

Papua New Guinea's Experience

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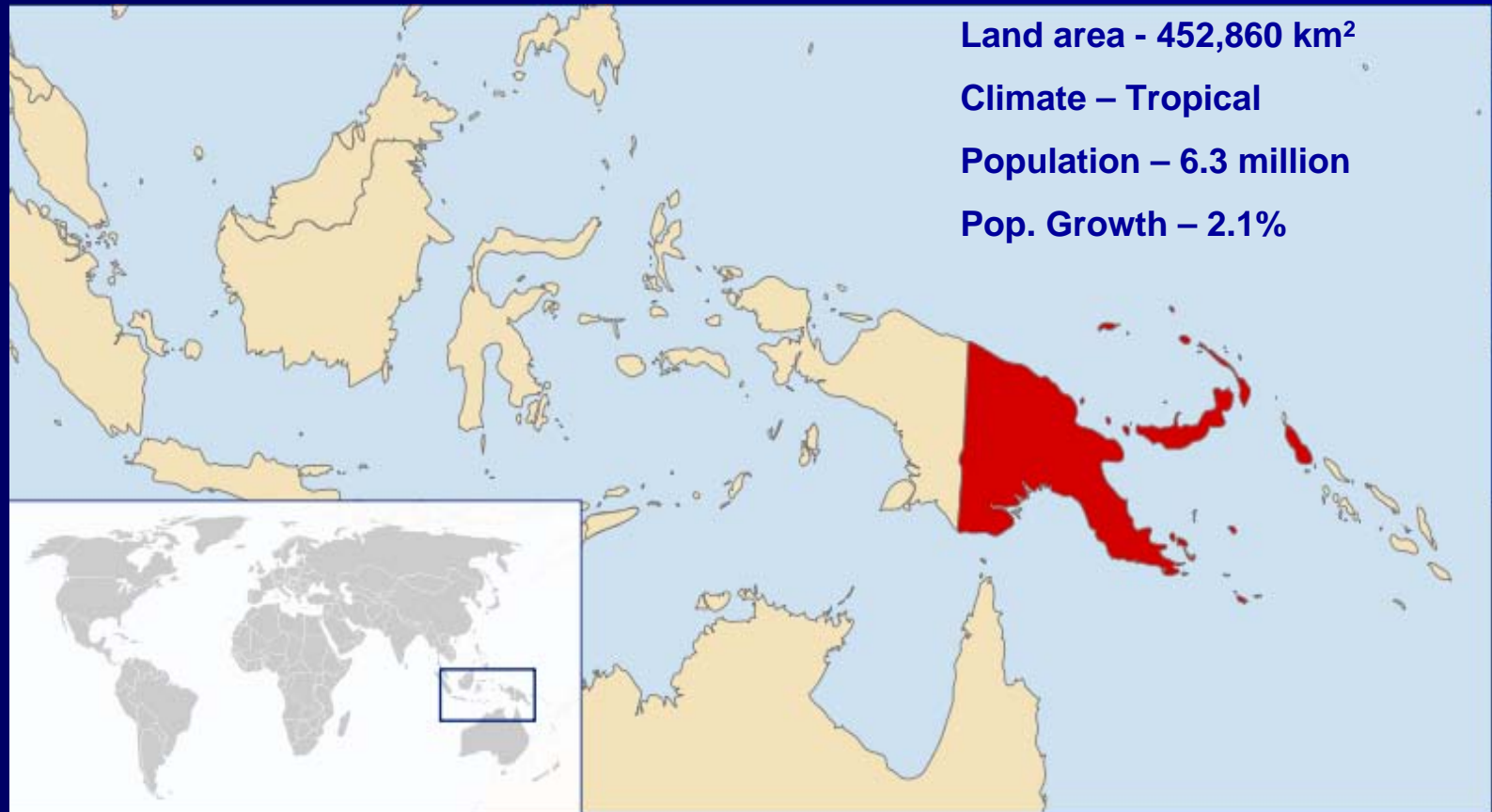
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Where is Papua New Guinea?



Background

- Most diverse countries on Earth
 - over 850 indigenous languages and at least as many traditional societies, out of a population of just under 6 million
- The estimated size of PNG road network
 - about 10,000 km of national roads and about 20,000 km of provincial roads.

What we have done

- TA 3004-PNG: Road Asset Management System, approved on 3 April 1998
- TA 3378-PNG: Road Asset Management System in the Provinces, approved on 28 December 1999
 - Road Asset Management System (RAMS) was first established in Papua New Guinea (PNG) in 1998
 - RAMS has inventoried 8,738 km (87%) of national roads, and about 7,700 km (39%) of provincial roads.

RAMS Architecture

- Road Information Database (RIDB)
- Geographic Information System (GIS)
- Highway Design and Management IV (HDM-4)

RAMS Operation

- RAMS for national roads is currently operated by the Maintenance Coordination Services (MCS) division of Department of Works (DOW).
 - MCS prepares an annual maintenance plan
 - The planning office of the Department of National Planning and Monitoring (DNPM) reviews the maintenance plan and determines the road maintenance budget of the following year.

Data Collection

- Two devices are used in the collection of road condition data:
 - About 1/3 of national roads are surveyed using RoadMaster, a device to automatically measure roughness and counts surface distresses.
 - In some areas, another device, Roughometer is used to collect roughness data.
 - The aim is to cover the whole network of national roads for every 3 years.

What are problems?

■ RAMS

- Calibration studies were undertaken by ADB TA's and by the Government of PNG. However, findings and results of studies have not been systematically incorporated into RAMS to support budget programming and maintenance planning.
- The operation of RAMS in provinces has been suspended due to limited funding and capacity of provincial authorities.

■ Data Collection

- Quality Management are not systematically designed and conducted in data collection, which put the data quality in question.
- The current location reference system is based on landmarks, which created problems for surveyors to identify road sections.

What is needed

- HDM-4 models need to be calibrated and reviewed regularly;
- Data collection capacity needs to be enhanced; and
- A quality management mechanism (QA/QC) is needed to ensure the data accuracy and consistence.

Thank you