

THE ROLE OF ICTs IN ACCELERATING THE ACHIEVEMENT OF THE SDGS

*New innovation approaches to support the
implementation of the Sustainable
Development Goals*



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ICTs and the SDGs

*“The spread of **information and communication technology** and **global interconnectedness** has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological **innovation** across areas as diverse as medicine and energy”.*

2030 Agenda for Sustainable Development (Paragraph 15)

ICTs are catalytic drivers to enable the achievement of all the SDGs

Specifically referenced in the SDG targets:

- SDG4 Quality Education (4b)
- SDG5 Gender Equality (5b)
- SDG9 Industry, innovation and Infrastructure (9c)
- SDG 17 Partnerships for the Goals (17.8, as a means of implementation)

Fast forward the SDGs

Many of the Sustainable Development Goals (SDGs) will not be met unless we accelerate the pace of change. We need information and communication technologies (ICTs) to meet the SDGs.

Talk to us today about how ICTs can help achieve the SDGs.

fast forward together
#ICT4SDG

The role of Innovation

- **Innovation** is one of the four Strategic Goals of the ITU
 - Fostering an **innovative ICT ecosystem**
 - Contributing to the development of an environment that is **sufficiently conducive to innovation**, where advances in new technologies and strategic partnerships become a key driver for the 2030 Agenda
 - Recognizing the need to **foster engagement and cooperation** with other entities and organizations in pursuing that goal



INNOVATION
& PARTNERSHIP

ITU support to Tech SMEs



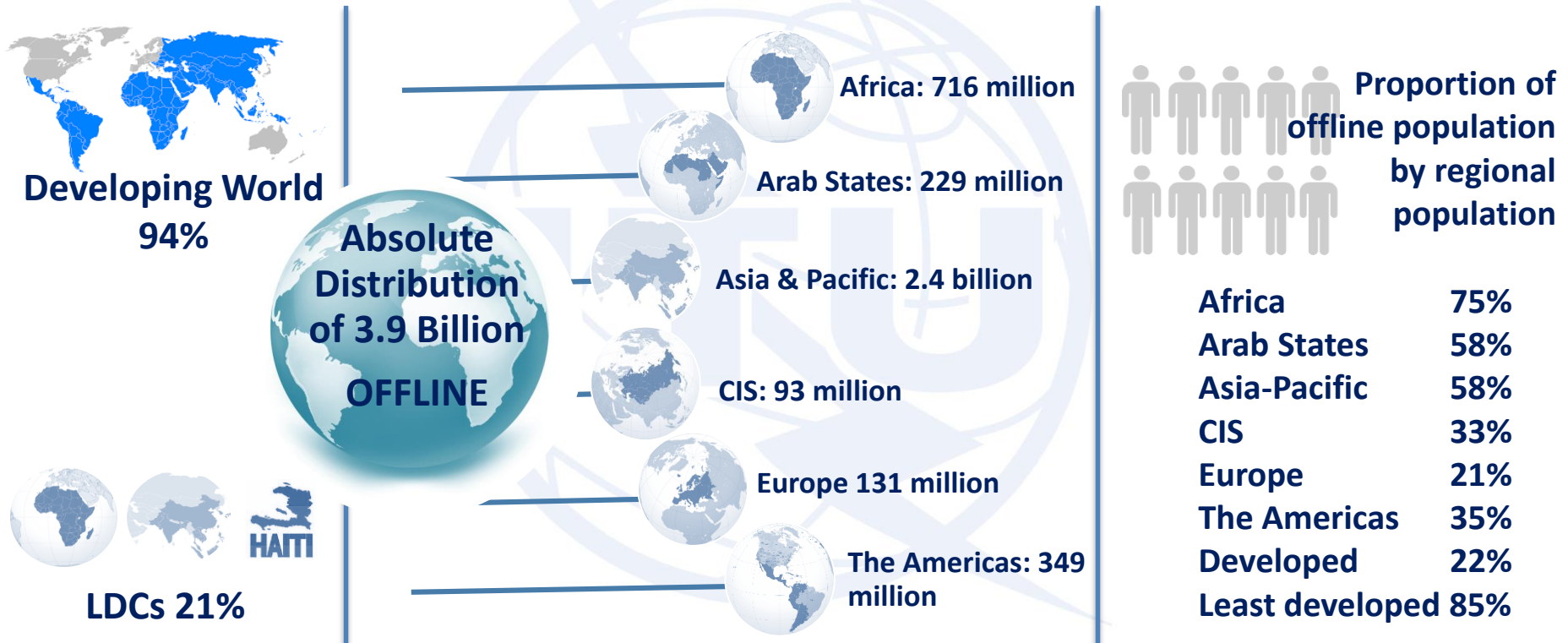
ITU has put special emphasis in **supporting tech SMEs and entrepreneurship** as part of ITU's support to innovation. Key areas of action:

- Providing a platform to showcase tech SMEs and country-led support: ITU Telecom World series of events since 2015
- Recognizing most innovative tech SMEs from emerging markets: ITU Telecom World Awards, established in 2015
- Mapping best practices and producing recommendation for policy makers:
 - 2 publications launched in 2016
- Building network of key organizations supporting tech SMEs: EMERGE initiative
- *More information at www.itu.int/entrepreneurship*



Global Connectivity Overview

Distribution of the offline population 2016 by region and development level





Source: Discussion paper for Special Meeting of the Broadband Commission and the WEF, Davos 2017, Connecting the Unconnected – Working together to achieve Connect 2020 Agenda Targets ITU data





HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT


"Eradicating poverty and promoting prosperity in a changing world"


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1 NO POVERTY



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5 GENDER EQUALITY



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2 ZERO HUNGER



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9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



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3 GOOD HEALTH AND WELL-BEING


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14 LIFE BELOW WATER


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#ICT4SDG

17 PARTNERSHIPS FOR THE GOALS


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Adama is reaping the harvest of real-time data

In Mali, thanks to regular SMS messages from the nkalo agricultural information service, delivered straight to his phone, Adama stays up to date on the latest market data, and knows the best time to harvest and sell his crops.

Want to increase your project's yield through ICTs?

	<i>fast forward together</i> #ICT4SDG	1 NO POVERTY 
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	<i>fast forward together</i> #ICT4SDG	
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SDG1 No Poverty

- ICTs can be used for ending poverty and promoting inclusive & sustainable economic growth – for example, by:
 - Promoting sustainable resource management system by using ICT to secure last-mile delivery food, medicine and disaster relief
 - Enabling agricultural extension and business development services by using ICT to provide timely information and solution
 - Banking the unbanked, through inclusive digital financial services
 - Improving opportunities and facilities for the poor by using ICT to map and monitor their needs and support development initiatives
 - Promoting inclusive innovation and better education/jobs for the poor, via online work/education opportunities
 - Transforming public services and making them accessible and responsive to the poor by using ICT

“Helping empower people and lift them out poverty”



Case study – Bangladesh

➡ The **Krishi Call Centre (Agriculture Call Centre)** is a **public-private initiative** that aims to help **end hunger and achieve food security by promoting sustainable agriculture**. The service acts as an agriculture extension service, providing easy, rapid, real-time and low-cost extension services to all farmers, particularly smallholders and the marginalized, via the toll-free short number 16123. The service leverages the widespread availability and adoption of mobile cellular telephony in Bangladesh, and by the end of 2014 was receiving **3,000 calls a month**, with a total of 64,000 calls received.

SDG2 Zero Hunger

- ICTs can be used for improving food security and promoting agricultural sustainability – for example, by e-agriculture strategies:
 - Offering opportunities to benefit farmers and agricultural production via better access to useful information, e.g., weather forecast, market prices
 - Monitoring environmental and soil conditions to make farming more profitable and sustainable, e.g., water management, pest/disease control
 - Monitoring food supplies and mapping agricultural production and food shortages to establish comprehensive data base (Big Data)
 - Connecting people rural/remote areas and helping them to improve their farming methods and productivity
 - Improving storage conditions and delivery efficiency throughout the smart supply chain, e.g., using radio-frequency identification (RFID) tags

Naki's mobile phone is her best babysitter

For pregnant women like Naki, knowing when to visit her local clinic was often a guessing game. Today, access to mobile phones means Naki and thousands of pregnant women in Ghana get the care they need through regular data collection and texts alerting them to their next check-up.

