

A map of the Pacific region, showing various island groups and countries. The map is centered on the Pacific Ocean, with landmasses in light gray and water in white. Labels for various regions and countries are scattered across the map, including Taiwan, Philippines, Palau, Mariana Is., Caroline Is., Marshall Is., Kiribati, Polynesia, Bismarck Arch., New Guinea, Solomon Is., Santa Cruz, Vanuatu, Fiji, Tonga, New Caledonia, Norfolk Is., Kermadec Is., New Zealand, Australia, Easter Island, Society Is., Cook Is., Tuamotu Arch., Mangareva, Austral Is., Marquesas Is., and Hawaii. The text of the slide is overlaid on this map.

## Global ICT Capacity Building Symposium (CBS 2018)

### *Developing Skills for the Digital Economy and Society*

18-20 June 2018

Santo Domingo, Dominican Republic

# **“Challenges and opportunities faced by LDCs, SIDS and LLDCs and implications for capacity development”**

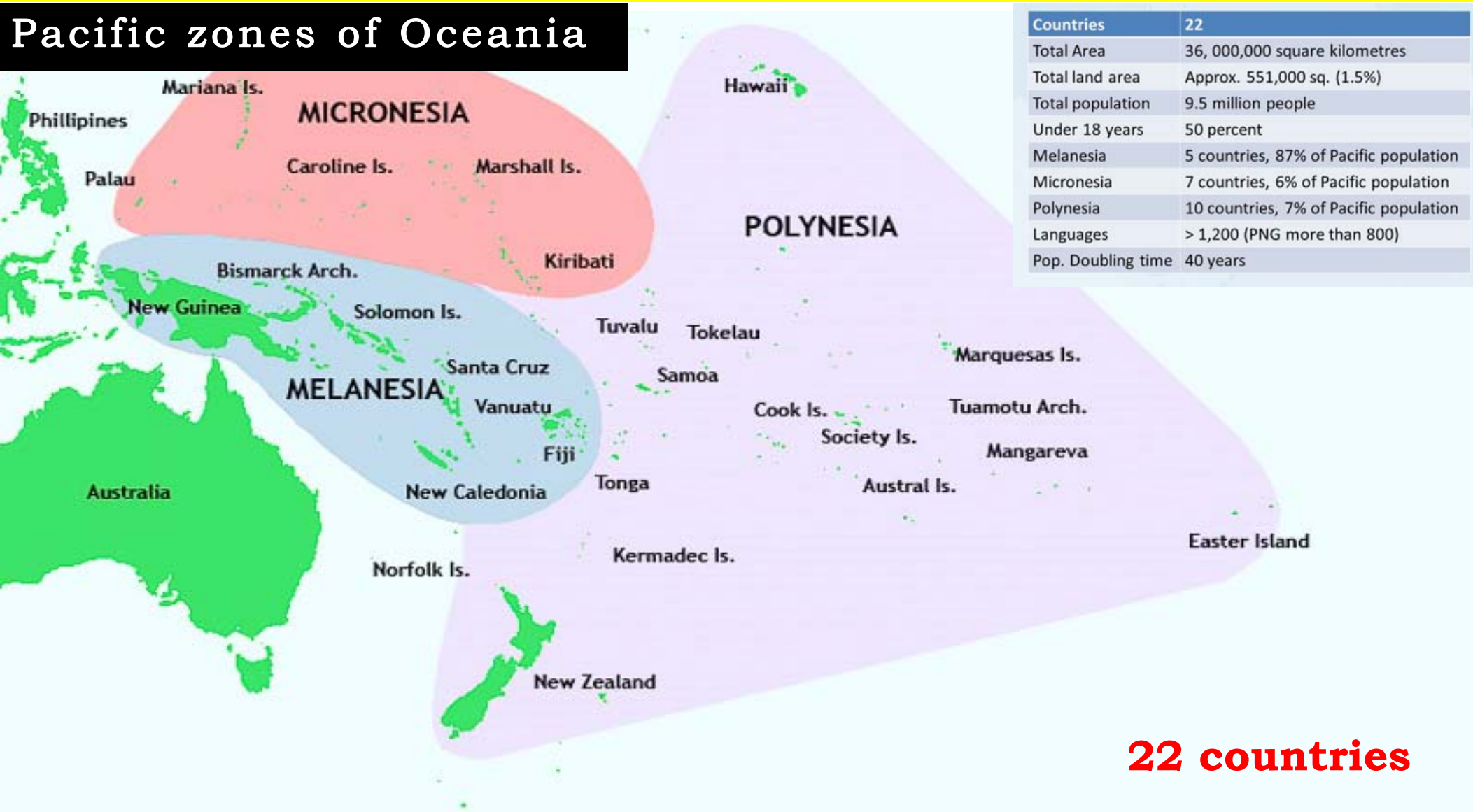
Presentation by

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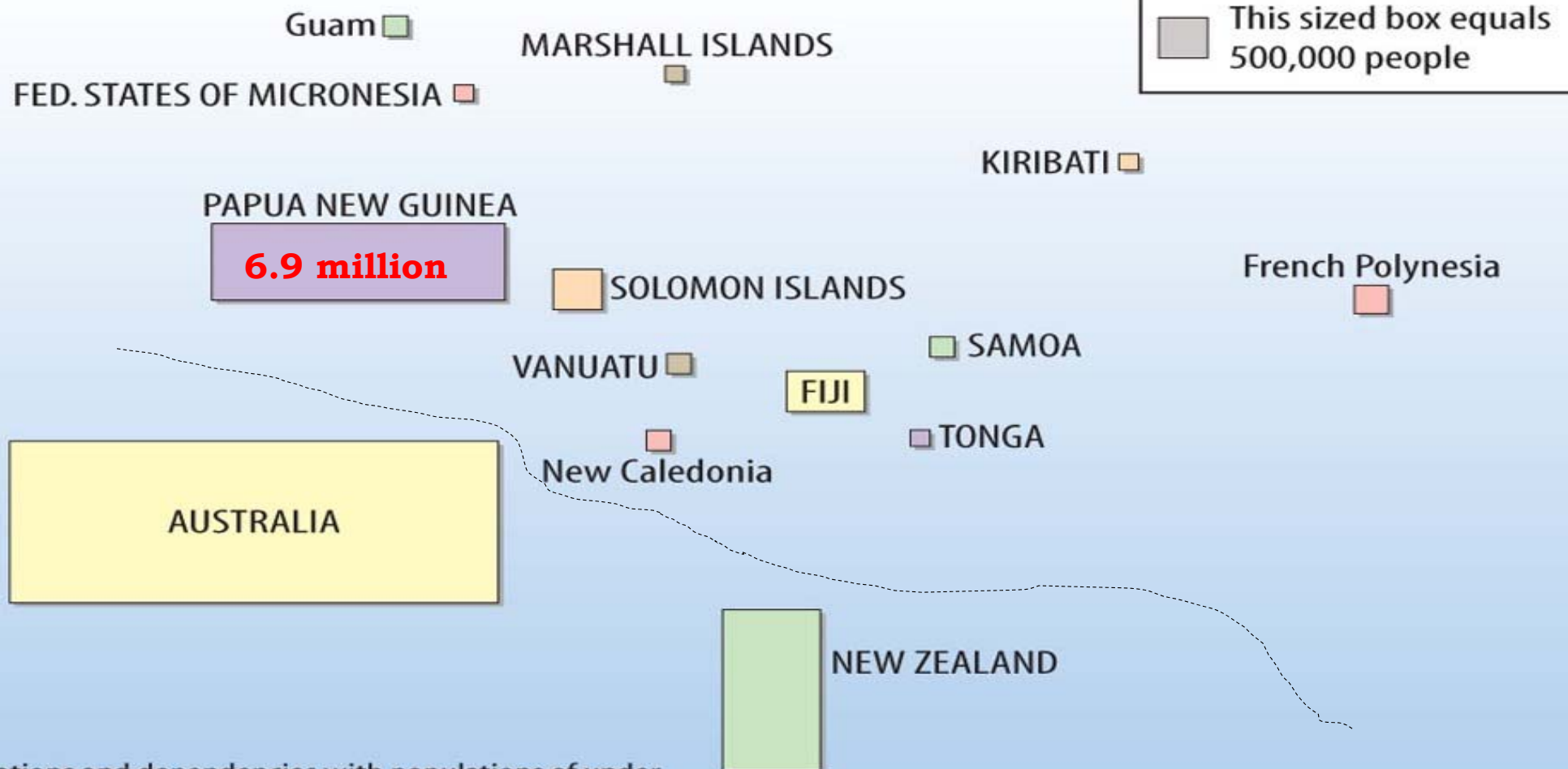
# Pacific zones of Oceania



