Pacific Island Countries have very unique geographic characteristics which include extreme remoteness, small land-masses and populations dispersed over a large number of islands and vast ocean areas, vulnerability to economic shocks, and environmental fragility.

The dispersion of small populations over a large number of islands which are often remote from the capital raises a range of questions which an ongoing study by the World Bank is examining. These include:

- Spatial dimensions of socio-economic development and hardship in the Pacific
- The role of political institutions in shaping Pacific Island Countries spatial development agenda
- Challenges of service delivery and investment in remote areas and on the outer islands
- Migration and urbanization as mechanisms to improve standards of living
Spatial Development Challenges in the Pacific Island Countries

Robert Utz
Program Leader and Lead Economist
Equitable Growth, Finance, and Institutions
The World Bank

• Limited access to cash income earning opportunities
• Little infrastructure
• Poor connectivity
• Limited and difficult delivery of public services

Motivation for World Bank Study on Spatial Development Issues in Pacific Island Countries

Outer Islands

Main Islands

• Urbanization challenges

WB focus on reducing hardship and boosting shared prosperity
Governments request assistance to address these issues
Objectives of World Bank Study on Spatial Development Issues in Pacific Island Countries

- Deepen understanding of spatial inequalities in socio-economic development of Pacific Island Countries
- Review policy and investment options for fostering the socio-economic development of outer islands populations

PICs are unique with respect to distance and size
Kiribati: distance from main island

... and with respect to geographic dispersion

Distribution of Population between Main and Outer Islands

Kiribati: distance from main island

‘Outer Islands’ of Kiribati (distance vs. land area vs. population size)

‘Outer Islands’ of Kiribati (excluding Line Islands) (distance vs. land area vs. population size)
Socio-economic development gaps raise important policy questions

- How to address spatial inequalities with respect to socio-economic development and hardship
- What are the trade-offs between investing on OIs vs investing on islands with higher population density?
- What role does (internal) migration play and what are the policy options to respond to internal migration?
- What are cost efficient ways of providing services on OIs?

Spatial development concepts provide helpful directions for understanding the situation in Pacific Island countries:

<table>
<thead>
<tr>
<th>Spatial concepts</th>
<th>Characteristics and focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban - rural</td>
<td>Each category considered to represent distinct development issues - focus on urban management and rural development</td>
</tr>
<tr>
<td>Leading-lagging regions</td>
<td>Focus on spatial differences in productivity, with some areas of the country able to produce goods and services that are internationally competitive Facilitate movements of people and capital to where the greatest opportunities are</td>
</tr>
<tr>
<td>Remote and low population density areas</td>
<td>Focus on challenges of service delivery (e.g., Sahel, Australia)</td>
</tr>
</tbody>
</table>
### Focus areas of WB study

1. **Spatial dimensions of socio-economic development and hardship indicators**
2. Spatial policies and decision making framework
3. **Political Economy of spatial policies**
4. Internal migration
5. Interisland connectivity (sea, air, ICT)
6. Health and education service delivery on outer islands
7. Livelihoods on outer islands
8. **Urban settlements and resilience**

---

**Table: Spatial concepts and Characteristic and focus**

<table>
<thead>
<tr>
<th>Spatial concepts</th>
<th>Characteristic and focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main-outer island</td>
<td>• Geography implies limited private sector production of tradables and elevated cost of public service delivery on main island and even more so on outer islands.</td>
</tr>
<tr>
<td></td>
<td>• Main island stands out as seat of government and connector to rest of the world through air and sea connectivity which are key sources of employment and cash income.</td>
</tr>
<tr>
<td></td>
<td>• Aid, resource rents, and remittances (and in a few cases tourism) as the main sources of foreign exchange.</td>
</tr>
<tr>
<td></td>
<td>• Political process determines how aid and resource rents are divided between main and outer islands (in the form of public services, infrastructure, transfers and subsidies.</td>
</tr>
</tbody>
</table>

