



Final Digl meeting 18-19May2020

Digital Empowerment through the National Knowledge Portal

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Tremendous success by the DigiI project

- Exciting team - so much knowledge
- Reflection in the Norwegian government, Meld. St. 11 (2019-2020)
 - ➔ Focus: Access, Skills, Regulations, Inclusion
 - ➔ other publications
- Invitation to connect 500 schools in Ethiopia
 - ➔ (request for funding to NO gov.)
- Requests from KE, RW, TZ, ET, ...
 - ➔ Internet Society
 - ➔ 10 schools pilot with UCSAF (confirmed)
 - ➔ no other projects
- Strategy for Sustainability
 - ➔ Free access to National Knowledge Platform

[hide]

1 DigiI Villages

- 1.1 Tanzania: Connected Villages and Schools
- 1.2 Kenya: Connected Villages and Schools
- 1.3 Ethiopia
- 1.4 Rwanda with Iris Hub
- 1.5 Myanmar with Zabai
- 1.6 Ghana with HOPin Academy
- 1.7 Uganda, Mali, India, ...
- 1.8 Lessons learned

2 Connect your village/school/health facility/community centre?

- 2.1 Achievements, Lessons learned and Recommendations
 - 2.1.1 DigiI Achievements
 - 2.1.2 Recommendations and Future Work



Addressing the Priorities by

- Report to Stortinget 11 (2019-2020),
Priorities
 - ➔ Access, skills, regulations, inclusion
- “Boys have the toys”
 - ➔ digital divide in both **devices**
 - ➔ and **mobile broadband** access
- **Costs** of Access
 - ➔ School connectivity (SDG indicator 4.A.1)
 - ➔ Digital Health for primary health facilities
 - ➔ Community involvement/digital transformation