**22 countries**

# Population cartogram

**Total population 9.5 million**



**6.9 million**

This sized box equals  
500,000 people

AUSTRALIA

FIJI

NEW ZEALAND

New Caledonia

VANUATU

SOLOMON ISLANDS

PAPUA NEW GUINEA

KIRIBATI

French Polynesia

SAMOA

TONGA

MARSHALL ISLANDS

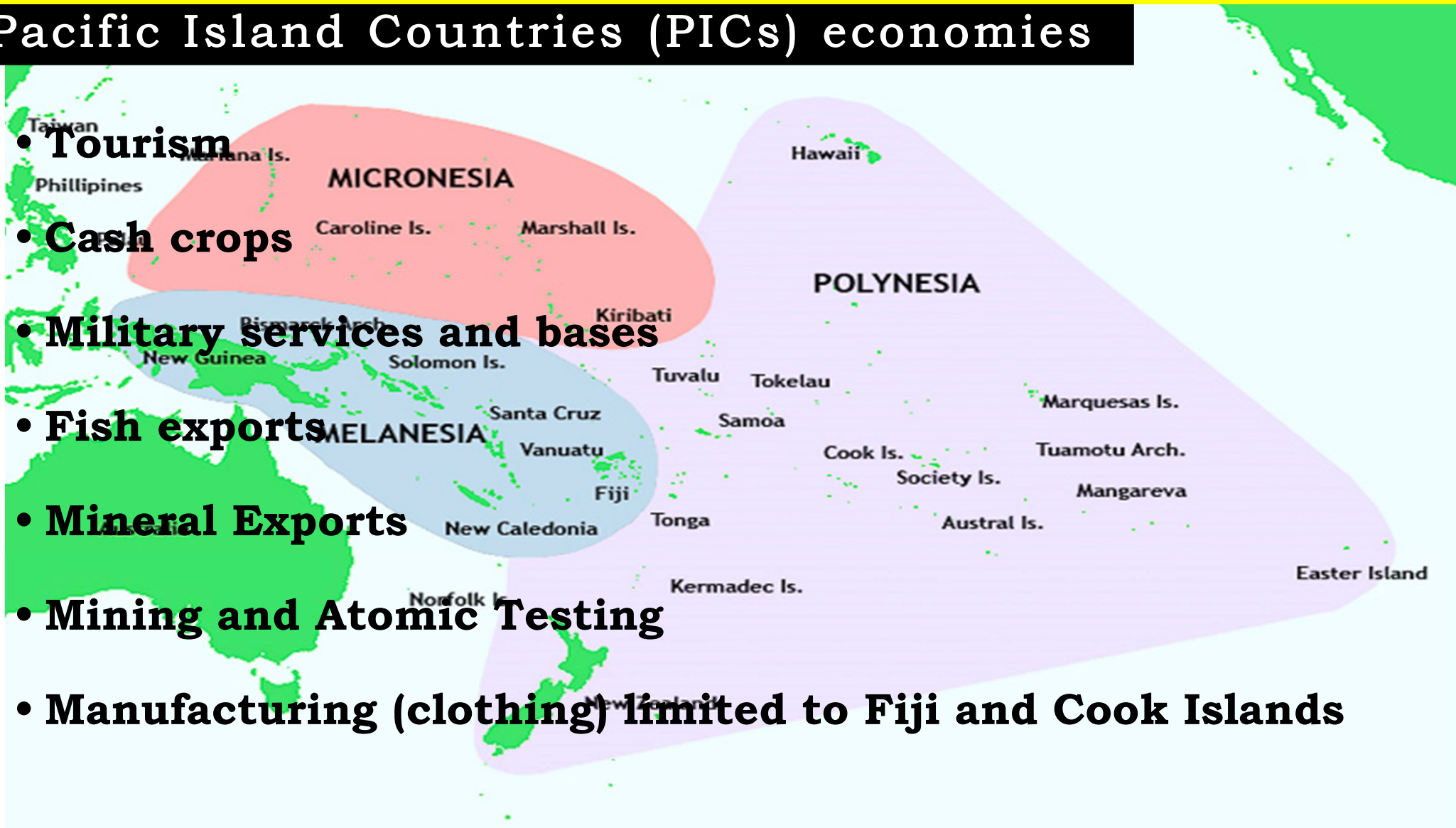
FED. STATES OF MICRONESIA

Guam

*Note:* Nations and dependencies with populations of under 100,000 are not shown on this map.

