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# Papua New Guinea

## Health & Safety Snapshot and Case Studies



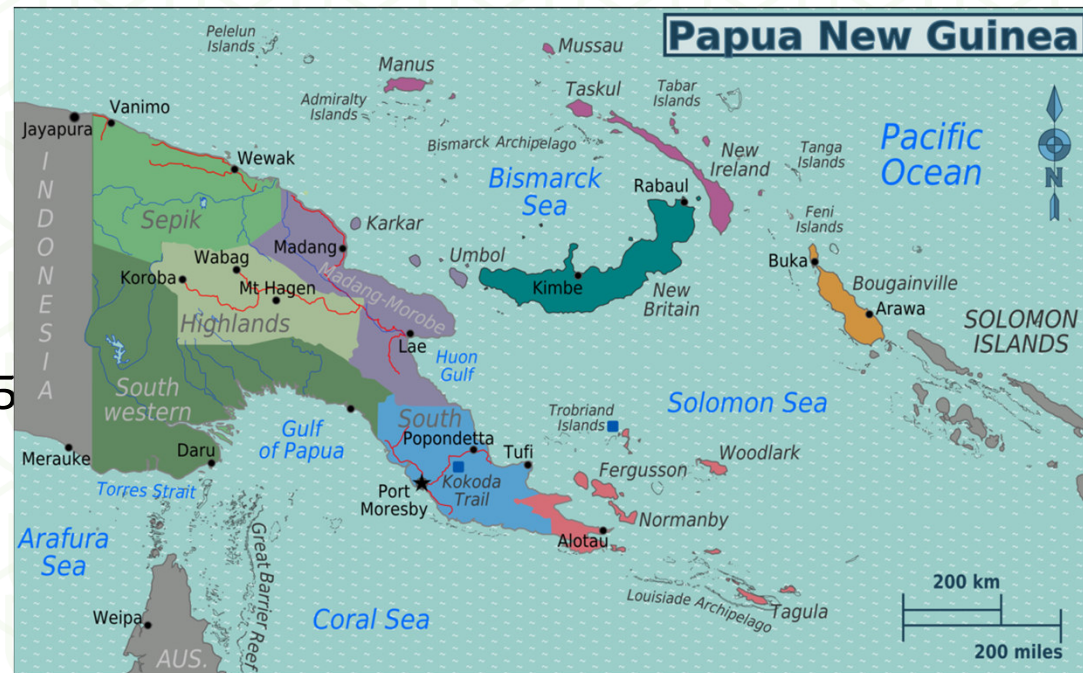
**National  
Airports  
Corporation**  
PAPUA NEW GUINEA



# In Context – PNG



- Papua New Guinea (PNG) is geographically located north of Australia
- Shares the same border with Indonesia on the western part
- 4 Regions (Momase, Southern, Highlands and New Guinea Island)
- 22 Provinces
- National Capital City – Port Moresby
- Total population – 10 million
- Land mass - 452,860 Km<sup>2</sup>
- Gain Independence in 16<sup>th</sup> September 1975
- 800+ different languages and culture

