Korea-Africa Cooperation:
Promoting Sustainable Development through Innovation

3 May, 2023

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through Innovation

COVID-19 Pandemic

Innovation Importance of Digital Innovation Technology in COVID-19 Crisis

- ➤ According to the OECD (2020), the demand for telecommunication networks has increased significantly since the outbreak of COVID-19
- ➤ Consumption of contents and application services is also increasing rapidly
- ➤ In the COVID-19 pandemic situation, the importance of digital technology is being emphasized to establish a disease monitoring, response system and public awareness
- ➤ While the digital transformation accelerates, the digital divide between countries and within a country is widening due to the spread of COVID-19
- ➤ Digital transformation has been pushed in all aspects of social life while digital inequality is worsening due to differences in digital capabilities between countries
- ➤ The international community's interest in the case of Korea using digital technology (ICT, AI) to respond the pandemic has been growing: Social distancing, 3T based on innovative technology (Test, epidemiological investigation (Trace), patient Treatment), measures to contain the spread through data utilization, and etc.

Sustainable Development Goals (SDGs)

To Do List for the Planet Transforming the World

❖ At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030

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Digital Innovation Technology and the SDGs

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|	
1 NO POVERTY	Thanks to digital financial services, many are entering the digital economy for the first time, and access to financial services has proven to be a pivotal step in helping people out of poverty ✓ Support for corporate management in the formal market rather than the barter method ✓ Increase revenue by providing price information ✓ Providing access to microfinance and loans through mobile banking ✓ Reduction of transaction costs through mobile payment systems ✓ Support for policy development through computer simulation
2 NO HUNGER	ICT helps farmers to improve crop yields and productivity by increasing access to online content (market information, weather forecasts, educational programs, and etc.) ✓ Smart farming to increase yield by monitoring soil and climate conditions ✓ Reducing waste through food supply chain adjustment ✓ Promoting soil resilience and realization of sustainable agriculture through crop management

ICT Contributions to the SDGs

fast forward together #ICT4SDG

3 GOOD HEALTH	ICT has the potential to provide benefits across the global healthcare ecosystem ✓ Providing low-cost health checkup and diagnosis through IoT ✓ Support for health officials in island areas through special diagnostic equipment ✓ Providing epidemic forecast through big data analysis
4 QUALITY EDUCATION	The digital learning revolution (mobile learning) can help bridge economic barriers, urban-rural disparities, and gender disparities ✓ Increasing access to online learning materials and the educational community ✓ Learning support and effective instruction through big data analysis ✓ Provision of specialized training
5 GENDER EQUALITY	ICT provides great opportunities for gender equality by giving everyone access to the same online resources and opportunities ✓ Providing access to education and information to increase women's empowerment ✓ Providing access to microfinance and secure payment systems

ICT Contributions to the SDGs

fast forward together #ICT4SDG

Initiative of ITU: #ICT4SDG

6 CLEAN WATER AND SANITATION	Contribution to ensuring fair and sustainable expansion of services through smart water management (supply measurement, monitoring, etc.) using ICT ✓ Reducing losses through smart water management ✓ Improving the safety through water quality supervision ✓ Reducing the risk of contamination through smart water management
7 RENEWABLE ENERGY	Green technologies and processes using ICT have the potential to play an important role in significantly reducing global greenhouse gas emissions ✓ Management of energy use through smart meters and devices ✓ Reducing carbon dioxide emissions and creating a sustainable energy supply through the use of micro grids and smart grids
8 GOOD JOBS AND ECONOMIC GROWTH	ICT itself is changing the way business is done in all areas and creating new employment opportunities ✓ Reducing raw material and carbon dioxide emissions required for the production process and increasing productivity through the use of IoT and AI ✓ Small-scale customer-centric manufacturing processes through additive manufacturing
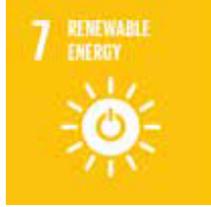
ICT Contributions to the SDGs

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Emphasizing the importance of establishing a communication network system (digital infrastructure) to promote the development of scalable solutions for all SDGs ✓ Implementation of smart infrastructure through ICT, IoT, big data, and AI ✓ Promoting resilience through preventative maintenance and continuous oversight ✓ Promoting learning through the plasticity of advanced ICT ✓ Rapid prototyping and continuous innovation
10 REDUCED INEQUALITIES	ICT helps reduce inequality within and between countries by increasing access to information and knowledge for disadvantaged groups in society (women, girls, persons with disabilities, and etc.) ✓ Reducing income inequality between countries by decentralizing and localizing production through the use of ICT ✓ Reducing inequality among individuals in a country by improving education through the use of ICT

ICT Contributions to the SDGs

fast forward together #ICT4SDG

11 SUSTAINABLE CITIES AND COMMUNITIES	ICT provides innovative approaches for more effective and holistic management of cities through applications such as smart buildings, smart water management, intelligent transport systems (ITS) and new efficiencies for energy consumption and waste management ✓ Smart energy-efficient city operation through IoT ✓ Improvement of urban transportation system through big data analysis and AI ✓ Creating safe residential areas and responsible city government
12 RESPONSIBLE CONSUMPTION	Positive impact on energy consumption reduction through the use of ICT such as cloud computing, smart grid, and smart metering ✓ Promoting harmony between consumers and producers through the combination of IoT and big data ✓ Increasing efficiency and sustainability through additive manufacturing and just-in-time manufacturing

13 CLIMATE ACTION	ICT not only enables global monitoring of climate change, but also strengthens resilience by helping to mitigate the impacts of climate change through forecasting and early warning systems. ✓ Reduction of carbon dioxide emissions from production and consumption through big data analysis and use of AI ✓ Developing and mimicking precedents in the information sharing and learning community
14 LIFE BELOW WATER	ICT plays an important role in ocean conservation and sustainable use ✓ Tracking marine resources with detection and monitoring technology ✓ Promotion of resource management and utilization of early warning system with big data and AI
15 LIFE ON LAND	ICT (satellite-based monitoring, big data, and etc.) plays an important role in the conservation and sustainable use of terrestrial ecosystems and prevention of biodiversity loss ✓ Protecting resources through land resource use, deforestation, and soil monitoring

ICT Contributions to the SDGs

16 PEACE AND JUSTICE	ICT plays an important role in crisis management, humanitarian aid and peace-building ✓ Promotion of citizens' rights and interests through big data analysis and data disclosure policy ✓ Increasing government transparency through big data analysis and monitoring ✓ Promoting a culture of international tolerance through direct trade
17 PARTNERSHIPS FOR THE GOALS	ICT plays a role as a catalyst for all three pillars (economic growth, social inclusion, and environmental sustainability) of sustainable development ✓ Revitalizing the formation of a new community through citizen participation through ICT ✓ Providing development cases through knowledge diffusion and sharing through big data and AI