# Pacific Island Countries (PICs) economies

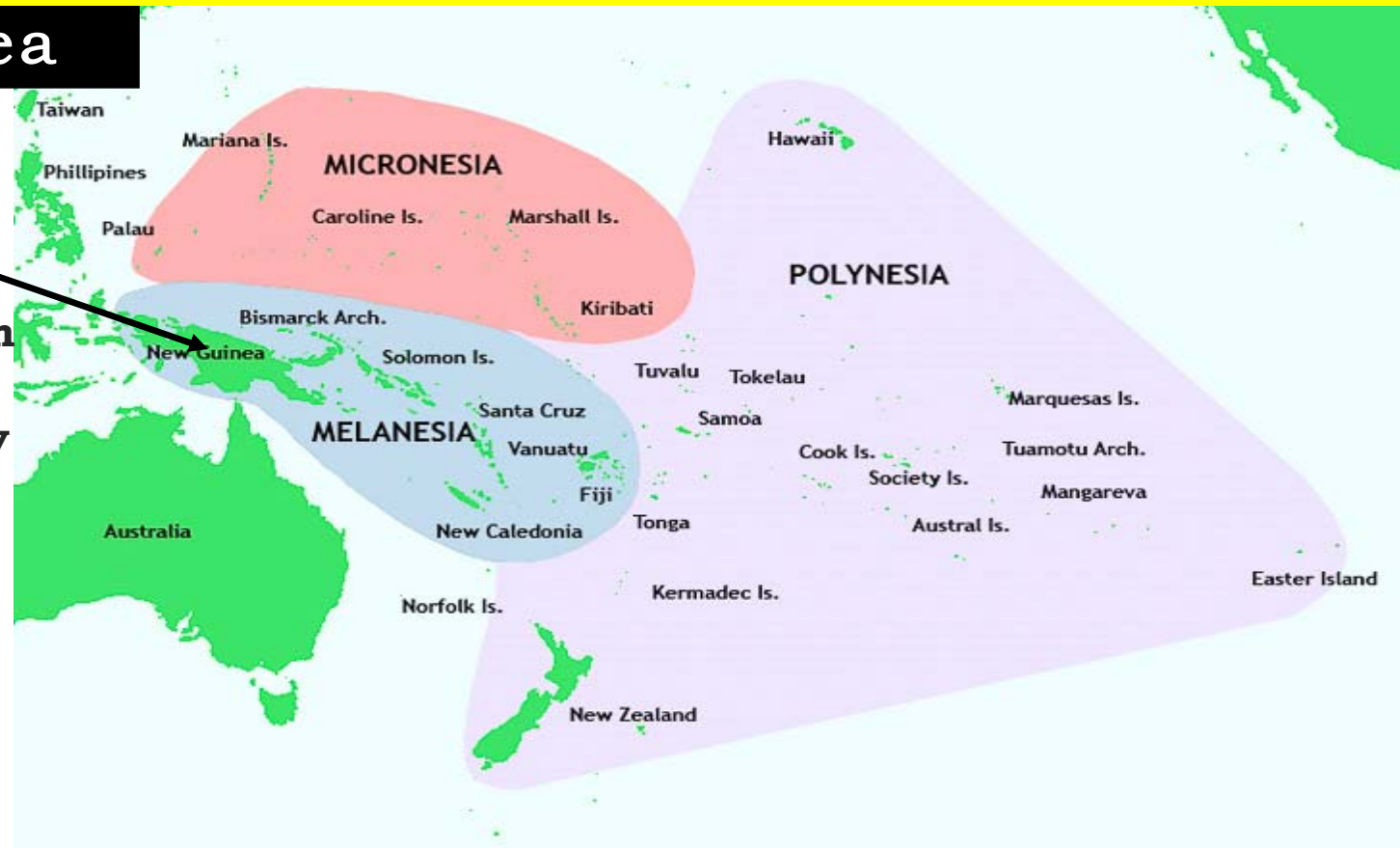
- Tourism
- Cash crops
- Military services and bases
- Fish exports
- Mineral Exports
- Mining and Atomic Testing
- Manufacturing (clothing) limited to Fiji and Cook Islands