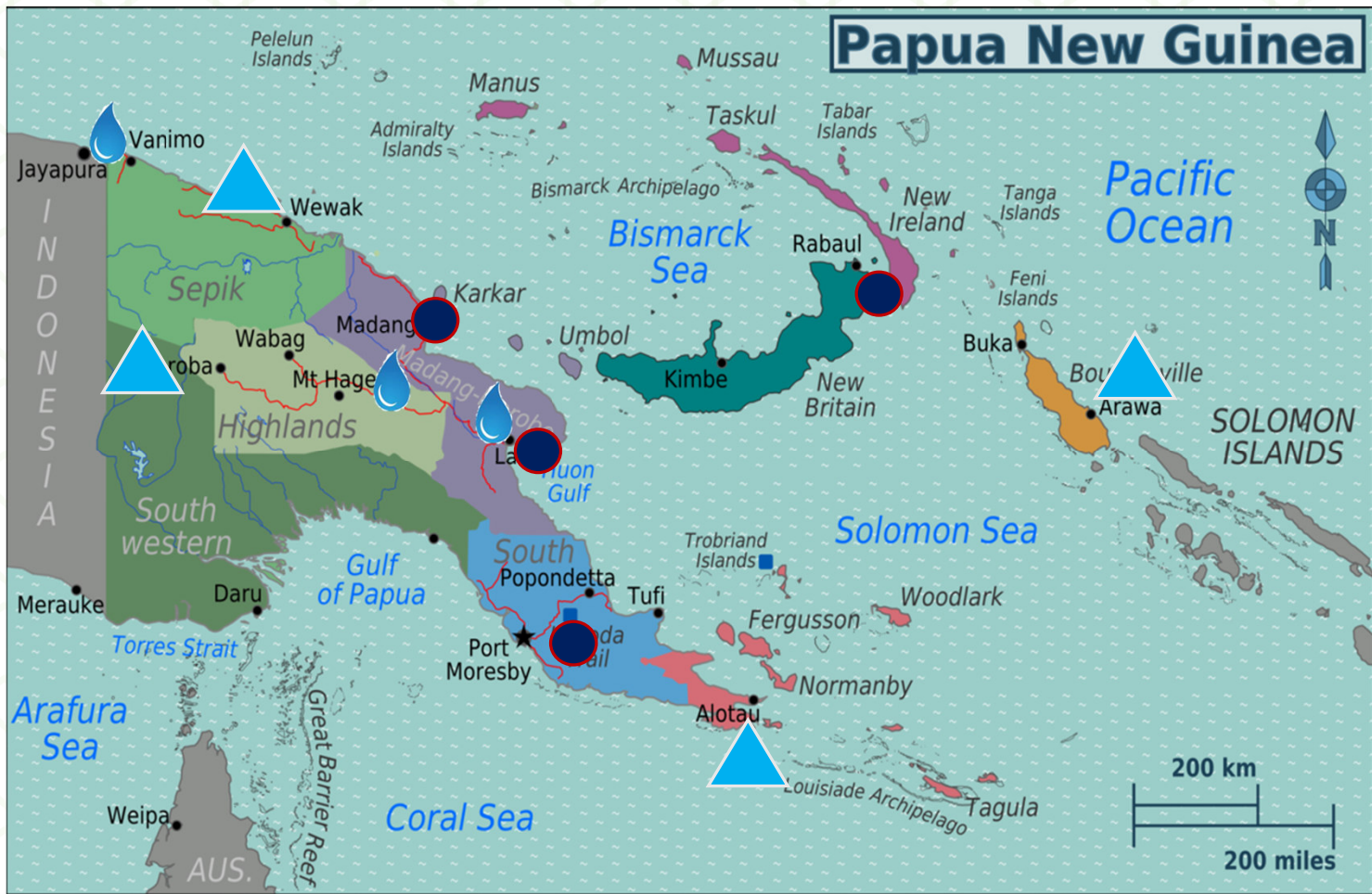


# Country Portfolio – PNG



- ADB is one of PNG's largest sources of official development assistance, with an average annual lending of \$364 million over 5 years from 2019 to 2023. ADB's support is aligned with the Government of Papua New Guinea's development plans, including the Medium-Term Development Plan IV 2023–2027, the Development Strategic Plan 2010–2030, and Vision 2050.
- As of 31 December 2023, ADB has committed 271 public sector loans, grants, and technical assistance totaling \$4.7 billion to PNG. ADB's current sovereign portfolio in PNG includes 15 loans and 2 grants worth \$1.28 billion.
- Case studies for H&S challenges and measures/actions: Civil Aviation Development Investment Project (CADIP II), Sustainable Highlands Highway Investment Program (SHHIP), PFR - Highlands Core Road Network Project, Power Sector Development Project (PSDP) and Building Resilience and Water Security.

# Project Locations – PNG



-  Domestic Airport Upgrade
-  Water Supply
-  Power Upgrade

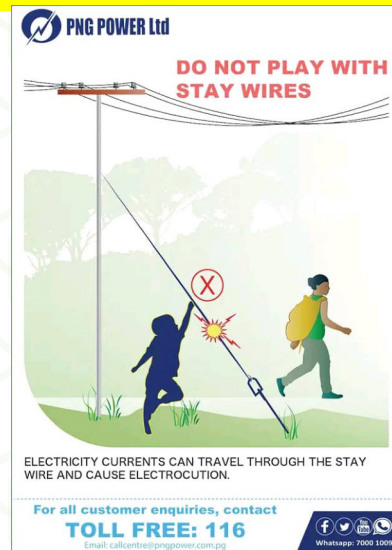
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# Case Study 1 – PNG



## » Sector Led Challenges

EA	Issues	Mitigation Measures
PNG Power	Community Health & Safety	<ol style="list-style-type: none"> <li>1. Enforcement of building board standards through provincial administrations</li> <li>2. More awareness through local media, meetings and school talks</li> </ol>



**Ignorance to H&S**

# Case Study 1 – PNG



EA	Issues	Mitigation Measures
PNG Power	Community Health & Safety	1. Enforcement of building board standards through provincial administrations



- Ignorance to H&S Awareness
- Building structures right under the HV transmission lines

# Case Study 2 – PNG



## » Sector Led Challenges

EA	Issues	Mitigation Measures
Water PNG	1. Effect of religious beliefs on OHS requirements (behavioral issue)	1. Eliminate through engineering design. 2. Toolbox talks emphasizing the requirements of OHS



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# Case Study 3 – PNG



» Cont..





