Opportunities and Challenges

Country cases: The Gambia and Tanzania

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Spatial Data Commons

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Commit to empower the global community where quality data inform decision to benefit people most in need.

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Spatial Data Commons

University Consortium

Empowering Global Community with New Data Sources and Open Technologies

Overview

- Context
- Needs
- Key stakeholders and engagement model
- Approach
- Challenges

The Gambia

Tanzania

GBoS THE GAMBIA BUREAU OF STATISTICS

PURA Public Utilities Regulatory Authority *Equity in Development*

WORLD BANK GROUP

THE UNIVERSITY OF TOKYO

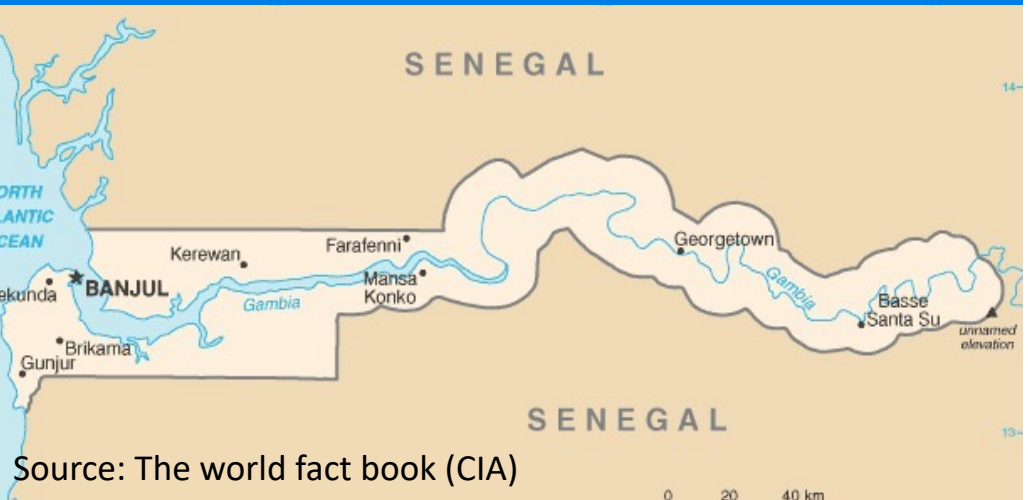
United Nations WORLD DATA FORUM BERN, SWITZERLAND 3-6 OCTOBER 2021

Photo: Kurt Cotoaga (Unsplash)

Use of mobile phone data for internal migration

The Gambia use case

Country context: *The Gambia*



Source: The world fact book (CIA)

- Inland is largely rural where its economy is driven by agriculture.
- The largest driver of formal employment is tourism in urban areas.
- Dependent on domestic and international remittances from migrants.

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Early engagement: *Before Covid-19*

- Supported the GBoS (NSO) in complementing migration statistics.
- Established a platform to discuss the policy relevance.
- Adopted technical and organizational measures to protect privacy.

Key stakeholders

Data producers PURA (Regulator), 2 MNOs

Data users GBoS (NSO)

Data protection agency A committee formed by government agencies

Intermediary World Bank, University of Tokyo

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Needs:
after Covid-19 onset

- An evidence base for examining the impact of COVID-19 and enforcement measures.
- Timely and quality data to assist NSO's data collection.
- Technical support in producing more statistics in addition to migration statistics.

Approach

Data access PURA brought the regulatory mandate and technical capacity.

Method GBoS guided and motivated the analytics.

Data protection Policy relevance and data privacy was assessed based on the legal framework.

Privacy protection

- Data were aggregated, kept strictly confidential, and used only for statistical purposes.
- No individually identifiable information included.
- Privacy preserving techniques were rereviewed based on legal frameworks.
- Data were processed on the PURA's premise.

DART
DAR RAPID TRANSIT AGENCY

CRA
CREATING A LEVEL PLAYING FIELD

THE UNIVERSITY OF TOKYO

麗澤大学
Reitaku University

Supported by
公益財団法人 三菱財団
THE MITSUBISHI FOUNDATION

Photo: K15 Photos (Unsplash)

Use of Mobile Phone Data for Transport Statistics

Country case: Tanzania

Country context: *Tanzania*

Source: The world fact book (CIA)

Increasing transport demand with rapid urbanization

50% of population <u>living in urban areas</u> by 2030

5.7% population growth annually <u>with increasing commuting population</u>

70% of people in Dar es Salaam <u>lacking good infrastructure</u>

BRT (Bus Rapid Transit) system

Phase I: 20.9 km completed in 2016

Phase II - VI: To be developed

In operation

New services to be installed

- Smart card with automated ticketing gate
- Feeder transport services
- Wifi services (smartphone app already used)