"Islandness" adds additional challenges.
# Agenda

<table>
<thead>
<tr>
<th>Item</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Introduction</td>
<td>Robert Utz, Program Leader and Lead Economist, WB</td>
</tr>
<tr>
<td>2) Spatial Dimension of Socio-Economic Development in Pacific Island Countries</td>
<td>Darian Naidoo, Economist, WB</td>
</tr>
<tr>
<td>3) Political Economy of Spatial Development in the Pacific Island Countries</td>
<td>David Craig, Consultant, WB</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td>All</td>
</tr>
<tr>
<td>4) Affordable and resilient settlements in Port Vila metro area</td>
<td>Colleen Butcher-Gollach, Consultant, WB</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td>All</td>
</tr>
</tbody>
</table>
Urban Settlements in PICs – What we know from national statistical databases

- Clustering and drivers of urban immigration
- Youthful population – high natural growth rates
- Rapid urban growth rates, not a new phenomenon
- High incidence of preventable diseases in urban settlements
Clustering - Migrants move to less remote islands

Positive economic effects of clustering (agglomeration)
- Deeper networks of buyers/suppliers and specialized inputs (sharing)
- Finding the right worker, supplier, investor (matching)
- Knowledge spillovers (learning)

(Marshall, 1950; Richardson, 2010)
Primary driver: urban-rural income differential

Poverty is not solely a rural condition – Urban areas do not make people poor but they attract poor people looking for opportunities

Source: Estimates reported in Poverty and Equity Briefs 2013, based on most recently available HIES data
Urban growth - also a function of high natural population growth rates

'Missing middle' people of working age in outer islands ... migrate to islands with job opportunities (urban)

e.g. 120-150 new plots are needed in South Tarawa every year to keep up with natural population growth

**Clustering | Urbanization is not a new phenomenon in PICs**

- In the past 30 years, urban growth rates > rural growth rates in all PICs except FSM, Samoa & French Polynesia
- Not a new phenomenon (stability & permanence?)
Urbanization & Prosperity – Global trends

- “... a near perfect correlation between urbanization and prosperity across nations. ... Per capita incomes are almost four times higher in countries where the majority of people live in cities than ... where the majority live in rural areas”

(Schafer 2001, p7).


- Similarly strong correlation between increasing urbanization: growth in GDP per capita
But, benefits of urbanization in PICs overshadowed by challenges

Preventable diseases in Kiribati, South Tarawa as % of national:

- **Tuberculosis** (80% of all cases - overcrowding)
- **Pneumonia** (60% of all cases - dusty roads)
- **Diarrheal disease** (53% of all cases - dirty water)
- **Worm infestation** (30% of school children - no sanitation)
- **Skin lesions and rashes** (20% of school children - dirty water and no sanitation)
- **Birth defects** (contaminated well water)

Clustering and Challenges
Increasing Urban Settlement Exposure to Natural Hazards

Urban expansion largely unguided and increasingly into hazardous locations, e.g.

- South Tarawa, growth rates of ‘extreme-high risk’ villages:
  - Antebuka 10.4% p.a.
  - Fita 2.6%
  - Bikenibeu 3.6%
  - Tomaiku 6.8%

- Honiara informal settlements in flood plains:
  - 1984 = 5 ha
  - 2010 = 131 ha

- Greater Port Vila: 15% buildings & population are exposed to moderate levels of earthquake and cyclone risk; 15% at high levels

Political weight in PICs

![Graph showing political weight in PICs](image-url)
Urbanization is not positively harnessed in the Pacific

- **Anti-urban bias**: “squatters”, “outsiders”, “How do we reverse the trend?”, limited secure tenure in informal & squatter settlements.
- **Lack of or restrictive strategies or plans**:
  - Static, normative land use zoning plans (Master Plans)
  - No forward planning and new serviced subdivisions for low income earners
- **Formal land administration systems out of date, slow, unresponsive and costly**
- **Under-investment in basic infrastructure services** – “don’t encourage squatters”; no addresses to collect service fees
- **No housing finance** for informal sector employment
- **Inflexible DRR strategies** - no-build zones, unaffordable building codes.

Evidence-Informed Policies and Actions
Urban data deprivation – is a major issue in the Pacific

- No standardized definition of “urban.”
  - e.g. Port Vila municipal boundary population = ~65,000 people (2015) BUT
  - Port Vila functional city* = ~114,000 people (2018)

- Census and HIES data do not disaggregate peri-urban (unplanned, informal, squatting) data:
  - 33% of Honiara’s pop.
  - 45% of Port Moresby’s pop.
  - Port Vila 74% growth from 1991-2009 in Shefa province (peri-urban)

- Census and HIES data do not provide qualitative insights:
  - e.g. South Tarawa access to improved water source = 80% BUT
  - 2 hours’ supply every 48 hours
  - Water is highest priority (WASH surveys)

* The functional city: economic and social connectivity.