# Case Study 3 – PNG



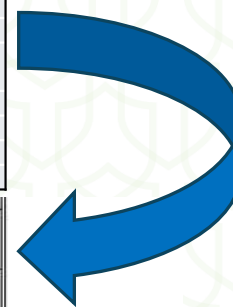
## » Sector Led Challenges

EA	Issues	Mitigation Measures
NAC - CADIP	1. Measurement of H&S implementation payment to contractor	BOQ for H&S and provide cost for value items.
	2. Mental wellbeing causing major accident on-site	EA to assist contractor to set-up a medium to address workers mental health e.g one on one interview at toolbox meeting

# Case Study 3 – PNG



Item	Description	Unit	Qty	Rate	Total
<b>Occupational Health &amp; Safety Requirement (OHSR)</b>					
	OHSR Documentation				
	Preparation, Submission for Review and Approval including any Amendments	Lsum	1	6,000.00	6,000.00
	OHSR Implementation				
	Awareness to Construction Personnel's on issues of Work Safety /Health and Hygiene/Plant & Equipemnt Safety/Traffic Mangt including distribution of awanreess materials such as posters and phamplets. This awanreess shall be done once every quarter.	Item	9	500.00	4,500.00
	Awareness to nearby communities on Health & Safety including distribution of awanreess materials such as posters and phamplets. This awanreess shall be done once every quarter.	Item	9	500.00	4,500.00
	Safety Induction	Item	4	1,000.00	4,000.00
	Basic firefight prevention to be done 2 times in a year	Item	4	2,000.00	8,000.00
	Documentation and Submission of Pandemic Response Subplan	Note			
	Implementation of HIV/AIDs and Pandemic Plan Reposnse Subplan	Item	9	1,000.00	9,000.00
	Documentation and submission of Hazard Reduction Subplan	Note			
	Implementation of Hazard Reduction Subplan	Item	9	200.00	1,800.00
	Supply, Usage and Replenishment of First Aid Kit to attend to injuries.	Item	9	200.00	1,800.00
	Supply, Install and replenish Safety Signages	Item	15	200.00	3,000.00
	Supply & Install Signboard and Signage Canvas. Allow for canvas change every 6 months for a project duration of 2 years.	Lsum	1	19,000.00	19,000.00
	Supply & Equip all workers with appropriate PPE including replacement	Item	2	100,000.00	200,000.00
	Supply & Install Fire Extinguisher	Item	4	500.00	2,000.00
	Supply and usage of Breathalyser including replacement of consumables	Item	9	400.00	3,600.00
	Supply & Provide Safety Scaffolds (Rails) / Harness and Caution Tapes / Barricade/Static Lines to prevent fall when working at height	Item	4	500.00	2,000.00
	Communication for safety adherence	Item	9	500.00	4,500.00
	Provisional	Item	18	1,000.00	18,000.00
			Carried to Summary		291,700.00



Total cost generated forms part of the OHS implementation cost in the BOQ

206	Implementation of Site-Specific Environmental Management Plan (SSEMP).	item	1	100,000.00	100,000.00
207	Implementation of HIV/AIDS, Occupational Health, Safety and Security (OHSS) Plans	item	1	50,000.00	50,000.00
208	Implementation of Gender Action Plan.	item	1	50,000.00	50,000.00

# Case Study 2 – PNG



EA	Issues	Mitigation Measures
NAC	2. Mental wellbeing causing major accident on-site	EA to assist contractor to set-up a medium to address workers mental health e.g one on one interview at toolbox meeting