Want to find out how data can deliver results for your project?



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SDG3 Good Health & Well-Being

- ICTs can be used for improving healthcare and Health Information System (HIS) on many levels, for example,
 - Connecting remote health centres and expertise
 - Improving diagnosis and patient support (ICT for integrated care)
 - Empowering patients with better information & responsibility (Self-management of health based on predictive computer modelling)
 - Improving data management for reporting and monitoring
 - Facilitating communications between frontline health workers, specialists and patients.
 - But only 63% of countries (of 116 respondent countries) have an eHealth strategy (Global Survey on eHealth, 2015, WHO)

From street sweeper to web entrepreneur

Angelica is just one of more than a million previously unskilled women who have benefited from Telecentre.org's Digital Literacy programme. Formerly a street sweeper, she's now a successful entrepreneur with a fast-growing online business.

Why not kick-start your project with the help of ICTs?

 <p><i>fast forward together</i> #ICT4SDG</p>	<p>5 GENDER EQUALITY</p> 
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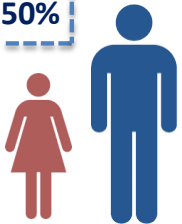




SDG5 Gender Equality

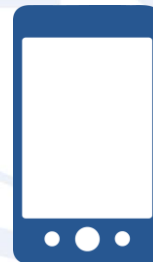
Women are 50% less likely to use the Internet than men (World Wide Web Foundation, 2015)

- 50%

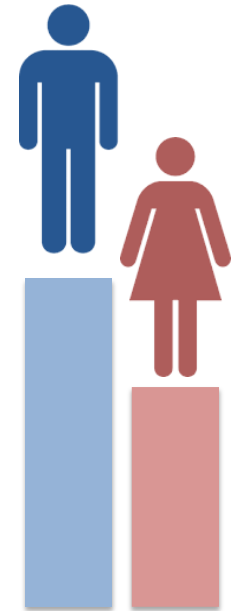


The global Internet usage Gender Gap has increased from 11% in 2013 to 12% in 2016.

The Gender Gap is largest in Africa at 23% and lowest in The Americas at 1.8%.



In low- and middle income countries, 200 million fewer women have mobile phones than men.



There are 250 million fewer women online than men.

Source: Discussion paper for Special Meeting of the Broadband Commission and the WEF, Davos 2017, Connecting the Unconnected – Working together to achieve Connect 2020 Agenda Targets ITU data





Mahmoud is mobile mapping his city



In Egypt, Mahmoud and his friends from 'Transport for Cairo' are using their GPS-enabled mobile phones to map the transport system, including both formal and informal modes of transport such as microbuses.

Discover the benefits ICTs can bring to your project.

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#ICT4SDG

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

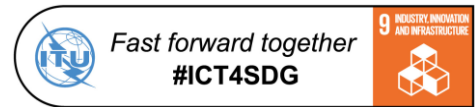



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SDG9 Infrastructure,

Industrialization, and Innovation



- ICTs can be used for **building resilient infrastructure** and **fostering innovation**
- **Infrastructure is controlled, managed and optimized by ICTs**, e.g., power networks, water supplies, transportation system, or telecommunication networks
- ICTs contribute to **making cities smarter and more sustainable to improve quality of life**, with respect to economic, social, environmental as well as cultural aspects
- Industrialization and the **increase in productivity**, highly depends on the effective use of ICTs
- Nowhere has **innovation been more clearly fostered than in emerging ICTs**
- **3.2 billion people connected** and around **5 billion mobile subscribers**

Target 9.c of the 2030 Agenda calls for us to “significantly increase access to ICT and strive to provide universal and affordable access to Internet in the LDCs by 2020”