How do PICs urban areas move from poverty of access and high disaster risk to become affordable & resilient settlements?

- Case studies: Kiribati, Vanuatu, Fiji (urban continuum)
- Vanuatu MOLNR – three key questions:
  1. Future land & housing needs for low-middle income earners?
  2. Where and how can needs be met (affordable & low-medium risk)?
  3. Role of Government to lead and enable public and private sector investment, guide future expansion, and ‘capture’ urban benefits of economic growth and prosperity for all residents?
1. Underutilized Public & State Lands in Prime Locations

- Using satellite imagery and ground-truthing, assist Mol. staff-
  1. Inventory of vacant and non-leased lands in Port Vila municipal boundary.
  2. Inventory registered leases vacant for 5+ years in Port Vila municipal boundary:
     - Identified 348 plots (8%) = 65 ha.
     - Opportunity cost = 600 new dwelling units.
- Detailed investigation 29 (of 50) vacant Commercial sites:
  - 72% had 0 to very little development after 5 years (breach of Lease).
  - 32% in rental arrears (breach of Lease).
  - 37% had land rents outstanding since 2012.
  - Remaining leases had no land rent rates reviewed for 30 years.
- Last property valuation in Port Vila: 2003

- Training workshops with Mol. Leasing & Enforcement Sections – strengthen existing monitoring and management procedures.
2. Backlog in serviced land supply is at choke-point

- 75% of urban growth is occurring on peri-urban kastom land outside municipal boundary with no infrastructure services
- Low incomes
- Length of time to register a lease (692 days)
- High construction costs – unable to meet Building Code requirements
- No bridge finance for land development/services
- No mortgages for house construction

3. Future land needs are not being planned for

- 2018-2030: 11,830 new households will be formed (4.8 ppl/hhd)
- 2018-2030: 11,130 new houses will be needed excluding existing backlog (1.28 hhd/house, 2009 Census)
- 2018-2030: 1,170 ha needed for new serviced plots in low hazard areas
- Of which, 900 ha needed for low-middle income residential land uses.
  - Allowing for 20% replacement of houses damaged by disasters over this time.
  - Allowing for 17% roads, 10% open
4. Greater Port Vila has Guided Land Development Options

- Multiple-hazard information (VGMD-MDRR Project)
- Distance to major employment nodes
- Main transportation routes, UNELCO water coverage, location of school
- Existing rapidly growing unplanned settlements
- Vacant, well located land (safe and close to employment)

= Guided land development options

5. Existing Settlements ‘Deep-Dive’

1. 28 existing unplanned/informal/squatter settlements identified
2. Letters of request to MoL from Seaside (5 communities), Tokyo (2 communities), Ohien Mataso and Anamburu in low-moderate risk locations.
3. Deep dive comprises:
   - Land tenure (formal and verbal) and community governance arrangements
   - Sampled household surveys of land, services and housing needs & priorities, and perceptions of resilience
   - Household expenditure diaries
   - Engineering pre-feasibility, concept designs and costing for upgrading of services.
### Deep Dive Household Survey

<table>
<thead>
<tr>
<th></th>
<th>Otieno Mataso 52 hhds</th>
<th>Seaside 232 hhds</th>
<th>Tokyo 58 hhds</th>
<th>Anamburu 300 hhds</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% in Port Vila/Came with family as a child or young person/Travelling to school</td>
<td>89%</td>
<td>61%</td>
<td>58%</td>
<td>73%</td>
</tr>
<tr>
<td>Own a house on another island</td>
<td>50%</td>
<td>40%</td>
<td>14%</td>
<td>68%</td>
</tr>
<tr>
<td>Visited home island in 2019/20</td>
<td>44%</td>
<td>25%</td>
<td>29%</td>
<td>58%</td>
</tr>
<tr>
<td>Last visited home island more than 5 years ago</td>
<td>30%</td>
<td>63%</td>
<td>57%</td>
<td>30%</td>
</tr>
<tr>
<td>Plan to live in town permanently</td>
<td>50%</td>
<td>40%</td>
<td>87%</td>
<td>35%</td>
</tr>
<tr>
<td>Don’t know/ plan to live in town permanently</td>
<td>11%</td>
<td>21%</td>
<td>5%</td>
<td>28%</td>
</tr>
</tbody>
</table>

