this the catalyst for the mobilisation of customary land in the upper reaches of Fairfax Harbour for industrial and ancillary purposes.

- The redevelopment of the “Downtown Moresby” sites to be vacated by PNG Ports Corporation Limited is to be undertaken by an Authority yet to be established.

PW/Team/Rosemary Adu — Malahang Industrial Estate
Date: 28 August 2013

- Have head lease and sub-lease.

- Water supply comes from Water PNG.

- Pioneer project under the former government ICDC. ICDC is the regulator, and the centre is an operational centre. It was established 20 years ago. It is made up of government agencies, representatives from legal firms and business houses. Business owners have very little say in the provision of services.

- It was intended to bring in companies involved in manufacturing activities, so was expanded to storage facilities and service functions. Individual titles are needed for separate allotments. Individual allotments left were sold outright 5 years ago. The corporation still holds onto the initial blocks. When private developers come in they need to abide by the development principles and physical planning and building board requirements, and the corporation monitors them.

- Rental (charged at market rent) from the buildings are still undertaken. Their ownership and service/management rates are very minimal and are put towards maintaining the roads etc., in place of a municipal fee, as boundary doesn’t cover this area. K240,000 per annum
from management fee goes towards monthly expenses. It has been self-funding for past 10 years.

- 10–12% return over the past 5 years.
- Charging market rent.
- A budget is set, with endorsement from head office before proceeding to commit funds.
- Head office operates on allocation from the government. No support from government. They operate on what they generate here. What is earned is put back to maintain the centre.
- The contract sets out the arrangement and the handover of land title to developer but is still obliged to pay a rent — ACDC to charge and collect rental.
- Charge 80% of what is recommended at market value rent. Those with manufacturing activities are supported so are on a subsidised rent.
- Nawab Local Level Government, but national project. Working relationship with National level government.
- Building Board approval and Physical Planning Board are both complied with.
- Maintenance of roads, rubbish disposal is undertaken by the Centre.
- Administration/maintenance and upgrading of buildings is undertaken as required.
- Relationship with customary landowners is maintained. Provide good employment base with security employment.
- Expansion plans with one or two similar projects in Lae and beyond. Looking for a suitable State Land site up the Highway, for the next development.
- Preference to have a mixture of activities rather than being reliant on one activity only. This is more sustainable.
- Provide support services including housing for tenants, little shops, offices close by.
- National budget to allow for head works (drainage etc.).

**PW/Team/Chris Thompson— Awilunga Housing (Hornibrook Site) at 9-Mile**

**Date: 28 August 2013**

- Titled land.
- Falls under Morobe Provincial Government.
- Highway to be upgraded in two stages. Mains power and tank water. Two bore water sources. All houses have built-in septic tanks, handled on site.
- Population of 1000 people within the site. Full development achieved and no potential to expand if they wish to.
- Good long term tenant.
- Innovative construction methods including sandwich panels etc. to produce affordable housing.
Appendix 4: List of Stakeholder Workshops

The following list identifies the organisations who were invited to attend the workshops:

**Port Moresby Workshop — Public Sector Stakeholders**
- National Capital District Commission Department of Environment and Conservation;
- MotuKoitabu Assembly;
- PNG Ports;
- Office of Urbanisation;
- Celcor;
- Department of Lands and Physical Planning;
- UN Habitation;
- Department of Transport;
- AusAID;
- PNG SDP;
- National Housing Corporation; and
- Central Province.

**Port Moresby Workshop — Private Sector Stakeholders**
- Chamber of Commerce and Industry;
- Curtain Brothers;
- Esso Highlands;
- Lamana Development Limited;
- Avenell Engineering Systems;
- Business Council of PNG;
- Anitua;
- JICA PNG Office; and
- Steamships.

**Lae Workshop — Public Sector Stakeholders**
- Lae City Administration;
- Department of Lands;
- Morobe Provincial Government;
- Butibam Progress Limited;
- Ahi Land Mobilisation;
- Regional Lands;
- Morobe Provincial Government Building Board ILG Office;
- Unitech Property Division; and
- PNG Water.

**Lae Workshop — Private Sector Stakeholders**
- Lae Builders and Contractors;
- Lae Chamber of Commerce;
- Professionals Real Estate Group;
- Morobe Mining;
- Mainland Holdings; and
- Hornibrook.
Overview

Two workshops were held in Port Moresby in August 2013 to discuss the Urban Development Plans of Port Moresby and Lae with both corporate and public sector stakeholders. Dr Charles Yala, Acting Director of the NRI, provided a welcome to each of the workshops, followed by a presentation by Paul Walter of City Plan Services.

Workshop sessions were then held with each group to determine some of the aspirations for the cities and practical solutions that could be implemented. The findings of the workshops highlighted some overlapping themes related to governance, land ownership, housing needs and strategic planning.

Port Moresby Workshop 1–27th August 2013, 8.00–11.30am

Overview

This workshop was aimed towards Corporate Sector stakeholders who are operating in Port Moresby, such as developers and members of Chambers of Commerce. One representative from Curtain Brothers attended.

General discussion

There is a fundamental problem in the way in which land is planned, developed, managed and administered in PNG. The processes are there, they are just not being followed, and there needs to be more integrity in system. Laws are still following those of 1960s Canberra. However, Canberra has moved on and PNG is being left behind. The importance of training in planning and built environment needs to be emphasised. These are currently not in the consciousness of Papua New Guinean people. The old system gives so much monopoly of power to the government in office. There is a monopoly of control over the application of lands. And there is competition with the informal sector which is allowing it to flourish. The incentives of the informal sector need to be undermined to reduce its power. A restructure of the system will help allow the proper administration of the processes to take place. The chain of command is too lengthy, with power concentrated in one place. Key roles including that of the Secretary-General, the Surveyor-General, the Valuer-General and the Chief Physical Planner should be questioned and reviewed, along with the person responsible for the final decision. It should not just serve the Lands Department but other agencies also, such as NCDC. There are conflicting interests in the various departments. Developers such as Curtain Brothers find development easy in PNG compared to that in Australia (Justin McGann cited the example of the difficulty in developing on Magnetic Island compared to PNG). The most difficult aspect from a commercial developer’s perspective is acquiring the land to create meaningful suburbs. The best way forward is to allow ILGs to formulate the voluntary surrendering of land.

Port Moresby Workshop 2–27th August 2013, 1.00–4.30pm

Overview

This workshop was aimed at the Public Sector representatives in Port Moresby, and was attended by representatives from NCDC, DEC, PNG Ports and the Office of Urbanisation. The group was divided into three groups, and each group discussed some of the issues, the aspirations and then practical solutions to achieve these aspirations.

WORKSHOP GROUP 1

Key issues

- Lack of political will;
- unplanned towns and cities;
• overcrowding of services;
• growth of unplanned informal settlements;
• planning settlements into unplanned settlements;
• traffic congestion; and
• issues with topography and developing. A large amount of flood prone land, land too steep.

Aspirations/Dreams/Actions + Solutions
• Safer City > infrastructure, healthier living standard, drainage;
• physical planning to be recognised at a higher level;
• formalise customary land;
• educate landowners;
• customary land allocation > Lands department administrative structure and support;
• customary land authority > tailor a legislation > links to Lands Act; and
• connect investment and administration into customary land.

WORKSHOP GROUP 2

Key Issues
• Lack of coordination, lack of responsibility;
• Government funding issues;
• capacity of roads, traffic congestion;
• land tenure and ownership;
  land not given to parks; and
• bribery.

Aspirations/Dreams/Actions + Solutions
• More parks, open spaces, sporting facilities;
• expanded roads;
• designated suburbs for affordable housing from city centre to the outer areas;
• development to cater for the ownership of property; and
• regular census > either national or local > population growth and housing.

WORKSHOP GROUP 3

Key Issues
• Urban drift;
• informal markets > settlements > strain on infrastructure;
• politics and settlements > politicians will align with settlement residents;
• Department of Planning needs holistic approach to socioeconomic and physical issues;
• land allocation; and
• Government department structure > relationship between agencies and department.

Aspirations/Dreams/Actions + Solutions
• Policy of planning first;
• comprehensive land use zoning (conservation areas and agriculture);
• cities/towns identified > hierarchy;
• all the towns and centres should be planned;
• access to all to build houses;
• user-friendly and habitable housing design;
• Building Board to approve design;
• proper design of infrastructure;
• incorporate more parks and recreational areas;
• incorporate bike lanes and bus lanes with proper drainage; and
• no vandalism.

**Lae Workshop 2–29th August 2013, 9.00am–12.30pm**

**Overview**

The Lae workshop was attended by a combination of both public sector and private sector representatives. On the public sector side this was idle. After the presentation by Paul Walter, four participants on both sides were invited to start the workshop discussion with a summary of the key projects that they have been involved in.

**Kathryn Apelis — Manager, Ahi Land Mobilisation Authority**

Established by the Morobe Provincial Government to implement a policy in which the Government works with the people. Launched in 2001, the policy looks at mobilising customary land still in hands of Ahi Group for proper urban development in Lae, to benefit the city but also provide socio-economic benefits to the landowners themselves. The landowners were a part of the process of developing the Lae-Nadzab Urban Development Plan 2005–2015. Last year, a full executive and committee starting implementing in line with land implementation program, to reduce land being sold off without the consent of all involved.

The main major project is Wagan Village, swampland identified as a fish port, to facilitate containers for tuna cannery. It is pure customary land, and the land is still intact. The ILG is still in the process of being undertaken with the three clans. There is a stakeholder group including NFP, real estate agencies, the Morobe Provincial Government, and five canneries which will be involved. Majestic will be a major investor. Morobe Provincial Government will be a principal investor in the public infrastructure.

**Mr. Patilias Gamato — Deputy Administrator**

Landowners did not want to sell, but rather lease their land. There is a difficulty in going out and identifying landowners. Apply Land Mobilisation Program on the land, where the Majestic site is located. BUP — Three clans own the parcels of land. They bought the freehold land back from the church. It took two years to arrange the land so that it is leased out, not sold out. It is on long-term lease with the BUP. Incentives were arranged for landowners to be involved — buying trucks, putting up fences etc., so there is some involvement. Land tax is paid to municipal authorities and land rates are paid to the landowners rather than the state.

**Mike Quinn — President, Professionals Real Estate Group PNG**

Nambawan Super Mixed-use the Scheme. They are the only major developer in PNG of developments for leasehold purposes. This is the only high rise development in Lae, and supply and demand of commercial buildings is very finely balanced. Key tenants will be the Mbank and tenants leaving the recently vacated Vele Rumana Building, which has been subject to poor building management. This highlights companies trying to manage their own structures with no knowledge of facilities management. Vele Rumana will be re-developed.

The new building is the re-development of an existing site which previously had a three storey building. Issues with project management and completion occurred due to change of management and architects. A lot of the planning was deficient, including no provision for partitioning and no provision for carpets. As a result there are no tenants, and it is in danger of sitting like Vele Rumana Building which sat empty for 15 months.
Mr. Mal Lewis — Managing Director, Hornibrooks

The establishment of property development market with key companies involved in Lae. Property management is not Hornibrooks’ principal business but they have seen opportunities.

Funding is by NASFund. The land was open fields. There was a thought that development would increase land values. A state community for people to avoid the fly in fly-out scenario with the mines. A community would be established where Hornibrooks would look after families while workers were at the mine. 9-Mile was a joint venture, banks agreed to it, and the development commenced with roads and houses. The bank then decided that land based developments weren’t to be approved with the GFC and uncertainty with PNG.

Currently 136 houses have been built, along with the hotel, dining facility, gym and laundry to cater for single fly in–fly out operations.

The idea was to incorporate a supermarket so that residents don’t have to go through the 3-Mile area where there are security issues, in order to get to Lae to shop. The intent is to try and create a natural centre.

Hornibrooks have also been looking at other ideas such as home ownership schemes, with USD 300,000 as a house and land package, facilitated through NASFund. However housing affordability is a key issue.

Infrastructure is a major driving force. Power and water are also a priority; supply is intermittent and there is a huge reliance on generators.

The idea of leasehold and renewing leaseholds — a number of people don’t realise that leases can be renewed.

Issues
- There is not much land available;
- the possibility of putting a road through is a long process;
- segments of land are being sold off for small amounts of money; and
- availability of capital.

Dreams
- Suggestion of a new freeway style road which will connect Lae CBD, and the port, and cut across and connect undeveloped areas (feasibility studies underway); and
- upgrade of highway — and the ability to connect public and private investment.

Solutions
- Bring people up to speed to show them the possibilities of how the situation could work;
- a vision is needed which will bring customary land into bigger picture of Lae and future developments;
- an acknowledgement that methods need to be strategic in relation to the implementation of projects;
- getting the backing of the government; and
- need to come up with a physical plan.
Appendix 5: Case Studies

The case study projects are a key part of the methodology and research of this project, and support the patterns of growth which have been identified in the previous chapter. Case studies have been chosen in both Port Moresby and Lae, based on their ability to convey evidence of either a successful outcome or failures in the planning system. Each project is assessed and the key findings are reported.

