Strengthening ICT Connectivity and Digital Inclusion of LLDCs

Genaro Cruz, GSMA
GSMA’s scope to enhance digital inclusion

**mHEALTH**
Facilitating access to essential healthcare and nutritional information

**MOBILE MONEY**
Accelerating the digital financial ecosystem for the underserved

**MOBILE FOR HUMANITARIAN INNOVATION**
Accelerating the delivery and impact of digital humanitarian assistance

**M4D UTILITIES**
Unlocking access to affordable and improved energy, water and sanitation services

**CONNECTED SOCIETY**
Addressing access and usage barriers to increase mobile internet adoption

**CONNECTED WOMEN**
Reducing the gender gap to increase digital and financial inclusion for women

**DIGITAL IDENTITY**
Enabling robust and unique digital identity for greater inclusion

**ECOSYSTEM ACCELERATOR**
Delivering social impact and scale through mobile innovation

**mAGRI**
Increasing productivity and profitability of smallholder farmers and the agricultural industry
3.9 billion unconnected in low and middle income countries

- Usage Gap (3.1bn)
- Coverage gap (821m)
- Connected (2.3bn)
The coverage gap framed as a lack of supply and demand.
Main barriers that limit demand for internet services

- **Accessibility**: including network coverage, handsets, electricity, agents
- **Affordability**: handsets, tariffs, data plans and transaction fees
- **Usability and skills**: including lack of awareness and understanding
- **Safety and security**: harassment, theft, fraud and data protection
- **Relevance**: of content, products, and services
Main barriers that limit supply for internet services

**Technology:** classic technology is not always well suited for rural areas. Innovation is needed in radio, backhaul, and power.

**High CapEx requirements:** high investments and high risk to invest in rural areas

**Imperfect information:** lack of reliable information results in suboptimal investment decisions
Ultra-granular data to target investment in uncovered areas

Satellite imagery to detect settlements

Ultra-granular coverage data

Coverage status per village/city

Optimal deployments targeting uncovered areas
Lesson 1 from Ghana: no remaining “low hanging fruit”

- All settlements with population **above 5,000 are already covered**.
- Sites with population **below 4,600 are not profitable** using traditional technologies.
- Uncovered **9% lives in the remaining 34% landmass** in 25,000 settlements averaging 50 people
Lesson 2 from Ghana: multi-approach solution required

- **Technology**: A combination of different types of mobile infrastructure need to be deployed
  - Deploying small rural sites can increase coverage by 5pp.

- **Investment**: Different types of investment are required to achieve universal coverage
  - Beyond 94.5% CAPEX subsidies needed
  - Beyond 98.1% OPEX subsidies needed

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<th>CAPEX subsidy</th>
<th>Commercially sustainable coverage</th>
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<tr>
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Governments? USF? DFIs?