### Land Tenure

<table>
<thead>
<tr>
<th></th>
<th>Otieno Mataso 52 hhds</th>
<th>Seaside 232 hhds</th>
<th>Tokyo 58 hhds</th>
<th>Anamburu 300 hhds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land tenure – contribution to community fund for lease</td>
<td>89%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Land tenure - registered lease</td>
<td>0%</td>
<td>20%</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Land tenure – verbal agreement with owner</td>
<td>23%</td>
<td>10%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>(of which female)</td>
<td>(of which 3%)</td>
<td>(of which 7%)</td>
<td>(of which 3%)</td>
<td>(of which 10%)</td>
</tr>
<tr>
<td>Distance and more than 10 years ago</td>
<td>89%</td>
<td>57%</td>
<td>23%</td>
<td>24%</td>
</tr>
</tbody>
</table>
### Deep Dive – Household Surveys

<table>
<thead>
<tr>
<th></th>
<th>Ohlen Mataso</th>
<th>Seaside</th>
<th>Tokyo</th>
<th>Anamburu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>House tenure (owner)</strong></td>
<td>99%</td>
<td>77%</td>
<td>99%</td>
<td>55%</td>
</tr>
<tr>
<td>(of which 7% female)</td>
<td></td>
<td>(of which 11% female)</td>
<td>(of which 9% female)</td>
<td>(of which 13% female)</td>
</tr>
<tr>
<td><strong>House tenure (main tenant)</strong></td>
<td>11%</td>
<td>10%</td>
<td>5%</td>
<td>33%</td>
</tr>
<tr>
<td>(of which 4% female)</td>
<td></td>
<td>(of which 7% female)</td>
<td>(of which 2% female)</td>
<td>(of which 8% female)</td>
</tr>
<tr>
<td><strong>Productive activity on plot</strong></td>
<td>55%</td>
<td>50%</td>
<td>52%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Head held v. activity: Full time sector employee</strong></td>
<td>100%</td>
<td>50%</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Head held v. activity: Temporary/fausal</strong></td>
<td>11%</td>
<td>10%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Time in employment - average (months)</strong></td>
<td>54</td>
<td>93</td>
<td>41</td>
<td>93</td>
</tr>
<tr>
<td><strong>Time in employment - median (months)</strong></td>
<td>24</td>
<td>48</td>
<td>22</td>
<td>32</td>
</tr>
</tbody>
</table>

### House Structure

<table>
<thead>
<tr>
<th></th>
<th>Ohlen Mataso</th>
<th>Seaside</th>
<th>Tokyo</th>
<th>Anamburu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>House tenure (owner)</strong></td>
<td>60%</td>
<td>33%</td>
<td>76%</td>
<td>46%</td>
</tr>
<tr>
<td>(of which 7% female)</td>
<td></td>
<td>(of which 11% female)</td>
<td>(of which 9% female)</td>
<td>(of which 13% female)</td>
</tr>
<tr>
<td><strong>House contains problems – finance</strong></td>
<td>40%</td>
<td>30%</td>
<td>80%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>House contains source of finance – self</strong></td>
<td>70%</td>
<td>40%</td>
<td>80%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>House contains source of finance – family</strong></td>
<td>15%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Build helped neighbours to construct their house</strong></td>
<td>89%</td>
<td>50%</td>
<td>86%</td>
<td>53%</td>
</tr>
<tr>
<td><strong>House contains time - average (months)</strong></td>
<td>11.5</td>
<td>11</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td><strong>House owner's price (in millions)</strong></td>
<td>3,590,000</td>
<td>7,500,000</td>
<td>534,285</td>
<td>17,100,000</td>
</tr>
<tr>
<td><strong>House monthly rent (in millions)</strong></td>
<td>29.300</td>
<td>25.710</td>
<td>15.750</td>
<td>29.400</td>
</tr>
</tbody>
</table>
“Things I most like about my settlement ...”

- Sense of community/collaborative living/safety/church
- Buses/close to town or work
- Affordable Rent
- Near to natural resources

“Things I don’t like about my settlement ...”