- In the LDCs, hardly **1.5 person in 10 is online**, with **85% of LDC populations completely unconnected**
- At current rates of progress, we might not even **reach 20% of people online in LDCs by 2020**
- Without **universal and affordable access to the Internet**, it is **unlikely to achieve any of the 17 SDGs**



SDG14 Life Below Water



- The [UNESCO/IOC Oceanographic Data Exchange Policy](#) was set up to allow for the timely, free and unrestricted international exchange of oceanographic data which is essential for the efficient acquisition, integration and use of ocean observations gathered by countries around the world. This data is gathered for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible.
- The International Oceanographic Data and Information Exchange (IODE) has benefited enormously with advances in ICTs for data management and dissemination. The traditional model of centralized data centres at the national or global scale are gradually being replaced by a decentralized network of data centres accessible and searchable over the Internet. Thanks to this decentralized model, scientists can participate more actively in the data management chain, and can also access data and information more easily. The model also enables a wider range of user communities to access data, data products and information.

SDG14 Life Below Water



ICTs can play a role in the conservation and sustainable use of the oceans, for example,

- Internet and satellite maps can be used to chip and track migration patterns of endangered sea-animals & better understand lifetimes, loss and predation;
- Monitor global fish-stocks, oxygen levels, algal blooms, pollution, temperature & currents
- Big data can be used to analyse the oceans, in terms of biodiversity, pollution, weather patterns or ecosystem evolution

Senam discovered the power of networks

A new and innovative partnership between industry and the Jamaican government paved the way for the roll-out of broadband and vital ICT infrastructure. Now, connected to new market opportunities, Senam's business is flourishing.

Discover how to power your project with ICTs.

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17 PARTNERSHIPS FOR THE GOALS




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SDG 17 Partnerships for the Goals

ICT4SDG Partnership Progress:

- ITU/UNESCO Broadband Commission for Sustainable Development (2010)
- Alliance for Affordable Internet (2013)
- Connect 2020 (2014)
- Global e-Sustainability Initiative - SMARTer2030 (2015)
- OECD/G20 work on Digitization (2015)
- Global Connect (2016)
- Partnership for Sustainable Development Data (2016)
- Digital Impact Alliance (2016)
- World Bank's Digital Partnership for Development (2016)
- WEF's Future Internet for All initiative (2016)
- ITU/UN Women EQUALS: The Global Partnership for Gender Equality in the Digital Age (2016)

ITU SDG mapping tool

- A comprehensive overview of how ITU activities contribute to the Sustainable Development Goals
- Linkage of ITU strategic framework, Connect 2020, WSIS Action Lines, SDGs

The screenshot displays the ITU SDG mapping tool interface. The left sidebar shows the selected SDG, SDG9: Industry, Innovation & Infrastructure, with a description: "Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". The central dashboard features a grid of 17 SDG icons, each with its name and the number of outputs and activities it contributes to. For example, SDG9 has 41 outputs and 59 activities. The right sidebar contains a matrix table titled "Home > ITU Objectives/SDGs Matrix". This table has columns for ITU-R objectives, ITU-T objectives, ITU-D objectives, and Intersectoral objectives, and rows for ITU objectives R.1 through R.15. Blue checkmarks indicate the contribution of each ITU objective to specific SDGs.

ITU Objective	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15
R.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
T.1				✓											
T.2				✓											✓
T.3															
T.4				✓											
T.5				✓											✓
D.1	✓	✓	✓												✓
D.2	✓	✓	✓												✓
D.3	✓	✓	✓												✓
D.4	✓	✓	✓												✓
D.5	✓	✓	✓												✓
I.1	✓	✓	✓												✓
I.2															✓
I.3															✓
I.4	✓	✓	✓												✓
I.5	✓	✓	✓												✓

□ <https://www.itu.int/sdgmappingtool>



International Telecommunication Union



Ministerial and
Academy Societies for
Sustainable Development Goals
www.wsis.org

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12-16 JUNE 2017
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ITU Headquarters

