

IGF 2022 WORKSHOP #162

Topic: **“Rural Community Networks, Electricity and Digital inclusion: The case of rural and underserved impoverished communities in the developing countries”**

Date: Thursday 1 December 2022

Time: 09:30-11:00 EAT / 06:30 to 08:00 UTC

Venue: UN ECA Conference Room #: CR2

Addis Ababa

Organisers / Facilitators:

1. Wisdom Donkor, Africa Open Data and Internet Research Foundation (AODIRF)
2. Lee W. McKnight, Associate Professor, School of Information Studies, Syracuse University, USA
3. Danielle T Smith, College of Arts & Science, Syracuse University, USA.
4. Jane Asantewaa Appiah-Okyere, Syracuse University USA

About the Session:

The objective of this workshop session is to bring together key stakeholders to discuss this important topic within the context of sustainable financing and how we can fully develop and improve community networks and showcase best practices and innovative solutions within the global digital frameworks.

Description

People living in part of urban rich areas are more likely to have access to the internet and more likely to use it than those living in rural, remote regions and the urban underserved poor communities where economic opportunities are minimal. According to the latest estimates from the United Nations specialised agency for ICT, the International Telecommunication Union (ITU), less than two out of every five people living in rural areas have an internet connection (ITU, 2021). In contrast, nearly twice as many people living in urban areas are connected. This stark disparity in internet use is known as the rural-urban digital divide and relates to the forms of digital exclusion that keep billions of people around the world offline and under-connected

The question remains how long it will take to connect the rural, underserved poor urban communities, and when it will take the world to fully include the remaining underserved and unconnected communities. While many reports and studies note the benefit of connected communities to support development agendas; yet there remain significant gaps in national level governmental public policies towards rural and underserved communities, especially in regulatory and legislative frameworks that support last mile and rural connectivity. This is often compounded by inadequate core infrastructure such as rural power sources, tower infrastructure and back-haul, with a commercial operators' focus on more lucrative urban rich areas.

Energy and digital connectivity are enabling mechanisms for diverse industries, education, health care, trade which impacts communities globally. Whilst there has been substantive discussion in the past on

bridging the divide, the reality remains that there is no simple answer to the remaining challenges of connecting those who are not connected, or who are under connected – e.g limited access, lack of digital skills, lack of useful content, lack of affordable power sources.

The affordability of mobile data and internet-capable devices are one of the most commonly mentioned barriers to internet access in rural and underserve urban poor communities (GSMA, 2021; see also A4AI, 2022, and A4AI, 2021). This is even more so in rural and underserved urban poor communities in the developing countries, where incomes tend to be lower, thus negatively affecting comparative affordability. In research conducted by A4AI-Web Foundation in 2020, more than a third (35%) of the people surveyed in rural areas in Colombia, Ghana, and Uganda reported that the most frequent limitation to greater internet use is the cost of mobile data (Web Foundation, 2020). Also, a third of people in Colombia, Ghana, Indonesia, and Uganda identified the cost of mobile devices as one of the main reasons they do not use the internet. Economic conditions vary by geographic location (ILO, 2020) and what might be considered affordable in the urban areas in the developing world may be considered expensive in a rural communities.

Silo approaches, by regulators and Ministries in healthcare, agriculture, education, finance and economic development, need to be removed, and new technologies and innovation encouraged. There needs to be a multi-faceted approach of changing how electricity can be more broadly distributed.

At heart, community networks rely on the active participation of individuals and local communities, are owned by the community, and operated in a democratic fashion. Community networks are operationalized through a whole variety of local stakeholders, NGOs, private sector entities, and or public administrations, who are involved in the designing, developing, implementing, maintaining and governing community networks.