5.1 Port Moresby

Analysis of a selection of the case studies is provided for the following project sites in Port Moresby:

- Rainbow;
- Taurama Village;
- 9-Mile Self Help Housing; and
- Koki Village

In addition the team visited the other following projects:

Poreporena Freeway

This is an infrastructure project funded by the State with the support of the respective Superannuation Funds. The project cost of K57 million included the Freeway Port Moresby Fire Station to Erima; a 450mm water main over Burns Peak apparently not used by Eda Ranu; four lanes/dual carriageway from 4-Mile to Gerehu and the Hanuabada Bypass.

Motukea Island

Motukea Island is occupied by Curtain Brothers who have been in operating in PNG for many years and run a shipyard and wharf on the site. The site area covers a total of 183.00 hectares of which some 65.00 hectares, including substantial built improvements and a fully commissioned and operative international wharf, will be purchased by the State and utilized by PNG Ports Corporation Limited which will relocate from “Downtown Moresby”.

Moale Valley

Moale Valley is the biggest land release of state land to have occurred within Port Moresby in recent years. The Chief Physical Planner initiated the subdivision and approval was obtained. Superannuation Funds have been invited over the period 2000–2012 to develop it with funding, and have since been mobilising and paying rent. Concurrently with this, the Land Board has allocated leases to another developer, who was not advised that it had been previously leased out.
Figure 15: Location of Port Moresby case study projects.
5.1.1 Rainbow

Name: Rainbow
Location: Gerehu, Port Moresby
Development objective: Mid-range housing
Developer: Private Developer
Funding source: Private
Date of construction: 1990s
Site area: approx. 107 hectares
Type of land: State land
No. of dwellings: approx. 400 dwellings

Synopsis
Rainbow was developed in the 1990s providing middle range housing, and was one of the largest private subdivisions to occur in either city in the last 20 years. It is characterised by a series of streets and typical houses of two storeys with car parking underneath.

Findings

No amenities were integrated into original scheme
• The project was developed to satisfy residential needs only. There are no parks, schools, (or community school) or shops within the site.

Unplanned commercial development
• As a result, ad hoc and unplanned commercial facilities such as a Stop and Shop supermarket, a petrol service station and the market have emerged on land not zoned for commercial uses.

Traffic congestion
• Road access through the development was not planned properly. There is only one road access point from Waigani Drive, which results in traffic congestion; and
• markets have also developed, and are spilling onto the road reserve of Waigani Drive. There is a resulting issue with traffic congestion and the successful functioning of the commercial centre.

Urban Design
• There is one access point into the site from Waigani Drive, which results in a lack of pedestrian and vehicular connectivity. This lack of connectivity has a resulting negative effect on security and crime. Lack of pedestrian connectivity reduces the number of people and activity on the streets.

Non-compliance with Planning Act
• The regulations of the Planning Act were not met in relation to the requirement for parks, schools and other amenities for a scheme and population of this size;
• standard allotment sizes were not complied with; and
• the houses do not comply with the Building Act.
Figure 17: Rainbow.
5.1.2  Taurama Village

Name: Taurama Village  
Location: South Port Moresby  
Development objective: Mid-range housing  
Developer: Office of Urbanisation  
Funding source: State funded  
Date of construction: 2012  
Site area: approx. 206 hectares  
Type of Land: Customary land  
No. of dwellings: approx. 85 houses

Synopsis

The Taurama Development was established as a pilot project by the Office of Urbanisation in 2008, to provide much needed housing for the country. The customary landowners are from Koitabu and Motu villages. Formal ILGs have been established within clans, and furthermore, private ILGs have been set up within family groups. The major ILGs have a screening process with terms for new settlers. The settler pays rent and this is shared amongst the members of the ILG. Some corporate clients have been settled (e.g. Telikom PNG, PNG Power) and those funds have been used to pay for school fees for ILG members who were in educational institutions. With the case of minor ILGs, proceeds are shared only amongst the immediate family and not the major ILG clans.

Findings

Land management difficulties

• Difficulties in mobilising and developing on customary land outside a formal legal structure. Most of the customary landowners have ILGs in place, however, in addition to this, some family groups with main clans have their own ILGs, and CLOs are dealing with customary land at their own will;
• the existence of private ILGs within the formal structure has resulted in private sales taking place, and the site fragmenting;
• as a result, there is now an ad hoc nature to the way in which lots are let to new tenants amongst various landowners. There have been instances of letting land to two settlers;
• the price of the lease can range extensively and so can the length of the lease;
• services and infrastructure are not managed properly within the development. Roads leading to each property, garbage disposal and water and electricity are not managed adequately.

Inadequate public amenities

• Within the greater area, there is an approximate population of around 1,000 people. Schools, hospitals and other amenities do not appear to have been considered as part of the overall picture.

Non-compliance with the Planning Act

• The regulations of the Planning Act were not met in relation to the requirement for parks, schools and other amenities for a scheme and population of this size;
• standard allotment sizes were not complied with; and
• the houses do not comply with the Building Act.
Figure 18: Taurama Valley.
5.1.3 Koki Village

<table>
<thead>
<tr>
<th>Name</th>
<th>Koki Open Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>South Port Moresby</td>
</tr>
<tr>
<td>Development objective</td>
<td>Open space</td>
</tr>
<tr>
<td>Developer</td>
<td>N/A</td>
</tr>
<tr>
<td>Funding source</td>
<td>N/A</td>
</tr>
<tr>
<td>Date of construction</td>
<td>N/A</td>
</tr>
<tr>
<td>Site Area</td>
<td>approx. 32 hectares</td>
</tr>
<tr>
<td>Type of land</td>
<td>State land</td>
</tr>
<tr>
<td>No. of dwellings</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Synopsis

This case study is focused on prime public open space along the waterfront at Koki.

About 4 years ago, low lying and reclaimed land was identified as a parkland and public utility zone. No land title was issued under the City Authority. It was left as public utility and then zoned as public open space. As there was no title issued, a developer was interested and a development application was made to rezone the land to commercial.

NCDC Development Approval unit made the recommendation to NCD National Physical Planning Board to rezone to commercial. There was a public outcry and the site is currently undeveloped. The area sits across the two local development areas of Port Moresby/Konedobu and Kilakila/Koki/Badili.

Findings

Two local development areas

- Anomalies in local development boundaries and the zoning of land have resulted in half of the land, which falls under the Port Moresby LDP, being zoned as open space. The remainder of the site is not zoned under Kilakila/Koki/Badili, which has no LDP. There has been a failure in formal planning procedures following developer interest in developing land.

No consultation

- There has been no consultation either with the relevant department or with the public about the decision to rezone.
Figure 21: Koki Park.
### 9-Mile Self Help Housing

<table>
<thead>
<tr>
<th>Name:</th>
<th>9-Mile Self-help housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>9-Mile, Port Moresby</td>
</tr>
<tr>
<td>Development objective:</td>
<td>Affordable housing</td>
</tr>
<tr>
<td>Developer:</td>
<td>National Housing Corporation</td>
</tr>
<tr>
<td>Funding source:</td>
<td>World Bank</td>
</tr>
<tr>
<td>Date of construction:</td>
<td>N/A</td>
</tr>
<tr>
<td>Site area:</td>
<td>approx. 345 hectares</td>
</tr>
<tr>
<td>Type of land:</td>
<td>State land</td>
</tr>
<tr>
<td>No. of dwellings:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Synopsis**

9-Mile is a ‘self-help settlement scheme’ which has now been completed with World Bank funding. In this model, the World Bank provides services and infrastructure and allotments are released through the Housing Commission for individuals to obtain and build on. Housing standards are relaxed. Power, water and roads all exist. This model was successful in the past but most developments have regressed because they are now not being coordinated and administered. Settlement Committees have dissolved and projects are no longer self-sustaining. The upkeep of roads was supposed to be transferred to NCDC but lack of funding has meant this has not occurred. Sanitation is very poor. Water is provided through standpipes in several key locations.

**Findings**

**Success of the partnership with the World Bank and Department of Housing**

- This project was successful in that it had designated funding from the World Bank, and was managed by the Department of Housing.

**Funding for ongoing maintenance**

- With the disappearance of this model, and the transfer of responsibility to the NCDC, funding to support the upkeep has not been available and as a result maintenance of infrastructure is not occurring.
Figure 22: 9 Mile Self Help Housing
5.2 Lae

Analysis of a selection of the case studies is provided for the following project sites in Lae:

- Former Lae Airport;
- Malahang Industrial Centre Awilunga Housing;
- Tent City; and
- Lae Tidal Basin;

In addition the team visited the other following projects:

**East Taraka**

East Taraka is a low-cost housing development developed through Government and World Bank funding. The intent was a land and house deal, where prospective homeowners could either borrow money or buy outright and get a 99-year lease. There are active resales happening with the demolition of existing houses and replacement with larger houses. The process of re-development and following planning procedures is to be confirmed. There are ongoing issues with waste collection, with an irregular services and no formal system in place for collection.

**Lae Biscuit Company**

**Nambawan Super Commercial Building**

Nambawan Super Commercial Building, located in the centre of Lae, is one of the few new commercial buildings to be developed in recent history, and it is changing the face of Lae. It is made up of commercial floors on the lower levels and residential development on the upper levels. One of the main issues now faced is that the rental is too high, which is putting off potential tenants. It was constructed by Lae Builders, and finished in May 2013 when the Building Board approved the occupancy. As there is a lack of a development market in Lae, this is a relatively new model, and despite technical issues of pricing, perhaps it will take some time for the market to realise its value.

**Rubbish Tip**

The current rubbish tip to the north of the City has reached capacity and is in a poor state of management. A new location has been identified but negotiations to implement this have been slow. As a result, numerous problems are arising including poor management of the current state of the tip. Rubbish has spread into surrounding areas and scavenging for a living is occurring.
Figure 23: Lae City case study projects.
5.2.1 Former Lae Airport

Name: Former Lae Airport  
Location: City Centre, Lae  
Development objective: High covenant housing, mixed use, industrial  
Landowner: Morobe Provincial Government  
Developer: Private developers  
Funding source: Private  
Date of construction: Not yet commenced  
Site area: approx. 66 hectares  
Type of land: State land  
No. of dwellings: Has the capacity for up to 3000 new homes

Synopsis

The former Lae airport functioned as a civilian airport up until the 1980s. It has a strategic location within the city centre and provides Lae with a site which has major development potential. The majority of the land is now owned by the Morobe Provincial Government. The site is of huge importance to Lae as it represents a vacant, unconstrained area of land within the city centre, making it a huge opportunity to develop a high density mixed use development through a clearly thought out mixed use master plan, providing much needed housing and employment on a consolidated large site.

Findings

Few remaining large sites for a major coordinated development

- The site is one of the few remaining large consolidated and unconstrained sites within the city centre, which has the potential for a well-developed mixed use development providing the city centre with much needed housing and other needed mixed uses.

Land registration processes have not been followed

- The process for registering land titles and subdivision has not been followed. Titles have been awarded without infrastructure in place.

No master plan in place

- Notwithstanding the issue above, a site of this size should not just be subdivided but have a holistic master plan and design guidelines in place to create a Vision for the place, developed by a team of urban designers, landscape architects and engineers. This would be a structured plan staged with the input of different developers and development types following the overall master plan and design principles to create orderly development.

- There is evidence that parts of the site are already being sold off on an ad hoc basis to individual developers which will result in a sub-optimum outcome. Development allowed to continue in this way will result in poor relationship to the surrounding areas, infrastructure, and other built forms. Development happening on this basis, without the benefit of a master plan in place, will result in a sub-optimum outcome in relation to build form, street network, uses, density and building footprint.

Need for a development agency

- A site as large as this would benefit from management by a development agency, which would coordinate the development process.
Figure 24: Former Lae Airport site.
5.2.2 Malahang Industrial Centre

Name: Malahang Industrial Centre
Location: Malahang, Lae
Development Objective: Manufacturing (initially)
Developer: ICDC (Government organisation)
Funding source: Corporation and private developer funded
Date of construction: 1993
Site area: N/A
Type of land: Customary land
No. of dwellings: Industrial units

Synopsis

The Malahang Industrial Estate was the pioneer project established 20 years ago under the former Government ICDC. ICDC is the regulator and the centre is the operational body. It is made up of government agencies, legal representatives and business houses.

It was initially intended to bring in companies involved in manufacturing activities, so was expanded to storage facilities and service functions. Individual titles are needed for separate allotments. Individual allotments left were sold outright five years ago. The corporation still holds onto the initial blocks. When private developers come into the corporation, they need to abide by the development principles and the Physical Planning and Building Board, and they are monitored by the corporation.

Findings

Success of the Development Corporation
- The Development Corporation has been a success for this project, providing a clear framework for the initial development, and all ongoing development, and acting as a regulator both in the set up and ongoing running of the site. It is a national project within the Nawab Local Level Government, which has a working relationship with the National level government.

Self-funding and self-sustaining
- Rental (charged at market rent) from the buildings still under their ownership and service/management rates (very minimal — put towards maintaining the roads etc., in place of a municipal fee as boundary doesn’t cover this area). K240,000 per annum from management fee goes towards monthly expenses. It has been self-funding for the past 10 years; and
- provide support services including housing for tenants, little shops, offices close by.

