



The Giga Project

ICT in Education: A Caribbean Forum

27 January 2022

Collaboration between UNICEF and the ITU

Conceptualised in 2019

Objective:

To **connect every school** to the Internet, and every young person to **information, opportunity and choice**

Giga is highlighted in the UN Secretary General's Roadmap for **Digital Cooperation** as a Key Way Forward to achieve **Universal Connectivity***

RECOMMENDATIONS

1A: Every adult should have affordable access to digital networks

We recommend that by 2030, every adult should have affordable access to digital networks, as well as digitally-enabled financial and health services, as a means to make a substantial contribution to achieving the SDGs. Provision of these services should guard against abuse by building on emerging principles and best practices, one example of which is providing the ability to opt in and opt out, and by encouraging informed public discourse.

1B: Have a broad, multi-stakeholder alliance, involving the UN, create a platform for sharing digital public goods

We recommend that a broad, multi-stakeholder alliance, involving the UN, create a platform for sharing digital public goods, engaging talent and pooling data sets, in a manner that respects privacy, in areas related to attaining the SDGs.

* See <https://www.un.org/en/content/digital-cooperation-roadmap/>

OVERVIEW

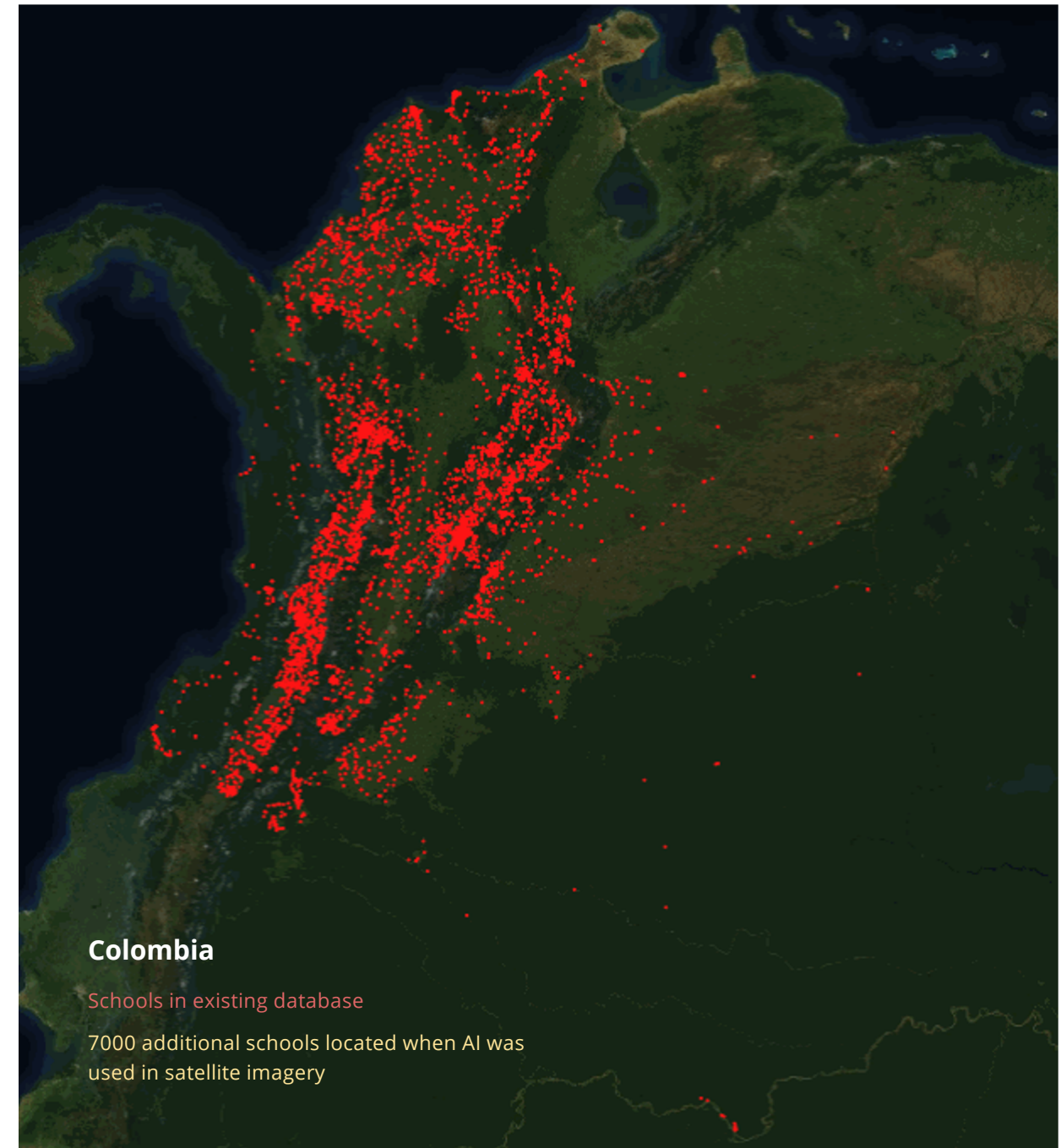
Solving big industry problems with innovative solutions

Transparent, open, reliable data. Live maps of schools and the quality of internet in real-time, ML algorithms to improve educational databases.

