UNIVERSITY OF OSLO

NURTURE strategy seminar 12Nov2026

Future directions on Partnership with Africa



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Towards a European-African collaboration



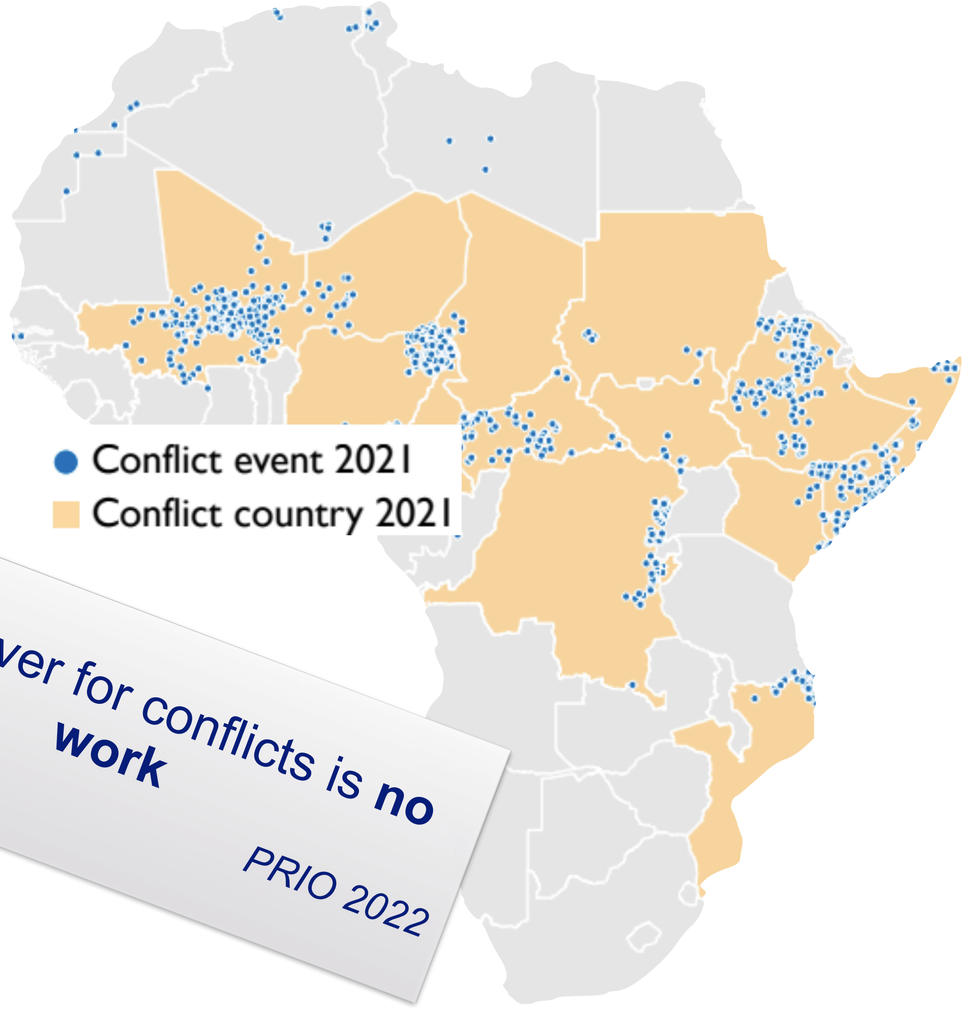
1. “The Future of Africa is the Future of Europe”