ICT Contributions to the SDGs

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Smart Initiatives in Africa

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➡ Transform Africa Summit in 2013

❖ Smart Africa's annual flagship event bringing together the brightest and smartest from global and regional leaders representing governments, businesses and international organizations

❖ Promoting the digitization and development of ICT in African countries, with the aim of building a digital market for the African continent

❖ Carrying out various projects such as increasing interconnectivity between African countries and establishing a digital identity verification system

Smart Africa's Vision Statement
" Transforming Africa into a Single Digital Market"

Five Regional Blocs
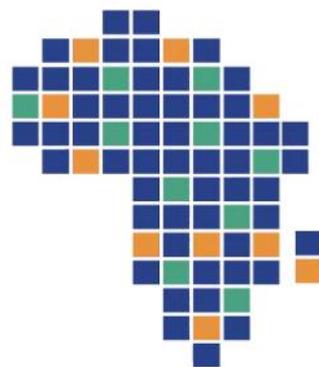
A Single Digital Market

Source: Smart Africa

Foundation

	Big Data Analytics
Smart devices	
BB Connectivity & Infrastructure	SMART Agriculture | Cities | Education Energy | Finance Health
Security	E-Services for Citizen, Business & Government
	Interactive Government Portal
Capacity Building	Digital Payments Platforms | Government API
Entrepreneurship & Innovation	Electronic ID Start with Government workers & move to Citizens & Business
	Unified Communication
Funding (Public, Private, PPP)	Cloud based Infrastructure
	Optimized Data Center
	Digital Government Platform
Policy, Legal & Regulatory framework	

Outcomes

- Job Creation & Economic Growth
- Sustainable Development
- Cashless Economy
- Citizen Participation
- Transparency, Trust & Accountability

Source: Smart Africa

Smart Africa (Projects in Active)

ONE AFRICA NETWORK

❖ One of Smart Africa's Flagship Projects while interacting with all member states of Smart Africa Alliance (36 countries in 2023)

❖ To make secure, affordable cross border communications of good quality supporting millions of Africans (Aiming to reduce roaming charges among the participating African countries, which collectively represent over 1 billion people)

❖ Demonstrating a clear and harmonious regulation across the different regional zones will benefit to the end users and businesses

Bulk Purchase of wholesale submarine and satellite internet bandwidth

❖ To reduce the cost of broadband internet for Africa to an average of $2 per 1Gb

Source: Smart Africa

SMART DEVICES

❖ Aim to provide affordable smartphones within the African continent (Problem of expensive smartphones within the African continent (Average cost of smartphones in Africa is US$248)

BLOCKCHAIN

❖ Fostering connections between professionals, students, and enthusiast in Africa to explore and work on various blockchain use cases

DIGITAL TERRESTRIAL TELEVISION

❖ The need to embrace DTT is high as its benefits will play a big role in the economic growth of the continent

SMART DEVICES

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E-GOVERNANCE

❖ Use of ICT to deliver government services to citizens, businesses, organizations and within government agencies

E-COMMERCE

❖ ICT infrastructure and services, trade logistics and facilitation, payment solutions, legal and regulatory frameworks, e-commerce skills development and access to financing

BROADBAND DATABASE

❖ An interactive Graphical User interface and user-friendly platform that enables 1st level analytics

Smart Africa (Country Flagships)

The Broadband Strategy Project

Republic of Senegal

The Intra-African Connectivity

Republic of Guinea

Cloud and Data Centers for Africa

Republic of Djibouti

Data Protection and Privacy framework

Republic of Senegal

ICT Skills development and Capacity

Republic of Burkina Faso

Startup and Innovation Ecosystem

By 2050, more than a

Smart Africa (Country Flagships)

Digital Identity for Africa

Republic of Benin
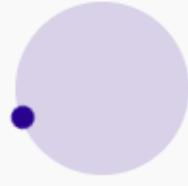
Smart Cities in Africa

Republic of Rwanda

E-Agriculture

Republic of Zimbabwe

Digital Economy Strategies

Republic of Kenya

Artificial Intelligence

Republic of South Africa
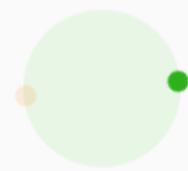
E-commerce and E-payment

Republic of Algeria & Ghana

Smart Villages

Republic of Niger

3

Global Cooperation Trends

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➡ **"World Development Report 2016: Digital Dividends"** (2016)

- ☑ Pointing out the importance of ICT
- ☑ Areas of focus: Digital Infrastructure, Digital Finance and Digital Identity, Digital Transformation and Entrepreneurship, Digital Platforms, Digital Literacy

➡ **Digital Development Partnership (DDP) Fund** (2016~)

- ☑ Aiming for economic growth through ICT development in developing countries
- ☑ Areas of focus: Data and indicators, Digital economy enabling environment, Cybersecurity, Internet access for all, Digital government, Mainstreaming digital services, solutions, and platforms

➡ **Digital Development Joint Action Plan** (2020)

- ☑ Increasing bandwidth, strengthening resilience and security of networks, and managing congestion
- ☑ Connecting vital services and ensuring the continuity of public services to safeguard the welfare of populations
- ☑ Powering FinTech and digital business models to support the most impacted businesses and communities
- ☑ Promoting trust, security and safety online
- ☑ Leveraging the power of mobile big data

ASIAN DEVELOPMENT BANK

➡ **"Strategy 2030"** Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific **(2018)**

☑ ADB's next 10-year strategy highlights the importance of digital transformation (risks and opportunities)
☑ Introduction of innovative technology content as one of the main principles

➡ **"Digital Development Forum"** (2018)

☑ Digital Technology for Development: ICT infrastructure, Building human resources with the right skills, Enabling policies and regulatory environments
☑ Achieving ADB's Digital Reforms

➡ **"Digital Agenda 2030"** (2018)
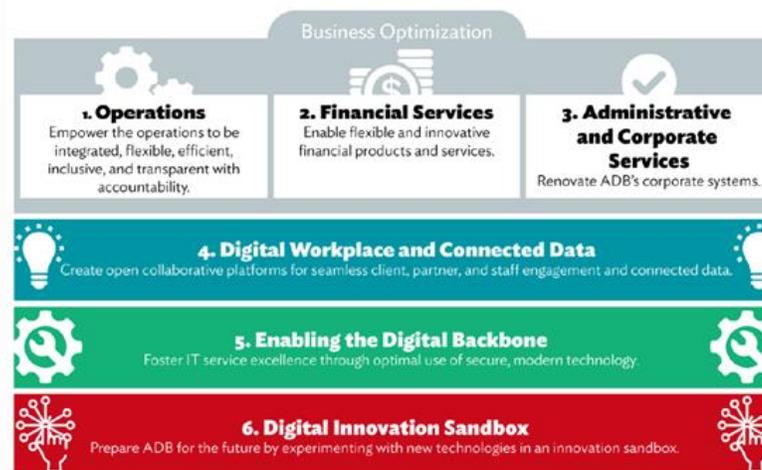
☑ Main Ideas: Access to ICT, Payment Options, Connectivity Infrastructure, Education and Training, Taxation, Regulation.