Norwegian Ministry
of Foreign Affairs

Summary



Access

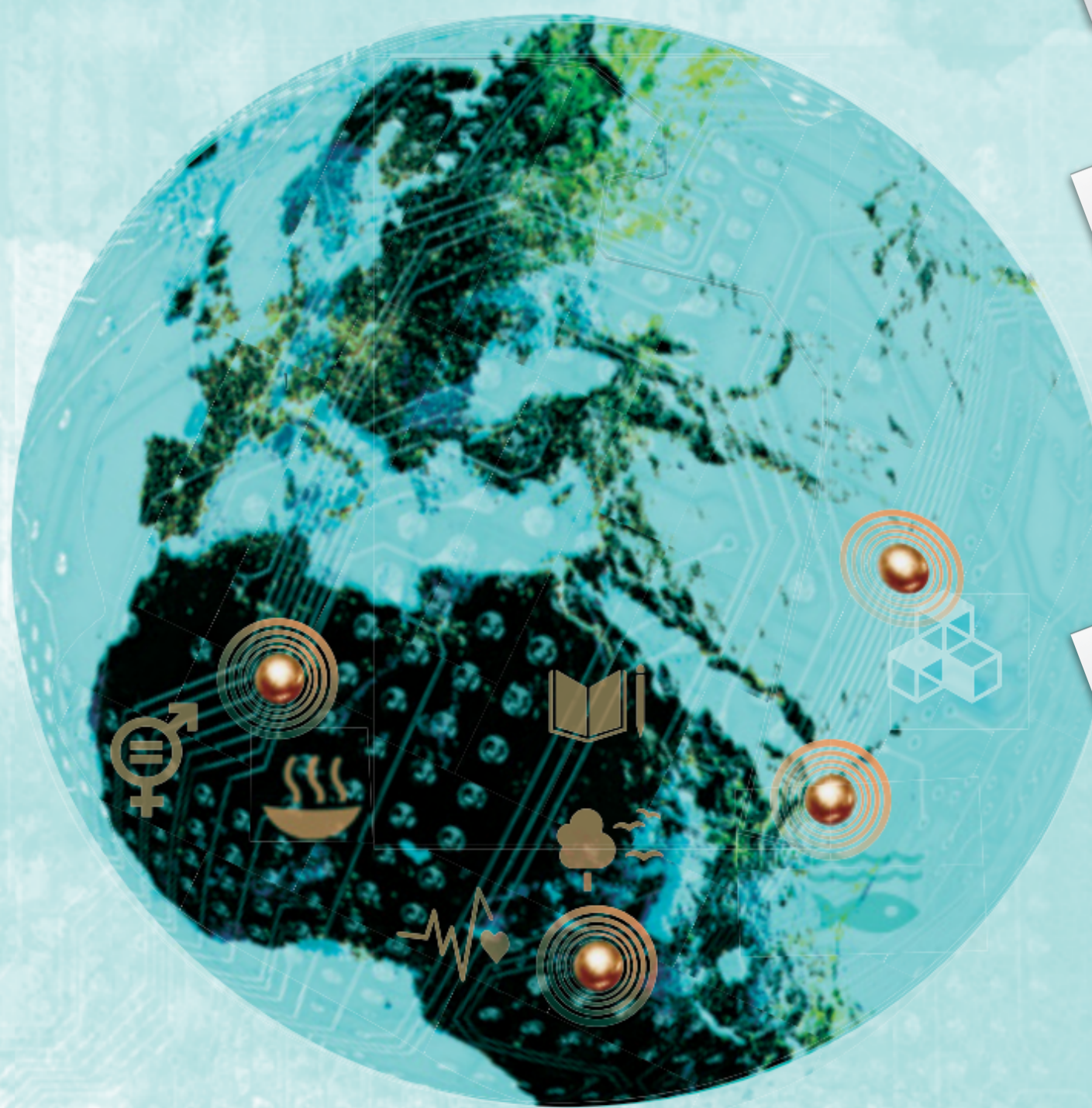
Skills

Regulations

Inclusion

