



UNITED NATIONS  
COMMITTEE OF EXPERTS  
ON GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT

Geospatial roadmap:  
informed policies,  
monitoring progress



# TOWARDS A NEW APPROACH



**“To change course, new approaches are needed.** This will require transformations in what governance systems value and how systemic risk is understood and addressed. **Doing more of the same will not be enough...** Without increased action to build resilience to systemic risk, the SDGs cannot be achieved... **Governments can, and should, invest in data...**”

**UNDRR  
Global Assessment Report 2022**



**United  
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Committee of Experts on Global Geospatial Information Management  
Secretariat

# GLOBAL DEVELOPMENT FRAMEWORKS

## 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Sendai Framework  
for Disaster Risk  
Reduction

Paris Agreement  
on  
Climate Change

Pact for the Future

Sevilla Commitment on Financing for Development

Our Ocean, Our Future:  
Call for Action

ABAS: A Renewed Declaration for  
Resilient Prosperity for SIDS

New Urban Agenda



The transformative nature of the 2030 Agenda requires new and innovative data sources and integration approaches to implement the SDGs and to 'leave no one behind'.

The SDGs are highly dependent on geospatial information and enabling technologies as the primary data and tools for relating people to their location, place and environment, and to measure 'where' progress is, or is not, being made, especially at local levels.

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“Need to include all parts of the statistical systems and new data source”

“Need for quality, accessible, timely, and reliable disaggregated data”

“Data on a wide range of topics, unprecedented amount”

Interoperability and integration of systems is crucial to harnessing the potential of all types of data

“Need for public digital infrastructure and services”

“Need for evidence-informed policy making, monitoring progress and accessing development financing, and capacity building for a stronger data governance and management”

# GLOBAL DEVELOPMENT FRAMEWORKS

# GLOBAL GEOSPATIAL FRAMEWORKS

## 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT



## UNITED NATIONS INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK (UN-IGIF)

**Sendai Framework for Disaster Risk Reduction**

**Paris Agreement on Climate Change**

**Strategic Framework on Geospatial Information and Services for Disasters**

**Global Statistical and Geospatial Framework (GSGF)**

**Framework for Effective Land Administration (FELA)**

**Operational Framework for Integrated Marine Geospatial Information Management (UN-IGIF-Hydro)**

**Pact for the Future**

**Sevilla Commitment on Financing for Development**

**Our Ocean, Our Future: Call for Action**

**ABAS: A Renewed Declaration for Resilient Prosperity for SIDS**

**New Urban Agenda**

Global Fundamental Geospatial Data Themes

Global Geodetic Reference Frame (GGRF)