# Papua New Guinea



- **Population est. 6.9 million**
  - *Most populated in the Pacific (75%)*
- **Port Moresby, Capital City**
  - *Est 500,000 population*
- **2 Submarine cables**
  - *PPC 1*
  - *APNG 2*
  - *New (Coral Sea cable 2019)*
- **3 Mobile Operators**
  - *Digicel*
  - *Bmobile Vodaphone*
  - *Telikom PNG*
- **Over 20 ISPs**





# ICT Challenges in the Pacific

**Unique geographical locations**

**Widely dispersed populations**

## ICT connectivity challenges

Satellite main means of connectivity  
2G/3G connectivity still dominant

**Lack of robust domestic backbone network**

**Digital literacy and high cost of internet access**

Low literacy rates in the Pacific, hence minimal digital literacy levels

**High vulnerability to natural disasters and climate change**

**Small market sizes in most PICs discourage private sector investment**

High cost of laying and maintaining subsea cables

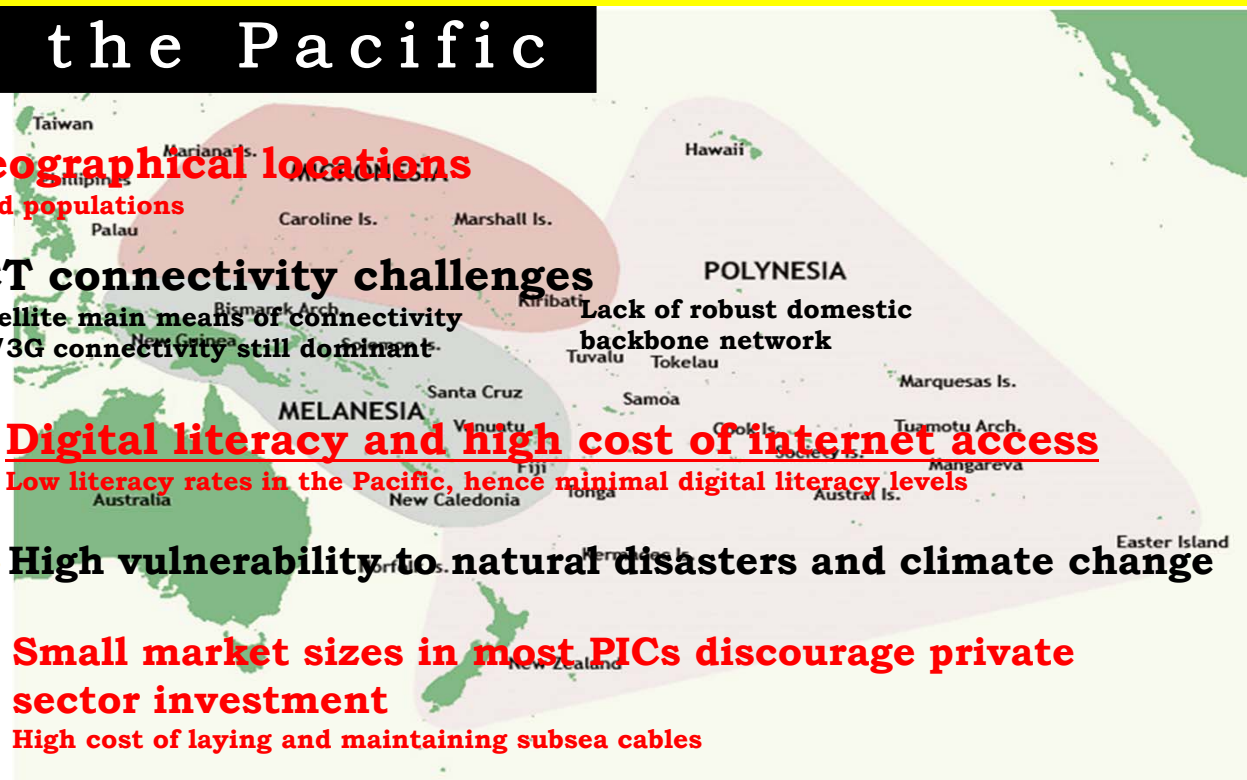
**Prioritizing funding for the ICT sector**

