GLOBAL PERSPECTIVES ON WATER DATA
INTELLIGENT QUESTION: HOW ARE NEW MODELS OF DATA INNOVATION BEING USED AROUND THE WORLD TO DRIVE SUSTAINABILITY IN WATER AND BEYOND?

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8TH ANNUAL CA WATER DATA SUMMIT
INTELLIGENT QUESTIONING (IQ)
SHARING WATER WISDOM
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STANFORD UNIVERSITY | PALO ALTO, CA
CaWaterDataSummit.org

#CAWaterDataSummit #IntelligentQuestioning
Data informed problem solving to strengthen water and sanitation services in emerging and frontier markets

What can we learn from the CaDC model?
Cities and utilities in emerging markets operate in an opaque market system with limited information on customers, costs, prices and service levels.

- This makes them less investible
- Exacerbates inequities
- Negatively impacts value for money from public finance
- Lowers resilience
Let me illustrate this with an example..

- Nanyuki in Kenya has 0.135 Mn population.
- 15% are poor
- 39% have access to with sewers. Rest of the areas are serviced by private operators
- The town has a water deficit of 1,080 m³/d
Scenario 1 - Investment decisions guided with limited analytical support to the utility

The proposed project is not nearly as financially viable.

- **US$ 22 Mn** Capital Outlay
- **$0.7Mn** Net Revenue/year
- **+33%** LIH Access Improvement
- **↑23%** Water Consumption

Poor in the blocks left out have to pay for a sewer project that not only do not benefit them, but may worsen their situation due to shift in treatment infra site.
Scenario 2 – Insights on the equity-viability-resource use tradeoffs can improve quality of decisions

Interventions to organize & deliver the onsite services + minor repairs of existing sewers

- **US$ 4 Mn**
  - Capital Outlay

- **↑ US$ 0.4Mn**
  - Net Revenue/year

- **+83%**
  - LIH Access Improvement

- **↑8%**
  - Water Consumption

**Sustainability:** Improved Value for Money and financial sustainable

**Equity & Safety:** Increased safe access to poor

**Environmental Sustainability:** Reduced stress on water requirement
CaDC as a template for a ‘scale driven’ approach to address technology, data talent and system gaps in cities & utilities

**Investing in Technology and Tools** –
Digital public goods (for ex: DIGIT, EquiServe)

**Investing in People** –
Attract and train talent (for ex: a data science fellows' program)

**Investing in Process and Systems** –
Norms and data standards
Vision for an Africa Utility Data Collaborative

- Anchored within a strong existing utility association
- Remain lean and agile
- Start small - Focus on one or two high priority use cases
- Build trust through value creation
- Create and democratize digital assets and resources
- Embrace a hybrid revenue model – member fees, advisory services, innovation grants
Thank you

www.athenainfonomics.com
How the CaDC was recognized as a leader among world-wide financially sustainable data collaboratives
About the Global Partnership for Sustainable Development Data

- Partners: 700
- Government partners: 30+
- Data partnerships: 120
- Work across 35 countries: 35
- Convenings delivered: 200+
Understanding basic cooking

The Data Sharing Food Pyramid

1. Carbohydrates
   - Mechanisms for building and sustaining trust

2. Fruit & veg
   - Shared value and benefits

3. Proteins
   - Dependable data and infrastructure

4. Dairy
   - Mechanisms for supporting knowledge and strengthening skills
   - Dairy helps develop and strengthen human bones. Similarly, knowledge and skills support data sharing functioning and operations.

5. Healthy fats
   - Flexibility and adaptability
   - No diet is balanced without a healthy dose of fats or—in this case—flexibility and adaptability, which facilitate storing energy for when it is most needed.

When all stakeholders share in the value from and benefits of data sharing, each is getting the necessary vitamins and minerals (like you’d find in fruits and vegetables) to reduce the risks of “initiative threatening diseases.”

Any healthy diet starts with a foundation of trust among data sharing partners, data users, and other stakeholders.
Effective and Ethical Data Sharing at Scale

A cookbook for data producers, donors, policymakers and other development practitioners
Thank you

For questions, contact: jmclaren@unfoundation.org
Visit data4sdgs.org for more information.