Meld. St. 11 (2019–2020) Report to the Storting (white paper)

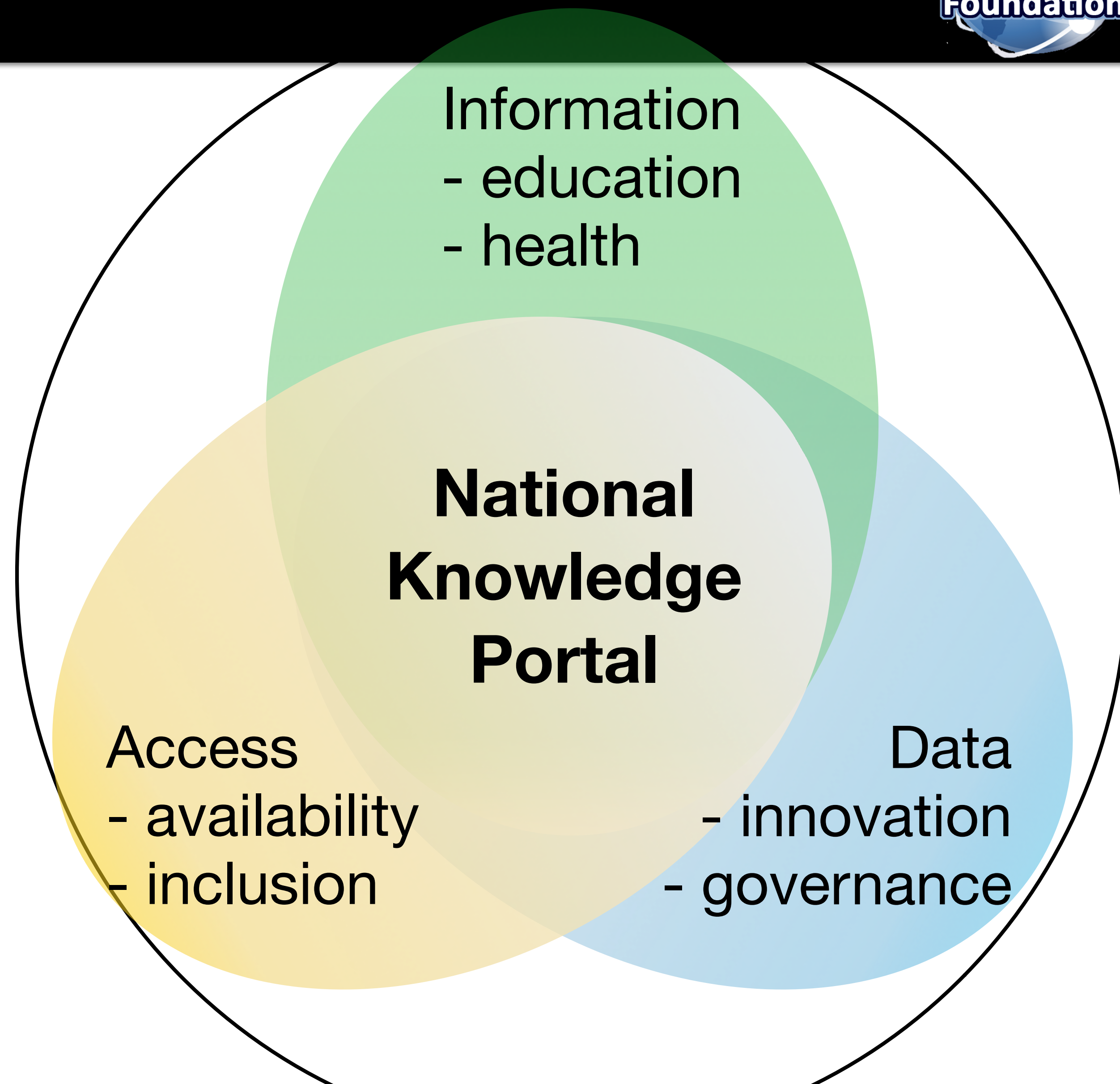
Digital transformation
and development policy