Institutional strengthening

**High business and operational costs**

**Lack of robust ICT Policy**

**Lack of electricity**



# Kiribati

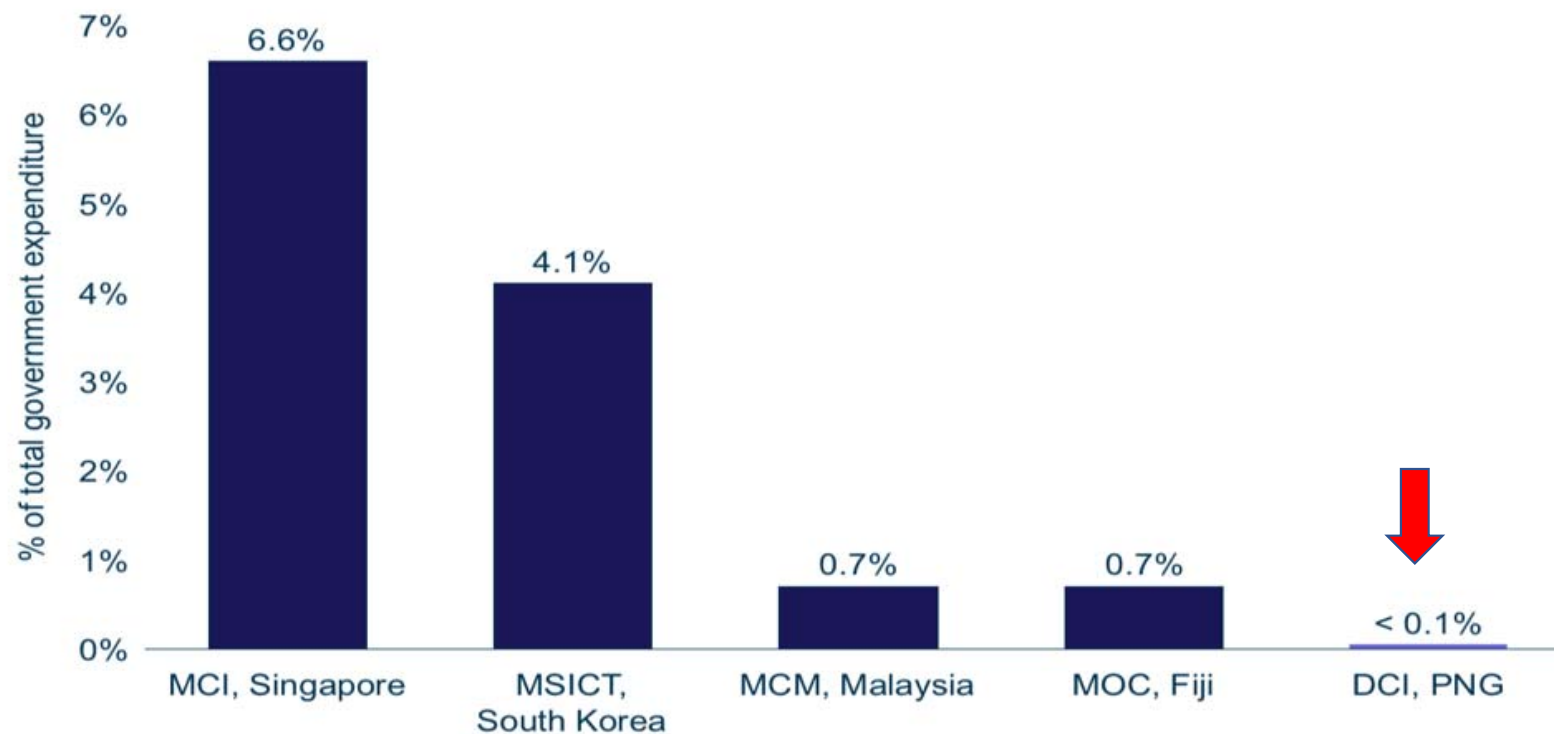
Total population just over 120,000  
(2015)



# Institutional Strengthening

## ICT policy department funding

2 Capacity building





# Promoting ICT in the Pacific region

- **ICTs are a key cross-cutting enabler for promoting and achieving each and every SDG.**
- **Has great potential to accelerate human progress**
- **Bridge the digital divide and to develop knowledge societies**
- **Rise in the mobile ecosystem (and smartphone penetration) contributing significantly to the economy and social wellbeing in the region**
- **Internet is empowering these communities and gives them an opportunity to actively participate in the global economy**