National Institutional Arrangements in Geospatial Information Management

Role of Standards in Geospatial Information Management

Statement of Shared Guiding Principles for Geospatial Information Management

# Fundamental geospatial data, **bridge** to Sustainable development



Global Geodetic Reference Frame



Addresses



Buildings and Settlements



Elevation and Depth



Agriculture



Marine



Security & Public Safety



Resilience & Emergency Management



Land Cover and Use



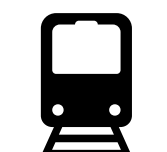
Land Parcels



Orthoimagery



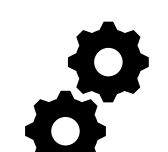
Physical Infrastructure



Transportation



Health



Logistics & Supply Chains



Water



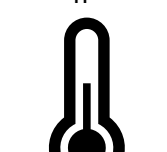
Functional Areas



Geographical Names



Geology and Soils



Climate Adaption



Construction & Infrastructure



Sustainable Energy



Mining & Extractives



Population Distribution



Transport Networks



Water



Biodiversity



Land Administration



Smart Cities

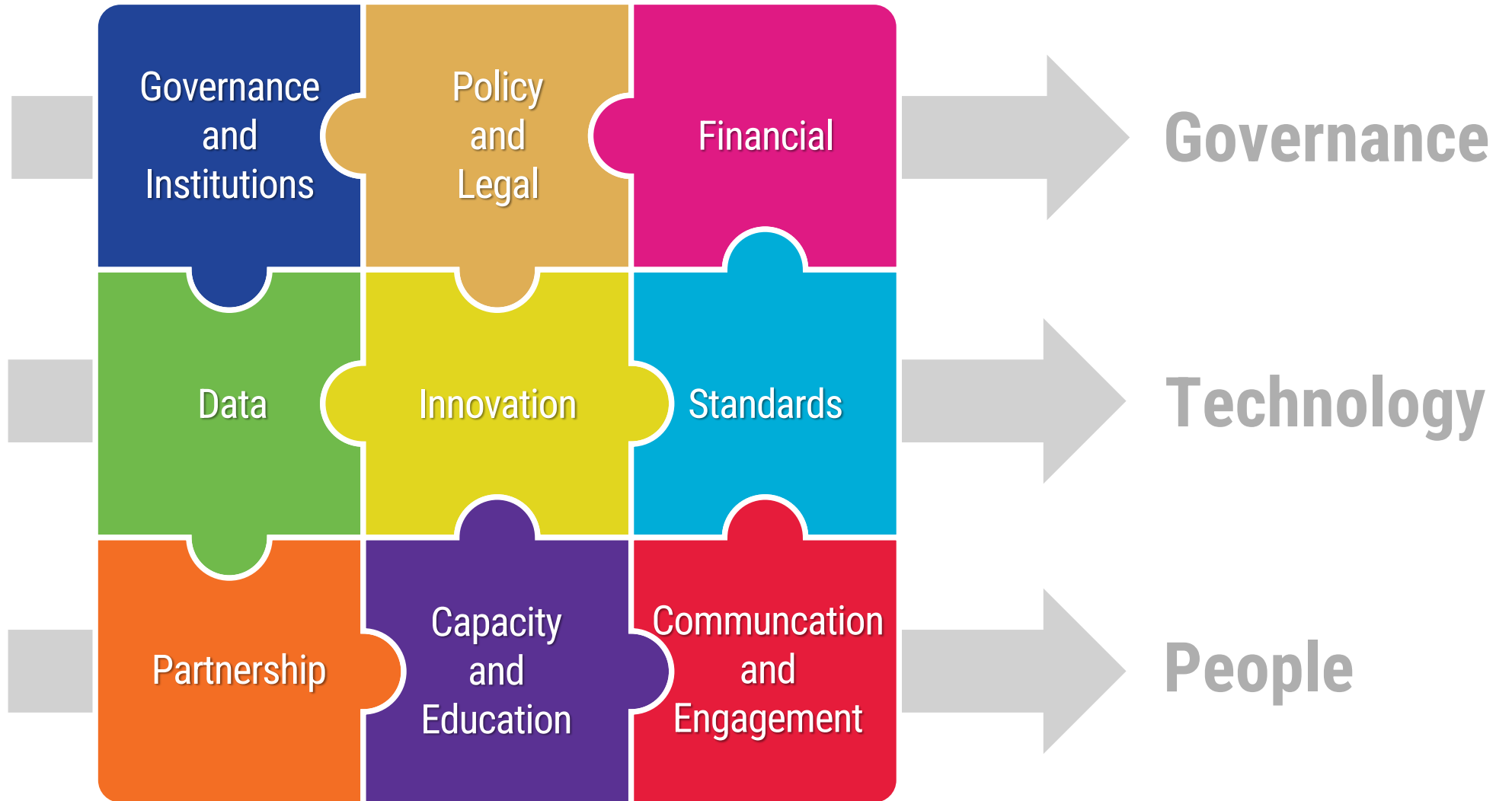


Industry



# United Nations Integrated Geospatial Information Framework (UN-IGIF)

## 9 Strategic Pathways



# 4th International Conference on Small Island Developing States

## *Charting the Course Toward Resilient Prosperity*

27-30 May 2024; Antigua and Barbuda

Participate

About

“**[Geospatial information]** is crucial for planning, decision-making, and implementation across various sectors—health, education, agriculture, urban planning, and environmental management.”

Steadroy Benjamin  
Deputy Prime Minister  
Attorney General  
Antigua and Barbuda  
October 2024



SIDS countries workshop on the UN Integrated Geospatial Information Framework in Antigua and Barbuda (2024)

## National priorities



Disaster resilience  
Oceans and resources  
Economic prosperity  
Employment  
Social well-being  
Tourism  
Climate mitigation  
Health services  
Social programs  
Rising sea levels  
Tourism  
Environment



## Data holdings



Housing  
Parcels  
Coastal data  
Road assets and conditions  
Emergency services  
Gas pipelines, oil, power lines  
Water networks  
Building Layers  
Population  
Schools and education  
Health facilities and services  
Statistical values

## Custodian

Ministry of Interior  
Ministry of Sea  
Ministry of Transport  
Ministry of Resources  
....



5 GENDER EQUALITY



ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS



women's full and effective participation and equal opportunities for leadership at all levels of decision-making  
Proportion of seats held by women in National Parliaments in 2020 (%)