- Overcrowding inside + outside
- Flooding
- Noise
- Public drinking, youth, unsafe
- Older, Temporary Housing
- Public health/no swm
Engineering Pre-feasibility Analysis & Costings for Ohlen Mataso, Seaside, Tokyo, Anamburu

In situ upgrading – tenure regularization + visible package of basic services for resilience and amenity is both feasible and affordable
@ $1,000-$5,000/household [excl. external drainage costs]

Internal drainage and circulation (footpaths)
6. Forward Planning for Urban Expansion

- Upgrading existing settlements is not enough.
- New serviced land/greenfield subdivisions urgently needed (low/moderate hazard areas, close to employment nodes and transport routes, plot sizes and service costs affordable by low-middle income earners).

- Changes from past practice include:
  - Make use of robust hazard information
  - Future economy (efficiency) of layouts (professional training for planners and developers)
  - Understand the site, adjacent land uses, provide a mix of land uses (f灵活性)
  - Subdivision Policy, Regulations and guidelines—clear “rules of the game”.

Applying the National Subdivision Policy
Affordable, Resilient, Sustainable Future Settlements
Take-outs for Policy and Practice

Urbanization is not new in the PICs – 3 decades

Well functioning cities don’t happen by chance – need risk- and evidence-informed policies and strategic infrastructure investments – guide and manage (not prevent) urban expansion.

Existing land administration systems are choked – the urban poor have no option but to seek their own solutions

Existing unplanned and informal settlements have stable and employed populations – upgrading of basic services is feasible, at lower per capita cost, if in low- to moderate-risk locations.

Upgrading existing settlements is not enough to meet demand for new, well located, serviced, subdivisions for the future - but much can be done to engage with private sector (developers, Kastom owners, community-based savings groups, individual households)

Clearly set out clear rules of the game for mixed land uses, minimum sizes for middle income residential development.

Need new ways of doing business - public sector (with external support partners) to bridge the financing gap for servicing new, safe, well-located land to enable private sector investment in housing.

Artessa Saldivar-Sali, Senior Municipal Engineer (asaldivarsali@worldbank.org)
Dr. Colleen Butcher-Gollach, Lead Urban & Housing Specialist (cgollach@worldbank.org)
Sources

- Slide 1 (Cover): Photo: Jerome Costanzo, Tokyo informal settlement, Port Vila, Vanuatu (May-2019).
- Slide 10: Photo: Jerome Costanzo, Tokyo informal settlement, Port Vila, Vanuatu (May-2019).
- Slide 11: http://www.nature.com/news/before-we-drown-we-may-die-of-thirst-1.18652
- Slide 35 (End): Photo: Colleen Butcher Gollach, South Tarawa, Kiribati, (Jan-2017)
Political Economy of Outer Islands and other Pacific peripheries

- Centripetal forces: primacy of the main island/capital city
- But does this translate into political power and OI neglect?
- Centrifugal forces: Electoral power and representation are slanted to Outer Islands
- But allocation of resource and other rents is centralized, leaving OIs dependent or marginalized, losing ‘scale wars’ around resources, especially in ‘areas of limited statehood’
Outer Islands representation: In Solomon Islands, a Shortlands vote is worth 4 times a Honiara vote.
In some PICs, political power is much more centralized. But Outer Islands still do well in securing services and resources. Hybrid systems can bring both centralized power and strong peripheral participation. Dominant, policy programmatic parties use aid rents to extend state power out through services and infrastructure. Ols support powerful links to centre. Samoa, Tonga, Kiribati, Fiji?
Towards fragmentation and personalized politics?

- Many Pacific states are more fragmented: local or regional power matters, and representation is about securing rents from centre
- Anti-urban policy, rural/OI gerrymander
- Westminster systems across very different local communities
- Weak parties, VONC threats, high MP turnover, resource/aid rents
- Politicians less reliant on government to deliver: active personal patronage
- Rise of constituency development funds, marginalisation of Local government. Autonomy?
- Solomons, PNG, Vanuatu? RMI
Areas of Limited Statehood and the shadow state

- State doesn’t reach all the way to outer locations
- Communities improvise: the “shadow state”
- “Limited scope and capacity for negotiating with larger states and private sector entities”
- Scale wars: local communities bypassed by resource grabbers, driving local conflict
- Eg Rennell and Bellona, parts of Bougainville, parts of Papua New Guinea