# Opportunities – Connectivity for the Pacific

**‘Focus on getting our people connected’**



## **Satellite Connectivity**

Kacific Satellite project

## **Submarine Cable Connectivity**

Coral sea Cable Project, Vanuatu ICL subsea cable connecting Solomon Islands

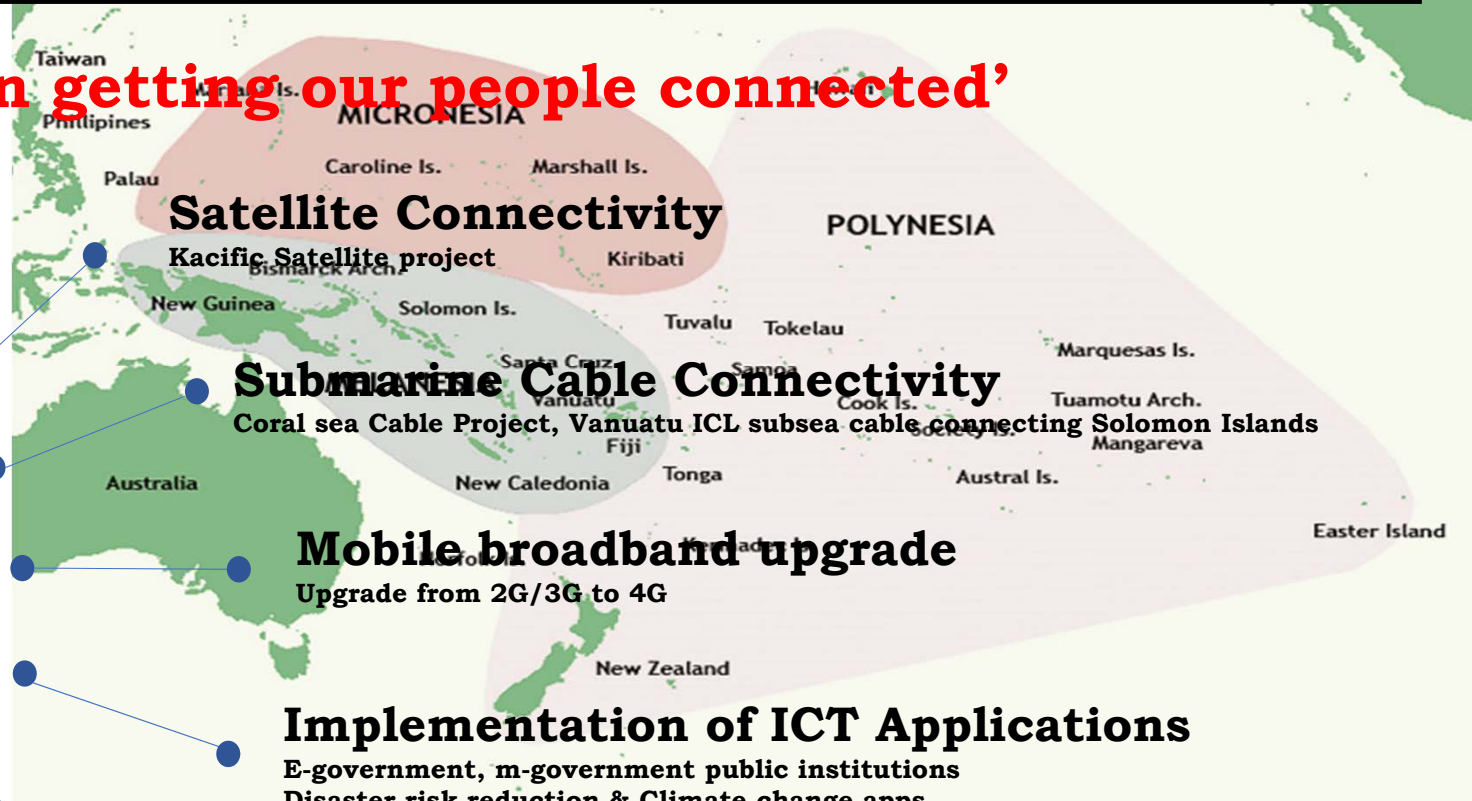
## **Mobile broadband upgrade**

Upgrade from 2G/3G to 4G

## **Implementation of ICT Applications**

E-government, m-government public institutions  
Disaster risk reduction & Climate change apps