**GLOBAL**

**CONTINENTAL**

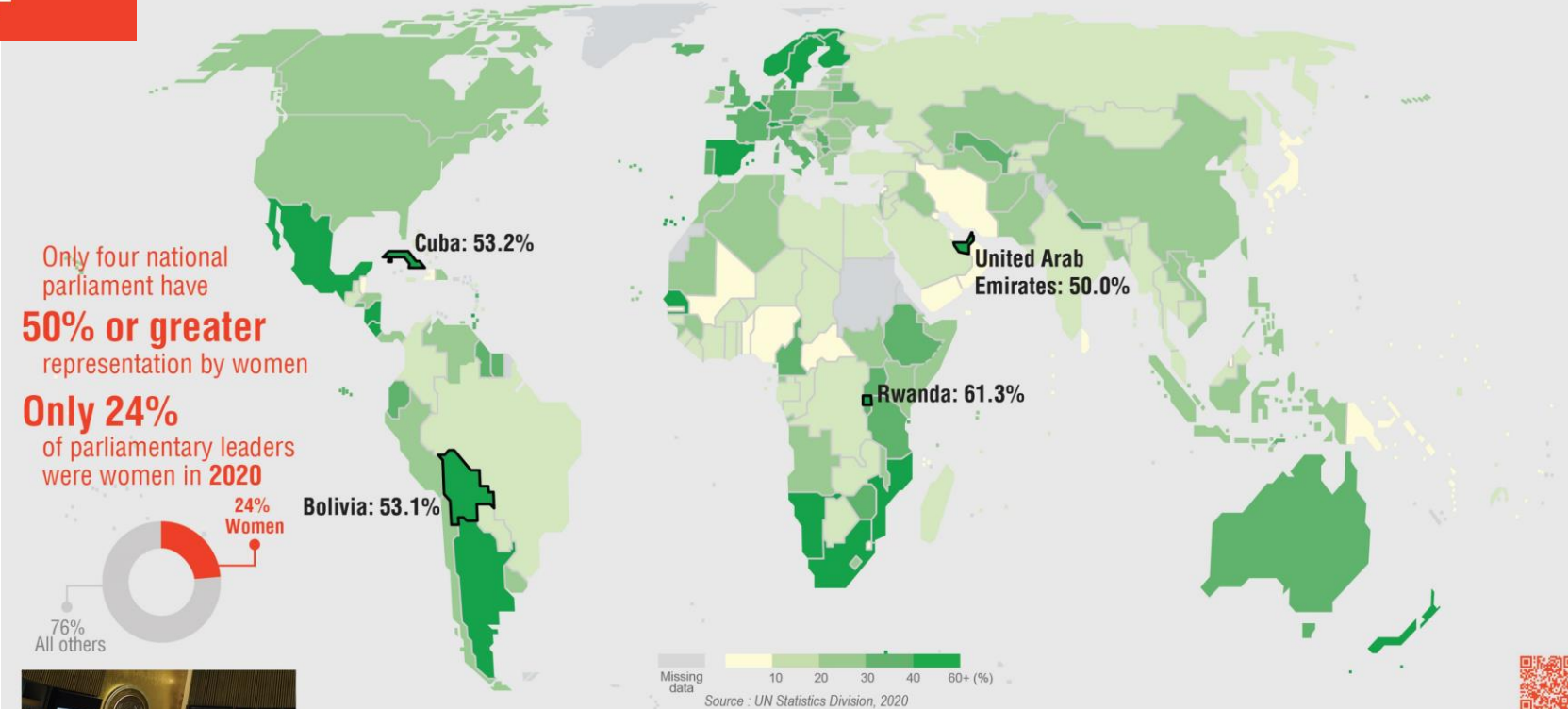
**REGIONAL**

**NATIONAL**

**PROVINCIAL**

**LOCAL**

**PIXEL**



◀ Opening of the sixty-fourth session of the Commission on the Status of Women where Member States adopted a declaration for Action on gender equality, 25 years ago.  
UN Photo - Loey Felipe, 2020

▲ More girls are going to school, fewer girls are forced into early marriage, more women are serving in parliament and positions of leadership, and laws are being reformed to advance gender equality. Despite these gains, challenges remain: discriminatory laws and social norms remain pervasive, and women continue to be underrepresented at all levels of political leadership as depicted on the map showing indicator 1.5.1 (2020) on the proportion of seats held by women in national parliaments.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.  
Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.  
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

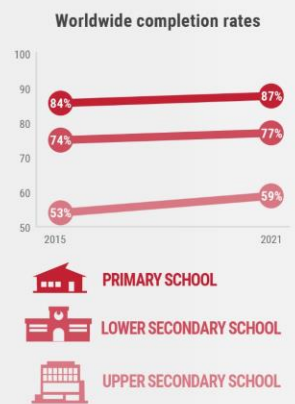


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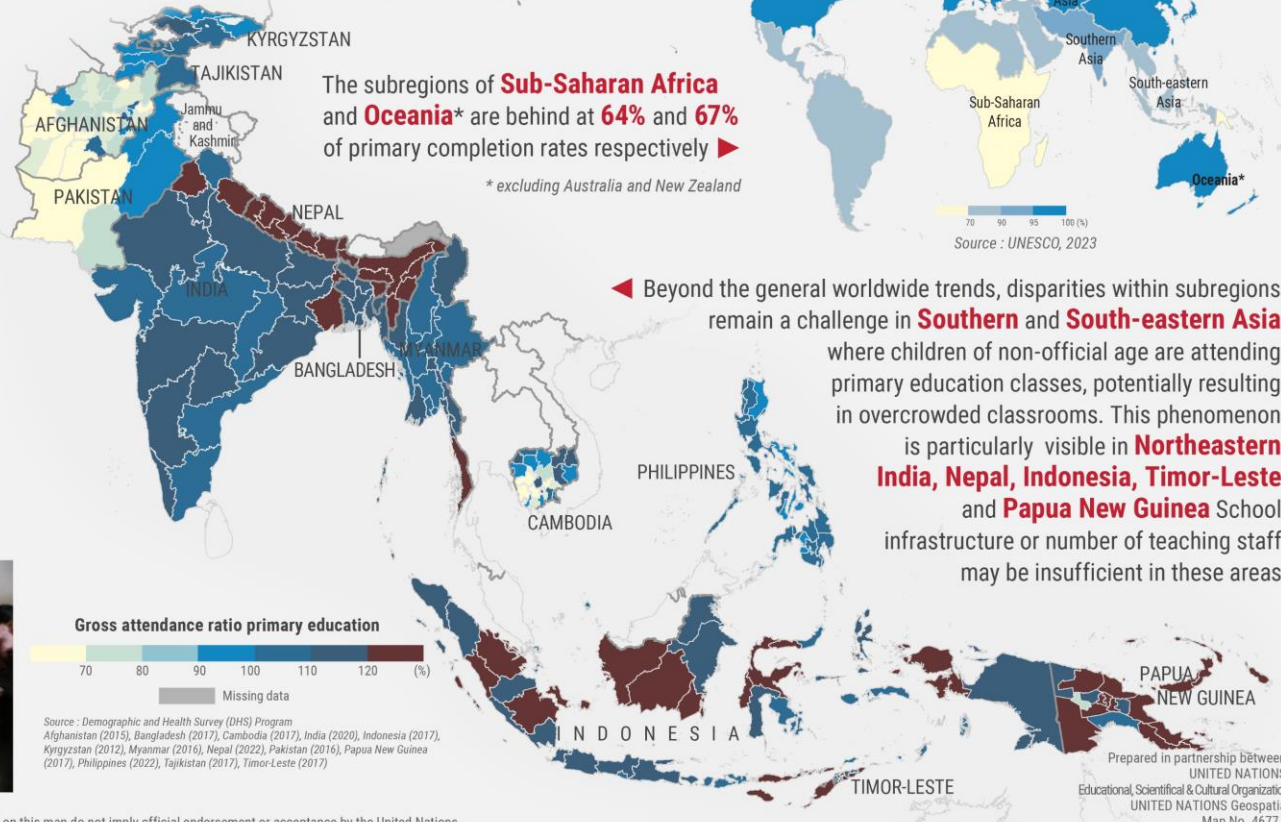


