

UiO Universitetet i Oslo

Kick-off, 8-9Apr2021

UiO's contribution to NURTURE



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UiO Department of Technology Systems

The Faculty of Mathematics and Natural Sciences

University of Oslo (UiO)

- UiO is Norway's oldest HEI institution
 - → 28,000 students and 7,000 employees
 - → 10 Centres of Excellence
- NURTURE contribution
 - Department of Informatics (Ifi)
 - Department of Technology Systems (ITS)

Centre for Global Health (CGH)

Through knowledge, responsibility and commitment we shall contribute to a sustainable future. We have shaped society for over 200 years and are a leading European university. For the next ten years, the University will promote independent, pioneering and long-term research and offer outstanding education. We shall strengthen the dialogue with the outside world and contribute to the use of knowledge.



UiO Department of Technology Systems

Google transfaculty of Mathematics and Natural Sciences

http://www.aftenposten.no/meninger/debatt/ Kronikk-Som-gjesteland-pa-G20-toppmotet-ma-vibidra-til-a-endre-verden--Erna-

Partnership for Digital Africa

Comment: As a guest country at the G20 summit, we must help to change the world | Erna Solberg

ERNA SOLBERG (H), PRIME MINISTER

UPDATED: 30.JAN.2017 9:39 P.M. | PUBLISHED: 30.JAN.2017 7:58 P.M.









In July last year was Erna Solberg invited by Angela Merkel for this year's G20 meeting. Here from a meeting between the German Chancellor and the Norwegian Prime Minister in Berlin in November, where Norway's participation as guest country at the economic summit were among issues discussed.

1. UN sustainability goals and Agenda 2030:

Germany has chosen this agenda as a backdrop for their entire program for the presidency, and I lead a group at the United Nations that will drive towards implementation.

We will work to ensure that the G20 goes ahead with its own specific commitments to help achieve sustainability goals.

2. Migration and partnership with Africa:

The world is experiencing the greatest influx of refugees since World War II. Europe, and especially Germany, have seen the consequences of that.

It is necessary to improve the situation where people break up close.

Germany will use its chairmanship to do something about the problems which people belong. There is no minimum job creation and private investment. There are agreements with African countries wishing to achieve it.

G20 can therefore help the countries and international organizations use their resources more on measures which create growth and job creation.

3. Health and education.

Norway has long had a heavy international involvement. Education and health are associated with economic growth.

Affordable Energy & Internet Lite for All

the catalysts for the goals

















9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Energy & Internet Lite for All Target 7.1&7.2 Target 9.C Target 16.10

PARTNERSHIPS FOR THE GOALS

Example: DHIS2.org

The world's largest health information management system — developed through global collaboration led by UiO

DHIS2 began in post-Apartheid South Africa and is now a global open-source project coordinated by the <u>Health Information</u> <u>Systems Programme (HISP)</u> at the University of Oslo (UiO). More than 73 countries worldwide use DHIS2 for collecting and analyzing health data. 2.4 billion people (30% of the world's population) live in countries where DHIS2 is used. DHIS2 is offered free of charge as a global public good.