2. “Connect the Future” of every single human

3. Health is a global issue: Covid, Pandemics



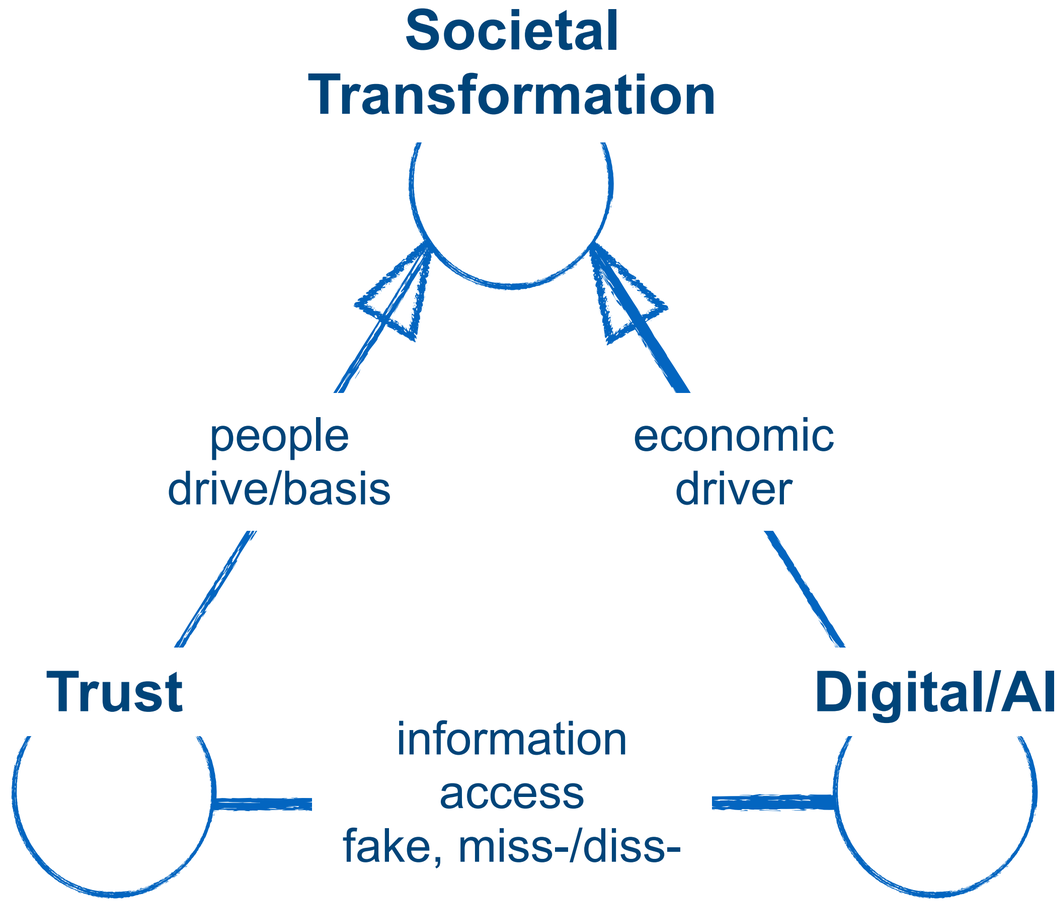
Societal Transformation:
Energy, Climate, Pandemics, AI, Economics



Main driver for conflicts is ***no work***

PRIO 2022

[Source: Palik et al. - Conflict Trends in Africa, 1989–2021, PRIO Paper 2022]