Dedicated bus lanes for BRT

Daladala (minibuses)

DART

Dar Rapid Transit Agency

- Executive Agency established in 2007
- Mandated to provide high quality and efficient public transport by buses
- Responsible for planning and managing:
  - BRT system
  - Feeder transport utilizing local transport

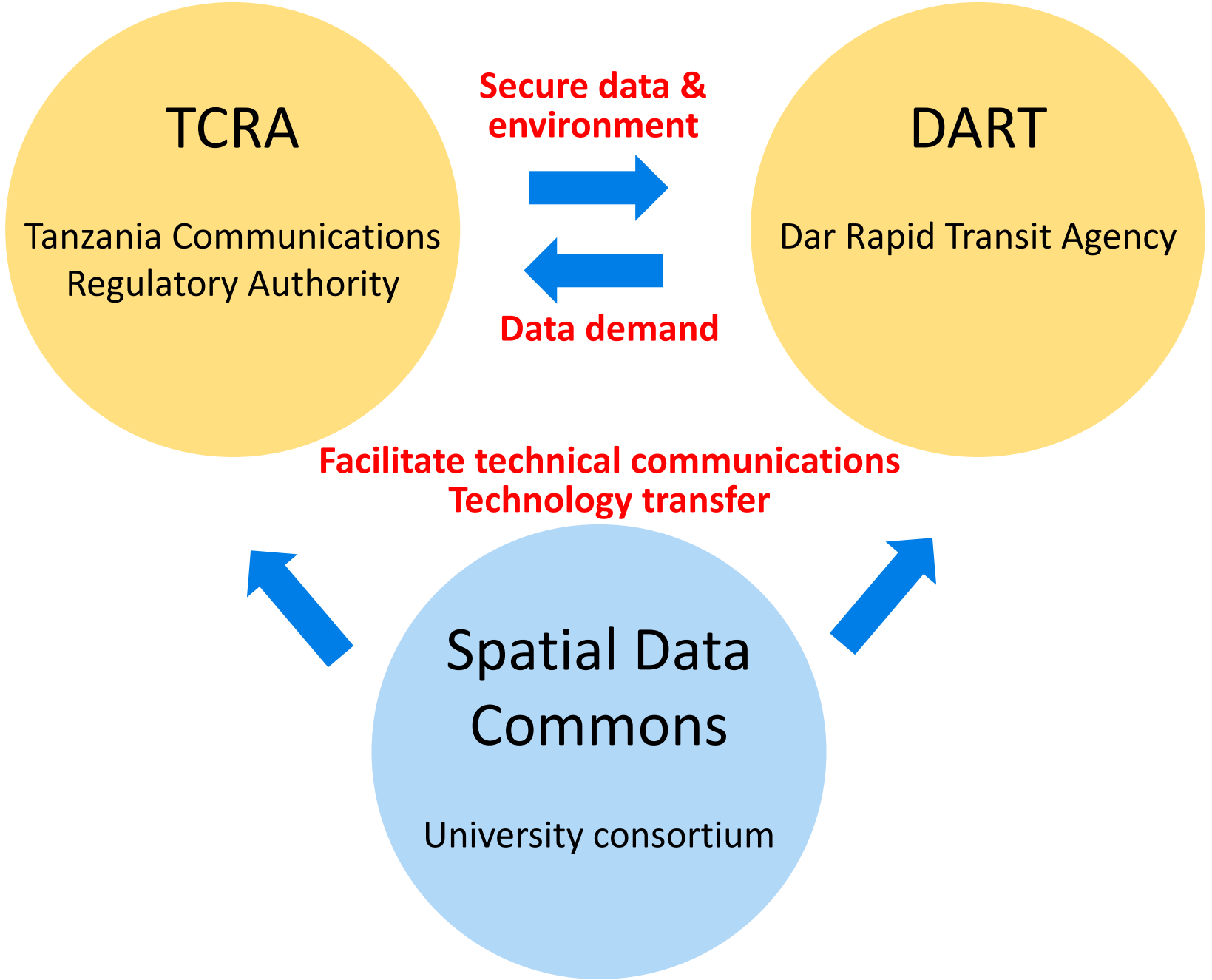
Data needs for DART operations

- For understanding transport demand at a metropolitan scale in more frequent manners → **BRT**
- For planning new routes and optimizing schedule at different time and spatial scale → **BRT and feeder transport**