Expected Outcomes:

The session will start with discussions on creating a road map process to better understand what needs to be done in the short and long term. There are several expected outcomes:

- Identify opportunities and lessons learned that would support the developing countries alignment of clean energy sources that support both underserved urban and rural and remote users
- Identify the most critical gaps hindering the adoption and deployment of community networks in the developing countries.
- Identify opportunities for governments to align national broadband and connectivity priorities programs with key community network infrastructure
- Identify key issues on funding, resources and capacity at the national level.
- Identify key data gaps hindering the penetration of Internet to the underserved communities in the developing countries

Policy Question(s):

1. The growth and diversity of users requires development of relevant content and enabling users to benefit from being connected. Are new approaches, including public policies to encourage digital

skills and digital literacy for inclusion in the increasingly digitized world? And are there similarities in priorities when it comes to access to, and the role of electricity as a basic building block for addressing digital inclusion in rural and the underserved impoverished communities?

2. Role of Spectrum: e.g. should regulators enable a pro-rural pro-poor Regulatory framework that proactively enables “special treatment” such as licensed exempt spectrum for Non-Governmental Organisation (NGO) technologies – e.g. tv White spaces, community networks; dynamic spectrum re-allocation of un-used or under used spectrum to connect the unconnected.

3. What Recommendations would you make that would expedite the digital promise for connecting the rural and underserved urban impoverished communities. What changes are needed to ensure that language and disability are no longer barriers to access in developing countries?

4. In the past 20 years, Africa (Developing Countries) has experienced a mobile revolution that has somewhat changed this continent's access to communication. However, access penetration is declining as broadband demand rises. Increasing amounts of evidence point to the failure of current connectivity initiatives to connect everyone, and poor rural populations in particular. Those of us with Internet access routinely take for granted the growing social and economic advantages of connectivity, frequently without taking into account how the disconnected are becoming more and more powerless as a result. It need not be like this. An alternative vision of access that may empower everyone is being offered by a fresh wave of organizational and technological innovation. If they do, small-scale business and community network operators can close access gaps if they are empowered by effective regulation and investment. What is your opinion on this?

5. Affordable access to communication is of such value as a social and economic enabler that we need strategies that can embrace everyone. In order to have a meaningful conversation about options to reach the unconnected, we need better information on current telecommunications network infrastructure and development. Telecommunications has been overlooked as a sector to which transparency principles and Open Data policies might be applied. What should we do differently in order to have last mile data release to the public in an open format?

6. Within the evolving digital economy, how can we get the most contribution from the different actors of the internet ecosystem, particularly strong players, in order to tackle digital inclusion and internet affordability without closing opportunities for different business models and preserving Internet openness?

Issues, Challenges and Opportunities addressed:

In order to address the gaps preventing rural areas from catching up with their urban counterparts, stakeholders must be aware of the specific obstacles holding rural areas behind. These include higher structural costs (A4AI, 2018), including those associated with lack of or limited access to power (A4AI, 2021; Mangal & Foditsch, 2021), lower overall demand levels, a lack of supply (ITU, 2016), vulnerability to disruption in the context of reduced redundancies (Mangal, 2022), higher rates of poverty (World

Bank, 2020), lower attainment rates in education and literacy (OECD, 2020), especially among women and girls, and an absence of public policies designed to increase and improve rural connectivity for all (A4AI, 2018).

Community networks are operationalised through a whole variety of local stakeholders, NGOs, private sector entities, and or public administrations, who are involved in the designing, developing, implementing, maintaining and governing community networks. This workshop seeks to thoroughly discuss the issues of connectivity, accessibility, electricity, digital skills and digital inclusion within the context of the developing countries, recommend possible solutions in addressing the gaps that might exist and the intersectionality of sustainable financing.

Relevance to Internet Governance:

The Internet Governance Forum (IGF) 'Policy Options for Connecting and Enabling the Next Billions' process is a bottom-up, community-driven intersessional work process that seeks to produce a collaborative document to identify ways to connect the next billions. Since 2015, this process has identified key barriers to connecting the next billions, made policy suggestions at the international and regional and local levels, and identified tangible linkages between grassroots ICT projects and the sustainable development goals, the output document of the compilation of the fourth phase of the process focus on case studies that aid in the attainment of four Sustainable Development Goals namely SDG 7 (Clean and Affordable Energy), SDG 8 (Decent Work and Economic Growth),SDG 9 (Industry, Innovation and Infrastructure) and SDG 17 (Partnerships to Achieve the Goals).