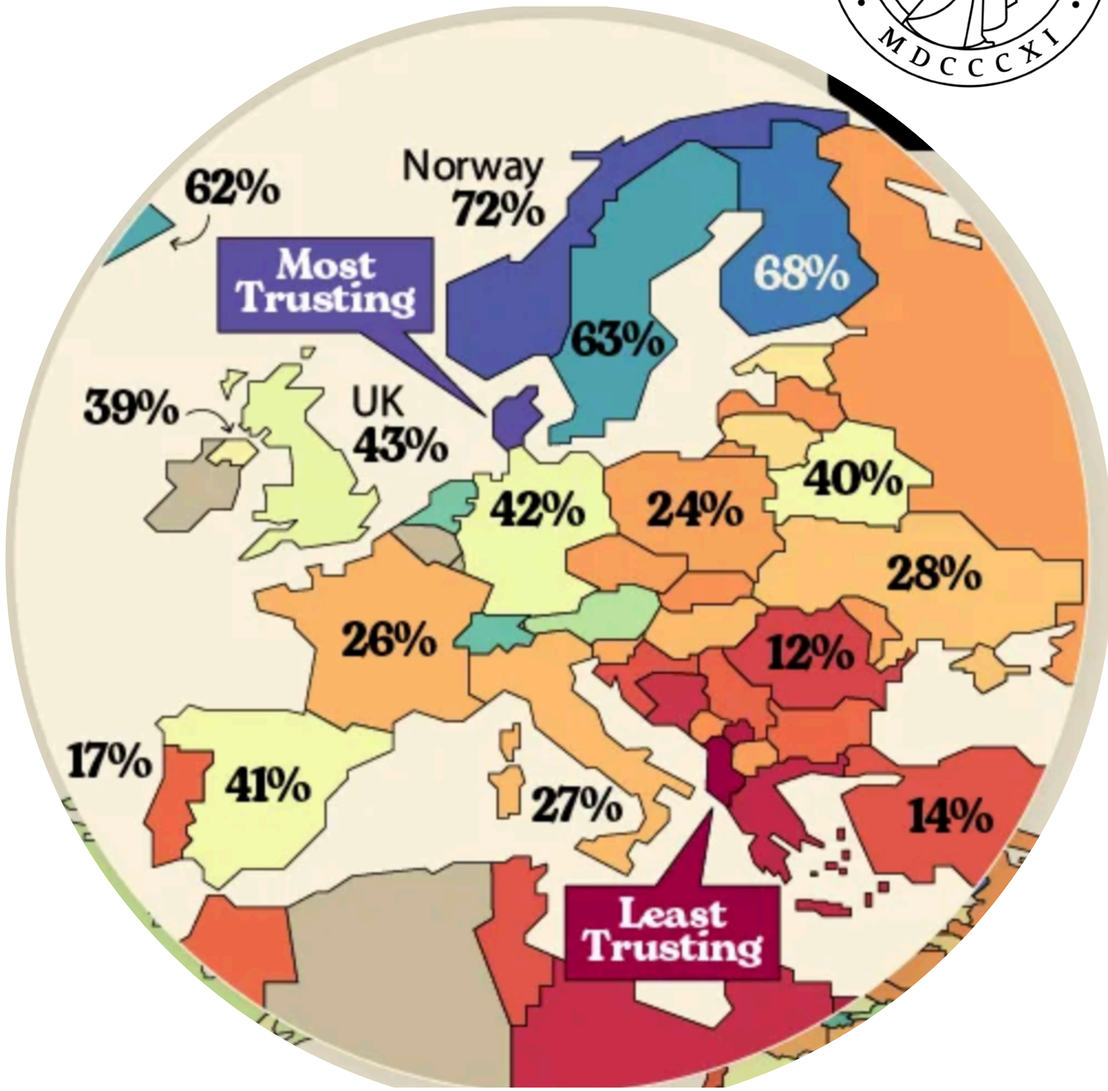


wie sieht es bei uns aus?

What is special in the Nordics?

- “You can’t live on your own”
- Trust in Institutions
- Collaboration - Open Interfaces
- Control through the society
- Hohe Arbeitskosten/hohe Effizienz

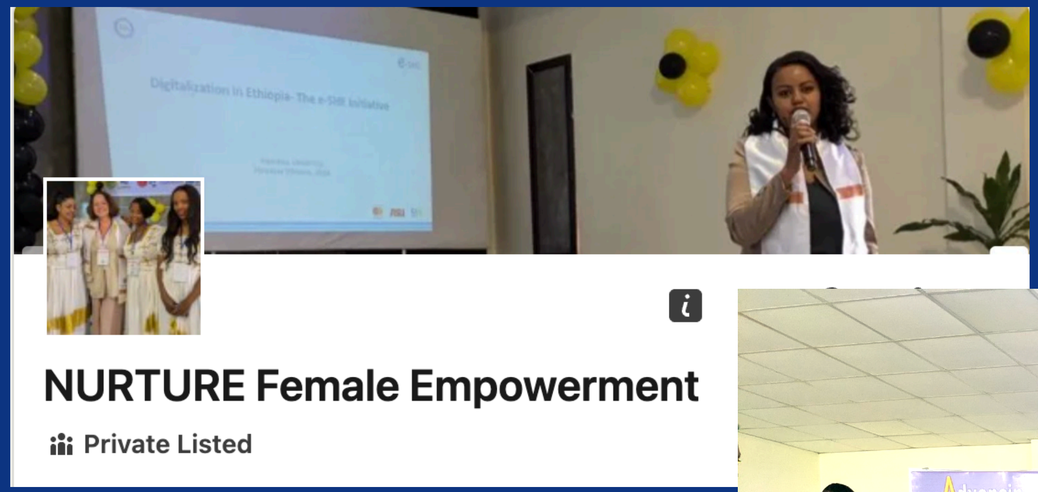
- Norway - Ethiopia (in common):
- Large distances (NO: E6 = 2576 km)
- Expensive Infrastruktur



https://www.visualcapitalist.com/mapped-where-people-trust-each-other-most-by-country/

NURTURE & DHP4DPI - our base for trust

Female Empowerment Group on LinkedIn



NURTURE Female Empowerment

Private Listed





AA4EDU & DHP4DPI.eu

Affordable Access for Education, Health and Empowerment &

Digital Health Promotion for Digital Public Infrastructure

Challenge: Mobile Internet a

KEY FINDINGS

1. **4.8 billion people (59% of the global population) now use mobile internet on their own device – but growth in mobile internet subscribers has slowed, with low growth rates across all regions.** Approximately 160 million people began using mobile internet on their own devices in 2025, down from 190 million the year before. A further 650 million people (equivalent to 8% of the global population) use mobile internet exclusively through borrowed or shared devices.

59% own device with mobile internet > 41% not

4. **In total, 38% of the world's population (3.1 billion people) live in areas covered by mobile broadband but do not use it – the usage gap.** The majority of the usage gap (70%) comprises those who do not own a device. However, the percentage of those in the usage gap who do not own a device is significantly lower when focusing on adults aged 18 and over. Only around a third of those in the adult usage gap do not own a device.

6. **Connectivity varies significantly by and within regions and countries – 92% of the unconnected live in LMICs.** Connectivity levels vary considerably – not only between HICs and LMICs; LDCs, LLDCs and SIDS lag other LMICs substantially too. In LMICs, adults in rural areas are 28% less likely than those living in urban areas to use mobile internet, while women are 12% less likely than men to use mobile internet.

