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**PVBLIC**  
FOUNDATION



**SDG**  
DATA  
ALLIANCE

## **SDG Data Alliance:** **Geospatial Information** **Implementation Experiences** **and Challenges**

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# Our Purpose

## PUBLIC Foundation

POWERING  
NEW POSSIBILITIES  
FOR SOCIAL IMPACT

PUBLIC  
FOUNDATION

Since 2012, PUBLIC Foundation has mobilized **media, data, and technology** for **sustainable development, social impact** and **change**, as part of our vision for a sustainable planet.

A **global leader** in reimagining solutions to the world's most pressing challenges, we are a **strong advocate** of the **Sustainable Development Goals (SDGs)**, helping to accelerate and advance their implementation through **impactful partnerships and innovative programs**.

Our commitment to **collaboration** ensures we bring **people, ideas, and resources** together to drive groundbreaking **solutions** and achieve extraordinary **outcomes**.

Launched in July 2021, the **SDG Data Alliance** is a **strategic 'impact program'** within PUBLIC Foundation, fostering **economic resilience in developing nations**, through **data-driven insights** and **innovative tools and technologies**.



# Creating Impact

## SDG Data Alliance

The **SDG Data Alliance** is an open, **multi-stakeholder partnership** comprising the **private sector, foundations, UN organizations, and national and local governments.**

The Data Alliance brings **geospatial technology capabilities, resources and training** to developing countries (especially LDCs and SIDS) with the goal of **accelerating the achievement of national sustainable economic development.**

Our **vision** is for **governments** to be able to **achieve the SDGs** with **people, data, technology, and processes**, creating a just, healthy, and prosperous world where no one is left behind.

The **mission** of our **partnership** is to build the **capacity of governments** and other key stakeholders to **achieve the SDGs** through the creation of **effective systems and frameworks** for monitoring progress on sustainable development using **leading geospatial technology.**





# Why the SDG Data Alliance

## Our Geospatial Data History

*“Early SDI initiatives focused on data, accessibility, and services, the core components being policy, access network, technical standards, people (including partnerships) and data.*

*These soon led to the development of, firstly product-based SDI approaches, where models tended to be data producer and national mapping agency led, focusing on data production, database creation, and centralization; and then process-based SDI approaches, driven more by data sharing and re-using data collected by a wide range of agencies for a great diversity of purposes.”*



# Why the SDG Data Alliance

## Historical 'Data' Problems

In **2014** the **SAMOA Pathway** reaffirmed the commitment of small island developing States (SIDS) to:

- Strengthen the availability and accessibility of data and statistical systems, and to
- **Enhance the management of complex data systems, including geospatial data platforms, by launching new partnerships or scaling up existing initiatives.**

In **2015** the **United Nations 2030 Agenda** (in launching the 17 SDGs) committed to:

- **Exploit the contribution** to be made by a wide range of data, including **Earth observations and geospatial information.**

And **by 2020** to:

- Enhance capacity-building support to developing countries, including for LDCs and SIDS, to **increase significantly the availability of high-quality, timely and reliable data disaggregated by geographic location and other characteristics.**





# Why the SDG Data Alliance

## Historical 'Data' Problems


### Our World is data rich...and a data desert

Despite the significant advances in **data acquisition and geospatial technologies** across the world in the past decade, many **developing countries** still **lack the resources, tools and technology** to track progress toward their sustainability and climate goals.