By 2030, ensure that all girls and boys complete free, equitable and quality primary  
Completion rate of primary education and gross attendance

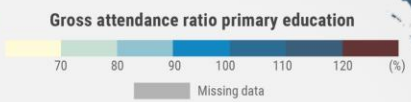


Primary and secondary **school completion rates are rising to 87% worldwide** but the pace is slow and uneven across the regions

Completion rate of primary education in



A girl is studying in her class with other peers in a primary school in Mumbai, India ▼  
UNICEF Photo - Bronstein, 2017



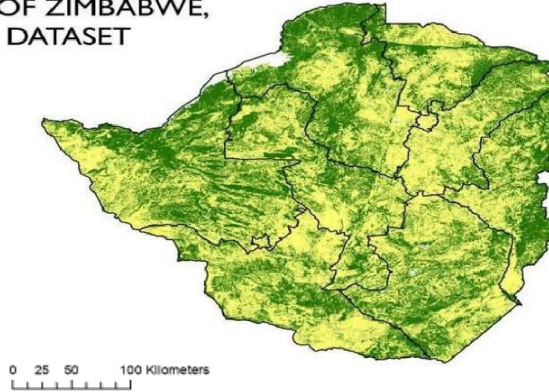
Source - Demographic and Health Survey (DHS) Program  
Afghanistan (2015), Bangladesh (2017), Cambodia (2017), India (2020), Indonesia (2017), Kyrgyzstan (2012), Myanmar (2016), Nepal (2022), Pakistan (2016), Papua New Guinea (2017), Philippines (2022), Tajikistan (2017), Timor-Leste (2017)

Beyond the general worldwide trends, disparities within subregions remain a challenge in **Southern** and **South-eastern Asia** where children of non-official age are attending primary education classes, potentially resulting in overcrowded classrooms. This phenomenon is particularly visible in **Northeastern India, Nepal, Indonesia, Timor-Leste** and **Papua New Guinea** School infrastructure or number of teaching staff may be insufficient in these areas

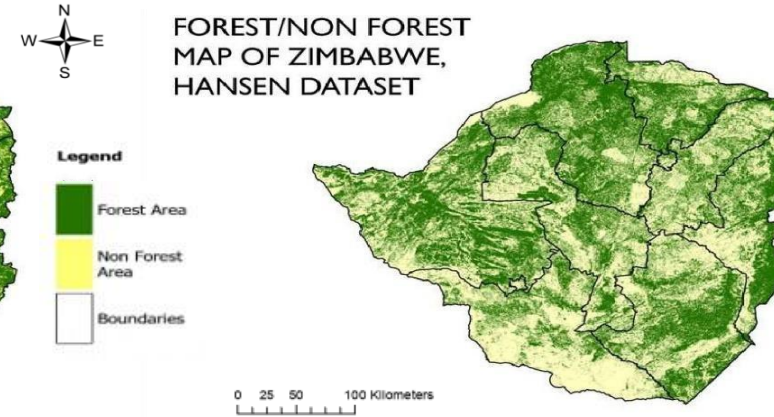
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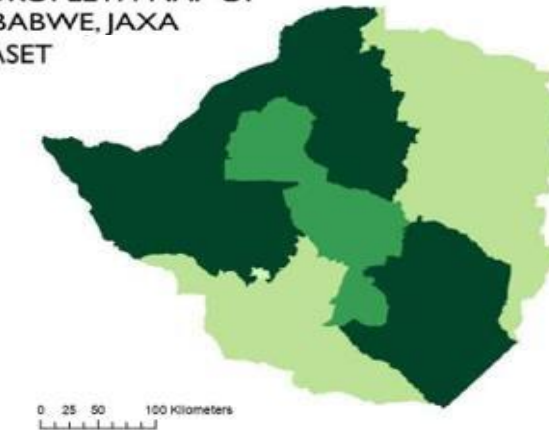
FOREST/NONFOREST MAP OF ZIMBABWE, JAXA DATASET