Catalytic financing and enabling investment. Working between government and private sector to incentivize investment, using blended finance and innovative instruments to overcome upfront capital barriers.

Better solutions with better outcomes. Advising governments on existing and emerging technology options, and monitoring quality of service to communities to ensure delivery.

Focus. Schools as an entry point for planning infrastructure and mobilizing funding gives us a laser-focus and unique “edge” to bring connectivity investments into communities.



OVERVIEW

With Mapping well underway, Giga is now making progress across the Finance and Connect pillars...



Map

Maintain a real-time map of school connectivity to identify demand for infrastructure and funds, measure progress toward increasing Internet access, and continuously monitor global connectivity.



Finance

Work with governments and advise them on building affordable and sustainable country-specific models for finance and delivery, subsidizing market creation costs and incentivizing private sector investment.



Connect

Advise on the best possible technical solutions to provide schools with connectivity, and countries with safe, secure, reliable, fit-for-purpose infrastructure to support future digital development needs.

Empower

Partner to ensure every young person has access to information, opportunity, and choice.

We have identified **1M+ schools** in **41 countries**

Each school is a marker of a **community**. A starting point for **demand**.
A unifying goal for **fundraising**.
An **anchor** for infrastructure – for cell towers, satellite dishes...

Giga is building a \$420B+ railroad

3

CONNECT YOUTHFUL ECONOMIES TO GLOBAL MARKETS

Generation Unlimited

Financing for future of jobs, future types of digital work, and new realities in an interconnected world.

2

BUILD AND MOVE THE SUPPLIES

Education, Innovation, Digital Public Goods Alliance

Financing for software and digital solutions that will be delivered to communities soon after they are connected

1

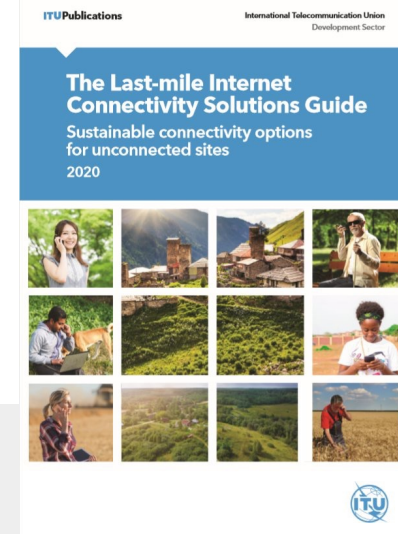
BUILD THE TRACKS

Giga: UNICEF & ITU

Financing and technology to extend telecommunications infrastructure, evaluate connectivity solutions, and monitor and implement connectivity at scale



The Giga Initiative leverages the **Last Mile Connectivity Solutions Guide** to identify suitable solutions for ensuring connectivity



Step 1



Step 2



Step 3



Step 4



Next steps

- Interactive software tools
- Support for capacity building
- Assistance in implementation



These dots are every school in **Brazil** colored by the quality of **internet access**

As at December 2021, Giga has increased schools mapped to 1M.

\$22M+

raised

from global partners including Ericsson and Dubai Cares, and the Musk Foundation

19

countries joined

to connect over 86,000 schools and more than 25.8 million students and teachers

2,900+

prototype schools connected

by Giga partners: Kenya, Sierra Leone, Kazakhstan, Brazil, OECS ... and more soon

1M

schools mapped across

41 countries

and all viewable on the Project Connect platform

14

partners joined

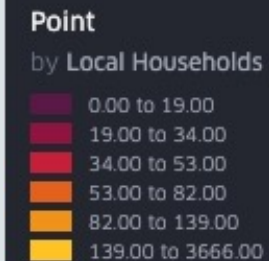
Ericsson, Dubai Cares, Musk Foundation, Softbank, BCG, NIC.Br, Actual, FCDO, Dell, Arm, Jumia, Liquid Technologies, Mapbox and GSMA

\$200M+

funding mobilized

to countries and UNICEF Country Offices to accelerate connectivity

Demand aggregation in Honduras



In **Honduras**, Giga used schools as a starting point to estimate the **number of unconnected households** around each school

