

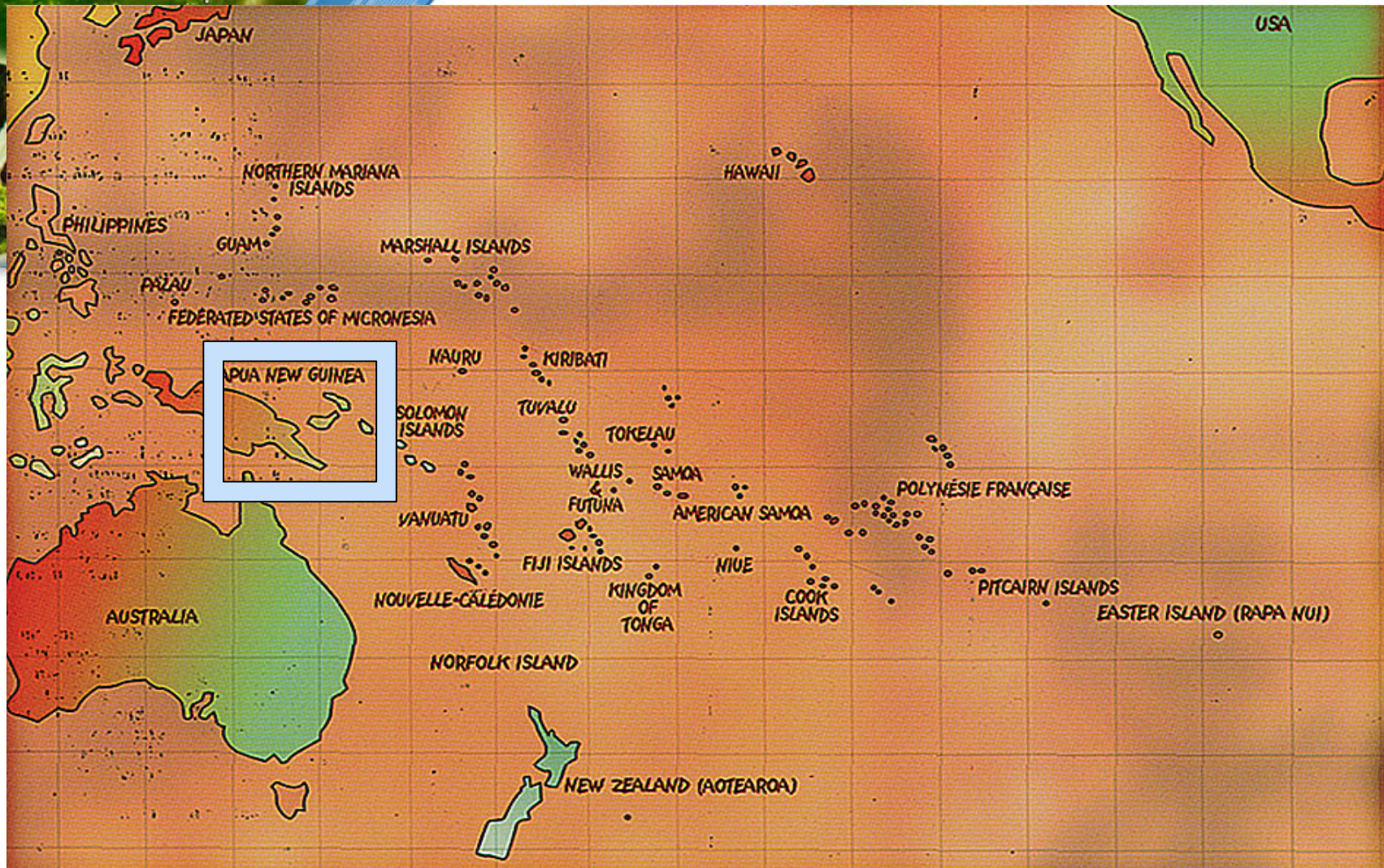


Papua New Guinea's progress towards climate compatible development

THE DECISION MAKING PROCESS



Location of Papua New Guinea



Map of Papua New Guinea





CHALLENGES

- Over 6 million people living in developing country covering a large area which is not easily accessible
- Over 800 different languages and cultures in the country
- Literacy level is quite low
- Climate change and its related subjects are hardly or not fully understood by all in the communities



DECISION MAKING

- People need to be informed about what is going to be done
- Effective communication becomes an important issue that needs to be properly addressed and approached
- Consultation is carried out in different languages that people can understand
- Climate change science and terminologies are translated into the languages that are understood



DECISION MAKING

**Communication is done
through two main sources**

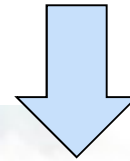
- Through the working of the Adaptation Technical Working Group including government, NGOs, CBOs, academia etc
- Direct consultation with communities in the provincial centres, local level government centres and even at the ward or village level