출처: ADB (2018)

→ "Digital Strategy 2020-2024" (2020)

❖ Emphasizing the creation of an open, secure and inclusive digital ecosystem that can contribute to broad and measurable development and humanitarian outcomes

❖ Supporting the self-reliance of emerging market countries.

☑ Establishment of a healthy digital ecosystem in partner countries through the spread of digital best practices

— RESPONSIBLY USE DIGITAL TECHNOLOGY —

OBJECTIVE 1

Improve measurable development and humanitarian-assistance outcomes through the responsible use of digital technology in USAID's programming

USAID   Partners

— STRENGTHEN DIGITAL ECOSYSTEMS —

OBJECTIVE 2

Strengthen openness, inclusiveness, and security of country digital ecosystems.

Civil Society   Partner Governments   Private Sector

출처: USAID (2020)

To achieve the overall goal of the *Strategy*, these objectives will be executed through four tracks:

TRACK 1: ADOPT AN ECOSYSTEM APPROACH ▸ Develop tools and resources necessary to deliver development and humanitarian assistance effectively in a digital age

TRACK 2: HELP PARTNERS NAVIGATE RISK AND REWARDS ▸ Build capacity of our partners to navigate the unique opportunities and risks that digital technology presents across USAID's Program Cycle

TRACK 3: SHIFT TO "DIGITAL BY DEFAULT" ▸ Support implementing partners in adoption of digital operations

TRACK 4: BUILD THE USAID OF TOMORROW ▸ Invest in our human capital to guide the Agency through the digital age

☑ Areas of focus:
Empowerment of women, Cybersecurity, Digital Healthcare, Digital Literacy, Financial Inclusion, Innovative Technologies, and Information Sharing

➡ "Digital Strategy 2018-2020: Doing Development in a Digital World" (2018)

❖ Emphasis on role as a global leader in the development of digital technology to address poverty

- ☑ Utilization of digital technology for development cooperation
- ☑ Transformation into a digital institution (expanding data openness and strengthening cyber security, etc.)

❖ Strengthening partnerships to respond to COVID-19 pandemic
- ☑ NIRAS Data Future's Hub [FCDO's Frontier Technologies Hub]
- ☑ GSMA ☑ Digital Impact Alliance (DIAL)

➡ "The Digital Agenda of the BMZ" (2017)

❖ Emphasis on the digital revolution and the use of digital technologies to achieve sustainable development

- ☑ Building a digital cooperation network with companies and associations in the EU, focusing on Africa
- ☑ Operation of the leverist.de online platform and the Lab of Tomorrow project
- ☑ Cases: (Accessibility) Establishment of digital center, (Economy) Establishment of mobile payment system, (Education) Online job training, (Health/Medical) Establishment of early response system for epidemics, Supply of medicines in remote areas using drones, (Agriculture) Application of ICT technology

➡ "Towards a World in Common. AFD Group 2018-2022 Strategy" (2018)

❖ Serving as a platform to accelerate global digital transformation and bring digital technology and culture into the mainstream

- ☑ Including Digital and Technological Transition among 6 major areas
- ☑ Focus on digital infrastructure establishment, institutional and capacity building support
- ☑ Emphasis on net neutrality, open source software, privacy protection, cultural diversity and environmental protection (responding to deforestation through digital technology, etc.)

Sida The Swedish International Development Cooperation Agency

➡ **"Strategy for Sweden's Global Development Cooperation in Sustainable Economic Development 2018-2022" (2018)**

☑ Adopting ICT4D as a mainstreaming agenda for development cooperation
☑ Emphasis on building digital infrastructure, utilizing digital in the private sector, nurturing human resources, inclusive finance, and incorporating into global value chains through digitalization

➡ **Basic Policy for Development Cooperation in ICT**

☑ Contributing to the achievement of SDGs through the active use of ICT, fostering ICT talent, and emphasizing linkage with domestic ICT policies in Japan
☑ Policy-making capacity building, human resource development, infrastructure development, ICT use and application activation
☑ Cases: Capacity building (expert dispatch, ICT engineer training), broadband network construction, industry development, and ICT use and application related to disaster risk reduction

JICA Japan International Cooperation Agency

❖ Responding to COVID-19 pandemic
☑ Next Innovation with Japan (NINJA) Initiative
☑ Gender-Responsive Initiative

➡ **Partnership with ADB**

☑ Largest donor to ADB's Asian Development Fund (ADF).
☑ Support for the 3 pillars of ADB's ICT strategy: Build environment, human resource development, ICT application and information contents)

4

Digital ODA in Korea

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Scope Setting for Digital ODA

The status of digital ODA project in Korea can be identified through the ODA statistical system of Korea (kodaportal.go.kr), and KOICA's own statistical system (stat.koica.go.kr). However, considering the characteristics of digital and the convergence environment, digital ODA is defined as "Aid for the direct purpose of digital development, or aid that utilizes or includes digital" and set the scope of analysis.

ODA for Digital

- Projects classified with CRS code 220 (Communications)
- Other projects supported mainly by digital element itself (communication networks, broadcasting, information systems, etc.)