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# Case Study 4 – PNG

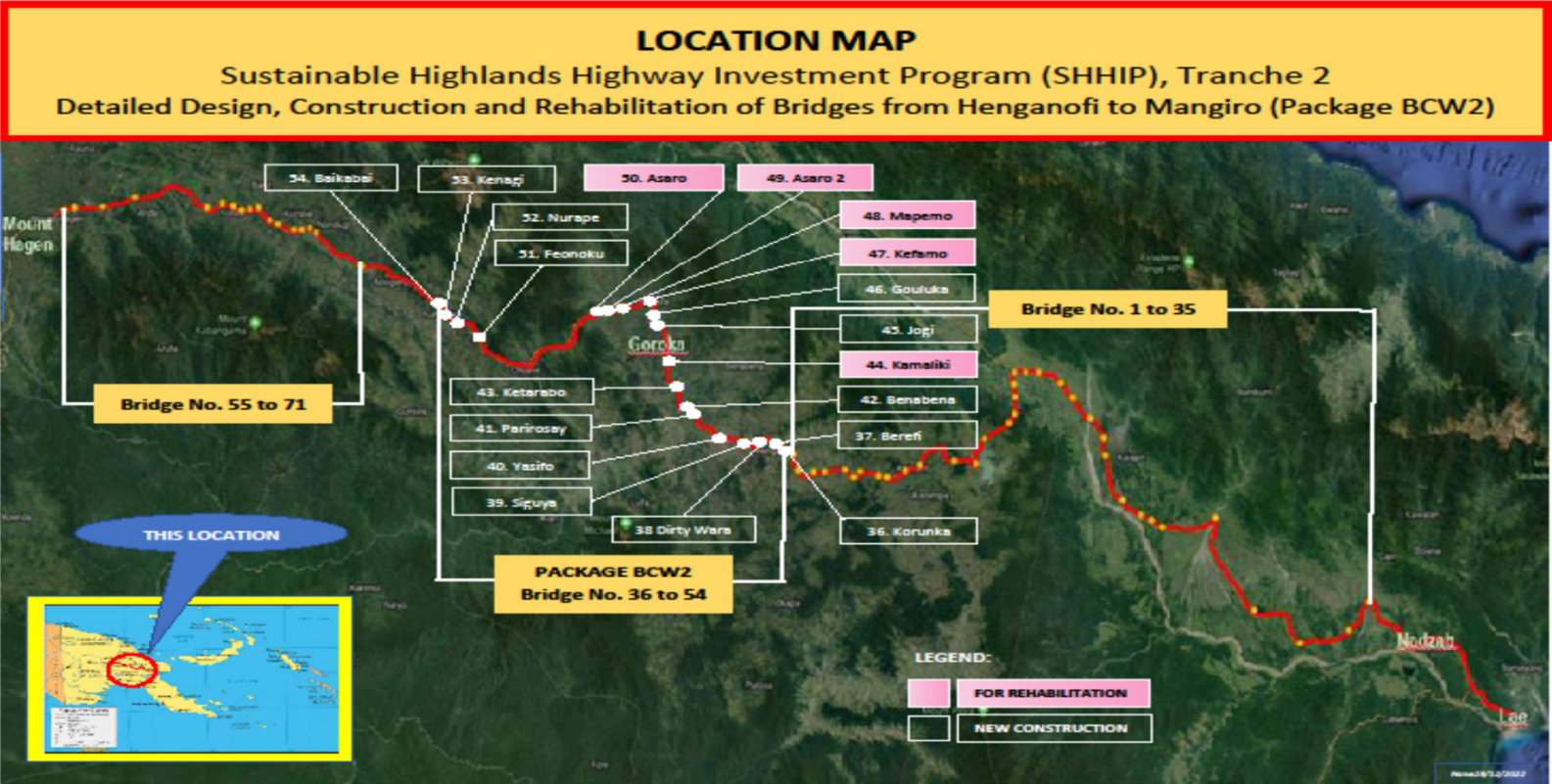


## » Sector Led Challenges

EA	Issues	Mitigation Measures
Department of Works & Highways		

**SUBCASE 1:** Improved HEALTH & HYGIENE through Provision of Roadside Market Stalls, Water Supply and Sanitary Facilities under SHHIP - Tranche 1 (ROAD WORKS)

**SUBCASE 2:** Improved SAFETY through Provision of Access Steps and Hand Rails to Wash Bays near Bridge Sites under SHHIP - Tranche 2 (BRIDGE WORKS)



# Country specific H&S Challenges – PNG



## » Geographical led Challenges

1. Landform poses a challenge in ensuring employees have accessibility to health services
2. Lack of adequate healthcare and infrastructure and services
  - Obstacles that hinder the ability of employees and employer to adhere to H&S regulation e.g. limited resources, insufficient medical supplies, shortage of medical personnel particularly in rural or remote areas

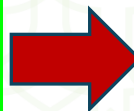
## Case Study 4 – PNG



### **SUBCASE 1:** Improved HEALTH & HYGIENE through Provision of Roadside Market Stalls, Water Supply and Sanitary Facilities under SHHIP - Tranche 1 (ROAD WORKS)