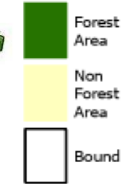
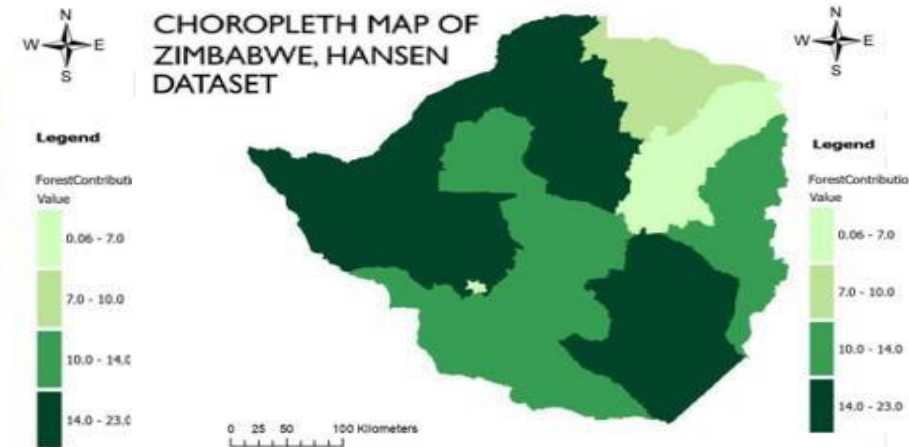
FOREST/NON FOREST MAP OF ZIMBABWE, HANSEN DATASET



