

Research Report

Committee; Economic and Social

Topic; The Question of Broadband Provision in the Developing World

Introduction:

In the developed world, the status of broadband connection is nearing that of a human right. Despite this, more than 50% of the World's population lacks basic internet access. The UN sees ICT as a 'means of implementation' in regards to its sustainability goals. In particular, broadband access has been shown to boost GDP, aid education and health services, help hold governments to account by providing information, and generally improve quality of life. Data from the Global Connectivity Index shows a widening digital inequality where the internet rich are leaving behind those without.

Definition of Key Terms:

Developing World - includes countries with a relatively low score on the Human Development Index (HDI), lower levels of economic activity and industrialisation, as well as generally lower living standards.

Broadband - a fast connection to the internet capable of transmitting large amounts of data simultaneously.

Telecommunications market - industry made up of those who help transmit data on a global scale.

Huawei's Global Connectivity Index (GCI) - this tracks 50 nations in their digital transformation using 40 criteria. It then groups them into three based on the scores; Starters, Adopters, and Frontrunners.

ICT - an acronym for Information and Communication Technology.

Knowledge economy - when intellectual rather than physical capital is valued in the production of goods/services.

Zero-rating services - free at the point of access internet services. The cost of running the service is generally subsidised through advertising or donations.

Human Right - rights that are believed to belong to every person regardless of factors such as ethnicity or gender, and include (but are not limited to) the right to food and water, and the right to live.

Contextual information:

There is a view that in today's society internet access is a human right. In 2011, the UN published a report that outlined a government's role in providing internet access - a government is to be condemned if they restrict internet access, and they have a responsibility to ensure that internet access is broadly available. Despite this only 50% of the world has access to the internet.

One of the main advantages of ensuring broadband access for all, is its reported effect on GDP. Research by the telecommunications company Ericsson suggests a strong correlation between GDP and mobile broadband, and more pertinently that it is the increase in mobile broadband strength that causes the boost to GDP. This suggests connectivity is key to reducing worldwide inequality by improving economies. Strong broadband connection also allows countries to enter the knowledge economy by creating the digital infrastructure that companies in that sector need.

Broadband has the potential to drastically improve education and healthcare services by improving the quality of information involved. Within schools, the internet can be a valuable resource, widening the field of study and opening up opportunities. Improved connectivity within the healthcare system can drastically save and improve lives by, for example, providing a way to digitally store patient files making them easily accessible wherever and whenever they are needed. The information provided through broadband connections can allow numerous other government services to run more efficiently, and can also help populations hold their governments to account. So, overall the provision of broadband can potentially improve overall quality of life in much of the developing world. Specifically, the provision of broadband could strongly contribute to the UN sustainability goals of; good health and well-being, quality education, decent work and economic growth, industry innovation and infrastructure, peace justice and strong institutions.

Major Countries and Organisations Involved:

ITU - is the United Nations specialized agency for information and communication technologies

80% of countries - have a National Broadband Plan (NBP)

UNESCO - The United Nations Educational, Scientific and Cultural Organization is a specialized agency of the United Nations based in Paris. It has recognised the importance of broadband in helping reach its goal of education for all.

UN Broadband Commission for Sustainable Development - a joint project between the ITU and UNESCO with the task of researching the current and potential role of broadband in sustainable development.

UN conference on Trade and Development - UNCTAD is a permanent section of the UN that deals with trade investment and development issues.

Timeline of Events:

Date;	Event;
1865	ITU founded
1945	UNESCO formed
1946	ITU becomes part of the UN
2010	UN broadband commission founded
2015 (September)	UN goals for sustainable development passed
2015 (December)	World Summit on the Information Society held in New York to discuss progress made in worldwide implementation of technology and gaps that remained

Relevant UN Treaties and Events:

UN goals for sustainable development (2015)

UN resolution on Information and Communication Technologies for sustainable development (2017)

Possible Solutions:

The Provision of broadband to developing countries presents many obstacles. In many cases the infrastructure to take action does simply not exist in any form, making it a costly task to even begin providing internet access. Even when the infrastructure does exist, the problem of low levels of disposable income comes into play. Many people can simply not afford the high costs of devices, mobile plans, routers, or expensive connectivity taxes that exist in many areas. The last hurdle is the difficulty in uptake of new technologies. Many people, particularly older generations, have lived their whole lives without access to technologies and so a reluctant to start using them. Those who do attempt to grasp the opportunity often lack the skills to do so.

The most cost-efficient way to bring people online is through existing mobile network infrastructure. If operators expand mobile broadband coverage by upgrading existing 2G sites to 3G and 4G, as well as targeting uncovered areas, this could allow 95% of the world's population to come online within 5 years. The problems of affordability and uptake can be addressed by; developing cost/benefit-based business models targeting urban and rural

areas, nurturing ecosystems for local apps and content development in local languages, and prioritizing development of ICT literacy and skills.

Recent advances and funding into space technologies can also aid the challenge of broadband provision. Space and upper atmosphere-based technologies now have an expanded reach, improved power generation and storage, as well as a cheaper price. These technologies are also exempt from the problems of space, theft, and natural disasters. This could also be a great advantage to landlocked countries. For example, Africa where landlocked countries have much worse broadband connection than those that aren't landlocked as it is harder to build infrastructure in the landlocked countries.

Another potential solution comes from zero rating services, like wikipedia. These free at the point of use services help to provide information on the internet, lowering the cost of an expensive practice. Investment into or encouragement of these sites could benefit many people. Connectivity taxes may also need to be reduced to make connections widely accessible. Additionally diversifying content i.e. having content that's not in English would remove the language barrier that many people face.

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