Free Access to National Knowledge Portal



- National Knowledge Portal
 - ➔ Repository for Health Data,
 - ➔ **Trustworthy** Health Information
 - ➔ Digital Health Promotion (DHP)
 - ➔ Education
 - ➔ Digital Public Goods (DPGs)
- **Job creation** and innovation
 - ➔ Governmental **data** sharing
 - ➔ Public-private partnership
- **Regulatory** Framework
 - ➔ **Free access** to Knowledge Portal



Answering “Infodemics”

- Infodemics
 - ➔ wrong information
 - ➔ not supported by science

Papaya-Saft als Blutprobe

Afrika Tansanias Präsident Magufuli setzt im Kampf gegen das Coronavirus auf skurrile Methoden. *Von Johannes Dieterich*

Tansanias Präsident John Magufuli wird nicht zufällig „der Bulldozer“ oder Planierraube genannt. Als er noch Transportminister des ostafrikanischen Staates war, plante er eine breite Asphaltstraße durch die Serengeti, einem der schönsten Wildreservate der Welt. 2015 zum Präsidenten gekürt setzte er seine Dampfwalzenpolitik fort: er schurigelt Nichtregierungsorganisation, sperrt Kritiker kurzerhand ein und verbannt schwangere Mädchen aus den Schulen.

Kein Wunder, dass Magufuli auch im Kampf gegen die Corona-Pandemie keine Hindernisse akzeptiert: der Präsident walzt jede Warnung nieder, die ihm Experten und Virologen aus aller Welt in den Weg gestellt haben. Als Mitte März die ersten Corona-Fälle in Tansania gemeldet wurden, schlug der 60-jährige Regent sämtliche Ratschläge zur sozialen Distanzierung in den Wind und forderte seine 55 Millionen Landeskinder erst einmal zu einem dreitägigen Gebetsmarathon in die Kirchen und Moscheen ein. Seine Kritiker belehrte der gläubige Doktor der Chemie mit der Gewissheit, dass „das Virus im Leib Christi nicht überleben“ könne: Es werde vielmehr „unverzüglich verbrannt“.

„Wahre Heilung“ böten alleine die Kirchen, zeigte sich Magufuli überzeugt. Dort werde der „Corona-Dämon“ die Gläubigen verlassen.