Transparent Regulation
- Planning and building board processes are all complied with; and
- national budget to allow for headworks (drainage etc.).

Ongoing maintenance
- Administration/maintenance and upgrading of buildings is undertaken as required;
- roads are not being properly maintained so the effectiveness of the rates is questionable; and
- business owners have very little say in the provision of services.

Ongoing relationship with customary landowners
- Relationship with customary landowners is maintained. It provides a good employment base with security employment.
Figure 25: Malahang Industrial Estate.
5.2.3 Awilunga Housing Estate

Name: Awilunga Housing Estate  
Location: 9-Mile, Lae  
Development objective: Housing for mining employees and their families  
Developer: Steel fabrication and building company  
Funding source: Private developer  
Date of construction: 1993  
Site area: approx. 24 hectares  
Type of land: Customary land  
No of dwellings: 134 houses, 46-room transit hotel

Synopsis

This is a planned housing development, developed by one large civil engineering company and occupied by a mining company, providing both long term and short term housing for mine workers and their families. The project has been a success in its ability to deliver quality housing in an ordered environment. Its limitations however are highlighted by the fact that as it is occupied on land for the operation of a large manufacturing company, its capacity to expand physically, and with the surrounding community, is limited.

Findings

Mixed use orderly development

- Provides a range of housing and other uses for mining families, with the aim of creating a community, within an orderly development;
- provides other uses such as a single person’s hotel, gym, laundry and in future, a shop; and
- development has been carried out in an orderly manner, in terms of planning infrastructure and subsequent housing.

Expansion is limited

- The site is physically constrained and there is no opportunity to expand the development; and
- the development, whilst successful, is contained within the site boundary occupied by the company, and as a result does not integrate with its surroundings. It has a specific market of the mining community. The result is that in this model, it will never create a diverse market and a wider community. Its community is limited by physical limitations of the privately owned site and its operations.
Figure 26: Awilunga Housing Estate.
5.2.4 Lae Tidal Basin

**Name:** Lae Tidal Basin  
**Location:** Lae foreshore  
**Development Objective:** New Tidal Basin, a multipurpose berth and terminal works, including buildings, infrastructure and utilities services.  
**Developer:** Steel fabrication and building company  
**Funding source:** Asian Development Bank  
**Date of construction:** Under construction  
**Site area:** approx. 24 hectares  
**Type of land:** Tidal land  
**No. of dwellings:** 482 resettled homes

**Synopsis**

The Port of Lae, the largest in the South Pacific, is about to undergo a major and much needed expansion that will increase its capacity by around 50% by 2011.

The Asian Development Bank extended a USD100 million loan for the Lae Port Development Project, which involves the construction of port facilities, including a tidal basin, a multipurpose berth and terminal works, including buildings, storage areas, roads, drainage, water, electricity and sewerage services. The PNG Government contributed another USD45.75 million. Part of this includes the Lae Tidal Basin Project.

A major part of this project includes the settlement program, to rehouse displaced people. The resettlement, livelihood restoration and income improvement activities are required to be incorporated as an important part of the Resettlement Plan and the Asian Development Bank’s loan.

This includes providing basic houses and relocation. The JFPR project grant will target livelihood rehabilitation and improvement for the affected people.

The key activities under this program include:

- Housing construction for approximately 482 households;
- canoe landing site for the affected (Labu) people; and
- relocation assistance.

**Findings**

**Lae City Council involvement**

- Lae City Council has not been involved in the project which is incomprehensible for a project of this importance, affecting local people. As a result, the implementation of the project and fundamental aspects have not been occurring as should resulting in:
  - Environmental issues; and
  - resettlement issues.
Figure 27: Lae Tidal Basin.
Appendix 6: Survey Questionnaire

Appendix 6.1 — Survey Questionnaire

### Urban Planning in PNG

1. **Where do you live?**
   - [ ] Port Moresby
   - [ ] Lae
   - [ ] Other Parts of PNG
   - [ ] Outside of PNG

2. **How would you rate your quality of life living in the city you live in?**
   - [ ] Very Poor
   - [ ] Poor
   - [ ] Average
   - [ ] Good
   - [ ] Very Good

3. **What do you think are the main problems currently facing urban development in your city?** Please rate the problems below - 1 being No Problem, and 5 being A Critical Problem

<table>
<thead>
<tr>
<th>Problem</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor quality housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing affordability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality public buildings eg schools and hospitals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient green public space eg parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorly managed green public space eg parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorly designed roads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorly designed footpaths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient shops and office space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality shops and office space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime and lack of security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Please comment on the most important issues as you noted in Q3.**
Improving Urban Planning in Papua New Guinea

Urban Planning in PNG

5. If you have had experience of dealing the development approval process, please rate your experience on the scale below.

<table>
<thead>
<tr>
<th></th>
<th>Very poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Allocation Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Planning Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Please comment on any of the problems you have had with the approvals board based on your answers above.

7. Please comment on your single most important dream for the development of your city?

8. What do you think is the best way for urban planning to help achieve your dream for the city?

9. Which of the following best describes your current occupation?
   - Public Sector
   - Private Sector
   - Self-Employed
   - Student
   - Not employed
   - Retired

10. How many people currently live in your household?
### Urban Planning in PNG

#### 11. In which type of housing do you currently live?
- [ ] Permanent House
- [ ] Semi-permanent House
- [ ] Make-shift House
- [ ] Bush materials House
- [ ] Apartment
- [ ] Townhouse
- [ ] Institutional housing
- [ ] Camp accommodation

#### 12. How would you describe the housing you live in?
- [ ] Permanent
- [ ] Semi-permanent
- [ ] Makeshift
- [ ] Bush materials

#### 13. What is your gender?
- [ ] Female
- [ ] Male

#### 14. What is your age?
- [ ] 18 to 24
- [ ] 25 to 34
- [ ] 35 to 44
- [ ] 45 to 54
- [ ] 55 to 64
- [ ] 65 to 74
- [ ] 75 or older

#### 15. What is your monthly income?
- [ ] Up to 100 Kina
- [ ] 101-500 Kina
- [ ] 501-2000 Kina
- [ ] 2000-5000 Kina
- [ ] Over 5000 Kina
### Urban Planning in PNG

16. Please feel free to add any further comments in relation to Urban Planning in PNG.
Appendix 6.2: Survey Questionnaire Response Analysis

Urban Planning in PNG

Q1: Where do you live?

Answered: 64  Skipped: 0

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Moresby</td>
<td>60.94%</td>
</tr>
<tr>
<td>Lae</td>
<td>26.56%</td>
</tr>
<tr>
<td>Other Parts of PNG</td>
<td>10.94%</td>
</tr>
<tr>
<td>Outside of PNG</td>
<td>6.25%</td>
</tr>
</tbody>
</table>

Total Respondents: 64
Urban Planning in PNG

Q2: How would you rate your quality of life living in the city you live in?

Answered: 64  Skipped: 0

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Poor</td>
<td>14.06%</td>
</tr>
<tr>
<td>Poor</td>
<td>31.25%</td>
</tr>
<tr>
<td>Average</td>
<td>39.06%</td>
</tr>
<tr>
<td>Good</td>
<td>12.50%</td>
</tr>
<tr>
<td>Very Good</td>
<td>3.13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
Q3: What do you think are the main problems currently facing urban development in your city? Please rate the problems below — 1 being No Problem, and 5 being A Critical Problem

Answered: 64    Skipped: 0
Improving Urban Planning in Papua New Guinea

<table>
<thead>
<tr>
<th>Poor quality shops and office space</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.56%</td>
<td>0%</td>
<td>12.5%</td>
<td>31.25%</td>
<td>54.69%</td>
<td>64</td>
</tr>
<tr>
<td>Insufficient housing</td>
<td>0%</td>
<td>0%</td>
<td>9.38%</td>
<td>70.31%</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Housing affordability</td>
<td>0%</td>
<td>0%</td>
<td>3.13%</td>
<td>17.19%</td>
<td>79.69%</td>
<td>64</td>
</tr>
<tr>
<td>Poor quality public buildings e.g. schools and hospitals</td>
<td>0%</td>
<td>3.13%</td>
<td>9.38%</td>
<td>35.94%</td>
<td>51.56%</td>
<td>64</td>
</tr>
<tr>
<td>Insufficient green public space e.g. parks</td>
<td>1.59%</td>
<td>1.59%</td>
<td>14.29%</td>
<td>34.92%</td>
<td>49.21%</td>
<td>63</td>
</tr>
<tr>
<td>Poorly managed green public space e.g. parks</td>
<td>0%</td>
<td>1.56%</td>
<td>10.94%</td>
<td>26.56%</td>
<td>62.50%</td>
<td>64</td>
</tr>
<tr>
<td>Poorly designed roads</td>
<td>0%</td>
<td>0%</td>
<td>14.06%</td>
<td>23.44%</td>
<td>67.19%</td>
<td>64</td>
</tr>
</tbody>
</table>
Urban Planning in PNG

Q5: If you have had experience of dealing the development approval process, please rate your experience on the scale below.

Answered: 47    Skipped: 17
Urban Planning in PNG

Q9: Which of the following best describes your current occupation?

Answered: 63    Skipped: 1

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector</td>
<td>60.32%</td>
</tr>
<tr>
<td>Private Sector</td>
<td>30.16%</td>
</tr>
<tr>
<td>Self-employed</td>
<td>4.76%</td>
</tr>
<tr>
<td>Student</td>
<td>1.73%</td>
</tr>
<tr>
<td>Not employed</td>
<td>1.83%</td>
</tr>
<tr>
<td>Retired</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Urban Planning in PNG**

**Q11: In which type of housing do you currently live?**

Answered: 64  Skipped: 0

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent House</td>
<td>39.06%</td>
</tr>
<tr>
<td>Semi-permanent House</td>
<td>9.38%</td>
</tr>
<tr>
<td>Make-shift House</td>
<td>1.56%</td>
</tr>
<tr>
<td>Bush materials House</td>
<td>3.13%</td>
</tr>
<tr>
<td>Apartment</td>
<td>7.81%</td>
</tr>
<tr>
<td>Townhouse</td>
<td>6.25%</td>
</tr>
<tr>
<td>Institutional housing</td>
<td>31.25%</td>
</tr>
<tr>
<td>Camp accommodation</td>
<td>1.56%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Q12: How would you describe the housing you live in?**

Answered: 64    Skipped: 0

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>82.81%</td>
</tr>
<tr>
<td>Semi-permanent</td>
<td>12.50%</td>
</tr>
<tr>
<td>Makeshift</td>
<td>1.56%</td>
</tr>
<tr>
<td>Bush materials</td>
<td>3.13%</td>
</tr>
<tr>
<td><strong>Total Respondents:</strong></td>
<td>64</td>
</tr>
</tbody>
</table>
Q13: What is your gender?

Answered: 62    Skipped: 2

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>33.87%</td>
</tr>
<tr>
<td>Male</td>
<td>66.13%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Urban Planning in PNG

Q14: What is your age?

Answered: 62  Skipped: 2

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 24</td>
<td>1.61%</td>
</tr>
<tr>
<td>25 to 34</td>
<td>53.23%</td>
</tr>
<tr>
<td>35 to 44</td>
<td>29.03%</td>
</tr>
<tr>
<td>45 to 54</td>
<td>9.68%</td>
</tr>
<tr>
<td>55 to 64</td>
<td>4.84%</td>
</tr>
<tr>
<td>65 to 74</td>
<td>1.61%</td>
</tr>
<tr>
<td>75 or older</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Urban Planning in PNG

**Q15: What is your monthly income?**

Answered: 61    Skipped: 3

<table>
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<tr>
<th>Answer Choices</th>
<th>Responses</th>
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<tr>
<td>Up to 100 Kina</td>
<td>3.28%</td>
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<tr>
<td>101–500 Kina</td>
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<tr>
<td>501–2000 Kina</td>
<td>45.90%</td>
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<td>2000–5000 Kina</td>
<td>32.79%</td>
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<tr>
<td>Over 5000 Kina</td>
<td>14.75%</td>
</tr>
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</table>

**Total Respondents: 61**
Questionnaires Summary

A total of 64 Questionnaires were received.

The following qualitative questions were included within the questionnaire:

- **Q4:** Please comment on the most important issues currently facing urban development in your city?
- **Q6:** Please comment on any of the problems you have had with the approvals board including the Land Approvals Board, Physical Planning Board and the Building Board.
- **Q7:** Please comment on your single most important dream for the development of your city?
- **Q8:** What do you think is the best way for urban planning to help achieve your dream for the city?
- **Q16:** Other comments?

The key comments are summarised below, grouped together under main themes.

**Issues**

**Urban Planning**

- No holistic development plan for centres;
- settlements and shanty towns are not zoned and are sprawling;
- land which has been zoned for open space and government buildings such as the Waigani Office area is being sold to foreign developers;
- commercial/office space is limited;
- planning is not the issue, implementation is the bigger challenge;
- urban planning needs to consider all sectors of society; and
- zoning is poor.