~3.1 billion people in LMIC are unconnected



source: GSMA, 2026

Was bedeutet das für den Zugang zu digitaler Gesundheitsinformation?

Establish Digital Public Infrastructure (DPI)

and apply the model of the road

Step 1:



[Source: https://www.gatesfoundation.org/ideas/digital-public-infrastructure]

Step 2:



1. Is access to digital health information a universal human right?

2. How can we enable access, especially for people and groups left behind by traditional business models?





Health System in “Afrika”

- TZ/ET: no compulsory to join public health insurance,
TZ: National Health Insurance Fund (NHIF) for public employees, optional for private (3%)
ET: Community-Based Health Insurance (CBHI), compulsory health insurance legislated, limited implementation

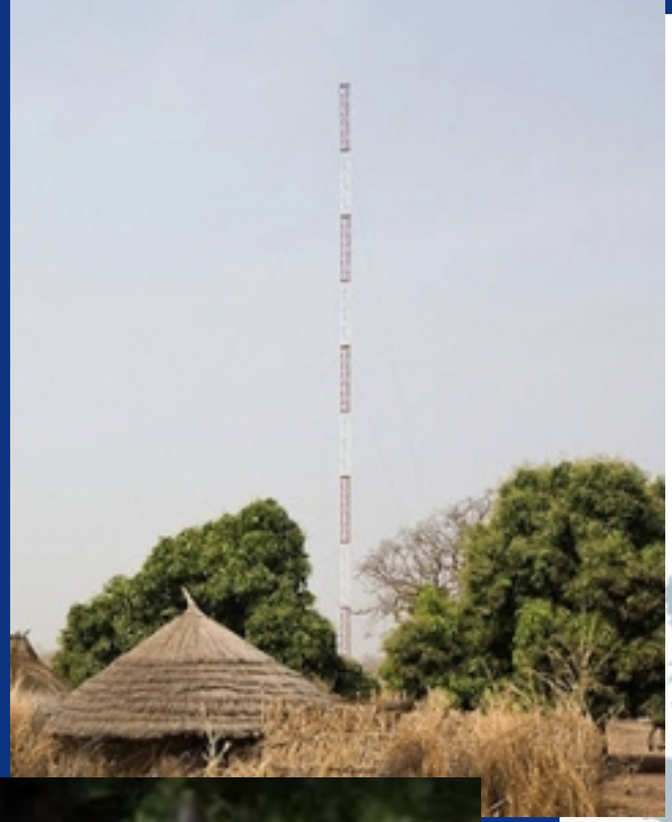
- “Cash is king” at hospitals

- TZ: 0.13, ET: 0.08-0.1 doctors per 1000 inhabitants (DE: 4,5)

> new Business Models



Usingo Secondary School, Kenya







Africa: Living with Viruses

- "Mosquitos in Europe"
  - West-Nile fever 157 incidents in GR
  - Malaria, Frankfurt (2026)
  - Dengue, Chikungunya-fever



- Antimicrobial resistance (AMR)
  - "catch the cold"

- Ebola outbreak (Kongo 2026)
  - distrust to international aid
  - conflict zone
  - "our next big challenge"