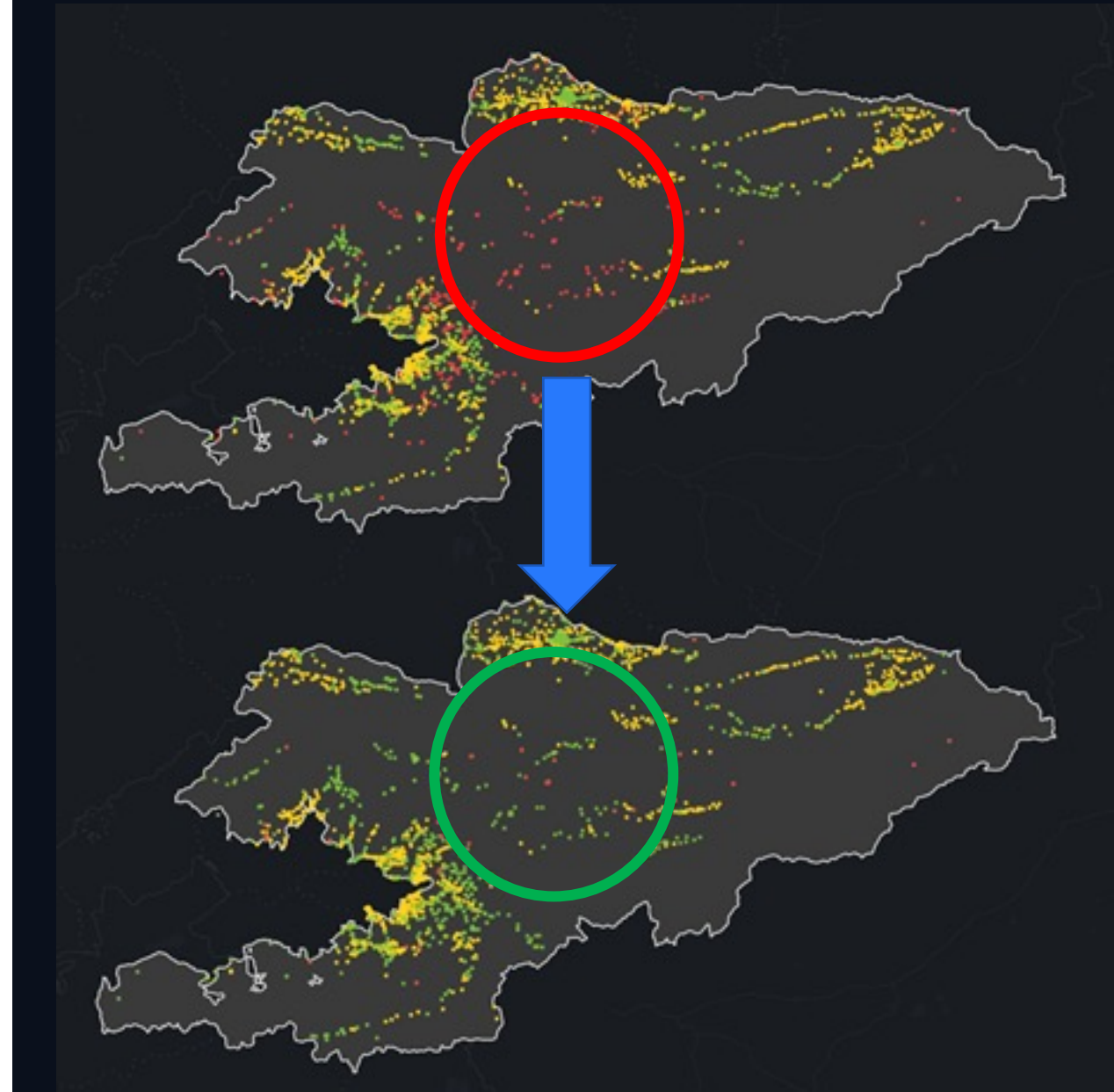
This approach is similar to how **Gavi** used birth cohorts to estimate vaccine demand

GIGA MAPPING

Giga has helped Kyrgyzstan save **40%** (~\$200k / year) of its education connectivity budget

- In fact, prices were lowered to almost half (from \$50/month to \$28.5/month) and speeds almost doubled (from 2Mbps to 4Mbps).
- This was possible after just mapping data and communicating with network operators

www.projectconnect.unicef.org



Giga in the Caribbean

- Collaborating with the **OECS**
 - 9 of 11 countries participating
- Still awaiting other Caribbean countries to join Giga
- Giga's work in the OECS discovered:
 - Virtually all schools have internet connectivity
 - But **affordability** and **quality of services** are challenges
- Work currently ongoing in the OECS under Giga include:
 - **Mapping** of all schools
 - Real-time **connectivity monitoring** in schools
 - Network **resiliency** study
 - **Child online protection** policy and strategic framework preparation/recommendations
 - Internet **service quality** study





Measures needed to maximize the impact

These include among others:

- **political support** at the highest level and intersectoral coordination between relevant agencies and ministries
- **national broadband and/or digital policies** supporting the development of broadband infrastructure, school connectivity and a digital education policy or strategy promoting digital capacities for all
- **a regulatory environment** conducive to the development of reliable, high-quality, technologically neutral networks, which promotes healthy competition in ICT markets, easier market access for national and foreign players, Incentive taxation
- **access to school location data**, data on schools and classes (number of students, etc.), data on existing infrastructure and projects, as well as network coverage
- that the government be prepared to **consider different types of investments and financing**, to establish public and private partnerships, to contribute financially, in particular through the universal service fund, or other dedicated funds
- To support the **development of a local ecosystem** and open source digital solutions to strengthen digital capacities and online training
- Ensuring **equitable access** to connectivity and digital solutions **for all**



Contact us

info@giga.partners | gigaconnect.org