CHOROPLETH MAP OF ZIMBABWE, JAXA DATASET

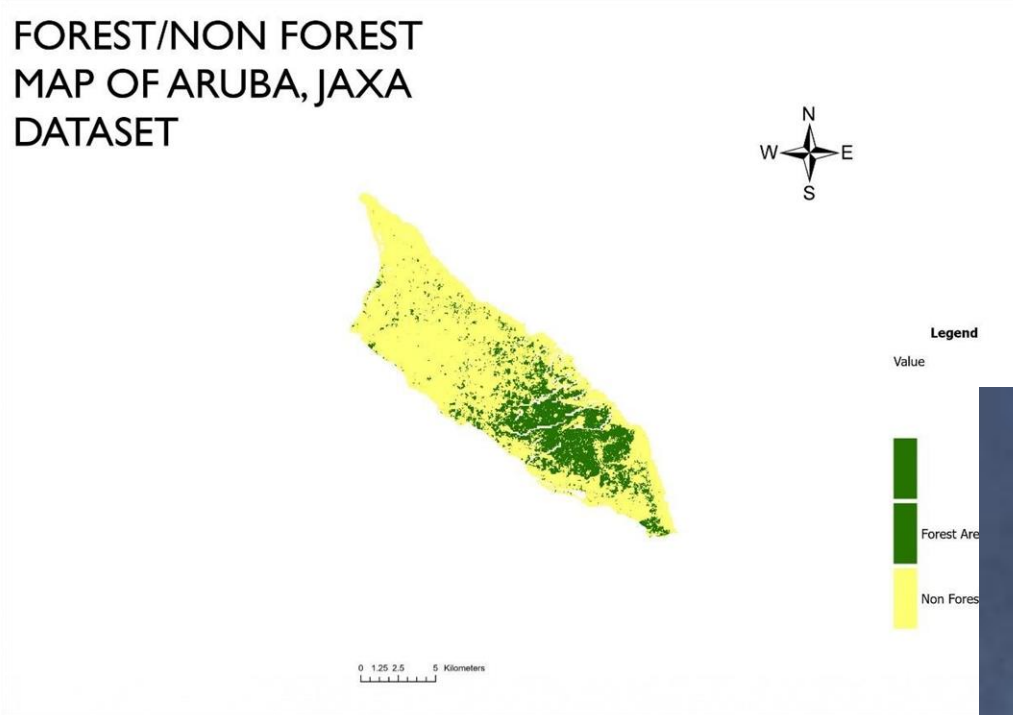


CHOROPLETH MAP OF ZIMBABWE, HANSEN DATASET