Auch Desinfektionsmittel hält der Chemiker für „ausgemachte Dummheit“. In den Städten versprüht töte es höchstens „Moskitos, Flöhe oder Kakerlaken“. Noch schlimmer: „Was, wenn die aus dem Ausland importierte Lösung selbst das Corona-Virus enthält?“ Magufulis Skepsis gegen die ehemaligen Kolonialnationen geht sogar so weit, dass er seine Geheimdienstagenten kürzlich anwies, das Blut von Ziegen sowie Papaya-Saft und Motorenöl als menschliche Blutproben etikettiert in das Labor der Hafenstadt Daressalam zu schicken. Dort soll tatsächlich sowohl das Ziegenblut wie der Papaya-Saft positiv auf Corona getestet worden sein. Entweder seien die ausländischen Test-Kits fehlerhaft oder Labortechniker seien bezahlte „Saboteure“, tobte Magufuli nach Bekanntwerden der Ergebnisse. Auf jeden Fall seien schmutzige Geschäfte der „Imperialisten“ im Spiel.

Es kam dann auch, wie nicht anders zu erwarten war: die Zahl der Infizierten in Tansania schnellte im April stark in die Höhe. Seit fast einer Woche werden aus dem Land jedoch keine neuen Zahlen mehr gemeldet. Die Statistik blieb bei 480 Infizierten und 16 Todesopfern stehen. Und das, obwohl innerhalb von elf Tagen alleine drei Parlamentariern starben. Die Todesursache wurde bei den Verstorbenen allerdings nicht offiziell bekannt gegeben. Einer der Abgeordneten, der 61-jährige Richard Ndassa, starb in einem Hotel, das Augenzeugen zufolge anschließend desinfiziert und geschlossen wurde. In den Sozialen Netzwerken machte er Videos von nächtlichen Beerdigungen, bei denen die Trauergäste Schutzanzüge trugen.

Die oppositionelle Chadema kündigte inzwischen an, dem Parlament aus Angst vor Ansteckungen künftlich zu bleiben. Magufulis Reaktion: Sie seien von „Imperialisten“ gekauft und müssten im Fall ihrer Abwesenheit auf ihr Verzicht. Auch die Kritik der Weltgesundheitsbehörde prallte wirkungslos auf dem „Bulldozer“ ab: WHO-Afrikadirin Matshidiso Moeti hatte dem Präsidenten mangelnde Kooperation vorgeworfen. Völlige Untätigkeit kann man dem selbstherrlichen Präsidenten allerdings nicht vorwerfen. Am Wochenende kündigte Magufuli eine Flugzeugladung „Organics“ bei seinem madagassischen Kollegen: Ein aus der Artemisia-gewonnenes Getränk, das Madagaskar-Präsident Andry Rajoelina nach einer Untersuchung an weniger als 10 Prozent kürzlich als Covid-19-Heilmittel anpries. Die Pflanze gilt in einigen Teilen Afrikas als Anti-Malaria-Mittel. WHO-Chef Tedros Ghebreyesus reagierte auf diese Therapieversuche mit Skepsis: „Es gibt keine Abkürzung im Kampf gegen die Pandemie.“ Doch diese Warnung liegt nun plattgewaschen im afrikanischen Busch.



Wittert die große Corona-Verschöpfung: John Magufuli. Foto: AFP/Michele Spataro

Addressing the need

- School connectivity in Ethiopia
 - ➔ Total Project: connect all schools
 - ➔ Phase 1: 3.500 secondary schools
 - 6 months time frame, 35 Million USD
 - ➔ Phase 2: all secondary schools
 - time frame 2020-2022
- Norway's share
 - ➔ Connect 500 secondary schools
 - ➔ 45.950 NOK, 1 year project
- Collaboration & Innovation
 - ➔ Competence building
 - ➔ Local deployment (Univ. & IBA Ethiopia & local ground)
 - ➔ Community empowerment (re-using)



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የትምህርት ሚኒስቴር
Ministry of Education
Federal Democratic Republic of Ethiopia



ተ/Date: 20/8/2012
ተ/Ref: 1/2-4344/23296/35

Innovation Norway
Oslo, Norway

Subject: Financial Support for Digital Interconnection of Ethiopian Secondary Schools

Currently more than 26 Million students are in School in Ethiopia in more than 46 thousand Schools in the pre-Primary, Primary and Secondary level classes. Among these large number of Schools, Schools connected to a bear 2Mbps Internet connectivity is less than 500 in number. It implies that these young generation is being brought up in non-digital Schools in a Digital Age.