These gaps make it difficult for countries to **achieve the SDGs** and make **informed decisions** that lead to **better policies and**

Countries continue to face **impediments** that limit their ability to address the **adverse impacts** of **climate change, inequality, limited resources, vulnerability to external shocks, geographic remoteness, and institutional challenges.**

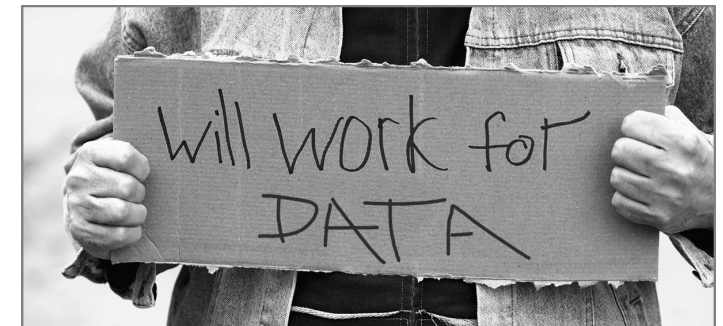
And..... as a global community we **never really tried** hard enough to **disaggregate data** by **geographic location** and other characteristics.



Because country data is still largely invisible. Agencies do not know how to best use it and extract the real value, purpose and impact from it!



Why?



# SDG Data Alliance

## Our first 3 years



Support developing countries with the creation of SDG Data Hubs and accelerate achievement of the SDGs.



Support implementation of UN-IGIF Country-level Action Plans in beneficiary developing countries.



Strengthen geospatial skills development and increase access to GIS technology, data, and resources.



Increase citizen engagement with the use of data, SDGs tracking and the SDG Data Alliance's work.



Strive to make SDG Data Alliance funding sustainable and increase funding sources for countries.





# Tonga's National

## Geospatial Action Plan

Tonga's **National Geospatial Action Plan** was launched by the Deputy Prime Minister in September 2023.

With a **Vision** for a “higher quality of life for all Tongans supported by **accessible, accurate and reliable integrated geospatial information**”, the Action Plan emphasizes the importance of **data and technology** in addressing the changes that Tonga faces.

The **Mission** of the Action Plan is to “promote and support **coordination and collaboration to achieve integrated geospatial information management** and leverage it for **decisions and sustainable solutions** to national needs and opportunities.”

*Deputy Prime Minister of Tonga, Hon. Samiu Vaipulu:*

**“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.”**



**KINGDOM OF TONGA**

**STRENGTHENING ARRANGEMENTS TOWARD  
AN INTEGRATED GEOSPATIAL MANAGEMENT**





# The Power of a National

## SDG Data Hub

A **Data Hub** is an easy-to-configure **cloud platform** that organizes **people, data, processes and tools** to communicate **data-driven solutions** and **insights** more effectively with **government agencies**, and if you choose – stakeholders and the community.

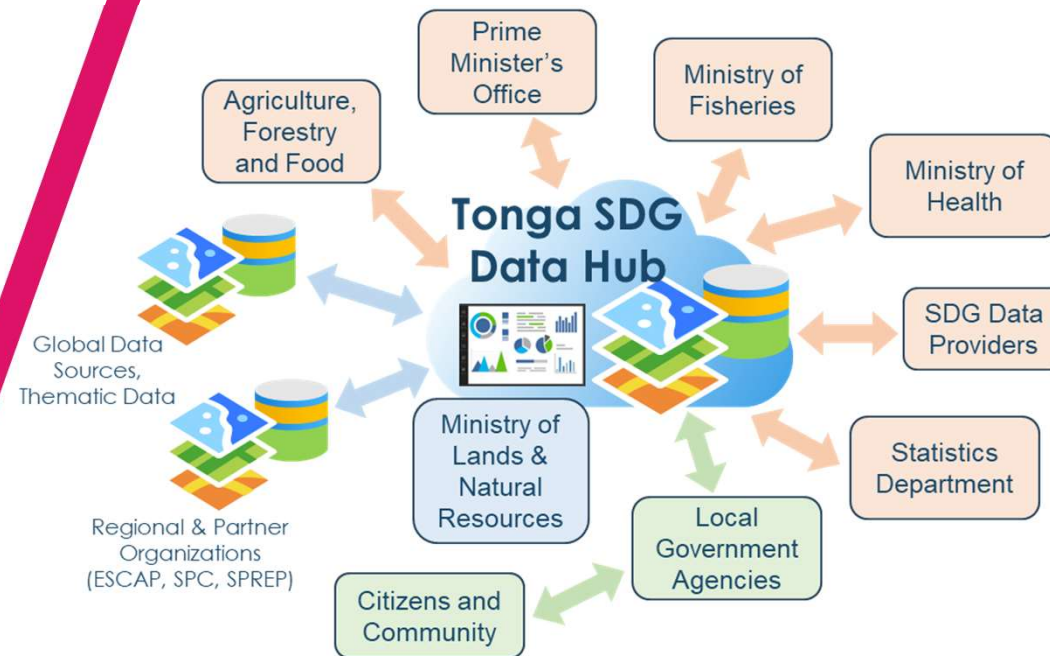
Data Hubs can easily be **connected, expanded** and **integrated**, from one system to another, creating an information '**system-of-systems**' leveraging the Internet, web services and Cloud.