https://tropeninstitut.de/aktuelle-krankheitsmeldungen

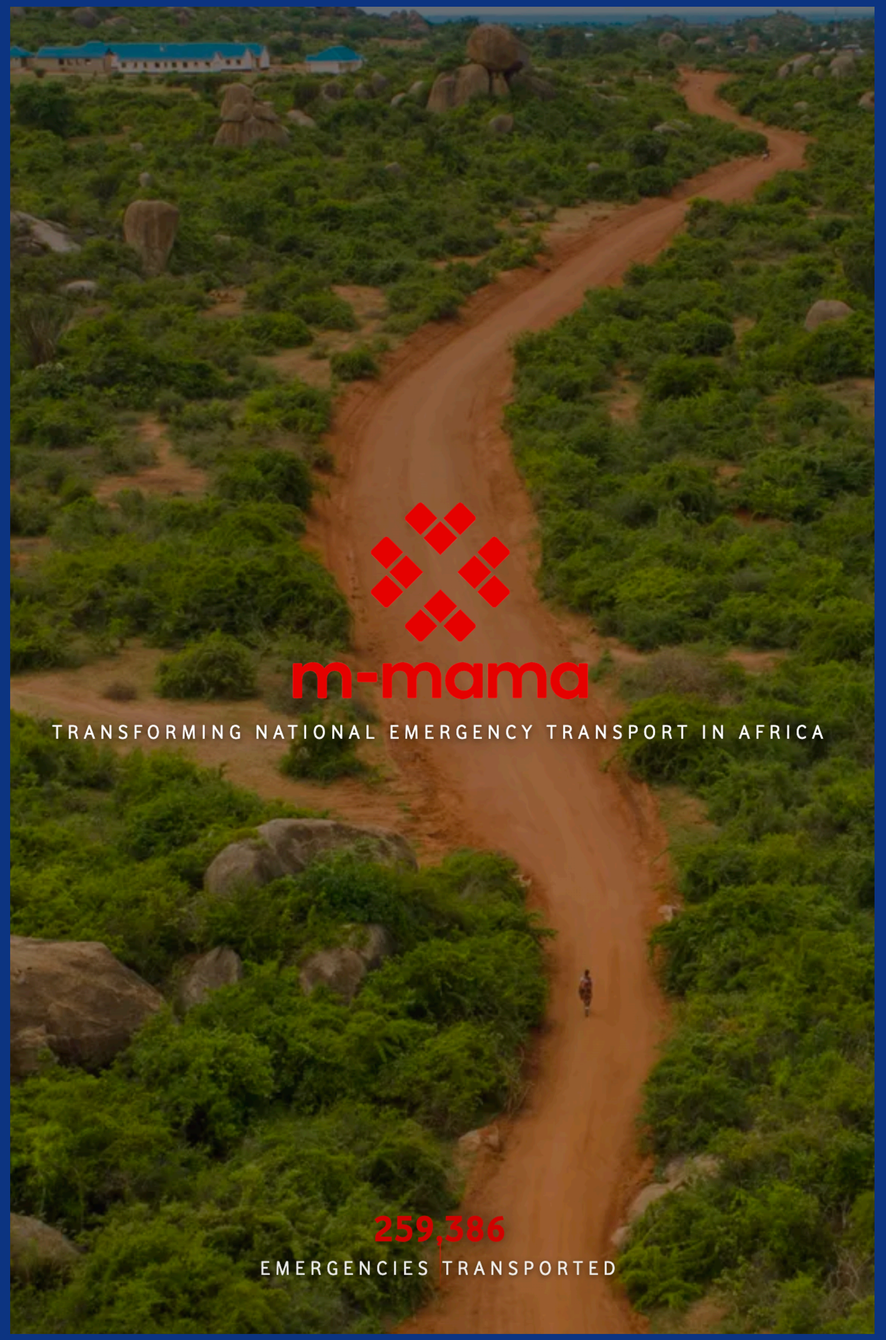
- Covid in Africa,
  - outside = Sonne & Aussenluft
  - Temperature measures at the entrance
  - Young population
  - "trained on viral attacks"



New health models

Example: Maternal mortality
- Transportation to the clinic
- 178,000 mothers die in Sub-Saharan Africa (one every 3 minutes)
- Typically, it takes 2 hours from postpartum hemorrhage (PPH) to the mother's death
- TZ: m-mama, a free national 24/7 service:
  Free call & Transport to the clinic

Example: Hospital visit
- "Indefinite waiting time" due to too few doctors
- New model: 40,000 TZS (approximately €13.50) for a nurse visit, remote diagnosis, transport to/from the patient, and app-based support



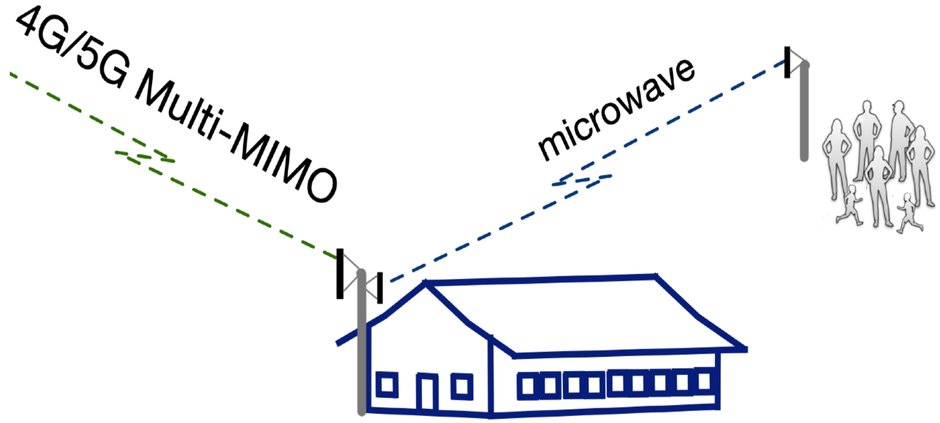
re-use ongoing: “Digital Health Promotion for Digital Public Infrastructure” DHP4DPI project

- Norwegian funded international co-operation Ethiopia - Norway
  - Jimma University, Norwegian Institute for Public Health (NIPH), UiO
  - 2026-2029, 6.25 MNOK (~550 kEUR)
- Outcome
  - Digital Health Promotion (DHP) in Ethiopia for Ethiopia
  - Digital Public Infrastructure (DPI) in rural communities
- Plans
  - Digital access through Information Spots at schools, health stations, …
  - health information at schools