The Ministry of Education has now decided to change this through implementation of two Phases. Phase one is provision of 300Mbps Internet connectivity to the 3500 Secondary Schools within a time period of 6 months at an estimated Budget amount of 35 Million USD. The Second Phase is to be implemented over two years and is set to interconnect all the remaining Primary and Pre-Primary Schools at a minimum of 50Mbps speed. The Budget requirement for the Second phase is yet to be worked out.

The Educational Network Connectivity is going to be exclusively used for Educational and governmental Services and once installed will provide free internet services to the 3500 Secondary Schools and other government offices.

This is, therefore, to kindly request your good office to financially support the first phase of this Project and be part of the digital transformation in the Ethiopian General Education Sector.

My Best Regards

Getahun Mekuria
Dr.ing. Getahun Mekuria
Minister



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BasicInternet.org

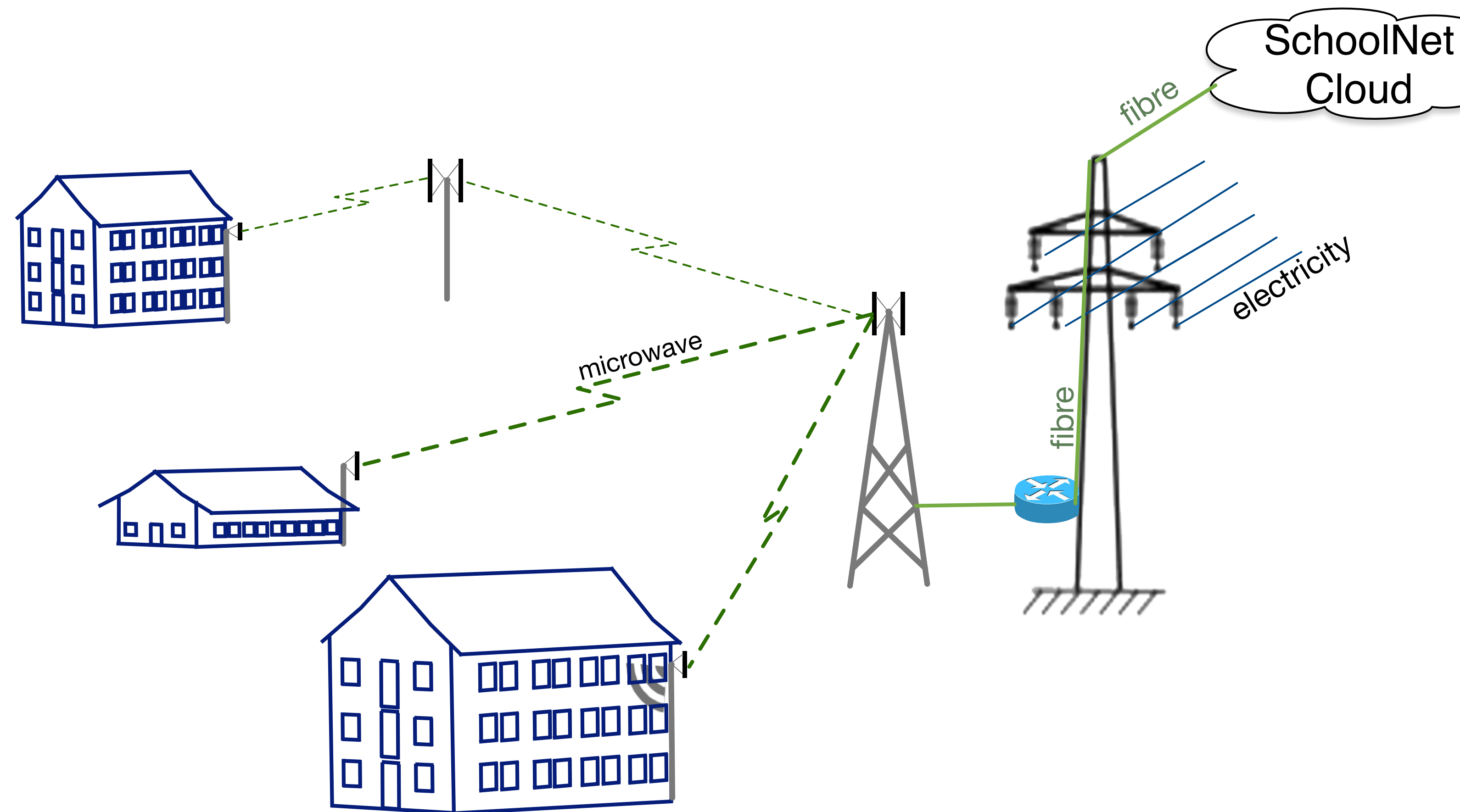


@Basic4all

Sch

Realisation

- SchoolNet distribution
 - educational network by Ministry of Education (MoE)
 - national fibre on high-voltage lines
 - fibre to microwave
- Microwave distribution
 - 0-5 km: point to multipoint
 - 5-15 km: point to point (mast)
 - >15 km: microwave relay mast
- Local school
 - receive microwave antenna
 - local Wifi distribution: local network controller & school server



Suggest plan for Ethiopia

- Connecting 500 secondary schools is an excellent contribution
 - ➔ Demand by Ministry of Education, who also provides fibre (high-voltage line)
 - ➔ Fibre end-point with microwave radio, connectivity to schools
 - ➔ 12 months, 45.950 NOK
- Answers directly to Norway's priorities Meld. St. 11 (2019-2020):
 - ➔ Access - to schools and communities
 - ➔ Skills - through knowledge portal SchoolNet
 - ➔ Regulations - equal access
 - ➔ Inclusion - community connectivity
- Continues existing cooperation
 - ➔ follow-up African Innovation Week
 - ➔ Centre of Excellence with Jimma & Ambo Univ.



Success in Tanzania

- Agreed on connecting 10 schools
 - ➔ UCSAF finances CAPEX costs
 - ➔ Tigo joining, Vodacom requested
- 80 units ordered (16May2020)
 - ➔ Brenda coordinates
 - ➔ Kenya, Tanzania, Rwanda

Connectivity provided by **BOACSE**

- **Chiwanda Secondary School** is at Chiwanda village in Nkangamo Ward, Tunduma Township Authority - in collaboration with BOACSE <https://plus.codes/RH79+CP> (Rashid)
- **Chikanamlilo Secondary School** in Halmashauri, Momba - in collaboration with BOACSE

Connectivity provided by **African Child**


- **Mkuranga District**, in the North-East of Tanzania - in collaboration with African Child at Kiparang'anda:
 - Kiparang'anda: <https://plus.codes/R5VG+RC>
 - Mwanambaya: <https://plus.codes/6G4XX62R+82>

Connectivity provided by **UDES** Usevya Development Society

- **Youth Centre Mpanda - Katavi**, connected by the Usevya Development Society (**UDES**) in Nov <https://plus.codes/V6RP+MC>
- **Usevya village and plans for other 5 sites**, Secondary School, Youth Center and Health Center

Collaboration with Tanzania Community Networks (**Matogoro Jabera**)