**Governance**

- Land board decisions take a long time;
- land zoning is not addressing issues of settlement growth in rural centres (such as Bialla);
- most of the prime land is being sold without giving due consideration for future development to accommodate housing, open space, public buildings, infrastructure;
- approvals with Building Board are happening with schemes of very poor materials, approved with money under the table;
- a change to the governance with leaders who have more vision for the cities (such as Justin (Tkachencko) and Powes (Parkop));
- good leadership (look at Japan as an example);
- PNG needs an engineering team with likeminded people and a team of expertise through bilateral agreements to trial out the idea of building roads and building in the space in one of the suburbs in Port Moresby;
- City planners and managers have neglected the issues of housing, open space, public buildings and public infrastructure;
- the boards are corrupt;
- there needs to be a reshuffle of faces in the Boards;
- insufficient funding given to deal with security;
- Government should perform with honesty, transparency and accountability and be able to deliver the necessary services for the people;
- no dialogue between the Government and landowners. For example, at the old Turf Club at 9-Mile opposite the public cemetery, the landowners have sold pieces of land to...
individuals for quick money with no proper planning for city expansion. As a result, prime sites and the right opportunities are being lost on sites like this;

- for New Ireland Province Building Board there is no problem with screening and approval of building applications but the problem lies with following up on actual construction whereby plans are altered during construction. The penalty for doing this is very small so people prefer to break the rules and pay the penalty. Enforcement is difficult when there are too many offenders; and
- no proper coordination between NCDC/Lands Department and Transport Department.

**Land Tenure**

- Obtaining title over land takes a long time;
- land is an issue — there needs to be thoughts about putting up roads and buildings in available space;
- lack of proper procedures in land allocation;
- increase land supply for housing development; and
- lack of available land in both Port Moresby and Lae.

**Amenity**

- Insufficient land for urban amenities such as schools, shops, parks, clinics etc.; and
- lack of security.

**Infrastructure**

- No separation of roads for heavy and light traffic;
- drainage is not adequate for rainfall; and
- settlements lack basic infrastructure such as roads, water, housing, sanitation.

**Built Form/City Image**

- Multi-storey buildings (higher density) should be approved in the city centre rather than industrial warehouse structures; and
- holistic development plan for all centres.

**Open Space**

- Insufficient parks which are well managed; and
- prime open land given away to private developers, for example, Vision City.

**Housing**

- Insufficient housing and affordability.

**Finance**

- Mismanagement of public funds.

**Other**

- Create employment opportunities for young people in the city;
- crime is one of the biggest major issues facing PNG at the moment. Crimes are committed because there is no suitable alternative for those who lead a life of crime. Crimes are committed by individuals who want to provide for themselves and their families, but because they lack the skills, certificates, and even looks, they are overlooked for various job opportunities. Providing an alternative form of employment is crucial to reducing crime in all cities;
- unemployed individuals should be organised by their LLG or Ward counsellors to manage the public recreation areas within their wards, as well as financial incentives such as
awarding of funds to those that have organised their communities in the well-keeping of their front yards, streets and recreational areas; and

- there is so much unemployment. People need to feel that they are contributing to the development and wellbeing of the areas they live in. If people care for their community, they will protect it and do their best to make it better.

**Dreams/Solutions**

**Urban Planning**

- Develop holistic development plan for all centres;
- zone settlements and shanty towns to specific appropriate areas;
- visionary planning is required;
- property zone all unzoned areas in the city and allocate land areas for appropriate people/land uses;
- rezoning of residential areas to incorporate public mixed utilities such as one stop shopping areas, recreational facilities and markets;
- towns should expand into the villages with all government services, regulations and utilities, so that local landowners feel part of the town expansion;
- look to international standards and best practice; and
- implement an urban planning system that mobilises public capital for non-commercial and private capital for commercial, thereby ensuring that the customary landowner maximises returns from the utilisation of the land.

**Governance**

- Government to take the lead;
- restructure the City governments with credible City managers who will work to objectives;
- Government to initiate effective dialogue with the landowners (including customary land owners), involving landowners in development so that they are informed about the process and importance of proper planning for future city development and expansion;
- measures to reduce crime;
- partnerships in development;
- mobilise businesses, houses, churches, institutions and NGOs to address the issues;
- good planning policy is worthless if it cannot be implemented;
- a complete overhaul of the urban planning process, including the existing regulatory, administrative and institutional arrangements;
- review the tender and procurement process of the three vital urban planning boards — and ensure prudent and transparent processes; and
- the Lands and Physical Planning Board plus stakeholders such as NCD, Eda Ranu, PNG Water Board, PNG Power, Office of Urbanisation, NLDP, customary landowners and other stakeholders must all work together to push an Urban Reform Program (for both cities).

**Land Tenure/Availability**

- Remove illegal settlements and relocate residents to a designated planned suburb (e.g. around the 9-Mile area). Improve the allocation of space for residential homes expansion.

**Amenity**

- An example like Rainbow in Waigani, but with better mix of uses including school library, clinic, banking, a park, multipurpose sports field.
Improving Urban Planning in Papua New Guinea

Infrastructure
- An effective public transport system;
- privatise public transport system;
- wider roads with good footpaths to allow for bicycles; and
- upgrade of airports as major infrastructure.

Built Up Form/City Image

Open Space
- A beachfront that is open, clean attractive and inviting to stroll along and enjoy the breeze coming from the sea, have a cup of coffee or snack and be able to do so without fear of being mugged. If that was in place it would imply that other things would have been taken care of also i.e. improved road network, better quality buildings, overall cleanliness and security.

Housing
- Government intervention to solve the housing issue;
- build more houses through Government funding under Legislative/Mandated Authority;
- housing for tenants at lower rates;
- improve quality of housing. This will reduce the crime rate and poverty; and
- remove the settlements or improve the standard of living in the settlements. Increase in public housing will reduce settlement issue and sprawl.

Finance
- Wise financial resources; and
- user pay toll system through toll gates which are operated by a private agency where all collections go back directly to improving the transport system in the township.

Training
- Employ the right people trained in town and urban planning/engineering and other built environment professionals to assist existing local authorities; and
- knowledgeable and skillful civil engineers.

Other
- Introduce residential addresses using street names and house numbers for postal services;
- communicate effectively with the public;
- incorporate better public participation so there is clear public understanding of the urban planners’ purpose and assist with setting urban vision and growth;
- monitor the real estate industry more effectively;
- increase the capacity of UPNG and UNITECH to increase their intake. Open up consultation to all stakeholders concerned in planning — get the real suggestions. Filter these suggestions in order of criticalness, prioritise and ensure Government makes available funding to carry them out. This calls for a capacity to understand the challenges (delivery constraints), and the technical know-how. Apply strong management;
- tactics that call for quality audit against expenses. Any contractor that fails to deliver should be prosecuted for breach of contract between the state and contractor. Contractors must face consequences for non-compliance with the contract;
- support variety in business (every other shop is selling the same thing); and
- implement the Vagrancy Act immediately.
Place specific initiatives

- A suggested initiative is to mobilise unemployed youth in Madang to venture into a small project of restoring street signs up again and to have a decent map of the town. Apply for public-private partnership funding with support from Madang Urban LLG to get the project going;
- construct a road from Gerehu to 9-Mile via Morata; and
- look to Australia and Asia as an aspiration.

Key Quotes

- “Honest and reliable people will make it work and put the smile back on the common people”;
- “I want to see Lae become a real city...”;
- “Everyone knows that if you care for something, you will protect it”; and
- “A beachfront that is open, clean attractive and inviting to stroll along and enjoy the breeze coming from the sea, have a cup of coffee or snack and be able to do so without fear of being mugged.”
Appendix 7: Stakeholder Review on the draft report

COMMENTS ON THE REVIEW OF NCD AND LAE URBAN DEVELOPMENT PLAN — First Draft

NATIONAL RESEARCH INSTITUTE, WAIGANI

March 2014, MR BRIAN ALDRICH, AKT ASSOCIATES

The following comments/observations relate to specified content of the “draft” of each of the “Review” and the related “Appendices” prepared by City Plan Services PNG dated October, 2013 and the ‘Environmental Aspects” thereof prepared by BMT WBM Pty Ltd for and on the behalf of City Plan Services PNG and this also dated October, 2013, all of which derives from a Commission awarded by the National Research Institute.

1. The “Appendices”.

1.1 Terms of Reference

The NRI’s “Terms of Reference” were comprehensive but the duration of the Agreement at 42 days somewhat unrealistic.

1.2 The Survey Questionnaire

A total of only 64 respondents, 60% of whom are residents of Port Moresby and 26% residents of Lae, who have been asked to rate the quality of their urban existence relative to what other experience?

Generally speaking I, with few exceptions, endorse the comments/observations presumably attributed to the respondents to the questionnaire albeit that I have some difficulty equating these comments/observations with such a small sample.

The exceptions:

• Land is being “sold”. The State does not sell land through the Land Board process … quite to the contrary, the land is given away to those who may have “undue influence” and for whom “exemptions from advertisement” have been obtained either legitimately or, predominantly, not.

• Prime “open land” given away to private developers — e.g. Vision City. This is not correct … this land has a considerable history which includes a sequence of a total of four (4) leaseholders, the current proprietor having purchased the land from the third owner.

• I have trouble reconciling comments on the incidence of crime with the proposal that we … “Introduce residential address using street name and house number for postal services”.

• There needs to be a road network strategy for the next 50 years. A need for a proper strategy. Map 9: “Future Land Use and Road Development” which derives from the NCD Urban Development Plan delineates a hierarchy of roads which includes a perimeter ring road from LNG in Central Province around the City through Gerehu to 9-Mile and thence south to the Magi Highway and this road corridor of a width of 60.0 meters is initially to accommodate 4 lanes and, subsequently, 6 lanes and for those domiciled within the City the upgraded inner city roads will provide ready and convenient access to the “Outer Ring Road”.

• The standard and cost of cadastral surveys is a matter for debate with the Surveyor-General. In this very regard it is pertinent to note that the Native Land Commission did, when hearing and determining the ownership of customary land, delineate the land by a drawing recording meets and bounds however, because these decisions do not relate to a registered plan of cadastral survey these ownership identified parcels of customary land
are not recorded on the town noting plans. However, this existing record can, with fieldwork, be transformed into a cadastral survey to be registered.

- Given that our towns and cities are fast running out of alienated land and given the Prime Minister’s commitment to four (4) mega cities (i.e. Port Moresby; Kokopo; Lae and Mount Hagen), then customary land audits are a fundamental prerequisite to further urban growth and the identification of customary landowners and legislated empowerment via the provisions of recently enacted amendments to each of the “Land Group Incorporation Act 1974” and the “Land Registration Act 1981” are preferable to compulsory acquisition by the State and alienation.

In this very regard some of the comments deriving from discussions with the Office of Urbanisation dated 06/06/2013 do, no doubt, relate to their attempt to mobilise customary land within the Taurama Valley for urban purposes which, unfortunately, was doomed from the outset.

- A billboard was erected at the top of the valley announcing the project, this without physical planning approval, for which the Office was fined; they disputed the fine but this was subsequently paid;
- the project lacked the discipline and rigour which would have derived from the searching of records held by the Land Titles Commission; the mapping of the land areas the subject of the investigations undertaken by the Native Land Commission/Land Titles Commission and the updating of genealogies recorded in the aforementioned determinations; and
- the project was hijacked by the real estate market driven by LNG.

The “truth” about Ela Beach is that Curtain Brothers Papua New Guinea Ltd has a contract to construct the Paga Hill ring road of 4 lanes to be extended down Ela Beach Road, 2 lanes each side of a median strip to accommodate a line of casuarina trees. The re-development of Ela Beach will require a 250 meter wide reserve below existing high water mark, this to permit construction activities to include dredging to a depth of 1.5 meters and the re-establishment of a sand beach of a width of 40.00 metres parallel to the existing Ela Beach.

However, of real concern is the fact that the DLPP gazetted Tenders Nos. 065/2013 and 066/2013 on pages 5 and 6 of National Gazette No.G247 dated 13/06/2013, these comprising a Business (Commercial) Lease over each of Portions 2847 and 2848 Milinch Granville, Fourmil Moresby each containing areas in excess of 7.00 hectares, each located below the high water mark at Ela Beach and each adjoining the NCDC’s Portion 2031 Milinch Granville, Fourmil Moresby (i.e. Sea Park) all as per Survey Plan Cat No.49/2915.

There is no evidence that each of Portions 2847 and 2848 Milinch Granville, Fourmil Moresby has been zoned “Commercial” (S67 of the Land Act 1996 prescribes that a State lease cannot be granted in contravention of the zoning of the subject land) and the Tenders advised that the land rent payable on each of the two (2) Business (Commercial) Leases (if granted) would be K350,000.00 per annum on each and for the first ten (10) year term thereof and the leasehold improvement covenants were to be determined by the PNG Land Board. Nevertheless, Tenders Nos. 065/2013 and 066/2013 did each attract 6 applicants and these were scheduled for hearing by PNG Land Board No.03/2013 (Items 321 and 322) which convened in Port Moresby commencing Monday 20/01/2014, the outcome of which is not yet known.