Data Hubs dynamically combine, **data, applications, maps, dashboards, stories** and status reporting.

Data is '**shared**' by agencies and access controlled. **Agencies remain custodians** of their data, and decide what data to share, whom to, how, and when.



As an integrated system, **Tonga's SDG Data Hub** will be scalable, strengthening the technical capacity of Tonga and supporting national development priorities. It will leverage available and new data sources, enabling technologies, and information systems management; allowing government agencies to visualize and share their data, monitor public investments, identify critical interlinkages, track progress on the SDGs, and make better and more informed decisions towards investing in sustainable social and economic growth.



# SDG Data Alliance

## But...we have had challenges

**Mixed levels of engagement by countries:** Resulting in slower than expected progress in developing UN-IGIF Country-level Action Plans (CAPs) and subsequently deploying SDG Data Hubs.

**Variability in rates of progress, completion and endorsement of CAPs:** Although implementation was to be 'country led, owned and self-paced', it has transpired that demonstrating tangible progress and outcomes towards CAP implementation has taken much longer than originally anticipated.

**Low implementation rate of SDG Data Hubs:** A major challenge for countries has been limited access to reliable, relevant, timely and quality data; and then integrating, visualizing and sharing that data.

**Limited ability to sustain and grow funding resources:** While the Data Alliance continues to have its same four core partners, our ability to grow funds and resources has been a challenge. This directly impacts our ability to directly support the needs and expectations of countries engaged in the Alliance.





# SDG Data Alliance

## While learning along the way...

Even today, in our highly connected technological world, the availability of and accessibility to **data**, as a basic human right, **remains the missing link**.

**Developing countries**, and SIDS in particular, have **limited resources, capacities and capabilities** available to them. This often includes skills in **applied geography and specific GIS training**. To scale some of our efforts we will need to focus more such training packages. This may even have to include: 'How GIS fits into an organization?'

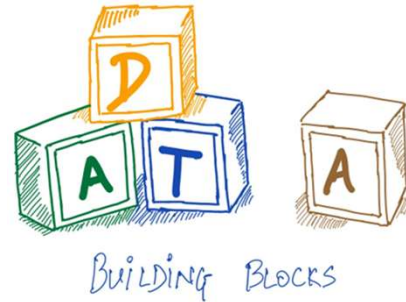
National geospatial agencies and institutions are finding it difficult to demonstrate the '**integrative systems**' nature of **data**, the power of being able to **integrate and visualize national fundamental data themes with SDG-relevant data** requirements and leveraging web services and the cloud with innovative **Data Hub technology** capabilities.

We need to '**keep things simple**' while also advancing the 'starting point' for countries. For example, providing **pre-populated Data Hubs** that countries can then **build upon** and configure themselves. This will quickly **build skills, capability, momentum, and impact**.