- Kasulu, Nyasa, Dodoma, Kondoa and Tarime



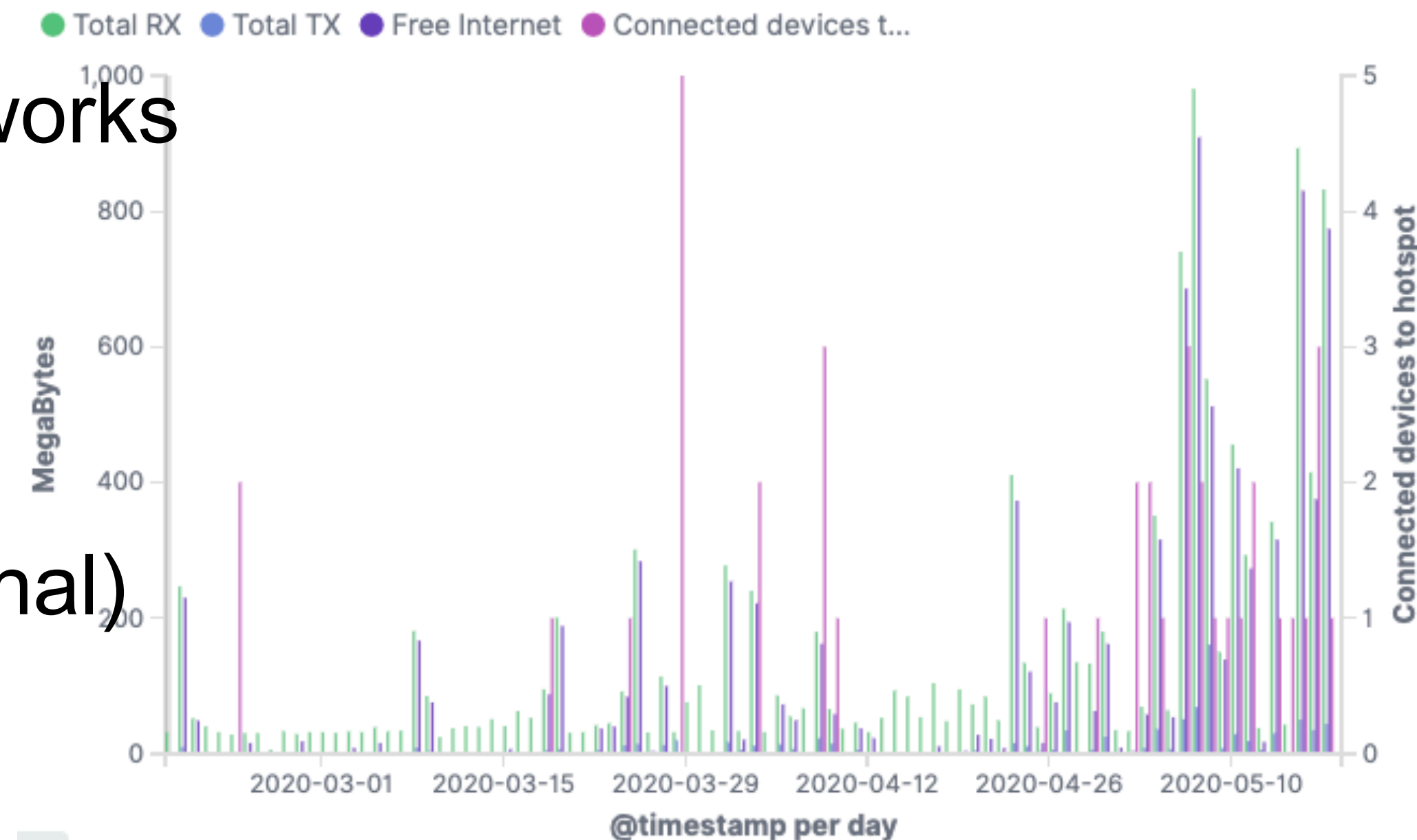
CONNECTIVITY REQUESTS FROM THE COMMUNITY PARTNERS			
Location/Center (Codes/Maps)	Network Operator	Number of boxes needed	Contact person
	sum	79	
RASHID ALLY (PQ35+FQ)	TIGO	1	Rashid-Boasce
Momba District Council Office	TIGO	1	Rashid-Boasce
Tunduma secondary school (6G2JPP9X+VW)	TIGO	1	Rashid-Boasce
Mpemba Secondary School (6G2JPRJV+VM)	TIGO	1	Rashid-Boasce
JK Nyerere Secondary School (6G2JPPFR+39)	TIGO	1	Rashid-Boasce
Momba Secondary School (6G3J47XH+G5)	TIGO	1	Rashid-Boasce
DIT Myunga Campus (6G2J5788+RM)	TTCL	1	Rashid-Boasce
JM Kikwete Secondary School (6G2JMQQP+9C)	TIGO	1	Rashid-Boasce
Mpakani Secondary School (6G2JPQ3Q+JH)	TIGO	1	Rashid-Boasce
10 communities - African Child		10	African Child, Catherine
10 schools around Tanzania project with UCSAF	VODACOM and TIGO	10	
10 communities			
Katavi-Mpimbwe District Council Tz	Vodacom, Halotel and Tigo	16	Eden Wayimba
Iris Hub (24CP+FH)-Kigali Rwanda	TIGO or 4G LTE, Mango Telecom KTRN	1	Benjamin Manirafasha
Tanzania Community Networks Alliance	Halotel, tiGo, Airtel or Vodacom	20	Jabhera Matogoro
Community Initiative Support Services Kabondo Centre (1HW3C+WJ Kodhoch East)	Safaricom 4G, Airtel	1	Robert Owino / Barrack Otieno
Oriang Mission Hospital and Community centre Kabondo (1HW3C+WJ Kodhoch East)	Safaricom 4G, Airtel	1	Robert Owino / Barrack Otieno
Kisumu Social Hall (VQX6+HX KISUMU)	Safaricom 4G, Airtel, Telkom	1	Robert Owino / Barrack Otieno
St Marys School Yala	Safaricom 4 G , Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Nyaguda Secondary School Bondo (Q6MH+93 Nyaguda)	Safaricom 4 G , Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Umala Polytechnic Siaya	Safaricom 4G , Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Nyakhobi Secondary School Funyula Busia County	Safaricom 4G, Airtel , Telkom Kenya	1	Robert Owino / Barrack Otieno
Nakhwana Primary and Secondary School Bungoma County Partnership with the Kenya ICT Action Network	Safaricom 4G, Airtel , Telkom Kenya	1	Robert Owino / Barrack Otieno
Seme Technical Training Institute Kisumu County (VHH4+6C Kisumu)	Safaricom 4G , Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Kabondo Deputy County Commissioners Office	Safaricom 4G, Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Nyakach Technical Training Institute	Safaricom 4G, Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Kilifi Community Network (In partnership with Kenya ICT Action Network)	Safaricom 4 G , Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno
Mamboleo Chiefs Camp Kisumu	Safaricom 4G, Airtel, Telkom Kenya	1	Robert Owino / Barrack Otieno