ODA by Digital

- Projects classified with CRS code 151 (Government and Civil Society) that includeds digital elements
- Projects that include (utilize, internalize) digital elements in fields other than Government and Civil Society

General Digital ODA

Convergence Digital ODA
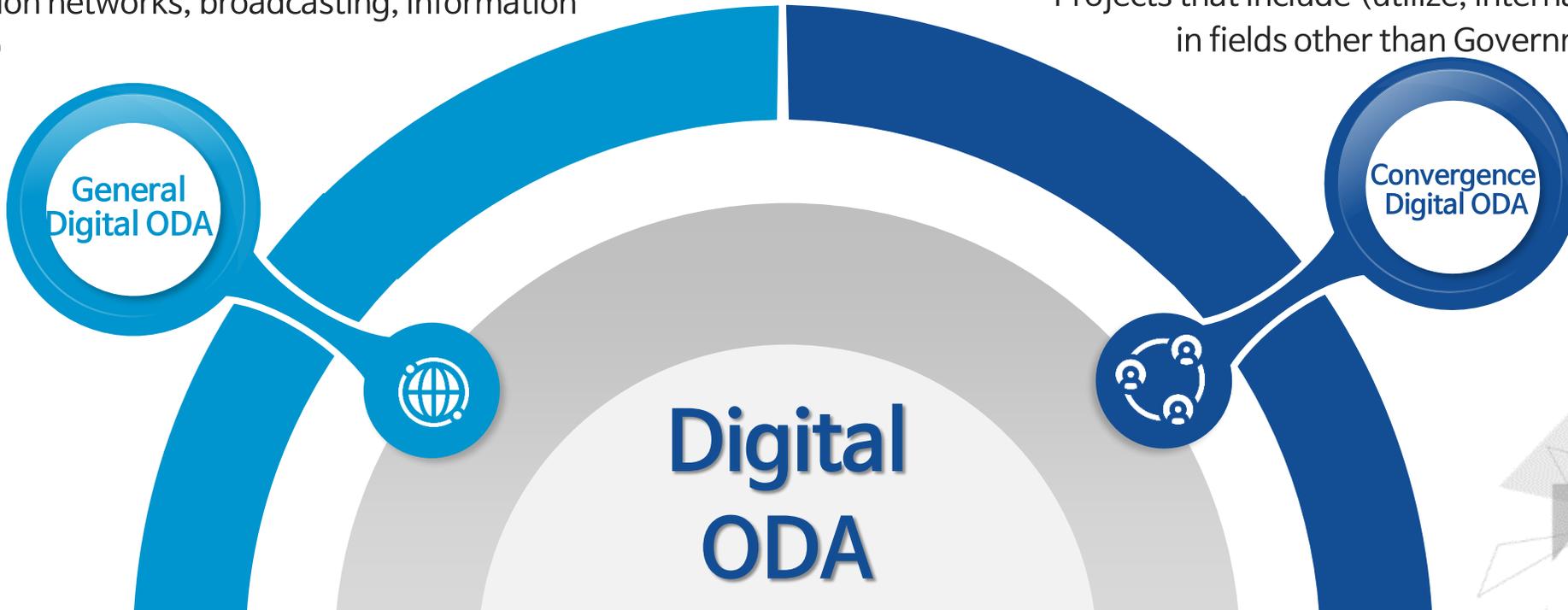
Digital ODA

4-1

Status Analysis

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Volume of Korea's Digital ODA considering its Characteristics

(unit: 100 million won) (1,380 won (KRW) ≒ 1 USD)

		2015	2016	2017	2018	2019	2020	2021	2022	Total
Total Volume of ODA		23,782	24,394	26,359	30,482	32,003	34,270	37,543	40,425	208,833
Volume of Digital ODA (ratio)		1,735	1,183	2,297	2,695	2,766	3,361	3,833	4,541	17,870
		(7.3%)	(4.8%)	(8.7%)	(8.8%)	(8.6%)	(9.8%)	(10.2%)	(11.2%)	(9.0%)
Volume of Digital ODA	General Digital ODA (ratio)	836	429	534	630	438	420	302	628	3,589
		(3.5%)	(1.8%)	(2.0%)	(2.1%)	(1.4%)	(1.2%)	(0.8%)	(1.6%)	(1.7%)
	Convergence Digital ODA (ratio)	899	754	1,763	2,065	2,328	2,941	3,531	3,913	14,281
		(3.8%)	(3.0%)	(5.7%)	(6.7%)	(7.2%)	(8.6%)	(9.4%)	(9.7%)	(7.3%)

30
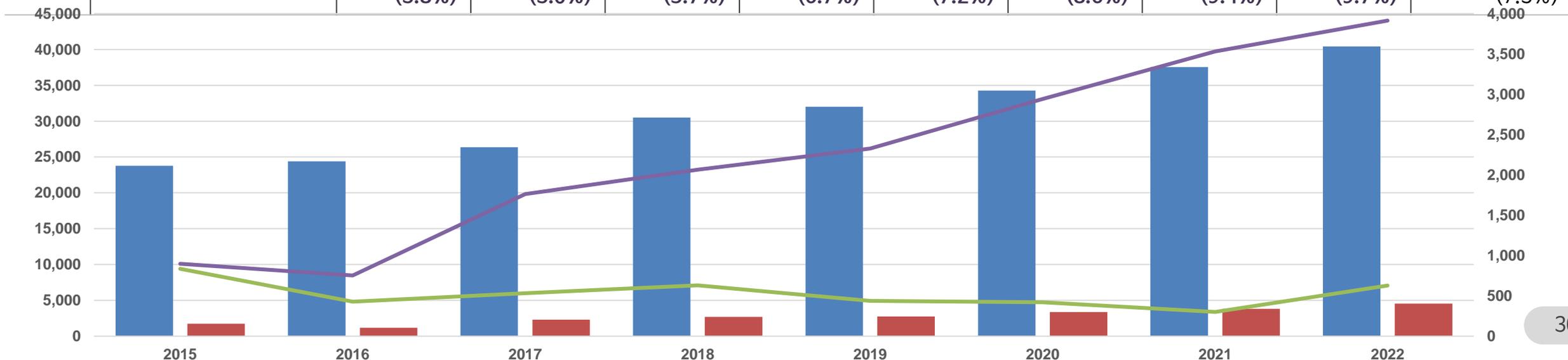
Budget Status by Sectors

Budget status by sectors of digital ODA in Korea for the past 8 years (2015~2022) (unit: 100 million won) (1,380 won (KRW) ≒ 1 USD)

Digital x Public Administration (24.2%) 〉Digital x Economic Industry Infra. (20.0%) 〉General Digital (18.8%) 〉Digital x Others (12.6%) 〉Digital x Education (12.2%)