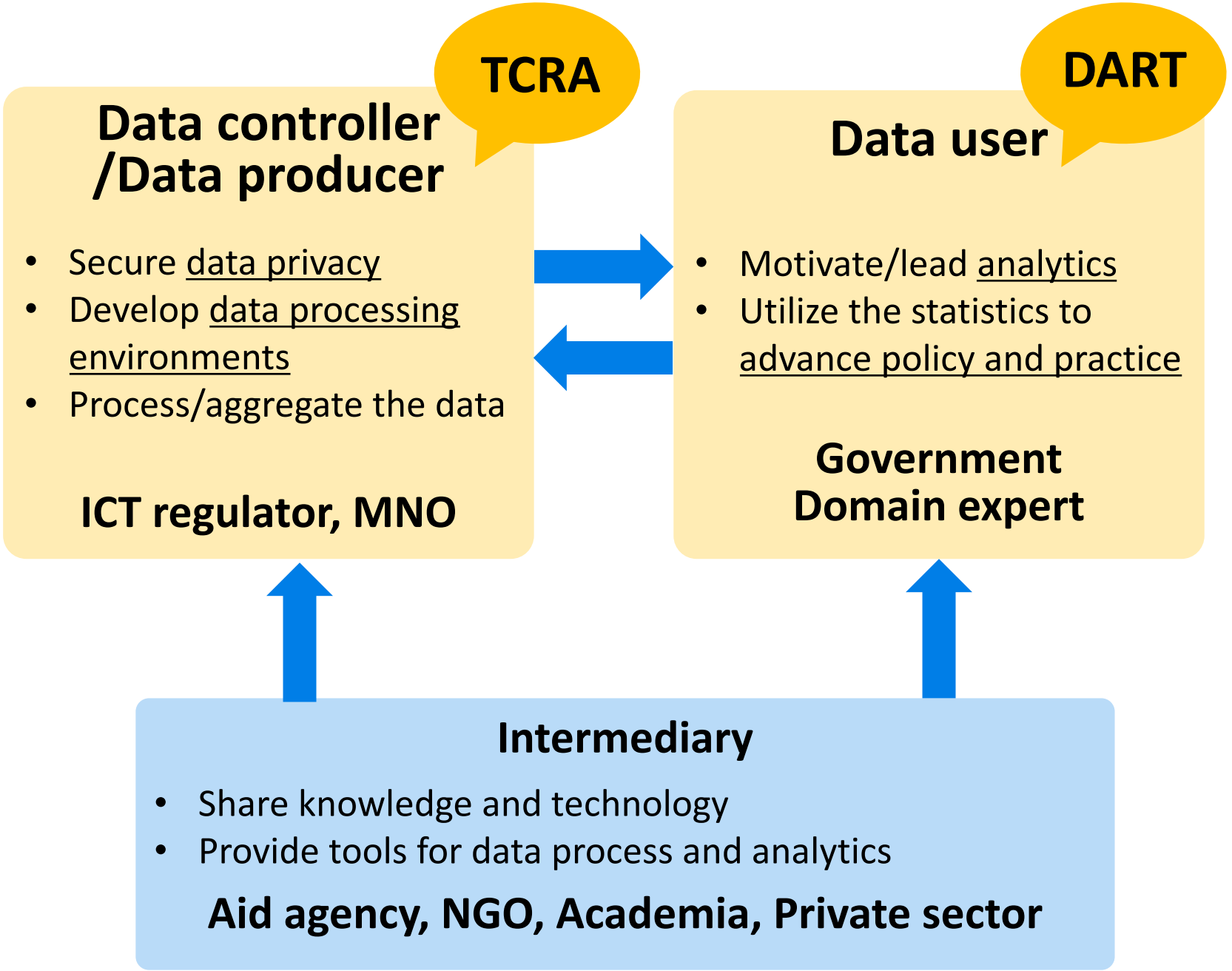
Dedicated bus lanes for BRT

Daladala (minibus)

Key stakeholders Partnership



Engagement model



Approach

Data access: TCRA brought the regulatory mandate and technical capacity

Method: DART guides and motivates the analytics based on their needs

Data protection: Policy relevance and data privacy was assessed based on the legal framework

Key to success

- DART's strong leadership and ownership of the project and
- In-depth discussion on policy relevance between DART & TCRA

Challenges - sustainability

- Engagement model (MNO)
- Infrastructure
- Transparency and trust (civil society)
- Capacity for project management/implementation (data producers & end users)

The Gambia internal migration
Oxford CSAE conference paper

Use of data maintaining trust
Data & Policy Journal

The Gambia project paper
Data & Policy Journal

Our initiative
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Please feel free to contact ! ☺

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