Consultation processes



The Adaptation
technical working
group (ATWG) in
session

Adaptation national
consultation being
carried out





IDEAL SITUATION

For adaptation projects

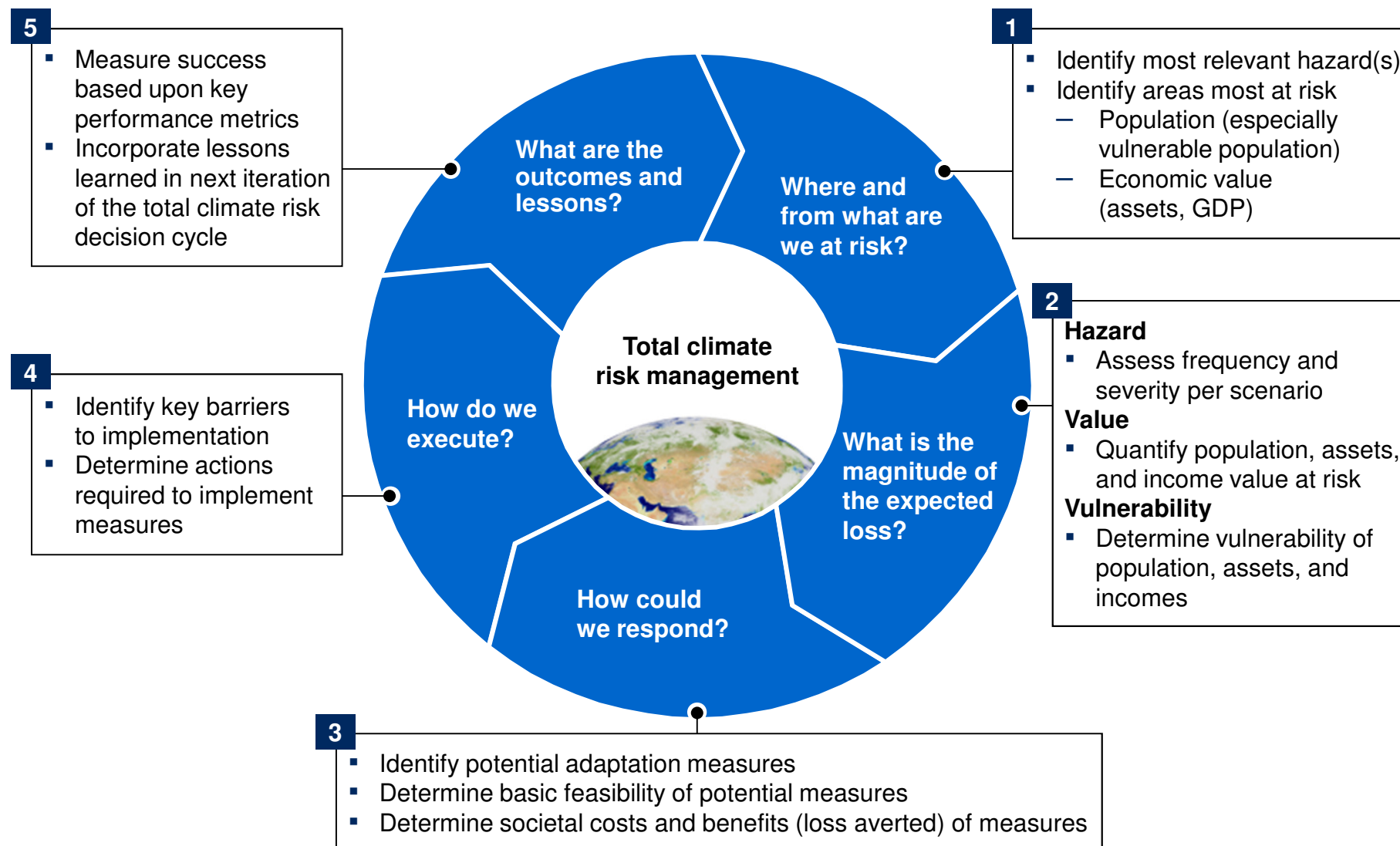
1. Define the objective
2. Collect relevant information
3. Generate feasible options
- 4. Make the decision on option**
5. Implement and evaluate






PNG's APPROACH TO ADAPTATION

- Consult to identify issue
- Identify the objective
- Collect the relevant information
- Conduct Vulnerability analysis
- Make decision on cost efficient solutions
- Implementation (and evaluation)

PNG's National Adaptation Strategy evaluates climate change hazards based on a risk management methodology