		2015	2016	2017	2018	2019	2020	2021	2022	Total
Volume of Digital ODA		1,735	1,183	2,297	2,695	2,766	3,361	3,833	4,541	17,870
Volume of General Digital ODA		836	429	534	630	438	420	302	628	4,217
		48.2%	36.3%	23.2%	23.4%	15.8%	12.5%	7.9%	13.8%	18.8%
Volume of Convergence Digital ODA	Digital x Public Administration	598	435	880	631	690	831	737	664	5,466
		34.5%	36.8%	38.3%	23.4%	24.9%	24.7%	19.2%	14.6%	24.4%
	Digital x Education	92	93	185	413	395	621	441	488	2,728
		5.3%	7.9%	8.1%	15.3%	14.3%	18.5%	11.5%	10.7%	12.2%
	Digital x Environment/Energy	77	69	97	157	195	428	419	535	1,977
		4.4%	5.8%	4.2%	5.8%	7.0%	12.7%	10.9%	11.8%	8.8%
	Digital x Economic Industry Infra.	66	122	330	788	527	496	996	1,151	4,476
		3.8%	10.3%	14.4%	29.2%	19.1%	14.8%	26.0%	25.3%	20.0%
	Digital x Agriculture, Forestry and Fisheries	14	6	85	30	76	92	183	230	716
		0.8%	0.5%	3.7%	1.1%	2.7%	2.7%	4.8%	5.1%	3.2%
	Digital x Others	52	30	187	46	445	474	755	845	2,834
		3.0%	2.5%	8.1%	1.7%	16.1%	14.1%	19.7%	18.6%	12.6%

Budget Status by Sectors

Budget Status by Sector 2015~2022

❯ While continuous decline of 'General Digital' and 'DigitalxPublic Administration' projects, other sectors have steadily increased

❯ As of 2022, 'DigitalxEconomic Industry Infra.' and 'DigitalxOthers' account for a greater proportion than Digital-based projects or projects dealing with public administration such as e-Government

Legend: ■ 일반 ICT ODA 사업 ■ ICT×공공행정 ■ ICT×교육 ■ ICT×환경·에너지 ■ ICT×경제산업인프라 ■ ICT×농림수산 ■ ICT×기타
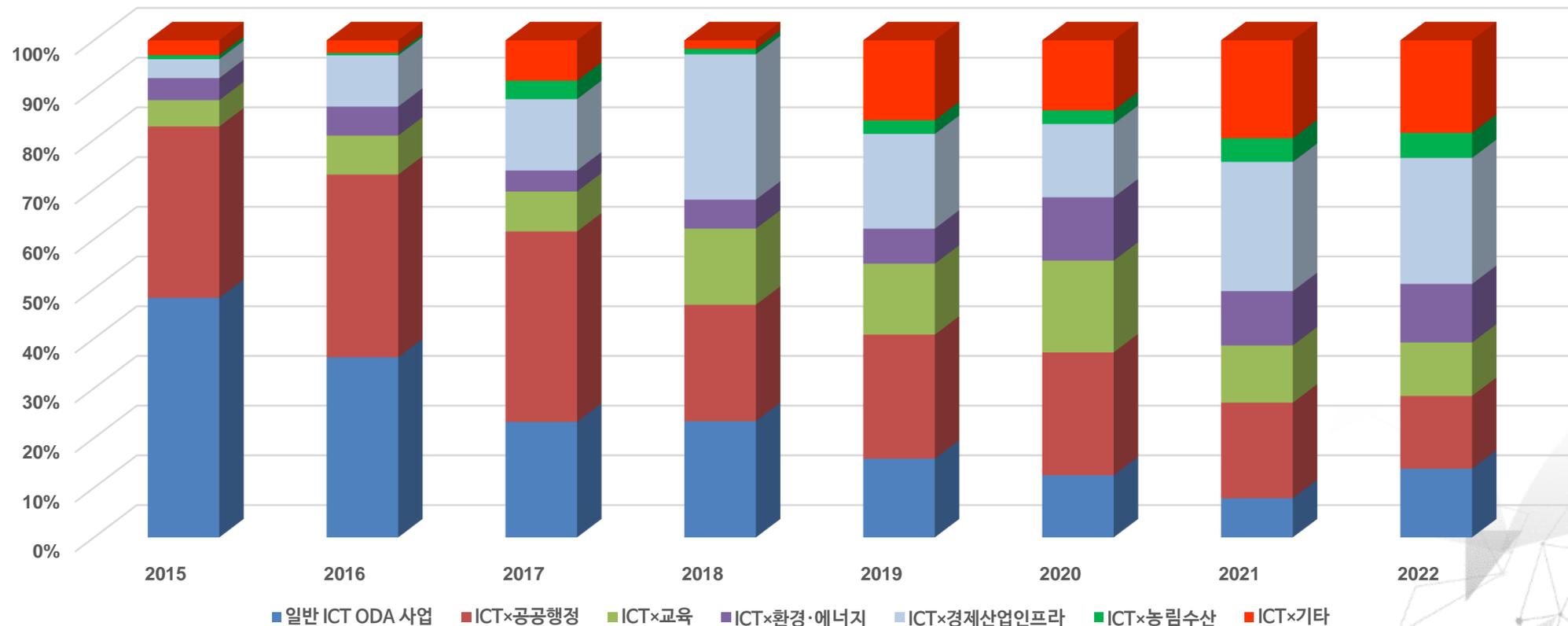
Comparison of proportion of Korea's Digital ODA budget by sector: 2015~2018 VS. 2019~2022

▶In the proportion of the convergence digital ODA by sector, 'DigitalxPublic Administration' dropped sharply, while 'DigitalxEnvironment/Energy' and 'DigitalxOthers' increased significantly

▶Especially, the proportion of 'DigitalxOthers' has increased 4.3 times compared to the first half (4%, 2015~2018), accounting for 17% in the second half (2019~2022)
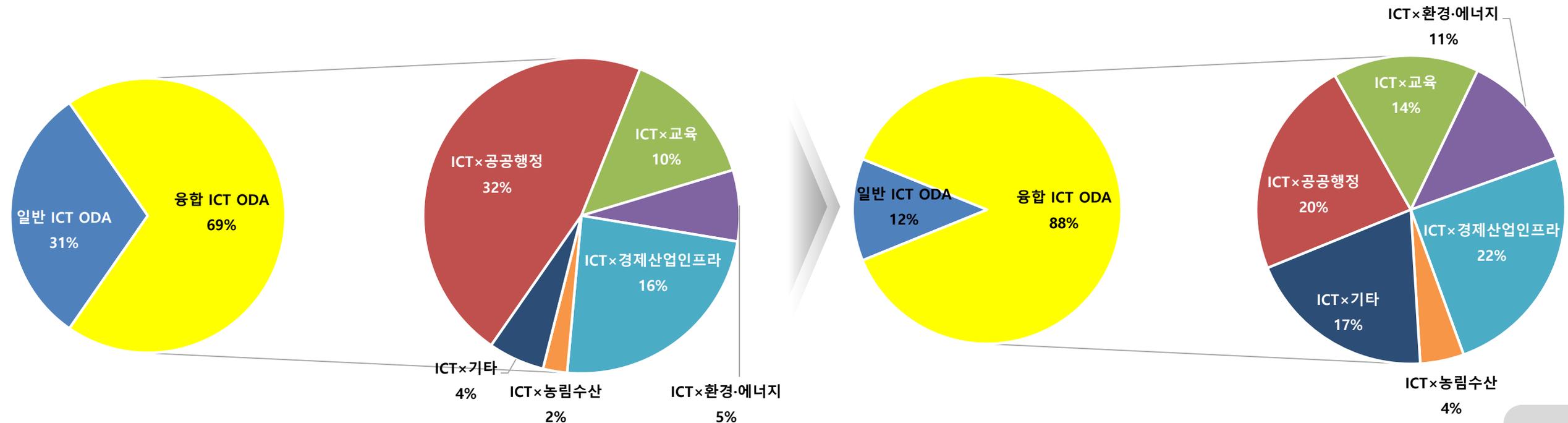
Budget proportion and trend by 'DigitalxOthers' among the convergence Digital ODA for the past 3 years (2020~2022)