Schools, Health Stations, and Community Learning & Living Labs (CL3)

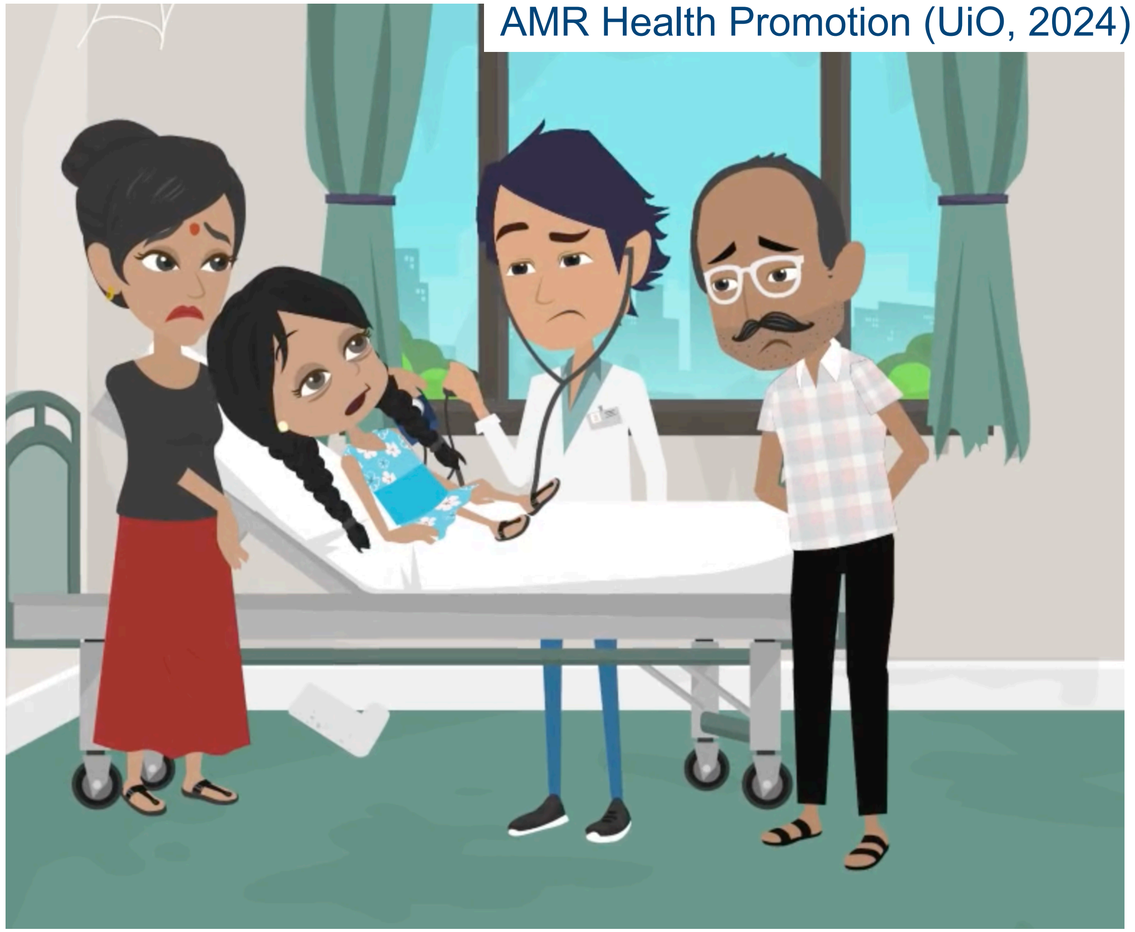
Health Promotion:
Antimicrobial resistance (AMR)

- Wrong usage:
  - too short (2-3 days)
  - every time
  - animal usage (food ad-on)

- Penicillin resistance 51% of countries
- Ciprofloxacin (Urinweginfektion)
  - Escherichia coli 8-93% resistance
  - Klebsiella pneumoniae 4-79%