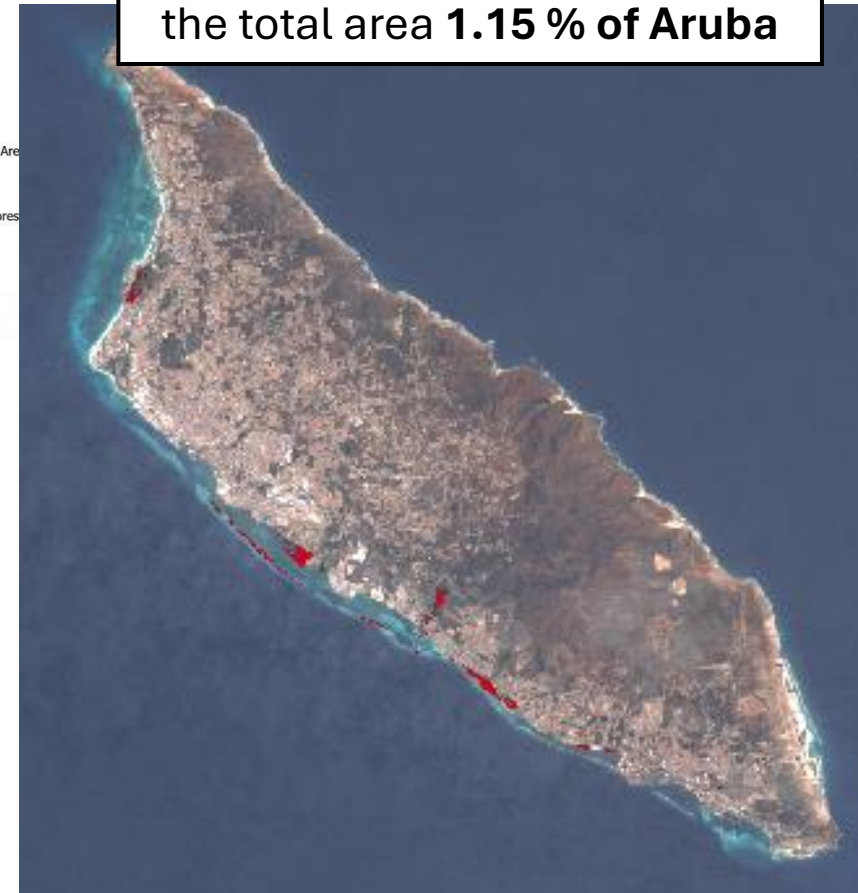


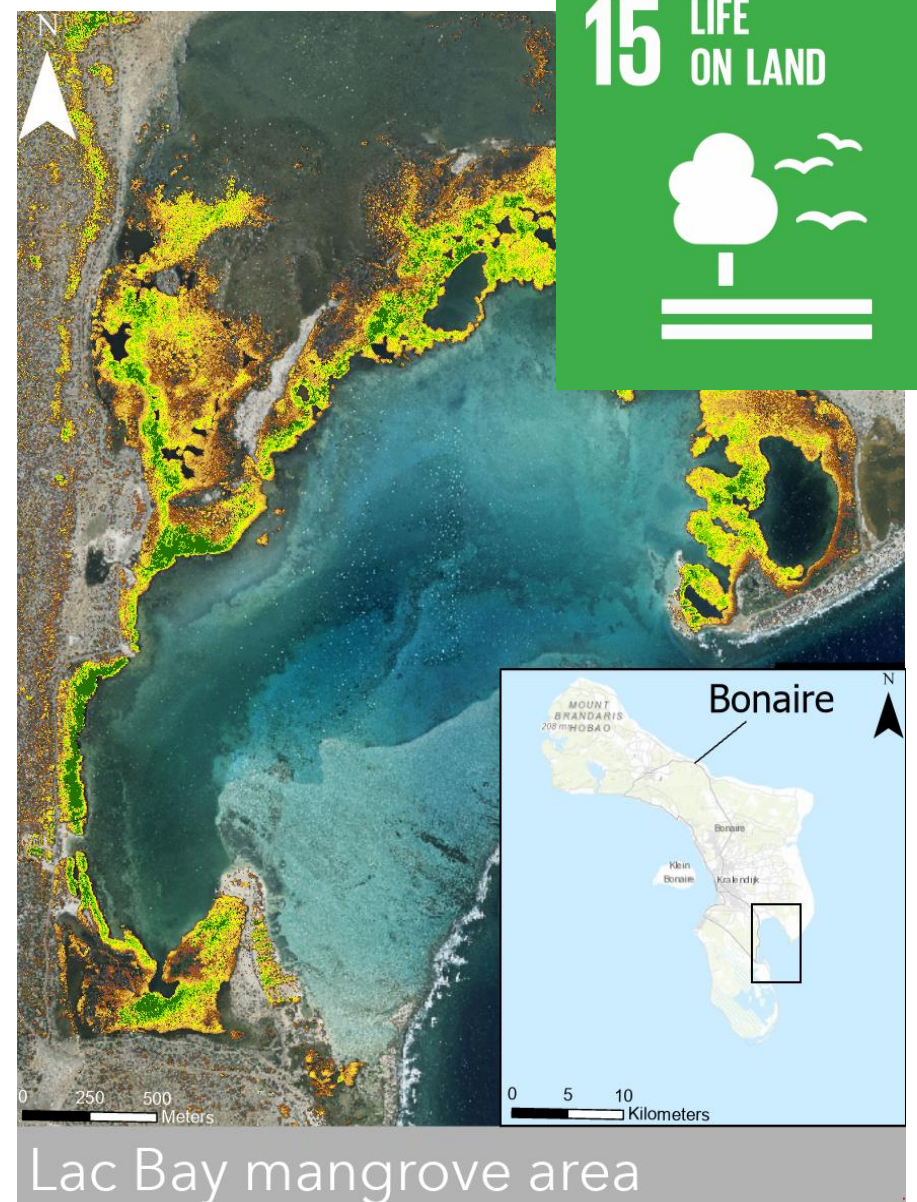
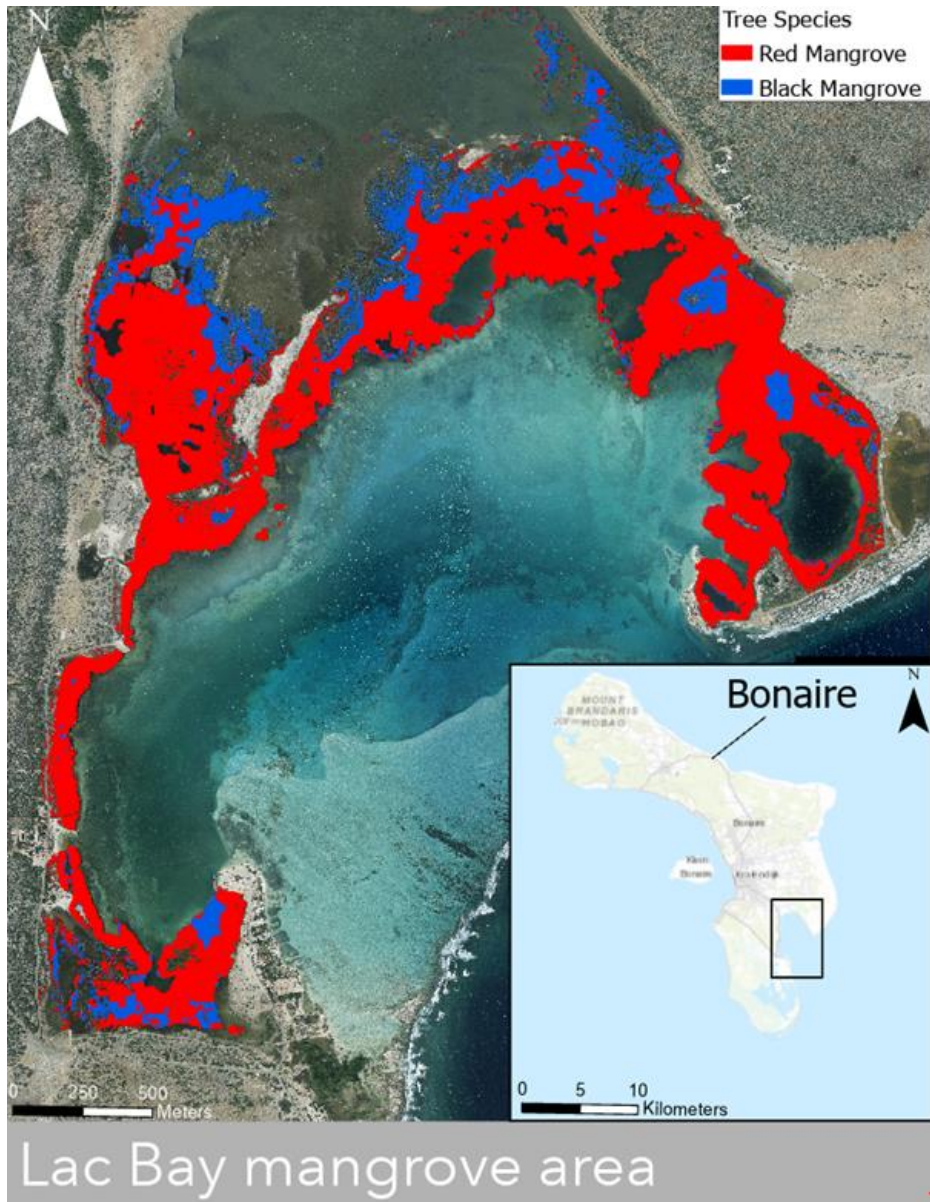