## Our Focus on 'Data'

### Often the missing link!

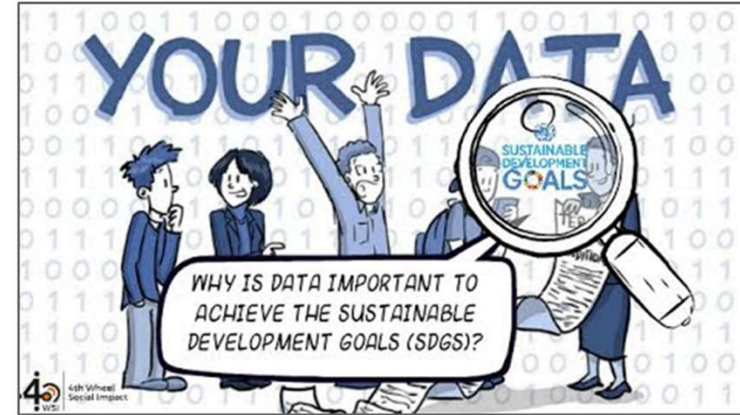


There is a recognition of the urgent **'data needs, availability and use'** towards the wider digital data and information ecosystem, including **geospatial, Earth observations** and other **location-based** information.

However, **data on its own has no inherent meaning**. It is like a pile of building blocks – you can't tell what they represent without arranging them.

While many innovative **technologies** and **data acquisition** capabilities exist, many countries either **do not have access to data** or know how to extract more **value and purpose** from it.

New opportunities exist for countries and communities to take a proactive **'data centric'** approach, to evolve the SDG and SIDS frameworks towards a more **robust and implementable geographic approach**.





# The Data Value Chain

## Ensuring Data has Impact

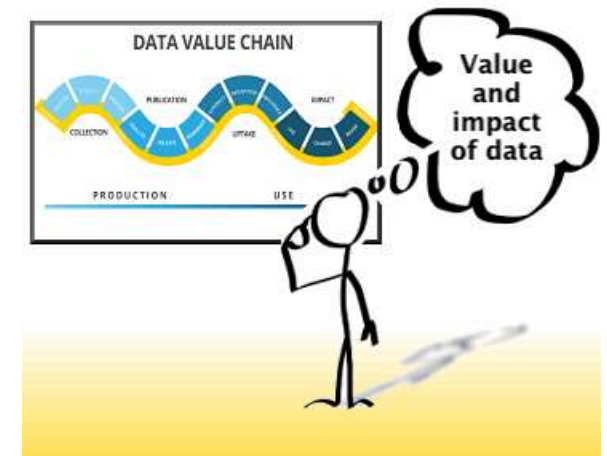
If data is **arranged, organized and structured**, it then becomes the building blocks of information.

Then the real value begins...

From (often integrating) **Data** we build **Information** enabling us to create **Knowledge** (or **Understanding**) which provides with it **Insights** enabling us to then make **Decisions** in such a way as to take **Action** that has measurable **Impact**.

**The Data Value Chain:**

**Data > Information > Knowledge/Understanding > Insights > Decisions > Action > Impact**



# The Data Value Chain

## Applying **Data** to real problems

### Aligning national data assets

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

### ...to 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







# 2025 Program of Work



## SIDS Global Data Hub

SIDS Voices | SIDS Future | SIDS Solutions

Charting the Course Toward Resilient Prosperity

## Building Country Map Portfolios



Collection

### Fiji Map Portfolio

A collection of data, maps, and apps for the Republic of Fiji.

Get started



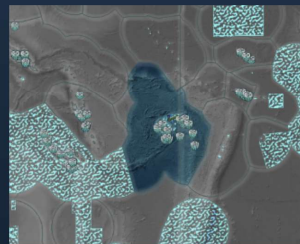
1 Infrastructure



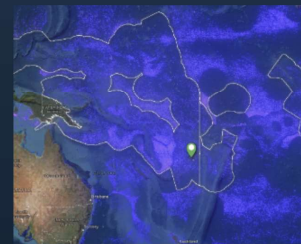
2 Land Parcels



3 Geographic Names



4 Protected Marine Areas



5 Annual Fishing Intensity (2020)





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**For more  
information**

**SDG.ORG**

**SIDS.SDG.ORG**

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