INDUSTRY, INNOVATION AND INFRASTRUCTURE

In the rapidly changing and ever more digitalized world, digital solutions and advances in equal access to connectivity, new products, innovative approaches to tackle exponentially growing global challenges, and investments in skills that prepare youth for the future are key to the achievement of all other SDGs.

KEY ASKS

Promote access to connectivity to all, particularly the most vulnerable. Target 9.C. urges governments to "significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020."

Globally, 29 per cent of young people[1] worldwide are not online and young people in Africa are the least connected. Around 60 percent of the population aged 15-24 in Africa are not online, compared with 4 percent of those in Europe. To be unconnected in a digital world is to be deprived of opportunities to learn, communicate and develop skills deemed critical for the twenty-first-century workplace. It will also exacerbate inequalities, reducing young people's economic opportunities and even means to access digitally-based government services. The gender digital divide is also growing. In least developed countries, the gender gap of internet users increased from 29.9 to 32.9 between 2013 and 2017. Also, in poor urban areas, studies show men outnumber women on the internet as much as two to one.

Schools represent an ideal starting point for connecting young people.[2] **UNICEF urges governments to prioritize expansion of safe, sustainable, and cost-effective digital connectivity in national plans and through assignment of specific resources to this**. One of the key recommendations of the United Nations Secretary General's (SG) High-Level Panel (HLP) on Digital Cooperation[3] is for every adult to have affordable access to digital networks, as well as digitally-enabled financial and health services, as a means to make a substantial contribution to achieving the SDGs. To support achievement of this recommendation, UNICEF recently launched, in partnership with ITU, the GIGA initiative that aims to connect every school in the world and provide young people with information, opportunity and choice. **UNICEF invites governments to participate in global connectivity pooling and price negotiation mechanisms and urges countries to join GIGA by mapping school locations and connectivity gaps and accessing financing to support the deployment of connectivity solutions.**

Promote the uptake, development and sharing of digital public goods (DPGs) that increase access to information, opportunity and choice for children and young people. Digital connectivity has limited value for the attainment of the SDGs without access to relevant content, particularly for young people. Therefore, one of the key recommendations of the UN SG's HLP on Digital Cooperation report is for a broad, multi-stakeholder alliance to create a platform for sharing digital public goods, engaging talent and pooling data sets, in a manner that respects privacy, in areas related to attaining the SDGs. **UNICEF urges governments to identify local DPGs and pilot and scale them through national systems, such as education, health, emergency preparedness and response, etc. UNICEF also invites governments to participate in global alliances to share, promote and fund the scaling of DPGs.[4]**

Protect and promote human rights in the digital era and adopt specific policies to support full digital inclusion and digital equality for women, girls and traditionally marginalized groups. The SG's HLP on Digital Cooperation stresses the role of governments, civil society, the private sector and the public in understanding and addressing new threats to human rights posed by new emerging technologies, ad designing new autonomous intelligence systems in a way that safeguards human rights and complies with ethical standards.

Promote opportunities and innovation though investing in building skills for tomorrow and in entrepreneurial ecosystems. Target 9.2. stresses the promotion of inclusive and sustainable industrialization. There are 1.8 billion young people[5] in the world today, nearly 90% in low and middle income countries - the largest cohort ever. Yet for many, opportunities are lacking. With only 30% of the world's poorest children attending secondary school[6]; over 50 million young people on the move[7] and with girls and young women more than three times likely than young men to be out of work or education - a vital window of opportunity to build skills and nurture growth and creativity in adolescent brain development is being missed. Meanwhile, there is strong evidence of a skills mismatch between young people and employers, and it threatens to become worse with rapidly advancing technology demanding changing skills. Young people, both those in and out of school, need structured opportunities to learn transferable skills for future employment or entrepreneurship and to build digital skills and literacy. **UNICEF recommends governments, in line with SDG targets 9.B and 9.5, to invest in building skill sets in adolescents and youth that prepare them for future job markets, including innovation, entrepreneurial skills, social entrepreneurship and STEM.** Governments should **adopt coordinated policy and investment across education and youth ministries, as well as those responsible for driving innovation and industry**. UNICEF encourages governments to take advantage of solutions in this area that enjoy robust multi-stakeholder support and evidence, such as the World Economic Forum, World Bank,

UNDP and UNICEF-supported UPSHIFT programme. This should include a specific focus on girls and vulnerable youth who lack access to the opportunities created in a digital society. **UNICEF welcomes Investment in local innovation and entrepreneurial ecosystems**, in line with Targets 9.3, 9.4, 9.5 and 9.B with a focus on **developing context-based solutions towards attaining the SDGs,** anchoring technology innovation to the Principals of Digital Development[1] that highlight designing with the user, focusing on context-based solutions, being open source, and addressing privacy and security.