FOREST/NON FOREST  
MAP OF ARUBA, JAXA  
DATASET



SDG indicator 15.1.1  
Forested Area as a Proportion of  
the total area **1.15 % of Aruba**



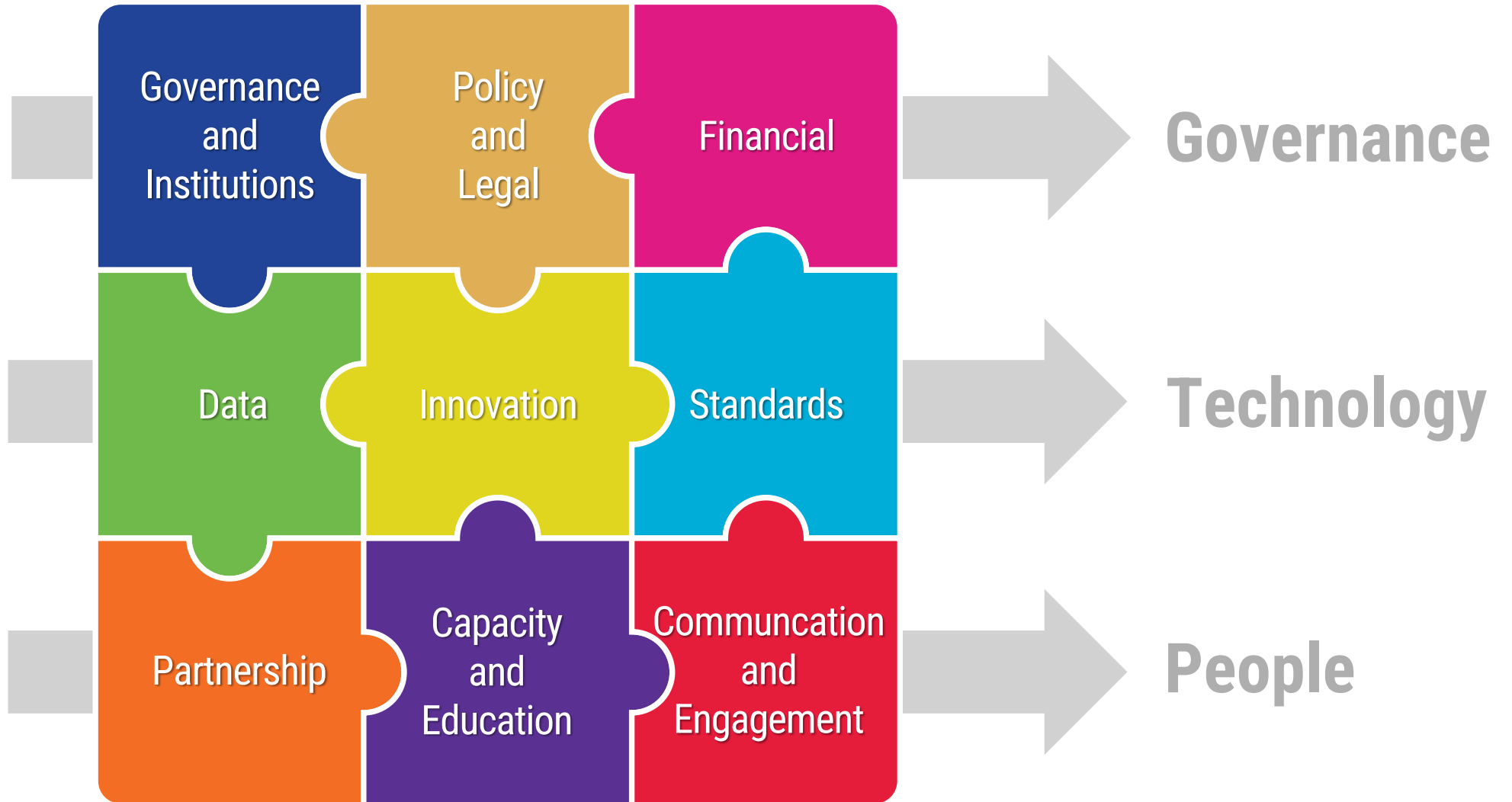


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# United Nations Integrated Geospatial Information Framework (UN-IGIF)

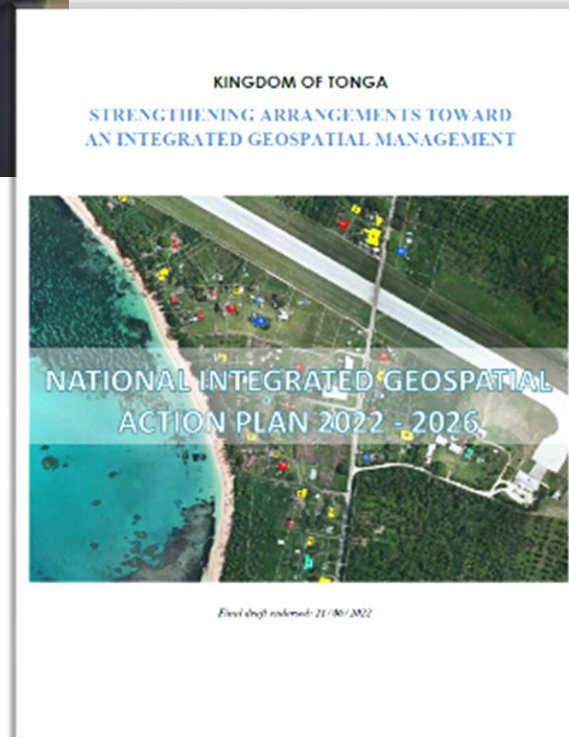
## 9 Strategic Pathways





“ Today is a digital era; **geospatial information** is a digital fuel for government and services. Data from many sources. We need to **act with knowledge and evidence.** ”

Hon. Samiu Vaipulu  
Deputy Prime Minister  
Kingdom of Tonga  
September 2023

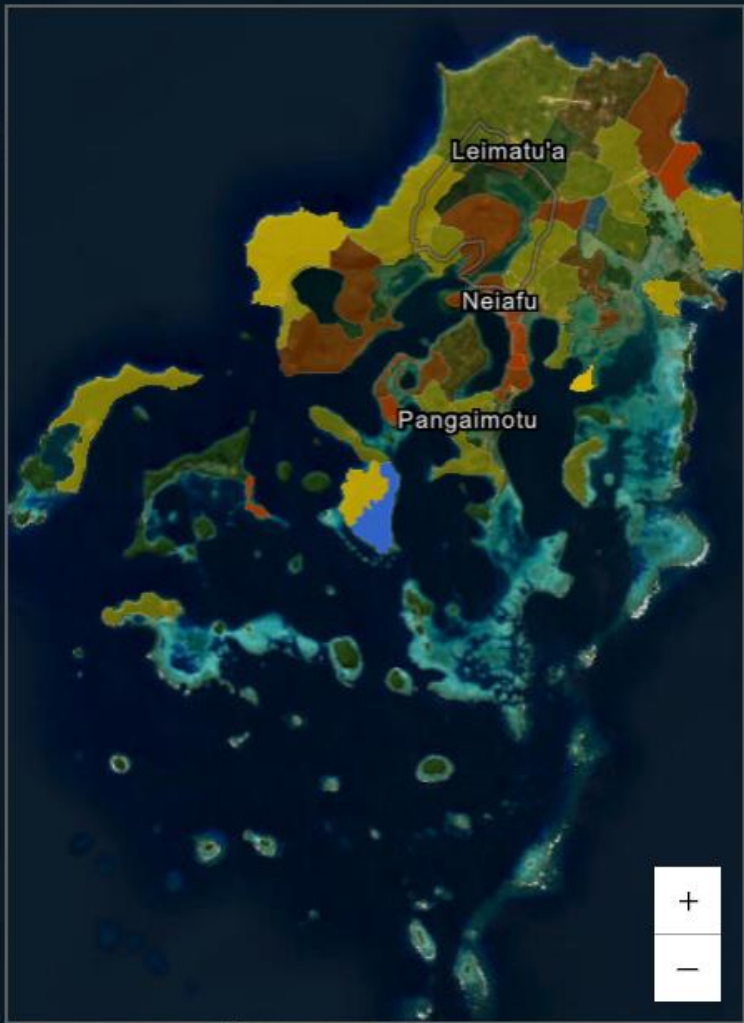


“ The implementation of this **Action Plan** will provide Tonga with a truly **national** collaborative approach to improving the management and **use of this valuable digital asset.** Strengthen government at all levels and strengthen industry. ”

Total Population

Ratio Female to Male

Predominant Education Level



Predominant category

Upper Secondary	Lower Secondary
Primary	

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# A world **where** geospatial information solves local to global challenges



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