Example: Digital Transformation

→ Koye Secondary and Preparatory School

connected as part of African Innovation Week 2019

using mobile network

Local knowledge portal

yeboo.com health information



Example: Village Platform

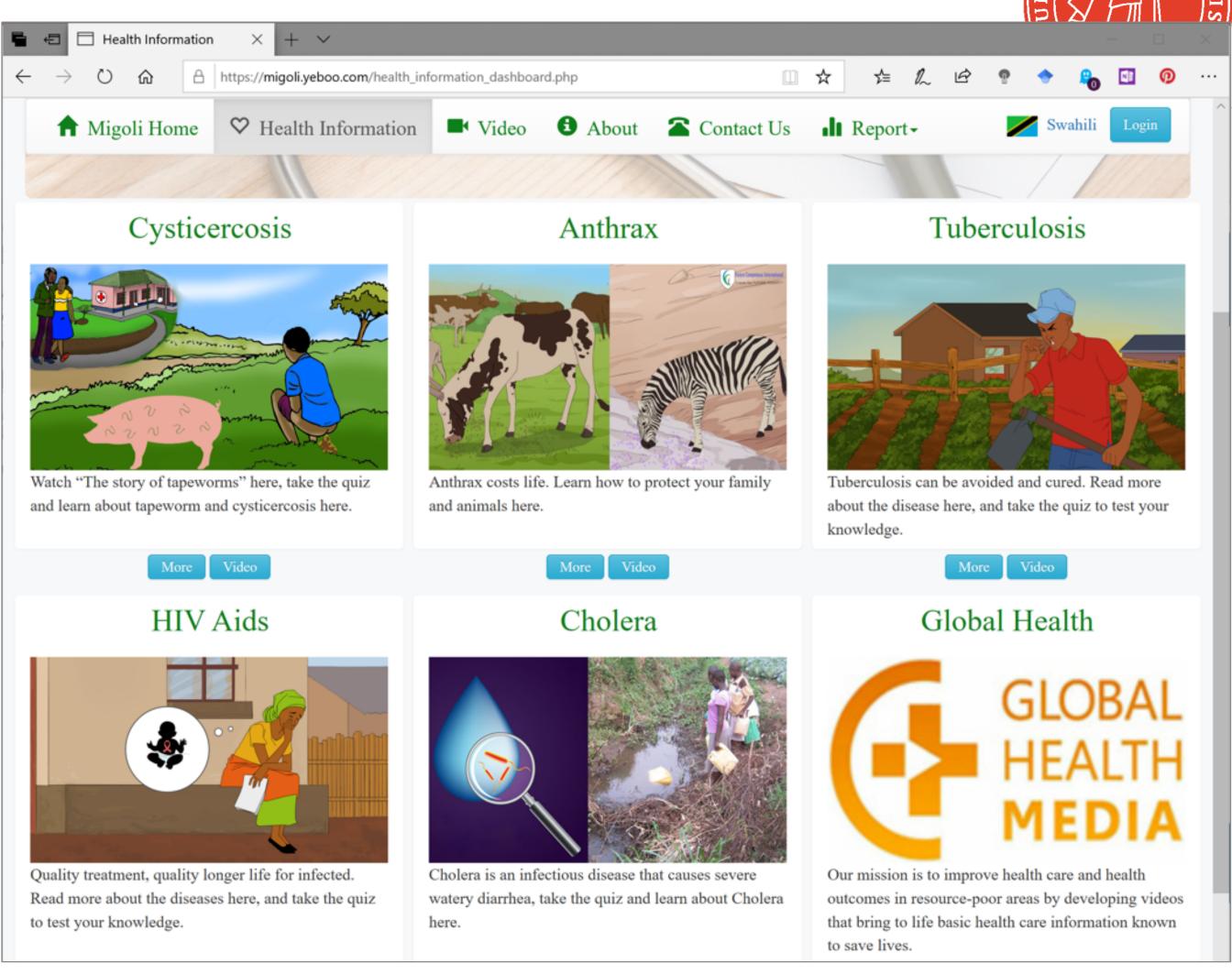
https://Migoli.Yeboo.com



The website will contain locally stored information on

- Health
- Entrepreneurship
- Education
- Agriculture
- Financial inclusion
 (e.g. via Women
 Community Centers)





Exemplary: Digital Health Information

Example:

▶ □ 0:38 / 4:11

Corona/COVID-19 video for African countries









- Pilot connection: Koye Secondary
 School
- Adoption of Regulations, "free access to health and education"
- → Invitation by the Ministry of Education to connect 3500 secondary schools
 - lack of funding
- Excellent University Network



Free access to information - in Ethiopia

- Government Ethiopia Agreement
 - "free access to health & education"
 - Ministry of Health
 - Ministry of Education
- Ethio Telecom offers "zero rating"
 - Health (MoH): MoH.gov.et
 - Ephi.gov.et & Covid19.et
 - Education: National Digital Library
 NDL.ethernet.edu.et
- → follow-up from discussions after African Innovation Week (AIW)



ኢትዮ ቴሌኮም የከፍተኛ ትምህርት ተቋማት ተማሪዎች እና መምህራን ትምህርታዊ መረጃዎችን ከ http://ndl.ethernet.edu.et/ በነፃ ማግኘት እንዲችሉ አደረገ

በአገራችን የኮሮና ቫይረስ (COVID-19) ወረርሽኝን ለመከላከል በመንግስት በኩል በርካታ እርምጃዎች እየተወሰዱ ሲሆን ከእነዚህም መካከል የገፅ ለገፅ ትምህርት በማቋረጥ ተማሪዎች ቤታቸው እንዲቆዩ መደረጉ ይታወቃል።

ከዚሁ ጋር በተያያዘ ኩባንያችን ከግንቦት 21 ቀን 2012 ዓ.ም ጀምሮ የከፍተኛ ትምህርት ተቋማት መምህራን እና ተማሪዎች ከትምህርት ጋር ተያያዥነት ያላቸውን አጋዥ መረጃዎች ከ http://ndl.ethernet.edu.et/ በነፃ ማግኘት እንዲችሉ በማድረግ የመማር ማስተማሩ ሂደት እንዲቀጥል የበኩሉን አስተዋፅኦ ማድረጉን በደስታ ይገልፃል።

በተመሳሳይ ሁኔታ ኩባንያችን ስለወረርሽኙ ወቅታዊ መረጃ ለህብረተሰቡ እየሰጡ የሚገኙትን የጤና ሚኒስቴር http://www.moh.gov.et ፣ የኢትዮጵያ ህብረተሰብ ጤና ኢንስቲትዩት http://www.ephi.gov.et እንዲሁም የተቀናጀ የኮቪድ 19 መቆጣጠሪያ ስርዓት ድረ-ገፅን http://www.covid19.et በነፃ እያቀረበ መሆኑ ይታወቃል።

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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Ministry of Education Federal Democratic Republic of Ethiopia



+7/Date: 20 8 20 12 +πC / Ref: 12-4344 23296 34

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

Value proposition - Conne

or.ing. Getabun Mekuria



ራዕያችን ብቁ ዜ*ጋ* የሚያፈራ ጥራትና ፍትሀዊነት ያረ*ጋገ*ጠ የትምህርት ሥርዓት በቀጣይነት ግንንባት ነው





- 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