- Open Space.

The following comments relate to Port Moresby and a total of 47 Special Purposes Leases granted over specified parcels of land zoned “Open Space” out of PNG Land Board No.2006, by gazetnal dated 17/06/1999 and each in the favour of the NCDC.
To date, and 14 years later, a total of 17 titles have issued of which one (1) was subsequently forfeited by the DLPP and over which a Residence Lease was granted to others. The NCDC cannot locate the “Owners Copy” of each of the 16 Special Purposes Leases which have issued.

Since the gazettal of the grants on 17/06/1999 and in the absence of the issuance of State Leases, several of the subject allotments have been subdivided (presumably with the approval of the NCDPPB?) and parts thereof granted to others, for example.

- Allotment 2 subsequently allotment 6 and thence allotments 7 and 8 Section 83, Matirogo; and
- Allotment 5 subsequently allotments 6, 7, 8, 9, 10 and 11 Section 27, Hohola.

Allotments 1 and 2 Section 122, Hohola over each of which the NCDC was granted a Special Purposes Lease out of PNG Land Board No.2006 (Items 101 and 102) and where Virgo No.65 Limited was granted a Business (Commercial) Lease also out of PNG Land Board No.2006 (Item 20) this over allotment 13 (previously allotments 1 and 2) Section 122, Hohola — i.e. the very same land. The disputation between Virgo No.65 Limited and the NCDC still awaits a determination of the National Court.

Unfortunately, the NCDC had a habit of naming public parks (i.e. “Unagi Park” and “Pidik Park”) prior to obtaining State Leases thereover and attempts to recover each is the subject of expensive and ongoing litigation.

In Port Moresby the pending Pacific Games 2015 has been the catalyst for the State’s compulsory acquisition of existing sporting grounds and complexes and these for redevelopment which is presently in progress and which, no doubt, will satisfy the members of Workshop Group #2. It would appear that Workshop Group #3 had an issue with “urban rift” which, clearly, should read “urban drift”.

There are responses to the Questionnaire; comments deriving from the interviews and the observations deriving from the Stakeholder Workshops with which I concur and these more specifically relative to the functional interaction (or lack thereof) by and between the physical planning process and the land administration process and which are deserving of elaboration by example.

However, before embarking on the “elaboration” I take this opportunity to record my dismay that this “Review” has failed to take on board and address the 47 Recommendations of the “Land Administration Committee” of the National Land Development Taskforce as these did more specifically relate to the administration of alienated land and all as recorded in NRI Monograph 39 titled “Land Administration, Land Dispute Settlement and Customary Land Development” which was first published in February, 2007.

Elaboration:

The amendments to each of the “Land Group Incorporation Act 1974” and the “Land Registration Act 1981” derived from the recommendations of the Committee on Customary Land Development and these amendments were enacted in 2012. However, the DLPP’s attendance upon reform of the administration of alienated land was, with the exception of the relocation to a new building (i.e.Eda Tano Haus), imperceptible and for which I held the National Land Development Program responsible.

This prompted the preparation of a comprehensive submission to the Bank South Pacific Limited dated 09/08/2012 which addressed “Dubious State Leases” the thinking behind which was that if the NLDLP is not going to drive reform then, surely, the increasing incidence
of “Dubious State Leases” with a questionable collateral value would motivate the commercial banks and financial institutions to take action to redress this unfortunate situation and with regard to which there is an increasing body of case law where, inevitably, the State and the DLPP are each respondents but from which little if anything is learnt and, as a consequence, little, if anything, changes.

As both a Town Planner and Land Administrator my particular concern was the apparent failure of the functional inter-relationship between the physical planning process and the land administration process all to the detriment of the built environment and its inhabitants/residents and this despite the fact that this functional inter-relationship is vested in the laws, not the least of which are the “Land Act 1996” and “The Physical Planning Act 1989”; the related “The Physical Planning (Consequential Amendments) Act 1989” and the related “The Physical Planning Regulation 2007 (Revised).

1. Section 67: State Leases not to be inconsistent with Zoning, Physical Planning etc. of the Land Act 1996.

1.1 Section 67 advises that ……. “A State Lease shall not be granted for a purpose that would be in contravention of zoning requirements under the Physical Planning Act 1989, any other law relating to physical planning, or any law relating to the use, construction or occupation of buildings or land.”

1.2 NCDC Regulatory Services have for and on the behalf of the NCD Physical Planning Board, regularly gone through Agendas for PNG Land Board and have subsequently written to the Chairman (copies to others) advising that specified items cannot/should not be considered, given that the nature of the application before the Board does not accord with the operative zoning of the subject land.

Unfortunately, this advice is not always taken by the PNG Land Board, as is apparent from the following assessment of five (5) letters from NCDC Regulatory Services relative to the Agendas for PNG Land Board Nos.12/2006; 05/2007; 01/2008; 05/2009 and 05/2010 and, unfortunately, it is apparent that NCDC Regulatory Services/the NCD Physical Planning Board is not prepared to initiate legal action in order to secure their statutory jurisdiction.

Section 42 “Functions of the National Capital District Physical Planning Board” of the Physical Planning Act 1989 — The National Capital District Physical Planning Board is empowered to consider and determine all physical planning matters which are wholly within the National Capital District.”

1.3 PNG Land Board No.12/2006 — Agenda Gazetted on 10/11/2006. Item No. NCDPPB Outcome (Gazette 05/04/07) 25 NCDPPB letter to the Chairman, PNG Land Board dated 27/11/2006 requesting that Items 25, 26, 32, 33, 38 and 136 be removed from the Agenda. Recommended but appealed. (1)

26  Granted.
32  Recommended but appealed. (1)
33  Recommended but appealed. (1)
38  Granted.
136  Granted.

1.4 PNG Land Board No.05/2007 — Agenda Gazetted on 12/07/2007. Item No. NCDPPB Outcome (Gazette 05/04/07) 73 NCDPPB letter to the Chairman, PNG Land Board dated
01/08/2007 requesting that Items 73, 92, 93, 95 and 96 be removed from the Agenda. Granted.

92     Granted.
93     Granted.
95     Recommended but appealed. (1)
96     Recommended but appealed. (1)

1.5 PNG Land Board No.01/2008 — Agenda Gazetted on 03/04/2008. Item No. NCDPPB Outcome (Gazette 05/04/07) 21 NCDPPB letter to the Chairman, PNG Land Board dated 01/08/2007 requesting that Items 21, 22, 43, 44, 109 and 137 be removed from the Agenda. Recommended but appealed. (2)

22     Recommended but appealed. (2)
43     Recommended but appealed. (1)+ (3)
44     Recommended but appealed. (3)
109     Recommended but appealed. (1)
137     Withdrawn.

1.6 PNG Land Board No.05/2009 — Agenda Gazetted on 17/09/2009. Item No. NCDPPB Outcome (Gazette 05/04/07) 4 NCDPPB letter to the Chairman, PNG Land Board dated 23/09/2009 requesting that Items 4, 14, 49, 50, 54, 55, 91, 102, 103 and 104 be removed from the Agenda. Withdrawn. (4)

14     Deferred.
49     Deferred.
50     Deferred.
54     Recommended but appealed. (1)
55     Withdrawn.
91     Granted
102     Recommended but appealed. (1)
103     Recommended but appealed. (1)
104     Recommended but appealed. (1)

1.7 PNG Land Board No.05/2010 — Agenda Gazetted on 09/09/2010. Item No. NCDPPB Outcome (Gazette 05/04/07) 248 NCDPPB letter to the Chairman, PNG Land Board dated 30/09/2010 requesting that Items 248, 253, 255, 256, 257, 258, 259, 260, 261, 262, 264, 265 and 266 be removed from the Agenda. Withdrawn.

253     Withdrawn.
255     Withdrawn.
256     Granted.
257     Withdrawn.
258     Withdrawn.
259     Withdrawn.
Recommended but appealed. (1)
Withdrawn.
Withdrawn.
Withdrawn.
Recommended but appealed. (1)
Granted.

Notes:
(1) Recommendation appealed by a competing applicant but the status of the appeal not known.
(2) Possible appeal by the NCDPPB but the outcome of the appeal not known.
(3) Appealed by the NCDPPB but the appeals rejected.

1.8 PNG Land Board No.03/2013 — Agenda Gazetted on 05/12/2013. On 15/01/2014 the NCDC did write yet again to the Chairman, PNG Land Board, advising that the NCDC Physical Planning Office has reviewed the Agenda for PNG Land Board No.03/2013 where 219 Items of a total of 378 items relate to land located within the NCD and concluded as follows:

- Of the 219 items a total of 164 items conform with the zoning of the subject land; and
- 15 items do not conform with the zoning of the subject land; and
- That the NCDC has no record of the location (i.e. Section, Allotment, Portion etc.) of the land the subject of each of 38 items.

Accordingly, the NCDC requested that a total of 53 items be withdrawn from the Agenda however, at this juncture, the outcome of the aforementioned correspondence is not known.

Where a State Lease is granted (i.e. gazetted) in contravention of the zoning of the subject land and the title thereover does subsequently issue, then yet another “dubious” State Lease is deposited into the Nation’s financial institutions.


An aggrieved party can appeal a determination of a Physical Planning Board and any and all such appeals are referred to the Papua New Guinea Appeal Tribunal which is serviced by the Office of the Chief Physical Planner, DLPP.

Upon receipt of an appeal Section 95(1) prescribes that “…The Tribunal shall afford the appellant, an applicant for planning permission, an owner or occupier of the land to which the appeal relates, an objector and the Board making the decision an opportunity to make representations concerning the appeal if they so wish”.

Over the period 2010 to 2013 the Appeal Tribunal has convened on at least three (3) occasions; in each instance the fact that the Tribunal has received an appeal has not been referred to the Board whose determination has been appealed; the appeals are then determined, referred to the Minister for Lands and Physical Planning for endorsement and thence gazetted.

Subsequent upon the gazettal of the determination of the appeal the beneficiary thereof will then action an application to the DLPP, this for referral to the PNG Land Board and,
subsequently, yet another dubious State Lease issues and is deposited into the Nation’s financial institutions.

The NCD Physical Planning Board and staff are fully aware of the aforementioned events which are in breach of Section 95(1) of The Physical Planning Act 1989 but to date have not initiated legal action to have all such determinations deemed null and void, thereby securing and enforcing their statutory jurisdiction.

3. Section 69 of the Land Act 1996 and the Papua New Guinea Land Board. Section 69(1) of the Land Act 1996 prescribes that all land must be advertised for tender. However, Section 69(2) thereof does permit the Minister for Lands and Physical Planning to exempt land from advertisement subject to one (1) or more of specified circumstances. PNG Land Board No.03/2013 gazetted on 05/12/2013 included a total of 378 items which comprised the following:

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<th>Number</th>
<th>Percentage (%)</th>
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<tr>
<td>Tenders</td>
<td>83</td>
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<tr>
<td>Apparent Exemptions</td>
<td>239</td>
<td>63.22</td>
</tr>
<tr>
<td>UDL’s Not Advertised</td>
<td>7</td>
<td>1.85</td>
</tr>
<tr>
<td>UDL’s Advertised</td>
<td>19</td>
<td>5.02</td>
</tr>
<tr>
<td>Renewals</td>
<td>16</td>
<td>4.23</td>
</tr>
<tr>
<td>Variations</td>
<td>14</td>
<td>3.70</td>
</tr>
<tr>
<td></td>
<td>378</td>
<td>99.98</td>
</tr>
</tbody>
</table>

Note the comments at paragraph 1.8 preceding where the NCDC Physical Planning Office reported that 15 of the 219 items relating to land within the NCD did not accord with the zoning of the subject land and that the location of the land which was the subject of 38 items was not known to the NCDC Physical Planning Office.

Given that the Land Act 1996 does at Section 105 prescribe that before land is offered for lease for subdivisional purposes (i.e. an Urban Development Lease) the Chief Physical Planner or his Delegate shall certify that the subject land is suitable for the purpose, it is common practice that the zoning of the subject land to “Subdivision Zone” is a prerequisite to the advertisement for tender/grant of an Urban Development Lease.

In this very regard it is of interest to note that the NCDC’s letter to the PNG Land Board dated 15/01/2014 relative to Land Board No.03/2013 did, with regard to Item 206 (i.e. an Urban Development Lease not advertised for tender) advise that the land is not zoned “Subdivision Zone” and intriguing that the NCDC had no knowledge of the whereabouts of all of 12 parcels of land over which Urban Development Leases had been advertised for tender — i.e. Items 340, 341, 343, 344, 346, 347, 348, 349, 350, 354, 355 and 357.

Note that whereas 83 items or 21.95% of the Agenda comprised tenders, the majority of the applications were apparently exemptions totalling 239 items or 63.22% of the Agenda — were these legitimate as per the provisions/requirements of Section 69(2) of the Land Act 1996?