Open issues

- **Connectivity:**
 - ➔ last remaining villages
 - ➔ voucher update (software issue)
 - ➔ reporting back from usage (monitoring)
- **MoH study in Esilalei and Selela (Elibariki)**
- **Sustainability**
 - ➔ DigI results taken as first step for community networks
 - ➔ Proven “own support” by BOACSE, UDESCO, African Child, tzCNA
- **Impact on disease prevalence**
 - ➔ reporting for HIV and TBc (district, regional, national)



Mikrotik_Traffic



Example: Corona/COVID-19 video for African countries

YouTube:
<https://www.youtube.com/watch?v=Bc3ojifPRlc>

Download (16:9)
<https://owncloud.basicinternet.org/index.php/s/4gB1Zdux6Clx1yR>

Download (social media)
<https://owncloud.basicinternet.org/index.php/s/jERKYmObsGcePBH>

Invitation to collaborate

- **Free access to National Knowledge Portal**
 - 1) Access - **Information Spot** per village
 - 2) Skills - Health, Edu on Knowledge Portal
 - 3) Regulations - Freemium model
 - 4) Inclusion - Free access for all
#LeaveNoOneBehind
- Internet Lite & **Freemium** model for access
 - **free access to National Knowledge Portal** for all
 - **premium** access to **broadband**
 - sustainable solution
- **New proposals** (working hard)...

+18 dB
>20 km

“Providing Internet to the basic of the pyramid isn't a question of affordability, but rather a question of sustainability”
Internet Governance Forum, Panel, WIN

At least
one Information Spot
per village

No magic, exist today.... Lightweight Protocols, e.g. AMP



<https://basicinternet.org/internet-lite-to-the-migoli-high-school/>

<https://basicinternet.org/internet-lite-to-the-migoli-high-school/?amp>



Full Web experience

MISSION PROJECTS ABOUT PARTNERS MEDIA

INTERNET LITE TO THE MIGOLI HIGH SCHOOL

By josef | 4 May 2019 | Uncategorized

The Migoli High School has 1271 pupils (Apr2019) and 35 full-time teachers. The high school is located about 3 km outside of Migoli in the Iringa district in Tanzania.



Basic Internet Foundation

Internet Lite - AMP experience

Internet Lite to the Migoli High School

josef

8 months ago

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