#### **UNHYGENIC VENDING PRACTICES**

- SIPs captured under the Loan Covenant but No proper Designs, Drawings and Cost allocated in the BOQ.
- Vendors previously sell market produce on the ground attracting dust, dirt, bacteria and contagious diseases
- Vendors fetched Dirty Water with Buckets sometimes at a far distance to wash and freshen Market Produce
- Vendors relieved themselves in nearby bushes where flies transmit disease



#### **POSITIVE OUTCOMES AFTER HYGENIC INTERVENTIONS**

- Designs undertaken with additional Funding sort through State Funding (GoPNG) under Variations
- Proper Elevated Market Benches to prevent intrusion of Dirt, Dust and Bacteria
- Clean Water Supply to prevent contamination of market produce and avoid walking long distances to fetch water
- Proper Toilets = proper disposal of Human Waste reducing risk of disease

# Case Study 4 – PNG



## SUBCASE 1: BEFORE AND AFTER PICTORIAL ILLUSTRATIONS – MARKET STALLS

### UNHYGIENIC VENDING PRACTICES



### POSITIVE IMPACT AFTER SOLUTION





# Case Study 4 – PNG



## SUBCASE 1 (CONT'D): BEFORE AND AFTER PICTORIAL ILLUSTRATIONS – SANITARY FACILITIES

### POSITIVE IMPACT AFTER SOLUTION



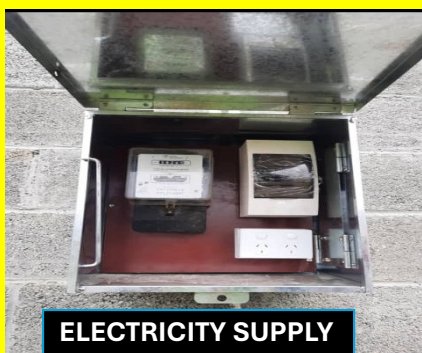
SANITARY FACILITY/MKT STALL



MALE/ FEMALE TOILETS



HAND WASH BASIN




ELECTRICITY SUPPLY



MALE URINALS



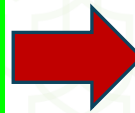
TOILET



**SUBCASE 2:** Improved SAFETY through Provision of Gender Friendly Infrastructure - Access Steps and Hand Rails to Wash Bays near Bridge Sites under SHHIP - Tranche 2 (BRIDGE WORKS)

**UNSAFE ACCESS & WASH BAYS**

- Risk of Slip, Trip and Fall injuries were common for females doing laundry due to steepness and unstable soil condition
- Risk of Drowning of infants and children was high due to slippery conditions
- Flash Flooding Upstream did result in people being swept away whilst struggling to escape



**POSITIVE OUTCOMES AFTER INTERVENTIONS**

- More stable foundation walkway provided
- No need to go into river or too close to river as concrete slab provided at safe distance for laundry
- Handrail can assist provide support during unsuspected flash flood and support with load movements.

# Case Study 4 – PNG



## SUBCASE 2: BEFORE AND AFTER PICTORIAL ILLUSTRATIONS – WASH BAYS WITH RAILS

**UNSAFE WASH BAYS AND ACCESS**



**POSITIVE IMPACT AFTER SOLUTION**



## Case Study 4 – PNG



### SUBCASE 2 (CONT'D): BEFORE AND AFTER PICTORIAL ILLUSTRATIONS – WASH BAYS WITH RAILS

#### POSITIVE IMPACT AFTER SOLUTION



# Country specific H&S Challenges – PNG



## » Other specific Challenges

EA	Challenge	Way Forward
All	<p>No updated OHS Law</p> <ul style="list-style-type: none"> <li>• <i>Industrial, Safety, Health &amp; Welfare Act 1961</i></li> <li>• <i>Explosives Act 1953</i></li> <li>• <i>Inflammable Liquid regulation 1968</i></li> </ul>	Streamline H&S Activities to align with EAs Act (relevant sections on H&S) including companies H&S Policy
	No defined Regulatory Body	Require a National OHS regulatory body
	Workers compensation covers only for actual injuries and not occupational diseases at workplace.	Need amendment to the Workers Compensation Act.

# Country specific H&S Challenges – PNG



## » EAs Laws & Policies

### NAC

- *CAA Act 2000*
- *Safety Policy 2018*
- *HSE Policy 2020*

### PNG Power

- *Electricity Industry Act (Amended) 2021*
- *National Energy Policy 2017 – 2027*

### Water PNG

- *National Water Supply and Sanitation Act 2026.*
- *PNG National Water, Sanitation and Hygiene Policy 2015 – 2030*

### Roads & Highways

- *Road Traffic Act 2014*

**PNG**



**EM TASOL NA  
THANK YOU  
TUMAS**