Relevance to Theme:

These Policy Options and concrete examples are already serving as tangible and useful resources for policymakers and other stakeholders, but also symbolize the IGF community's conviction that the need for multistakeholder collaboration towards expanding meaningful Internet access is a shared goal that remains at the core of Internet governance.

Discussion Facilitation:

This workshop will serve as a focal point for coordinated and constructive discussions about the different but interrelated aspects of Internet governance as described above. The workshop will benefit from the inclusion of all stakeholder groups, who shall be able to share in the knowledge and experience of key insight on the accessibility, digital inclusion and clean energy that is necessary for the Internet to entrench human rights for and well-being of all the outline chosen to serve that purpose comprises the gathering of specialists to initiate a panel conversation as well as a hybrid open mic in order to incorporate the broader views of the audience both onsite and online. The workshop will be structured around three core component, with each component organized around specific policy questions that examine the respective topic, plus a concluding closing remark as describe in the agenda below:

Agenda Format

1. Session introduction, welcome and opening remark.
2. Panel discussions:
 - a. Component 1: Community Network and Digital Inclusion,
 - b. Component 2: Spectrum and the Regulatory Environment

- c. Component 3: Clean Energy
 - d. Component 4: Financing
3. Discussants and Q & A: There will be two (2) discussants in the room and they will share their own perspective, based on their experiences and the lessons they've learnt developing and implementing various policies and initiatives with regards to the topics being discussed. The two (2) discussants will be carefully selected to respond to the speaker's submissions. Audience in-room and on-site will also be given time to ask questions
 4. Closing remarks

The initial three components will follow the same discussion structure. Speakers will be invited on a panel to respond to relevant policy questions, followed by a response from the discussants. To speed up the engagement with participants, a unique approach will be used to gather questions in the chat. The questions will be read out alongside discussants for the panel to respond.

Moderator: Zanyiwe Nthatsi-Asare, CEO of Digitally Legal, South Africa

Online Moderator: Lily Edinam Botsyoe, Ghana IGF / Africa Youth IGF

Rapporteur: Akinremi Peter Taiwo, Africa Rapporteurs Network

Speaker

1. Onica N. Makwakwa, Head of Africa Region, Alliance for Affordable Internet (A4AI), South Africa
2. Lee W. McKnight, Associate Professor, School of Information Studies, Syracuse University, USA
3. Hon. Samuel Nartey George, Member of Parliament, Ghana
4. Dave Ackerman, Mobilecoin

Discussants:

1. Andre Laperriere, Executive Director, Global Open Data for Agriculture and Nutrition, Canada
2. Hon. Neema Lugangira, Member of Parliament, Tanzania

Draft Agenda

1. Welcome and Introduction (MC) Kwaku Antwi, Africa Open Data and Internet Research Foundation
2. Opening remark. 2minutes
3. Panel discussions (45minutes)
 - a. Component 1: Community Network and Digital Inclusion 10minutes
 - b. Component 2: Spectrum and the Regulatory Environment 10minutes
 - c. Component 3: Clean Energy 10minutes
 - d. Component 4: Financing 10minutes

Speakers:

Moderator: Zanyiwe Nthatsi-Asare, CEO of Digitally Legal

Online Moderator: Lily Edinam Botsyoe, Ghana IGF / Africa Youth IGF

Rapporteurs: Akinremi Peter Taiwo, Africa Rapporteurs Network

Panel

- a. Onica N. Makwakwa, South Africa
 - b. Lee W. McKnight, Associate Professor, School of Information Studies, Syracuse University
 - c. Hon. Samuel Nartey George, Member of Parliament, Ghana
 - d. Andre Laperriere, Executive Director, Global Open Data for Agriculture and Nutrition (GODAN)
4. Discussants:
 - a. Andre Laperriere, Executive Director, Global Open Data for Agriculture and Nutrition (GODAN) 8minutes
 - b. Hon. Neema Lugangira, Member of Parliament, Tanzania 8minutes
 5. Q & A (In-room and Remote audience) 8minutes
 6. Panel Response to Q&A 10minutes
 7. Closing remarks 2minutes