Infrastructure planning in Papua

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Location
Population

- ~ 4.5 million residents
- Highest population growth rate

(Indonesian Health Ministry)
Forest cover

- 3rd largest tropical forest in the world
- Primary forest 40.8 million ha
- 86.2% primary forest

(Margono et al. 2014)
Forest loss

- Total primary forest = 261 000 ha (0.74%)
  2000 - 2012
- Lowland forest = 173 000 ha (.049%)
- Wetlands = 54 000 ha (0.15 %)

(Margono et al 2014)
Agriculture

- Undergoing a large expansion
- Merukae Integrated Food and Energy Estate
Infrastructure

- Ministry of Public Works and Public Housing
  - IDR 7,61 trillion in 2017

- Special Allocation Fund (DAK)
  - IDR 2,18 trillion
Infrastructure

- **Mining**
  - Grasburg (Freeport) Mine
  - Gold and copper

- **Port facilities**
  - Jayapura port revitalization
  - IDR 3.17 trillion, development and revitalisation of 9 ports

- **Hydroelectric dams**
  - Baliem Dam
  - IDR 4.7 Trillion cost
  - 230 million m³ capacity
  - 50 Mega Watts
Roads

- Trans Papua Highway
  - ~ 4325 km in length

- Ease commodity price disparity

- Aid development

Jalan Lintas Papua - Jubi/IST
Roads

- Papua – Kepulauan economic corridor
- Facilitate economic development
- Mining, Agriculture, Fisheries

(Indonesia master plan 2011-2025)
Challenges

- Mountainous
  - Risk
    - Landslides
    - High erosive potential
  - Costs
    - Cut and fill
    - Bridges
    - Construction and maintenance
Challenges

- Lowlands
  - Acid Sulphate Soils/Salinity
  - Seasonal inundation
  - Sensitive ecosystems - peat lands and mangroves
  - Climate change
Challenges

- Isolated villages
- Diverse cultural practices
- Traditional farming practices, crop selection, hunting
Stakeholder engagement

Environment agency team PP

Environment agency head PP

Central government representatives & NGO’s

Assistant governor PP
Proactive planning
Conclusions

- Epicenter of biological diversity and ecosystems values
- Population growth and development requirements
- Substantial infrastructure investment
- Great potential to optimize future development
- Proactive infrastructure and land-use planning is vital and time-critical
Thank you!