Note: JNS Limited (Plaintiff) vs Ors (OS846 of 2010) where Ellis J. found that there was no apparent justification for the exemption from advertisement of the subject land (S69(2)(d) of the Land Act 1996) and ordered that the State Lease be surrendered — this the subject of appeal.
Improving Urban Planning in Papua New Guinea

Variation — Section 119 of the Land Act 1996 provides for the variation of purpose, relaxation of covenants etc. specified in a State Lease — viz:

(1) On application by a lessee, the Minister, after considering a report of the Land Board, may vary the purpose for which a State lease was granted, but not so as—
   (a) To convert the lease into a lease of a type that may not be granted under the Division under which the original lease was granted; or
   (b) To make the purpose of the lease a purpose for which the lease could not have been so granted in the first instance.

(2) The covenants and conditions of a State Lease may be relaxed or modified or, if the lessee agrees, varied by the Minister, after considering a report of the Land Board, where it seems to him that special hardship would otherwise be caused.

The IEA held a Special Purposes Lease over allotment 31 Section 2, Granville (i.e. Ela Beach School) and obtained NCD Physical Planning Board approval to rezone the land to “Commercial and subdivide the land into two (2) allotments, this for a proposed development of 7x14 storey buildings.

The subsequent applications to, and approved by, PNG Land Board No.01/2012 (items 46 and 47) were actioned pursuant to Section 119(1) of the Land Act 1996 and sought approval to vary/convert a Special Purposes Lease into a Business (Commercial) Lease which contravenes Section 119(1)(a) of the Land Act 1996 given that a Special Purposes Lease issues pursuant to Division 8 of the Land Act whereas a Business (Commercial) Lease issues pursuant to Division 5 of the Land Act 1996.

Accordingly, the two (2) applications to the Land Board should each have sought the grant of a Business (Commercial) Lease over the subject land conditional upon the surrender of the Special Purposes Lease — there is no short cut.

This begs the question … why does the DLPP continue to issue “use prescriptive” State Leases which predominantly issue for the maximum term of 99 years within which time the best use of the subject land could change 2 or 3 times and where on each occasion and having effected the rezoning of the subject land, the lessee must go back to a Land Board which assumes that the DLPP can expeditiously attend upon and refer all such applications to a Land Board which, unfortunately, it cannot?

In place of “use prescriptive titles” it is recommended that the DLPP issues a “lease/lease” where the use to be made of the subject land shall accord with the provisions of the operative Urban Development Plan.

4. Case Study Projects.
   • The Poreporena Freeway (Highway) was not funded by the NCDC but, instead, by the State with the support of the respective Superannuation Funds. Project cost of K57 million included the Freeway POM Fire Station to Erima; a 450mm water main over Burns Peak apparently not used by Eda Ranu; four lanes/dual carriageway from 4-Mile to Gerehu and the Hanuabada Bypass.
   • Motukea Island — the site area does now total 183.00 hectares of which some 65.00 hectares including substantial built improvements and a fully commissioned and operative international wharf will be purchased by the State and utilized by PNG Ports Corporation Limited which will relocate from “Downtown Moresby”. This begs the questions … does/can the provision of the Napa Napa Poreporena Local Development Plan adequately accommodate the requirements of a relocated port? Note also that a
600mm Ø water main is to be laid linking the Gerehu reservoir with Portion 578 Milinch Granville, Fourmil Moresby at the junction of the Port Moresby/ Porebada/LeaLea roads.

- Moale Valley: Economies of scale are fundamental to the creation of a holistic urban environments including the elusive cost affordable home ownership solution which, one could reasonably conclude, was the ultimate objective of the “8/9-Mile Local Development Plan” prepared by the Strategic Planning Unit, NCDC Regulatory Services.

However, this objective has been significantly compromised by actions taken by the DLPP and their failure to take constructive advice from the NCDC’s correspondence to the Minister for Lands and Physical Planning dated 23/10/2012 entitled “The Implementation of the 8/9-Mile Area Local Development Plan and Nambawan Super Limited” which was copied to the then Acting Secretary, DLPP and which advised that 12 adjoining parcels of land totalling 566.61 hectares (of which, at the time, NasFund Limited and Nambawan Super Limited had tenure interests in a total of 335.81 hectares) comprising some 36.32% of the 1560.00 hectares the subject of the “8/9-Mile Area Local Development Plan” … “be granted to and held by only those entities which are committed to the development of the land those purposes specified in the “8/9-Mile Area Local Development Plan” and, preferably, by NSL and NasFund Limited whose commitment thereto dates from 1990 when each purchased land from the Athol Green; where NasFund Limited did undertake and complete subdivisional development of the nearby land at the junction of Hubert Murray Highway and the Sogeri Road; and where NSL did commission the Moale Valley project in 1996 which did not eventuate and which now, in better economic times, has commissioned the preparation of the “9-Mile Community Master Plan” by Cardno Emerging Markets (Australia) Pty Ltd this dated May, 2011” …

Neither the Office of the Minister for Lands and Physical Planning nor the DLPP responded to the aforementioned correspondence.

The aforementioned submission which was actioned subsequent upon Meeting No. 01/2012 of the PNG Land Board which at Items 40, 41 and 42 did, pursuant to Section 120(2) (a) of the Land Act 1996, consider applications by NasFund Limited and the Public Officers Superannuation Fund Board (now Nambawan Super Limited) seeking the renewal of State Leases over Portions 2123, 2124 and 1568 (respectively) Milinch Granville, Fourmil Moresby each of which they did previously purchase from others but each of which had since expired.

However, the DLPP did, without first attending upon the respective applications seeking the renewal of the expired titles (i.e. the specific purpose of Sections 120 (2) (a) of the Land Act 1996), include other entities/applicants in the respective items (i.e. entities which had no previous tenure interest in the subject land) and PNG Land Board No.01/2012 (Items 40, 41 and 42) recommended that titles over each of these three (3) parcels of land totalling 192.69 hectares be granted to others.

Both NasFund Limited and Nambawan Super Limited did appeal the determination of PNG Land Board No.01/2012 (Items 40, 41 and 42) however, each was rejected and the “recommended grants” deriving from PNG Land Board No.01/2012 (Items 40, 41 and 42) were each formalised by gazettal dated 07/05/2013 of which:

- Yawanaik Holdings Ltd was granted an Agricultural Lease over Portion 1568 Milinch Granville, Fourmil Moresby containing 70.00 hectares.

- A total of five (5) plans of cadastral survey of the subdivisional development of Portion 1568 Milinch Granville, Fourmil Moresby were commissioned and registered by the
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Surveyor General dated 30/07/2013 and 01/08/2013 one (1) month prior to the project being considered and approved by the NCD Physical Planning Board on 03/09/2013.

- The subdivisional development of what was Portion 1568 Milinch Granville, Fourmil Moresby was considered and approved at Meeting No.06/2013 of the NCD Physical Planning Board which convened on 03/09/2013.
- This approval was the subject of a statutory appeal period of 3 months which expired on 03/12/2013 and a 3 month appeal period did also apply to the gazettal of the land use zonings if and when gazetted.
- Both POSFB/NSL and NasFund Limited made application to the National Court requesting “Judicial Review” of the granting of titles over each of Portions 1568, 2124 and 2123 Milinch Granville, Fourmil Moresby to others and the leave sought was granted.
- An “Affidavit” sworn by Mr Joseph Kobol for and on the behalf of Yawanaik Holdings Ltd dated 14/10/2013 advised that the leasehold interest had been transferred to others; that some 400 titles had apparently been issued over surveyed but unserved allotments and that sales had been effected, all of which was premature, a blatant abuse of due and proper process and in all of which the DLPP is complicit.
- An “Affidavit” sworn by Mr Romily Kila Pat, Secretary, DLPP, dated 21/10/2013 detailed the Department’s position i.e. that POSFB/NSL purchased State Lease Volume 94 Folio 21 comprising an Agricultural Lease over Portion 1568 Milinch Granville, Fourmil Moresby which had been issued for a term of 25 years commencing 12/08/1982 from Oboboma Investments Ltd in 1993; in 1996 POSF/NSL made application for and was granted a Town Subdivision Lease over Portion 1568 Milinch Granville, Fourmil Moresby by gazettal dated 28/11/1996 conditional upon the surrender of State Lease Volume 94 Folio 21 (this a component of the Moale Valley project approved by the NCD Physical Planning Board on 06/05/1997 but which, unfortunately, did not eventuate) and State Lease Volume 94 Folio 21 was not surrendered prior to its expiration on 11/08/2007.
- The DLPP advised that the POSB/NSL had not effected the development of the land; this was disputed in NSL’s appeal against the recommended grant in the favour of Yawanaik Holdings Ltd. However, a subsequent site inspection by the DLPP did, apparently, determine that there were no existing improvements.
- The National Capital District Physical Planning Board wrote to the Chairman, Papua New Guinea Surveyors Board, dated 24/10/2013, registering an official complaint about the Surveyor-General registering plans of cadastral survey in the absence of physical planning approval.
- Apparently the National Court was of the opinion that this project had gone too far to be overturned albeit that this had been achieved as a consequence of a blatant abuse of due and proper process.
- In the event that the National Court had ordered that the State Lease granted to Yawanaik Holdings Ltd be revoked the matter would then go back to a Land Board and given the works undertaken by Yawanaik Holdings Ltd, and, subsequently, by Sanamo Group Ltd, it would be most unlikely that the title thereover would be granted to POSF/NSL.
- Whereas there was at one (1) time the probability that NSL and NasFund could, for and on behalf of their members, undertake the development of a total area of some 566 hectares for comprehensive urban purposes, this in accordance with the
provision/requirements of the operative “8/9-Mile Local Development Plan” where the “economies of scale” could have justified/supported the establishment and operation of an industrialised building system located on site and the provision of a reticulated sewerage system both on and off-site, the loss of some 101.99 hectares has significantly comprised NSL’s current land interests at 9-Mile which now total some 217.80 hectares.

- Apparently Eda Ranu has consented to the subdivisional development of Portion 1568 Milinch Granville, Fourmil Moresby containing some 400 allotments where the residential allotments predominantly approximate 500 square metres a significant percentage of which are “battle-axe” allotments all to be serviced by septic tanks.

In this every regard Eda Ranu should have knowledge of the nearby subdivision of the land located adjacent to and immediately south of the junction of Hubert Murray Highway and Sogeri Road undertaken by NasFund Limited, where poor soil absorptive qualities popped the tops to the septic tanks and one remedy was that of replacing the horizontal absorption trenches with vertical trenches/soak holes.

In fact the Malolo subdivision is the last sewerage reticulated subdivision north of the airport and I am given to understand that Eda Ranu has required that an 800 allotment subdivisional development adjoining the northern boundary of the airport and accessed from Hubert Murray Highway does reticulate sewerage services within the subdivision and constructs an off-site sewer main for a length of some 5kms or, alternatively, provides a centralized waste water treatment plant.

- Also, and in this very regard, it is of interest and concern to note that the reconstruction of Hubert Murray Highway from Erima 9-Mile does not include any services, i.e. there is no water or sewerage upgrade.

- The registered plans of cadastral survey of the subdivision of Portion 1568 Milinch Granville, Fourmil Moresby include a 40.00 meter wide road reserve running south from the Sogeri Road, this in part to accommodate a component of the proposed “Outer Ring Road” to connect with the Magi Highway at Bootless Bay.

The Independent Public Business Corporation in its capacity as the entity holding the State’s shares in State Owned Enterprises, including the utility providers, is overseeing the relocation of the Port and the upgrading of infrastructure services and has lodged an appeal with the PNG Physical Planning Appeal Tribunal requiring that this road reserve be widened to 60.00 metres. The outcome of this appeal is not known.

Addendum

Tender No.32/2012 (S/R) comprising an Urban Development Lease over Portion 2711 Milinch Granville, Fourmil Moresby containing an area of 101.460 hectares located at 9-Mile and adjoining land previously owned by NasFund Limited and Nambawan Super Limited and land still owned by Nambawan Super Limited (i.e. Portion 2159 Milinch Granville, Fourmil Moresby containing an area of 101.460 hectares) was advertised for tender on pages 4 and 5 of National Gazette No.G365 dated 27/09/2012 with a closing date of 3.00pm on Wednesday 24/10/2012.

Finally, a total of 13 applicants (including NSL) each seeking the grant of an Urban Development Lease over Portion 2711 Milinch Granville, Fourmil Moresby were scheduled for hearing by PNG Land Board No.03/2013 (Item 344) to convene in Port Moresby commencing Monday 20/01/2014.

Note that the NCDC’s letter to the Chairman, PNG Land Board, dated 15/01/2014 did, in part, request that Item 344 be withdrawn this, apparently, because Portion 2711 Milinch
Granville, Fourmil Moresby is not zoned “Subdivision Zone” — how then was an Urban Development Lease over Portion 2711 Milinch Granville, Fourmil Moresby advertised for Tender (i.e. Tender No.32/2012 (S/R)) on 27/09/2012 and this apparently not approved by/known to NCDC Physical Planning?