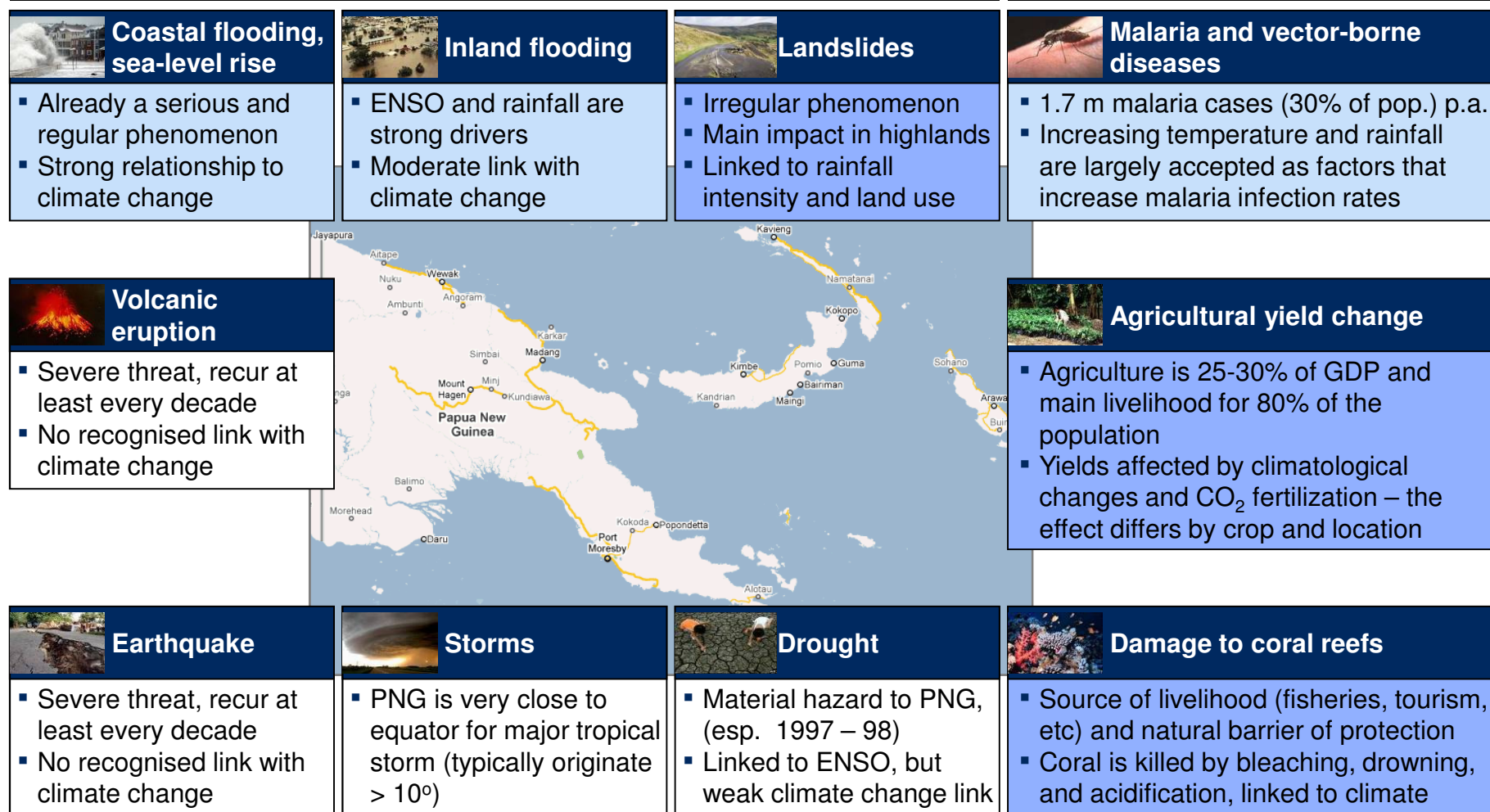


Multiple hazards are being and will be aggravated by climate change in coming years




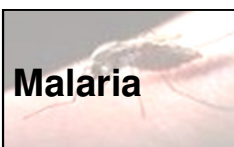
-  Risk exposure and loss estimation
-  Risk exposure only
-  Not included for analysis

PNG is prone to event-driven natural hazards ...