- UK (2050 estimate): 10 Mio death
  - economic loss $100 trillion USD by 2050

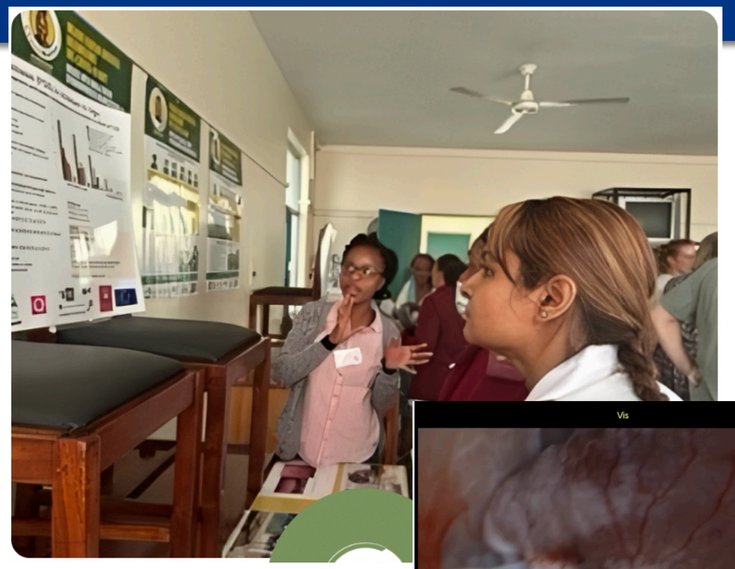
AMR Health Promotion (UiO, 2024)



https://wiki.basicinternet.org/images/f/f8/AMR_Prisha_video_v02.mp4

Ahmed et al., 2024, Antimicrobial resistance,…, ScienceDirect

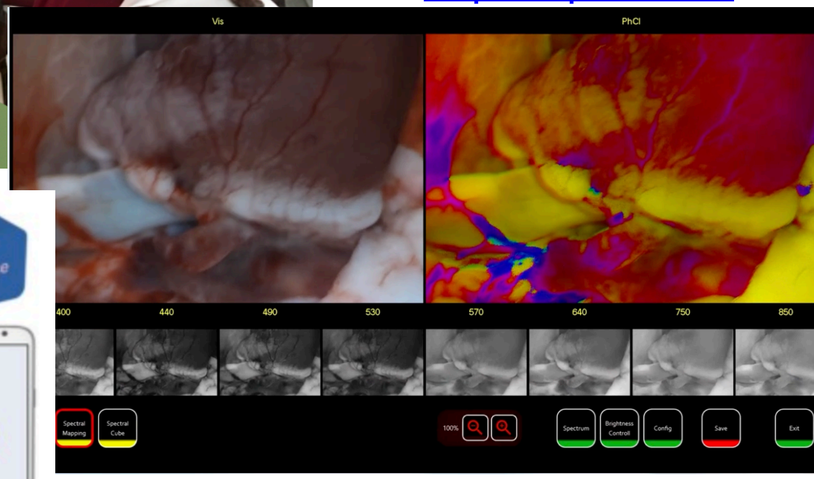
Learn with Africa

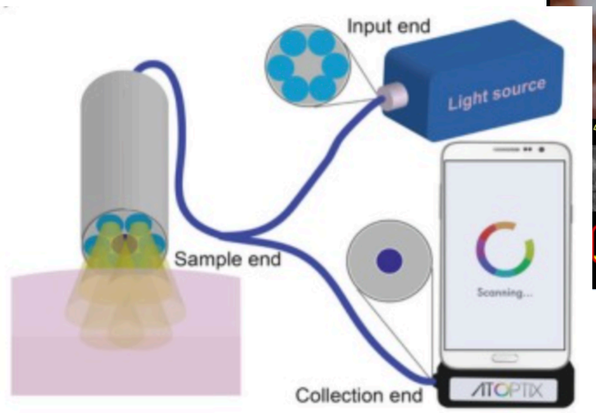


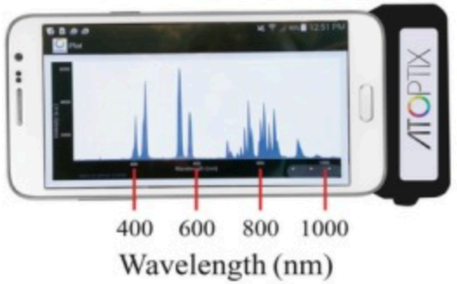
http://FGSnomore.org

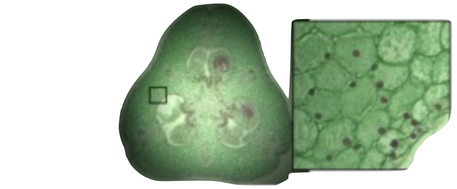
https://qcell.tech

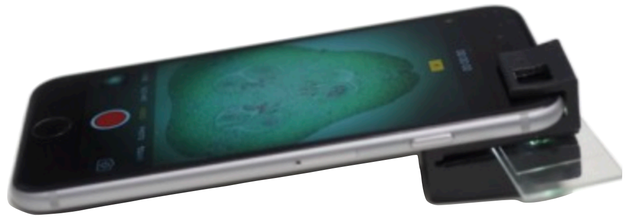
- Starting point: Resource scarcity
- Mobile phones are the only means of communication
  - SMS and phone calls are used for communication
  - Add-on sensors to mobile phones
- Nurses take on tasks, including remote examinations
  - involve them
- Community Health Workers & Health Extension Programme
- KISS - keep it simple, stupid