ICT×경제산업인프라 25.5%
ICT×농림수산 4.9%
ICTx기타(치안) 1.3%
ICTx기타(보건) 0.5%
ICTx기타(안전) 5.6%
ICT×환경·에너지 13.3%
ICTx기타 20.0%
ICTx기타(창업) 2.6%
ICT×교육 14.9%
ICT×공공행정 21.5%
ICTx기타(과학,혁신) 10.0%

ICTx기타(과학,혁신) · ICTx기타(보건) · ICTx기타(치안) · ICTx기타(안전) · ICTx기타(창업)

34
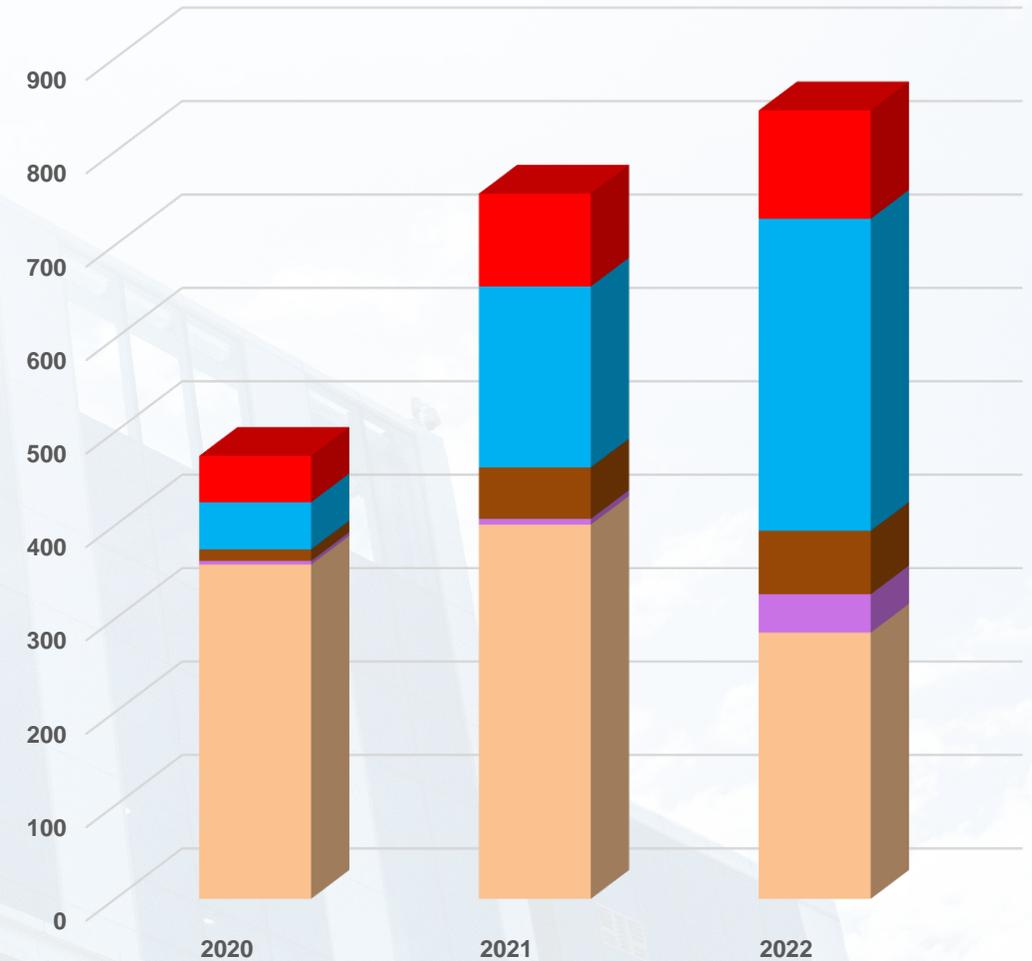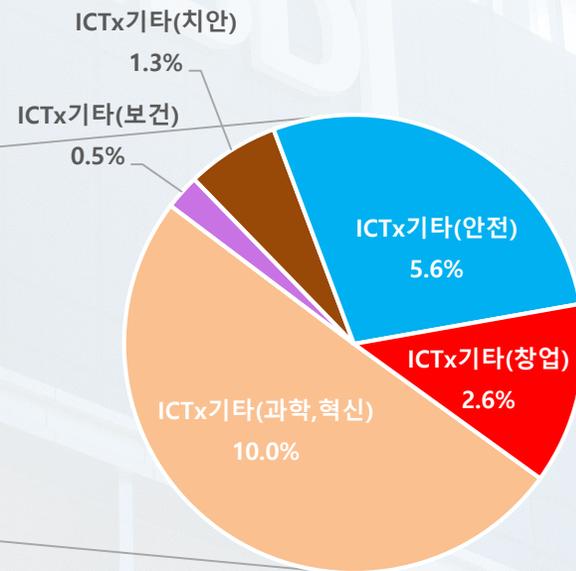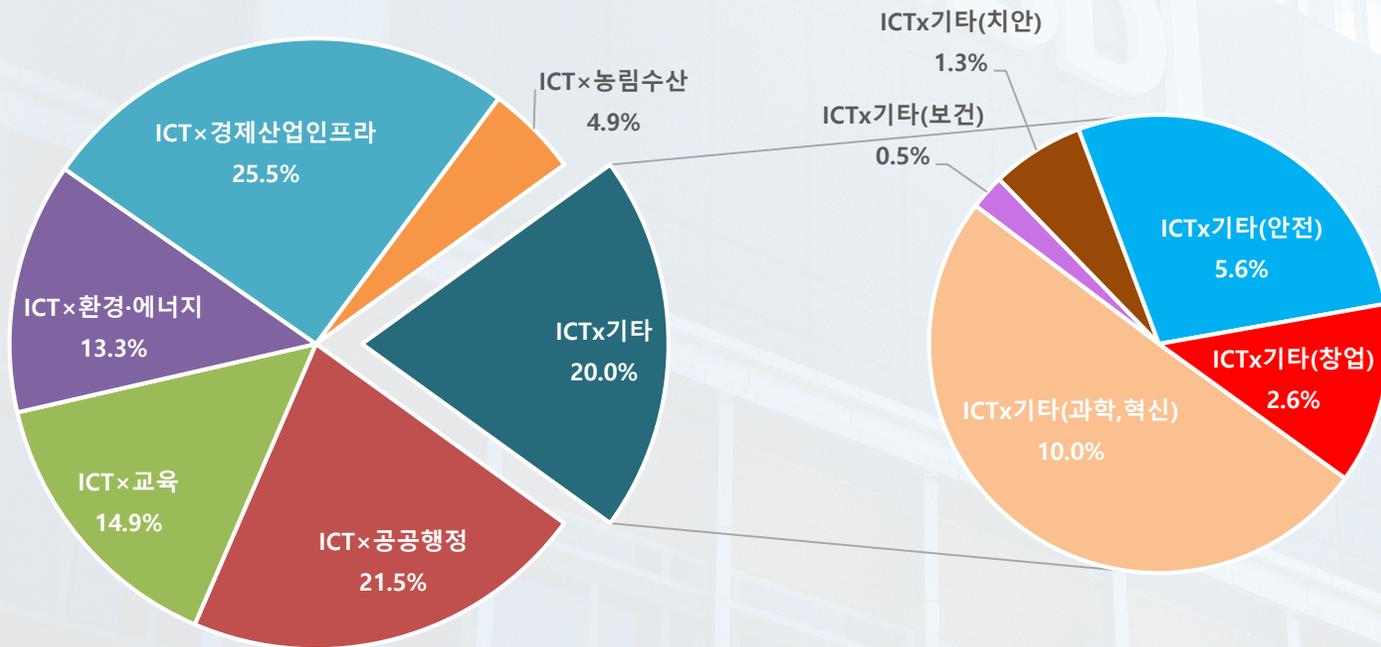
Budget Status by Regions (unit: 100 million won)