Nambawan Super Limited attended the Land Board hearing and subsequently reported:

“There were 13 applicants who applied for the land. The submissions were good, except that they wanted to know why we didn’t develop the land which was taken up by the some other developer. Our response was that the matter is in court. They insisted that we should develop the land. We already have instead of asking for more land. I explained that this was part of the development plans that we have and only when we have a big land area we can spread the cost of the development and develop affordable houses. It has to be an integrated development. We shall wait to see what the outcome should be.” Accordingly, it would not be unreasonable to conclude that the PNG Land Board does not/cannot “comprehend the big picture”.

Clearly then, and where unallocated alienated/State Land is still available, the implementation of Urban Development Plans or Local Development Plans deriving therefrom would be better implemented if in fact the recommendations of the National Land Summit which were endorsed by the Land Administration Committee had been implemented, i.e. “Replace the National Land Board with an open auction system. This would then be a transparent and efficient process for allocating land. There should be safety nets to accommodate the interest of the average citizen”.

4.1 Rainbow.

Unlike the Malolo Estate subdivision the Rainbow subdivision was marketed as a serviced and tilted allotment/house package — pay the money and you will receive the title and the keys.

Problems appeared and those pertaining to infrastructure services were referred to the NCDC, who denied any responsibility, it being claimed that what was built did not accord with the approved engineering drawings, albeit that some years later the NCDC at the taxpayer’s cost let a contract to repair infrastructure services.

The Malolo Subdivision excised out of the Aerodrome Reserve gazetted on 26/06/1980 progressed to the registration of seven (7) plans of cadastral survey and the issuance of 500 titles, all in the absence of infrastructure services — how so?

In Alotau we have yet another variation on the same theme or problem. Three (3) areas of customary land then located outside the Physical Planning Area were subdivided out into a total of 304 serviced allotments and these are as follows:

- Ravens Estate (Certificates of Title) 150 allotments;
- Toudikwa (SABL) 95 allotments; and
- ModewaSilabe (SABL) 59 allotments 304 allotments.

Plans of cadastral survey were registered by the Surveyor-General. Titles were issued, some of which have since been sold (in the case of Ravens Estate 2x Certificates of Titles were transferred to a non-citizen in contravention of Section 56(1) (b) of the Constitution of Papua New Guinea). However, in each of these subdivisional developments the road reserves remain customarily owned and, as a consequence, the titles have no collateral value.

The Milne Bay Provincial Physical Planning Board referred these “problems” to the DLPP in a letter to the then A/Secretary receipt of which was confirmed with the advice that the matter
had been referred to the Registrar of Titles. The same concern was referred to the Policy Unit, DLPP, but to date there has been no response from either the Registrar of Titles or the Policy Unit.

The MBPPPB is rejecting development proposals within Ravens Estate and the Toudikwa subdivision is presently under review by the NRI *et alia* and the SABLs are to be converted to a parent freehold and customary leases to derive therefrom, all in accordance with the amendments to the Land Registration Act 1981 and the ModewaSilabe subdivision to follow.

4.2 Taurama Valley

Refer to preceding comments at paragraph 1.2 preceding.

4.3 Koki Village

This development (i.e. house blocks serviced by walkways including one (1) concrete slab to be screened and accommodating ablutions with reticulated water and sewerage services located under the walkways, the latter to a large and centrally located septic tank) was facilitated by the National Housing Commission in the early 1970s.

Portion 2569 Milinch Granville, Fourmil Moresby now zoned “Commercial” and titled was, it is claimed, reclaimed/filled by/at the instigation of the then Koki Market Trust; thence titled in favour of a company and subsequently transferred to the current proprietor.

Given the pending construction of the Fish Market at Koki it would be appropriate that Eda Ranu investigate and confirm that the reticulated water and sewerage system is functioning … if not, then fix it.

4.4 9-Mile Self Help Housing

Apparently, cadastral surveys of the settlement are being prepared and this, presumably, is a prerequisite to the titling of the allotments deriving therefrom.

The “Draft Image” to be updated to record the Gerehu to 9-Mile 4-lane highway designed by Cardno PNG Limited and to be constructed by China Harbour.

Lae

How are the Case Studies relative to 9-Mile Self Help Housing (NCD); the Former Lae Airport Malahang Industrial Centre and Awilunga Housing Estate each recorded as Case Study 4.4?

Note that industrial development at Malahang (i.e. excluding the ICDC’s Malahang Industrial Centre) is being undertaken on titled parcels of customary land the subject of Special Agricultural and Business Leases many of which have been transferred to non-citizen entities and where, at the expiration of the SABL (maximum term 99 years) the subject land will revert to customary tenure — e.g. Lae Biscuit Co. Ltd, Associated Builders and Contractors Ltd and K.K. Kingston Limited.

When appointing the Commission of Inquiry into SABLs the National Executive Council imposed an embargo on all dealings in SABLs which to date and to my knowledge has not been uplifted albeit that it would appear that the DLPP is increasingly acting in contravention of the embargo if still in place.

4.5 Former Lae Airport

What was the former Lae Airport was to be serviced and subdivided out and it was intended that entities representing the original customary owners be granted serviced and titled allotments deriving therefrom.
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A total of 4 Urban Development Leases were to have been advertised and granted, of which a total of three (3) were granted and these in the favour of the Morobe Provincial Government, the Lae Urban Local Level Government and New Guinea Builders Supplies Ltd (after appeal).

The trunk services necessary to accommodate the development of this prime land including the access road within the 40.0 meter road reserve have not been constructed and it would appear that any commitment to give up serviced and titled allotments to entities representing the original customary owners has long gone.

The Morobe Provincial Government was granted an Urban Development Lease over Section 362 City of Lae containing an area of 12.2330 hectares (ie. State Lease Volume 12 Folio 96) and did effect the subdivision of the subject land into allotments 1 to 13 Section 362, City of Lae.

The existing building at allotment 4 Section 362, City of Lae dates from Lae Airport days and is occupied by Air Niugini Limited, which refused to formalise a sublease agreement with the Morobe Provincial Government and which did initiate legal action (ie. OS No.628 of 2010(JR)) the consequence of which was that the Morobe Provincial Government’s Urban Development Lease and all titles deriving therefrom were quashed by the National Court.

The Morobe Provincial Government did appeal the aforementioned determination of the National Court (SCM No.17 of 2012) and this appeal was dismissed.

A comprehensive development of the 12.2330 hectares should be pursued, this possibly to include Nambawan Super Limited and NasFund Limited, and to accommodate Air Niugini Limited, a prerequisite to which would be that of wresting the control of the land and thereby its proper future from the DLPP. Here we return to the preparation of a comprehensive development brief which identifies the development potential of the land and this a prerequisite to the auctioning of the land as was recommended by the Land Administration Committee of the National Land Development Task Force in 2006.

This opportunity and the proposal to establish a “Development Agency” for the express purposes of targeting and effecting “major coordinated development” would be better illustrated if the “Case Studies” had included “Harbour City” here in Port Moresby comprising a substantial capital investment in a mixed use functional development offering market attractive functional synergies (ie. a place to work, a place to live, and a place to recreate — marina and adjoining Yacht Club) within a secure environment.

4.6 Malahang Industrial Centre.

No comment.

4.7 Awilunga Housing Estate.

No comment save for the observation that the recent downturn in mining activities does, no doubt, explain the fact that vacancies have been advertised in the daily press.

4.8 Lae Tidal Basin

The project executing agent for and on the behalf of PNG Ports Corporation Limited is the Independent Public Business Corporation (IPBC) and maybe the observation that the Lae City Council’s non-involvement in this project is incomprehensible should be referred to the IPBC.
5. Issues

5.1 Land Tenure and Supply

I have addressed these matters in preceding comments but briefly comment on each as follows:

- Yes, the packaging and supply of land is one of the biggest problems. In this very regard I was somewhat horrified to find that in 2013 the DLPP advertised Urban Development Leases over a total of four (4) parcels of land here within the NCD, none of which was larger than 4.360 hectares and the smallest 1.188 hectares — viz:

<table>
<thead>
<tr>
<th>Gazette No.</th>
<th>Date</th>
<th>Portion Milinch</th>
<th>Fourmil Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G99</td>
<td>11/03/2013</td>
<td>3573 Granville</td>
<td>Moresby 1.7600</td>
</tr>
<tr>
<td>G321</td>
<td>26/07/2013</td>
<td>Lot 3 Granville</td>
<td>Moresby 2.9310</td>
</tr>
<tr>
<td>G347</td>
<td>09/08/2013</td>
<td>3129 Granville</td>
<td>Moresby 1.1880</td>
</tr>
<tr>
<td>G543</td>
<td>03/12/2013</td>
<td>3139 Granville</td>
<td>Moresby 4.3600</td>
</tr>
</tbody>
</table>

Recommendation 10 of the Land Administration Committee of the NLDTF was … “That an audit of all Government Land be carried out immediately (this recommendation was made in 2001 and is still to be implemented)” … and, to the best of my knowledge, is still to be implemented.

- Yes, the supply of State land is all but exhausted and urban growth (i.e. the four (4) megacities) is totally dependent upon the mobilisation of customary land preferably through the empowerment of customary landowners and not via compulsory acquisition by the State.

- Yes, the process to collateralise customary land is underway as a consequence of recently enacted amendments to the “Land Group Incorporation Act 1974” and the “Land Registration Act 1981”. However, the success or otherwise of this endeavour is significantly dependent upon the commercial banks and financial institutions accepting a customary lease deriving from a parent freehold as acceptable collateral.

If not, then the only option is State acquisition at the instigation of either the customary landowners or the State, both to the detriment of present and future generations.

5.2 Governance

I endorse/have no issues with the comments.

The preceding comments address the dysfunctional relationship between the NCD Physical Planning Board and the DLPP here in the NCD.

The fact that the 47 Recommendations deriving from the Land Administration Committee of the NLDTF have not been implemented over the ensuing seven (7) years is recorded in preceding comments.

The “Land Act 1996” (and not the “Land Administration Act 1996” as is recorded) is apparently the subject of review by the Constitutional Law Reform Commission and it is paramount that this process does actively seek public comment.

5.3 Planning Process and Enforcement

Recommendation #3 of the Land Administration Committee of the NLDTF proposed … “That the administration of land be centralised in the DLPP headquarters, but that the provision of services be located in provinces, and electronically connected to headquarters”.

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The DLPP has entered into “Agreements” with a number of Provinces as a consequence of which Provincial Physical Planning Boards have been established as is provided for by Section 19 of the Physical Planning Act 1989 as have Provincial Land Boards also.

The Provincial Offices servicing the devolution of these administrative processes comprise a component of the Provincial Administrative Authority (e.g. the Division of Lands and Physical Planning of the Milne Bay Provincial Administration). However, these offices “lack the tools to do the job” … Electronic access to the DLPP’s land records is not available and the convening of a Provincial Land Board assumes that the land administration files relative to the respective land parcels can be located within the DLPP and are, thereby, available to serve the Land Board.

For Debate

I do have some misgivings about the physical planning process here in the NCD. We have an Urban Development Plan dated August, 2006, this being the “skeleton” and the “meat” originally to comprise each of a total of 15x Local Development Plans scheduled for completion by 2012.

To date three (3) Local Development Plans are operational and these are the “Port Moresby Town Local Development Plan”, the “8/9 Mile Area Local Development Plan” and the “NapaNapa Poreporena Local Development Plan”.

My concern is that in the absence of rigorous oversight, and given the exhaustion of alienated land, the City could find itself in a situation where Incorporated Land Groups holding title are competing with each other across the City and seeking political favour to promote their interests in a competitive market place — “hey you guys come to NapaNapa Poreporena where we will have light rail”.

COMMENTS ON THE REVIEW OF NCD AND LAE URBAN DEVELOPMENT PLAN — First Draft

NATIONAL RESEARCH INSTITUTE, WAIGANI

13th March 2014, Patilias Gamato
Deputy Provincial Administrator (Infrastructure and Growth Centers)
Chairman for Morobe Physical Planning Board.

The Review on the NCD and Lae Urban Development Plan made seven recommendations. These recommendations are in the following areas:

1. Urban Design Policy.
2. Environmentally Sustainability Design (refer to BMT Paper).
3. Transport Policy.
4. Review of Jurisdictional Boundaries for Planning, Administration and Funding.
5. Review of Settlements and Recommendations.
7. Creation of a Property Development Authority.
8. An Expanded Role for the National Office of Urbanization.

Following are my comments offered as contributions to assist in the final outcome of the Review of the NCD and Lae Urban Development Plans Report:

1. Urban Design Policy

With the Prime Minister of Papua New Guinea announcing the development of four (4) cities in PNG to become mega cities, there was a need to identify a clearcut urban design policy.
These cities are Port Moresby, Lae, Kokopo and Mt. Hagen. The urban design policy should not be just a talked about academic policy wish-wash. The UDP must be a deliberate move from Policy level to Implementation level throughout the country.

This means that there must be implementation strategies designed to carry out or drive the policy. There must be socioeconomic and implementation drivers or mechanisms to drive this political vision forward. The Prime Minister’s statement is good enough to move things forward, hence the policy designers and implementers should by now work out strategies of implementation to drive the agenda forward. These four cities earmarked must be supported and stimulated with adequate resources and capacitated with clearly defined systems and processes for socioeconomic, infrastructure and social drivers.