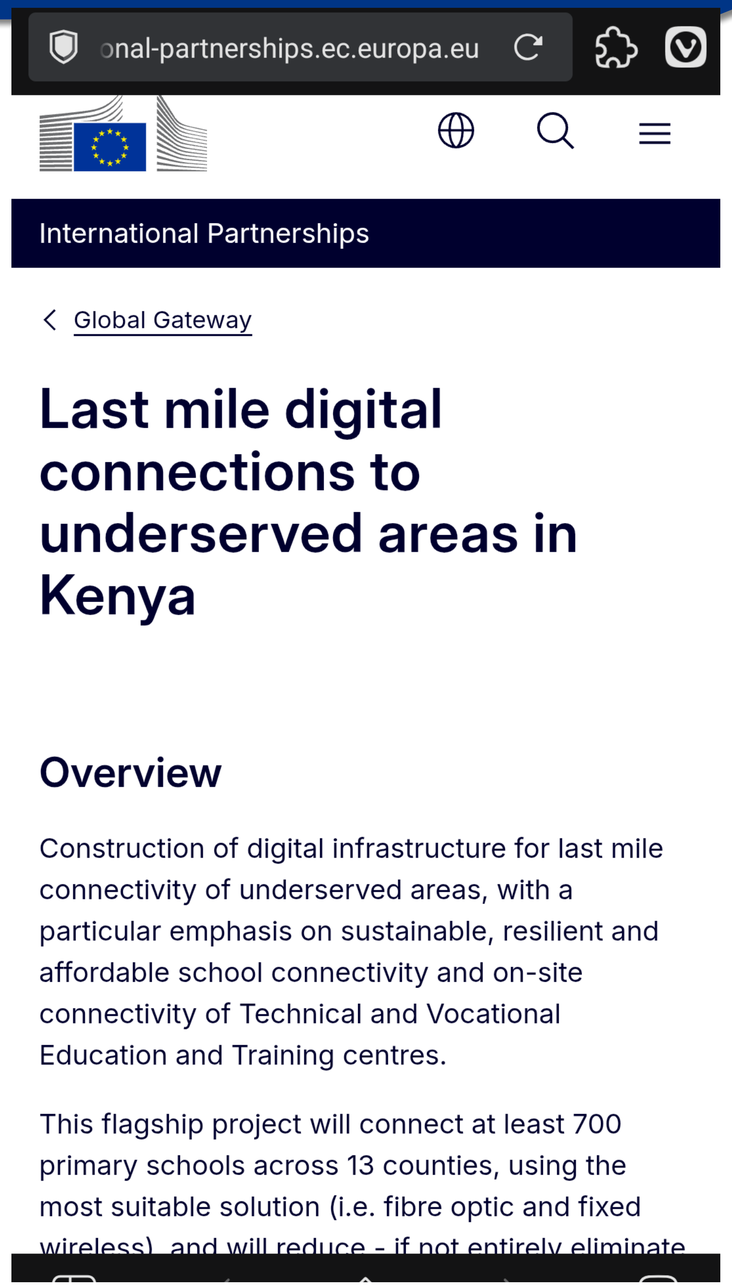




https://pmc.ncbi.nlm.nih.gov/articles/PMC6334517/

The role of Universities: Evolution of KPIs

- Driving international partnerships (INTPA: India-Europe-Africa)
  - India has joined Horizon Europe
  - India-Europe collaboration for Africa
- Emerging KPIs
  - Patents granted and technology transfer
  - Startups incubated and spin-offs
  - Industry adoption and IP revenue
  - Deep-tech-commercialisation
  - Innovation ecosystem and venture creation
- Digital Sovereignty



https://international-partnerships.ec.europa.eu/policies/global-gateway/last-mile-digital-connections-underserved-areas-kenya_en

Summary: Future Directions

- Infrastructure & Digital Sovereignty
  - Braille machine(s), wheel chairs, … - *shows the way*
  - Digital Public Infrastructure (DPI), AI, NLP
    - Semantic Mediawiki & Nextcloud
  - DHP4DPI.eu and AA4EDU.BasicInternet.org (<10 USD/month)
  - School Connectivity and Digital School Ecosystem: Digital Health@schools
  - Eduroam, MetroRoam, Educloud (Nextcloud)

- Academic Excellency in Ethiopia
  - International conference - a highly acknowledged light-house
  - International journal(s)

- Key Performance Indicators for Higher Education (HEI)
  - Higher Education: papers, candidates,
  - Societal KPI: GAP (increase, female), digital, needs,…
  - Industrial KPI: #challenges, #start-ups, external funding

- Ecosystem of change
  - follow-up of eSHE - digital from Universities to schools
  - Farmer Transformation Centres (FTCs)
  - …