Korean Digital ODA Volume by Regions

	2015	2016	2017	2018	2019	2020	2021	2022	Total
Volume of Digital ODA	1,735	1,183	2,297	2,695	2,766	3,361	3,833	4,541	22,411
Asia	919	474	714	871	970	1,358	1,683	2,174	9,163
	53.0%	40.1%	31.1%	32.3%	35.1%	40.4%	43.9%	47.9%	40.9%
Africa	335	309	871	620	869	904	1,235	1,224	6,367
	19.3%	26.1%	37.9%	23.0%	31.4%	26.9%	32.2%	27.0%	28.4%
Middle East · CIS	106	126	430	612	258	378	331	476	2,717
	6.1%	10.7%	18.7%	22.7%	9.3%	11.2%	8.6%	10.5%	12.1%
Latin America	126	119	114	364	336	361	299	340	2,059
	7.3%	10.1%	5.0%	13.5%	12.1%	10.7%	7.8%	7.5%	9.2%
Oceania	0	5	5	5	4	0	0	6	25
	0.0%	0.4%	0.2%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%
Int'l Organization/ NGO	48	31	73	0	53	70	27	59	361
	2.8%	2.6%	3.2%	0.0%	1.9%	2.1%	0.7%	1.3%	1.6%
Others	201	119	91	223	276	291	258	262	1,721
	11.6%	10.1%	4.0%	8.3%	10.0%	8.7%	6.7%	5.8%	7.7%

▶ Asia (40.9%) 〉 Africa (27.0%) 〉 Middle East · CIS (12.1%)

✓ According to the 2nd Comprehensive Basic Plan for Int'l Development Cooperation of Korea, it is consistent with the policy of maintaining Asia-centered support and gradually increasing the proportion of Africa (19.3% in 2015 → 27% in 2022)

✓ Characteristics of the projects in Africa

4-2

ODA Policies of Korean Government

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Policy on Digital Innovation Technology in Korea

Digital National Digital Agenda of Korea

❖ **Realizing a Digital Economy and Society that Leaps Forward again and Prospers Together**
- World's best digital competence: Intensive investment in R&D in 6 innovative technologies (AI, AI Semiconductor, ③ 5G&6G Mobile Communication, Quantum and Expanded Virtual World, Cyber Security)
- The expanding digital economy
- Inclusive digital society
- Digital platform government
- Innovative digital culture

❖ **The World's Top 3 AI Powerhouses, 3rd in Digital Competitiveness, 1st in Digital Infrastructure**
- Digital Industry: AI competitiveness, Data market, SaaS company, Cyber security, Digital talent, Platform company, Start-ups, Metaverse market, World's first 6G, etc.
- Digital Society & Culture & Government: AI-based flood forecasting, Information on elementary and secondary education, Digital universal rights, etc.

Policy on Official Development Assistance (ODA) in Korea

ODA

The 3rd Comprehensive Basic Plan for International Development Cooperation (2021~2025) of Korea

❖ **Spread of global challenges and widening gap between countries**
- Increased urgency of global solidarity and international cooperation due to global challenges such as spread of infectious diseases, climate change and natural disasters
- Rising poverty rate due to COVID-19, and increasing relative poverty due to the widening development gap (emerging countries enter middle-income countries, and conflict-vulnerable countries increase refugees)

❖ **Promotion of Innovative ODA**
- Reinforcement of partner countries' innovation capabilities (support on science and technology innovation, bridge the digital divide, promote digital new deal ODA, support for public administration innovation, etc.)
- Innovation on development cooperation programs (innovative business model development, business support method, new ODA content development, etc.)