MONITOR -- THE IMPORTANCE OF DISAGGREGATED DATA COLLECTION, ANALYSIS AND USE

Promote the use of digital mobile tools that allow for amplifying citizen voice through evidence, feedback and data by and from young people. According to the Conventions of the Rights of the Child[8], children, adolescents and young people have the right to express themselves, and the right to have their opinions considered. Technology has become a driving force in the lives of adolescents and young people across the world: more than 4 billion now have access to the internet; five billion have mobile phones. Digital messaging and data collection mobile tools are ideal to curate the opinions and perspectives of young people to inform political, social or economic topics at scale. As a contribution to this, 66 governments engage with more than 8.6 million young citizens with 350 partners, by making use of a UNICEF-supported global youth engagement platform, U-Report[9]. The UN SG's office has identified this as one of the platforms for engaging young people, including in SDG monitoring and VNRs.

Promote the use of new sources of real-time and big data, and new methods of analyzing such as machine learning and artificial intelligence to gain useful, faster insights on challenges facing children. While machine learning, artificial intelligence and big data have serious ethical implications to consider and have the potential to widen inequality, they also pose tremendous opportunities to gain faster and complementary insights on challenges facing vulnerable children, such as socio-economic indicators, emergencies and epidemics.

Adopt, measure and report against a set of metrics for digital inclusiveness. The SG's HLP on Digital Cooperation believes that a set of metrics for digital inclusiveness should be urgently agreed, measured worldwide and detailed with sex disaggregated data in the annual reports of institutions such as the UN, the International Monetary Fund, the World Bank, other multilateral development banks and the OECD.

INVEST -- SOCIAL SPENDING AND PROGRESS ON RESULTS FOR CHILDREN, ADOLESCENTS & YOUTH

Invest in connectivity through innovative financing mechanisms. Reaching the goal of digitally connecting the remaining half of the world's unconnected population rapidly requires harnessing innovation in connectivity technology, in financing mechanisms and in accountability mechanisms. UNICEF recommends governments, in line with Target 9.A, to join the global financing effort to create and use fair pricing mechanisms for bringing connectivity to unconnected or poorly connected areas, including through the GIGA initiative. Through joining such efforts, governments can lead the way in building the critical foundation for the digital future, with investments through Universal Service Funds, national budgets, multilateral banks, donors, and the private sector.

ACTIVATE -- AWARENESS BUILDING & MEANINGFUL PARTICIPATION OF CHILDREN, ADOLESCENTS & YOUTH

Invest in digital mobile tools that engage and empower young people and adolescents especially those that are marginalized and those living in humanitarian conditions. Youth engagement and participation are an important part to enabling sustainable development. However, rarely are youth consulted on issues of political, social, and economic development nor asked for their opinion or feedback in an emergency. Through the digital mobile tools, such as U-report, young people can provide valuable information when reporting on what is happening in their communities, and with it help improve their own lives and that of their peers and families. This should be part of a continuum to regularly, meaningfully and consistently engage children, adolescents and youth as agents of change to influence behaviors and social norms amongst themselves, their households and their communities. It goes beyond engagement just for the purposes of reporting periods, but rather systematizing the engagement of young people in a variety of ways and across media and communications channels.

Provide spaces for children, adolescents and youth to learn about, discuss and take action on the SDGs, including *Industry, Innovation and Infrastructure.* UNICEF can support this effort due to our existing work in this space and creating child-friendly education and entertainment materials through our foundational partnerships on the *World's Largest Lesson* and *Comics Uniting Nations*. UNICEF's Youth Activate Talk Methodology is also a platform from children to express their ideas on the SDGs through a variety of mediums.

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[1] aged 15 to 24

[2] Source: https://www.generationunlimited.org/our-work/promising-ideas-innovation/digital-connectivity

[3] https://www.un.org/en/digital-cooperation-panel/ 10 June, 2019.

[4] https://digitalpublicgoods.net/

[5] Young people are defined as aged 10-24. Other terms often used are adolescents (10-19) and youth (15-24)

[6] https://data.unicef.org/topic/education/secondary-education/

[7] https://www.unicef-irc.org/research-watch/Children-on-the-move/

[8] https://www.unicef.org/child-rights-convention

[9] https://ureport.in/v2/