... but also faces hazards due gradual shifts as a result of climate change



Three priority hazards were selected for detailed analysis

Hazard	Risk exposure
 Coastal flooding	<ul style="list-style-type: none"> ▪ Affects ~6,000; displaces ~400; and kills several people annually ▪ Damages buildings
 Inland flooding	<ul style="list-style-type: none"> ▪ Affects ~26,000; displaces ~8,000; and kills several people annually ▪ Damages buildings and property
 Landslides	<ul style="list-style-type: none"> ▪ Affects 500-600 and kills ~10 annually, mainly in remote, mountainous areas ▪ Damages infrastructure
 Malaria	<ul style="list-style-type: none"> ▪ Epidemics will affect ~200k more people in the highlands ▪ Highland cases are more severe
 Agricultural yield loss	<ul style="list-style-type: none"> ▪ 3 million people depend on climate-sensitive crops ▪ Climate change may reduce yields
 Coral reef decay	<ul style="list-style-type: none"> ▪ ~70,000 people earn a living from reefs ▪ Decay/ bleaching may reduce this

Top priority hazards to be addressed



Already affects almost half the population, with Climate Change impacting ~200k more



PNG is vulnerable to coastal flooding, only to be exacerbated by rising sea levels

- 20,000km of coastline and
- Severe floods affecting 6,000+ annually,



PNG suffers inland floods multiple times per year

- Extensive river system
- Population living close to rivers

Today, we focus on coastal flooding since PNG already suffered from six major historic coastal flooding events between 1995 and 2009

East Sepik		2008	Manus		2008	New Ireland		2008
Tidal waves hit the northern coast of Papua			Tidal waves hit the northern coast of Papua			Tidal waves hit the northern coast of Papua		
A: 20,000	USD: 15,000,000		A: 20,000	USD: 15,000,000		A: 20,000	USD: 15,000,000	
D:	2,800 homes damaged		D:	homes		D: 1,200	1,500 homes damaged	
M:			M:			M:		
K:			K:			K:		



Place	Date
Cause	
Affected	USD:
Displaced	
Missing	
Killed	
People	Damage

- //// High risk zone
- //// Moderate risk zone
- Affected people (< 10;000)

- ✈ Affected airports
- Affected buildings
- Agriculture

Estimated information

Aitape, West Sepik		2002	West Sepik		1998	Oro province, Milne Bay		2007
Small tsunami generated by an earthquake			Tsunami following a magnitude 7 earthquake			Cyclone Guba associated with several days of rain		
A: 4,400	USD: 12,000,000		A: 10,000	USD: 12,000,000		A: 15,000	USD: 50,000,000	
D:	Homes, cash crops, food gardens		D:	Homes, agriculture, airport		D: 1,300	Homes	
M:			M:			M:		
K: 3			K: 2,182			K: 10		

SOURCE: Dartmouth Flooding Database; press clippings; Reliefweb.int; team analysis

PNG has used the draft National Adaptation Strategy to facilitate the following climate change initiatives

1. Climate Investment Fund – Pilot Program on Climate Resilience – World Bank Funded and Implemented by ADB
2. Japan (JICA) 2012–2014 the ‘Building a more Disaster and Climate Resilient Transport Sector project.
3. CTI–USAID activities in Manus and Kimbe—Coastal Resource Management and mangrove planting and vulnerability Assessment
4. AusAID - Bilateral support for NGO community based adaptation activities: Wildlife Conservation Society – Strengthen the ability of vulnerable Island communities to adapt to climate change (Manus).

Continued...

5. AusAID – Regional funding for NGO community projects: The Nature Conservancy – Building Resilience in Communities and their Eco-systems (Manus and New Ireland)
6. AusAID - Regional funding for NGO community projects: Live and Learn – Food Security through Adaptation to Climate Change (WNB).
7. Pacific Adaptation to Climate Change (PACC) pilot site in PNG, Central Province, Kivori has relocated to higher ground due to high detection and evidence of sea-level rise and storm surges impacts (GEF/UNDP/ SPREP).
8. SPREP under the FINPAC Project (Finland–Pacific Project on Reducing Vulnerability of PICs livelihoods to the effects of climate change).

Continued...

- 9 The EU Climate Change project implemented by the National Agricultural Research Institute (NARI) 'Adaptation to Climate Change Associated Risks' aims to improve the food production capacity of smallholder farming communities in areas where precipitation deficits and / or excesses and soil salinity problems are becoming significant threats to agricultural production and productivity.
- 10 USAID grant to the SPC to enhance food security through capacity building and pilot demonstration projects. The project will also support SPC's Climate Ready Crop Collection program in identifying food crop genotypes that have climate resilient traits.
- 11 IOM/ACP- Migration and relocation

Continued...

12. Global Fund on Disaster Risk Reduction - Project Building a More Disaster and Climate Resilient Transport Sector (FY 2012-2015, US\$ 2.7M).
13. AusAID – Bilateral support for NGO community based adaptation activities: Conservation International - Boosting Traditional Approached to Food Security in PNG (Milne Bay).
14. The EU Climate Change project implemented by the National Agricultural Research Institute (NARI) 'Adaptation to Climate Change Associated Risks' aims to improve the food production capacity of smallholder farming communities in areas where precipitation deficits and / or excesses and soil salinity problems are becoming significant threats to agricultural production and productivity.



**Thank you kindly for your
attention**