## **Robust ICT Policy and Legislation**



# Outcomes..

## Opportunities – Connectivity for the Pacific

**'Focus on getting our people connected'**

### Satellite Connectivity

Kacific Satellite project

### Submarine Cable Connectivity

Coral sea Cable Project, Vanuatu ICL subsea cable connecting Solomon Islands

### Mobile broadband upgrade

Upgrade from 3G to 4G

### Implementation of ICT Applications

E-government, m-government  
Disaster risk reduction & Climate change

### Robust ICT Policy and Legislation

## • Connectivity (Satellite and Subsea cable)

- Rural connectivity for remote islands for digital inclusion
- Affordable broadband services across the Pacific
- High speed broadband connectivity
- Increase the demand for bandwidth

## • Mobile broadband upgrade

- Mobile connectivity has increased exponentially across the Pacific, however mobile broadband penetration low

## • Internet Exchange Point (IXP)

- Expensive international bandwidth reduced

- Access to information and high bandwidth applications that address social, economic and health needs
- Embedding ICT skills development in education and training curricula

# PACIFIC SATELLITE CONNECTIVITY PROJECT



**Development of Satellite Communications Capacity and Emergency Communications Solutions for Pacific Island Countries**



**To provide Ku band capacity**



**Five (5) locations already earmarked in PNG  
Up to 55 locations Pacific-wide**

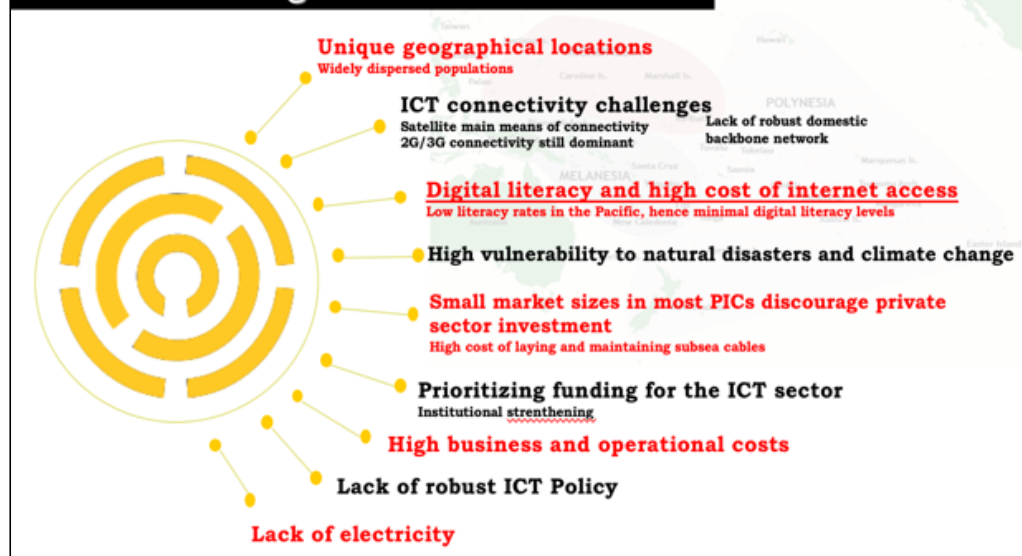


Image source: ITU



# Capacity building initiatives

## ICT Challenges in the Pacific



- **“Connect the Schools Project”**
  - Deliver broadband internet to primary, secondary and tertiary institutions
  - Establish public WiFi access for surrounding communities
  - Collaboration with ICT and Education ministries
  - Computers for schools
- **“Improve access to mobile broadband”**
  - Mobile broadband in under served areas
  - Increase uptake of mobile internet

## • Education and Training

- University of South Pacific remains lead university in the use of ICTs, both through USPNet and use of ICTs in DFL and in transformation of teaching and learning through ICTs
- Many regional players take an active role in capacity development, mainly in the form of workshops, e.g. ITU, PITA, APNIC, ICAAN, ISOC etc. and most regional universities have IT courses at the graduate and postgraduate level



A map of the Pacific region with Micronesia and Melanesia highlighted in light blue. The map shows various islands and archipelagos including Taiwan, Philippines, Palau, Mariana Is., Caroline Is., Marshall Is., Hawaii, Kiribati, Tuvalu, Tokelau, Samoa, Cook Is., Society Is., Austral Is., Easter Island, Marquesas Is., Tuamotu Arch., Mangareva, New Guinea, Bismarck Arch., Solomon Is., Santa Cruz, Vanuatu, Fiji, New Caledonia, Tonga, Norfolk Is., and New Zealand. A large black rectangle with the text "THANK YOU" is centered over the map.

**THANK YOU**

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