1.1 Economic Drivers

There must be specific catalysts designed and applied across the cities, but with specific drivers for growth and expansion. For instance, in Lae there must be Industrial and Business drivers. For Port Moresby, being a government administrative and business centre there should be government and business drivers.

For Kokopo, being identified as a tourism and business centre, there should be drivers to stimulate tourism, natural resources and business. Meanwhile, for Mt Hagen, being a centre for agriculture and business, drivers should relate to agriculture and business. Other towns and cities will be connected to these mega cities, therefore there must be connectivity and synchronization in terms of energy, transport and communications networks, human and labour capital investment, education and health support services.

1.2 Local Development Catalysts

Local Development catalysts should influence the developments. Already some cities have their local development plans. For example, in Lae City, there are the Lae-Nadzab Urban Local Development Plan, Malahang Local Development Plans, Lae-Nadzab Corridor Development Local Development Plan, Nadzab Local Development Area Plan and Project, the Javani Industrial Development and Old Lae Airport Land Development including the Wagang Fisheries Wharf Project and the Lae-Nadzab Four Lane Road Project. These local development plans must be upgraded and used as catalysts for growth and expansion.

1.3 Packaging Impact Projects

Within the local development plans (LDP), there will be specific impact projects. The National Government must pick up the impact projects and make deliberate moves to develop these impact projects. These impact projects and land mobilization should be packaged and given to a vehicle to drive it forward. A development vehicle is one like the Land and Property Development Authority which is discussed in point no. 7 in this commentary.

1.4 Development Vehicle.

It is suggested that Land and Property Development Authority should be established to take the lead in mobilizing land and property for the mega cities and start implementing it. The Land and Property Development Authority should work closely with the customary landowners and government agencies in providing values of land and property, mobilizing private sector investments and outsourcing finances to fund the strategies that are packaged. They should work with customary landowners and enter into arrangements with them and other investors and developers.

The National Government should allow the Land and Property Development Authority to have access to the credit facilities in the commercial banks, and this is where SOEs like
NADB should be utilized. All information and data services with Department of Lands should be used to negotiate with any developer/investor.

The Land and Property Development Authority will decide on the land use in close consultation with the Physical Planning Boards of the four cities, when dealing with other state agencies or landowner groups, to come up with the overall package in the mega city concept. There should be four LPDAs, one for each mega cities, working similarly like the Gazelle Restoration Authority (GRA) in Kokopo, ENBP but with greater powers and responsibilities.

1.5 Old Lae Airport Developments

The old Lae Airport developments should be reorganized. The old Lae Airport Urban Development Lease (UDL) is a mess. It should be revisited and the UDL land should become the main focus for greater urban development under the mega city concept.

2.0 Environmentally Sustainability Design (Refer to BMT Paper)

Lae City is threatened by a number of natural forces and physical developments. The big rivers Markham and Busu surround the cities. Often it becomes a direct threat to the growth and expansion of the city. Any urban development must take into consideration the natural activities of the rivers, the histories in the past, present activities and threats on infrastructure and properties and the future if there is going to be any. Today, around the world, rivers that run through the mega cities destroy the properties, infrastructures and even lives when they are stirred up by any natural cause.

The second threat is the quick erosion of land at the seafronts due to natural causes, the greenhouse effect and development activities. There are no more beaches at the front of this modern city. If Lae City is going to become a mega city, it must be recreated to give a modern cosmetic impression. The third threat is the human and development spillover that causes sand buildup at Voco Point, which interferes or diverts the natural ocean flow at the foreshore.

The fourth threats are natural disasters and human related disasters that might happen in the future. Morobe Government and business houses are unable to respond immediately to disasters like fires, oil spills, explosions from gas or oil companies or chemical discharges into the main river systems or the sea.

3.0 Transport Policy

New roads and bridges must be built for Lae. The National Government has given the 4-lane road from Lae to Nadzab to the people and business houses of Lae. However new roads, especially flyways should be proposed and built to connect the Local Development Areas. There should be new flyways from Igam over the Atzera Range to Nadzab. The Markham Bridge should be given a facelift with one more 4-lane bridge. A second bridge from Nadzab should connect the Bulolo Highway with the other 4-lane road near Nadzab.

There should be deliberate management of drain water. This means that new drainage should be designed and constructed, linking their waterways to the three main river streams. Two more bridges should be built across Busu River and the old bridge at Busu near Bumayong should be demolished and replaced with a 4-lane bridge. The three Bumbu bridges within Lae City should be demolished and replaced with a facelift with four lanes on each bridge.

If the National Government is serious about mega cities, these infrastructures should be given top priority to stimulate other developments.
4.0 Review Jurisdictional Boundaries for Planning Administration and Funding.

The electoral boundaries for Lae Open, Huon and Nawae Open Electorates overlap each other. These overlapping have existed before and have been identified and reported in two separate Electoral Boundary Review Commission Reports, but both Commission Reports have been rejected by Parliament. We are back to square one and we continue to huddle with all these mass. Today, we are faced with so many dilemmas when the Lae City is expanding beyond its boundaries.

Physical developments in Lae have overtaken the electoral boundaries. This affects the planning, administrative and funding jurisdictions and causes more problems to equitable distribution of resources when it comes to control, good governance and equitable distribution of resources. When developments of the mega cities are likely to stir exponential growth, electoral boundaries will not stop it. This means that Lae City will have greater implications on the local development settings, including the traditional landowners of Ahi, Wampar and Labu Villages and their hamlets.

5.0 Review of Settlements

Settlements in Lae must be reorganized to become formal. This review refers to those old settlements on customary land. Those settlements on the reserve land must be identified and relocated. Settlements and people who live in the settlements play an important role in the workforce and economic growth of the city. They are disorganized. They must be rearranged and settled properly, taking into consideration their rights and property developments.

Customary landowners must be encouraged to come forward to register their land according to their land tenures. There must be a tripartite arrangement between the landowners through their Association such as the Ahi Land Mobilization Authority, Morobe Provincial Government and the Settlers so that these arrangements are properly recognized in view of the mega city development. Essential services such as water, power, sewerage and roads must be installed and connected to the settlements. The block holders must be registered so that they too can pay the land rental and for the services like any other person on state alienated land.

The Department of Lands and Physical Planning should raise their standard and start getting involved. There is too much corruption within the Department of Lands and Physical Planning, especially the issuance of titles, UDL and abuse of Ministerial power by the Secretary for Lands. That power should be withdrawn and vested with NEC. There is a lot of land granted under license on the pretext of “public interest” even where there is nothing serious warranting an issuance of a license by the Minister in the interest of the public. This type of arrangement is a total abuse of power in public office.

The Prime Minister should intervene and commission a royal commission of inquiry into this type of dealing. If the royal commission of inquiry is set up, people with information will come forward and provide all the necessary information.

6.0 Review of Urban Villages

The settings of Urban Villages should not be touched or disturbed. Urban Villages will want their own identity recognized and settings maintained. With urban development pressures, they must be protected and supported. The urban villages are normally threatened by ethnic violence and crime. While protecting them, basic services such as clean water, schools, health posts, power and other services including landscaping and beautification should be provided to them. Special consideration should be given to them to access basic services.
Improving Urban Planning in Papua New Guinea

For Lae City landowners, the Lae Administration land payment is still an outstanding issue. Successive governments have forgotten them up to now. Before Lae is considered for greater development, the National Government must consider paying the landowners. In this way, the landowners will be supported, so that they too will harmonize with the great efforts embarked on by the National Government. Therefore if any agent of the government dealing with landowners asks for their support, at least there is a trade-off with the landowners.

7.0 Creation a Property Development Authority

The idea about creating a Property Development Authority is an important agenda that will move some recommendations of the National Land Reform forward. I would like to suggest the name to be changed and called Land and Property Development Authority. This Authority will be the vehicle to drive the agenda of Government on the mega city forward.

They should be given special status and empowered by law to bundle up development proposals with the Physical Planning Boards and when given the approvals, they will move forward to implement the ideas of the National Government, but with little or less political influence. They should be given the powers to negotiate with landowners and private sector investors to develop a local development area.

8.0 Omitted in the recommendations

8.1 Expanded Role for the National Office of Urbanization

Office of Urbanization is a waste of money and should be immediately abolished. They should only be allowed like any other Boards to operate under their respective laws and regulations. Professional bodies should work within their legal jurisdictions and services, and contribute in their professions, such as physical planners, lawyers, architects, engineers, designers, builders etc.

The powers, functions and financial powers of the Secretary for the Department of Lands and Physical Planning should be reviewed and changed. The Secretary for the Department of Lands and Physical Planning assumes too much power, let alone abusing the powers and functions. He is a bottleneck to change and developments in this country. A classical example is issuance of license by the Secretary who signs as Minister’s delegate on important licenses and approvals that are highly questionable. In Lae, we have many of these cases and these cases should be investigated by a Commission of Inquiry and put to stop. That licensing power should be held by NEC for major state decisions and compulsory acquisition of land in the interest of the public. There is a blatant abuse of power in this area.

These are my comments and I hope that this will provide some useful insights in making changes to the final report on the Review on National Capital District and Lae Urban Development Plans.

Thank you.

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Deputy Provincial Administrator (Infrastructure and Growth Centres)
Chairman for Morobe Physical Planning Board.

Find below comments regarding the “review of the NCD Urban Development Plan” that were presented at the workshop staged by NRI on 13 March 2014.

- At the outset, the NCDUDP had some limitations as clearly stated in the Plan document itself, and NCDC during the preparation of the Plan has been keen that a detailed plan be
Improving Urban Planning in Papua New Guinea

produced in the near future as the existing Plan was done rapidly because of the need to provide a basic statutory physical planning framework for NCD.

- The reasons for the non-success of the Plan are wide and varied. However, the following points are the main critical factors for the effective implementation of the plan in NCD. Thus any review of the existing Plan should take into consideration these factors.

  ➢ Administrative Problem
    - The purpose of the NCDUDP is to provide an overarching planning framework for NCD from which Local Development Plans should develop. Its success is thus dependent on the successful formulation and implementation of the LDPs;
    - funding of the creation of LDPs has been a major constraint. Hence, to date out of the 14 local planning areas identified, five LPAs are yet to have an LDP; and
    - additionally, there is a lack of technical expertise in NCDC as within the country and therefore NCDC continues to rely heavily on technical expertise from overseas.

  ➢ Land Mobilization
    - For the LDPs already developed and approved, the actual land mobilization remains the greatest hurdle. The land administration and management system has failed to support the objectives and intentions of the LDPs and oftentimes works against these objectives;
    - the abuse of land allocation process results in speculative sale of undeveloped land, resulting in high land values which are in the end locked out of development or even when developed, and particularly for residential development, is not affordable for middle to low income earners;
    - there is total abuse of set processes and state leases continue be granted, contrary to the recommended zoning in the LDPs. Therefore, NCD Physical Planning Board is coerced into making zoning decisions which diverge from the approved LDPs;
    - the Plan therefore needs to address the institutional setup so that the land release is synchronized with the land use and transportation planning.

  ➢ Lack of Social Housing
    - Any review of the NCDUDP must deal with a social housing policy that can be practically implemented so that the objectives of the Plan in terms of residential land uses are achieved.

  ➢ Mobilization of Customary Land
    - Landowners still have the inherent fear of losing their land to “foreigners” and are therefore very protective of their customary land. Some have gone ahead to deal directly with developers, giving rights over use of their land which many times is contrary to the intent of the NCDUDP or LDPs; and
    - the Plan needs to look at practical ways of mobilizing customary land and suggest possible mechanisms to ensure that customary landowners benefit from their limited land and its resources.

  ➢ Uncontrolled In-Migration
    - The Plan needs to make realistic projections to cater for these populations while also suggesting better alternatives to curtail this inward migration.
Rural to Urban Linkages

- Any review of the Plan must look at possible ways to maintain cost-effective connections and linkages with the rest of the country so that it discourages migration or relocation to Port Moresby.

Social Breakdown and General Disregard for the Law

- The social breakdown and disregard for authority and the law is becoming the norm for NCD. A lot of criticism has been levelled against NCDC for failure to enforce the Physical Planning Act and Regulation;
- the Plan must look at effective means of ensuring compliance with the controls and regulations outlined in the LDPs. It must also look at the institutional capacity of NCDC and other stakeholders to maintain compliance;
- in conclusion any review of the Plan will need to address the institutional setup so that land release is synchronized with land use and transportation planning, whilst taking into consideration the inclusion of the following:
  - A social housing policy;
  - feasible strategies to address settlement growth;
  - practical ways of mobilizing customary land and possible mechanisms to ensure customary landowners fully benefit from the development of their land;
  - realistic projections to cater for uncontrolled in-migration while suggesting better alternatives to minimize inward migration;
  - possible ways to maintain cost-effective rural to urban connections, and
  - effective means of ensuring compliance to the controls and regulations outlined in the various LDPs.

Note: the notes represent a collective view of the NCDC Planning Office regarding the review.