Information and Knowledge Societies for SDGs



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WSIS Forum Building Blocks



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POLICY STATEMENTS

WSIS PRIZES

ACTION LINE FACILITATORS MEETING

MINISTERIAL ROUND TABLE

ACTION LINE FACILITATION MEETINGS

INTERACTIVE SESSIONS

COUNTRY WORKSHOPS

THEMATIC WORKSHOPS

KNOWLEDGE EXCHANGE

EXHIBITION

UNGIS

UN REGIONAL COMMISSIONS

INNOVATIONS

ICTS AND SUSTAINABLE DEVELOPMENT

PARTNERSHIPS

UNGIS

COMMISSIONS ON REGIONAL DEVELOPMENT

INNOVATIONS

DEVELOPMENT

PARTNERSHIPS



Innovation at WSIS Forum 2017



World Summit
on the Information Society
www.wsis.org

Hackathon

Hackathon on ICTs for SDGs: The WSIS Forum 2017 Hackathon will seek to provide innovative solutions to a real world problem for individuals around the world under the theme of ICTs for the SDGs. The hackathon will provide the opportunity for teams of young coders to work over the course of two days to develop an application to help address a specific issue related to the SDGs. The participants will address a specific question, which will be developed during the WSIS Forum 2017 open consultation process, in order to develop an application that has the ability to be refined and deployed in the future.

Virtual Reality for SDGs

Virtual Reality for SDGs: To be at the forefront of Virtual Reality for advancing development a new Virtual Reality TRACK will held at the WSIS Forum 2017 bringing together high-level personalities, world class VR experience and a very special focus on education.

TEDx Geneva

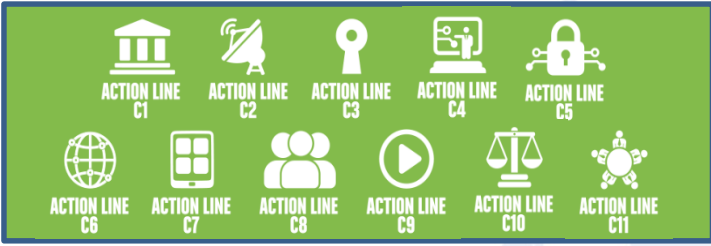
TEDx Geneva at WSIS Forum 2017: After a successful debut at WSIS Forum 2016 we are pleased to announce that TEDx Geneva will continue to partner with ITU, hosting another event during the WSIS Forum 2017.



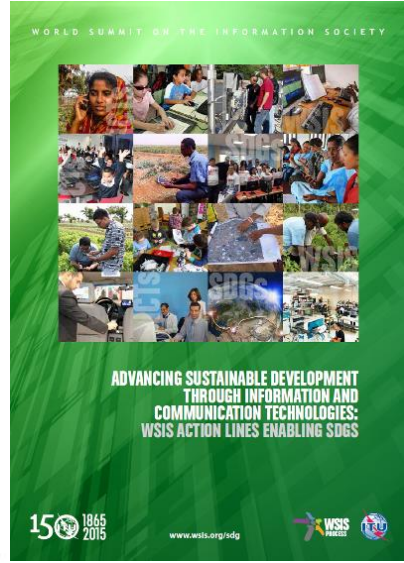


WSIS ALs-SDG Matrix

Impact of WSIS Action Lines on Sustainable Development Goals



- Released during WSIS Forum 2015
- Joint effort of all United Nations Action Line Facilitators
- Aims at drawing direct linkages between WSIS Action Lines and proposed SDGs, to continue strengthening the impact of ICTs for sustainable development
- analysis by each Action Line Facilitator, of connections and relations between their respective Action Line with the proposed SDGs and their targets.





SUSTAINABLE DEVELOPMENT GOALS \ WSIS ACTION LINES LINKAGES

	C1	C2	C3	C4	C5	C6	e-gov	e-bus	e-lea	e-hea	e-emp	e-env	e-agr	e-sci	C8	C9	C10	C11
SDG 1																		
SDG 2																		
SDG 3																		
SDG 4																		
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www.wsis.org/sdg



Thank You



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