Policy Directions [Activation Strategies on S&T·ICT ODA (2021)]

Vision: Accelerate the achievement of SDGs in the international community and contribute to shared prosperity by supporting inclusive development of partner countries

Goals

- Creating Synergies between Projects
- Contribution to Global Innovation Growth
- Demonstrate Global Leadership

Strategies

Strategy 01	Strategy 02	Strategy 03
Improvement of effective science and ICT implementation framework	Lead joint growth by supporting sustainable development	Lead science and ICT agenda in international community

Tasks

01 Reinforcement of policy and strategic functions and integrated promotion of Science and ICT ODA

02 Strengthen the local Science and ICT cooperation network

03 Drive Digital ODA Initiative

04 Joint resolution of the problems facing partner countries

05 Reinforcement on partner country′s commercialization capabilities and support for industrial development

06 S&T Innovation Human Resource Development

07 Strengthen global cooperation related to Science and ICT ODA

08 Leading bilateral/multilateral cooperation related Science and ICT ODA

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# Policy Directions [Activation Strategies on S&T·ICT ODA (2021)]

Driving Digital ODA Initiative

Diffusion of Digital public goods

Improve administrative service

Support customized e-Government systems from initial level to intelligent government considering the capabilities of partner countries

Cyber Security

Establish cyber security center, strengthen cyber investigation capacity

Information System

Support for the establishment of an analysis and utilization system for S&T data, such as a S&T big data analysis system

ICT Convergence expansion

Education

Reinforce educational infrastructure support such as establishing a digital education environment in partner countries (building an ICT-based education center, expanding tablet-based children's education apps in developing countries)

Health

Construction of big data in the health field, support for the development of infectious disease package services

Agriculture

Customized smart farm, improvement of productivity throughout the entire process F2F (Farm to Family)

Support for digitalization Socio-econ infra.

Water Resources

Smart water management

Transportation

Establish ITS

Energy

Smart Grid, etc.

Digital transformation support
Through ICT convergence in existing area

Source: Joint ministries (2021)

Policy Directions [Promotion Strategies on S&T·ICT ODA to Support Digital Transformation in Developing Countries (2022)]
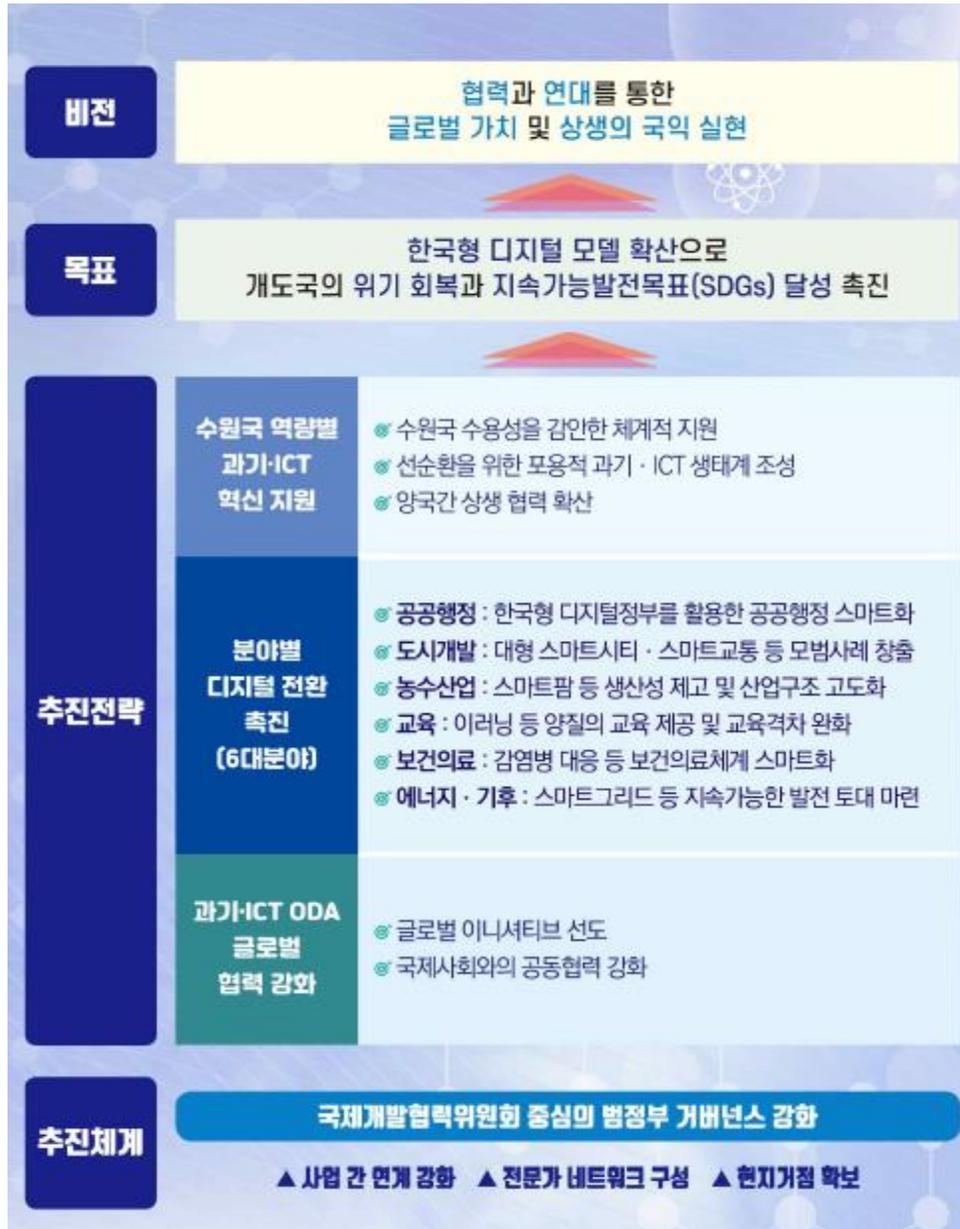
Reinforcement of linkages between projects such as Grant/Loan ODA, Public/Private, etc.

Organize expert network by region and field

Establishment and designation of S&T ICT ODA Key Cooperation Mission
(Vietnam Cambodia Rwanda Peru)

Source: Joint ministries (2022)

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The Way Forward

Korea-Africa Cooperation: Promoting Sustainable Development through Innovation

The Way Forward [at a level that everyone agrees on]

Considering the level of correlation between ICT and the SDGs, it is necessary to strengthen cooperation in sectors that can perform better (education, health, gender, etc.)

Dev. Coop. Direction

Digital Solution Support

Strengthen Coop. by Field

Directions

- **Infrastructure** : Key task is to create a foundation environment for the realization of a digital ecosystem
- **Institution** : Set regulations and institutions so that the established digital environment can function properly
- **Capacity Building** : Enhance digital literacy through education and develop high-quality human resources
- **Partnership** : Cooperation with various actors is essential to respond to global challenges (trans-border issues)
- **Entrepreneur Innovation** : Entrepreneurship and innovation are required to strengthen the digital value chain

Supporting data-driven digital solution is critical

- Cloud
- IoT
- AI
- Information Security

The Way Forward [think about it a little more]

Build a Dam First

- Given the relationship between digital penetration and economic growth, some level of infrastructure is essential

- In particular, it is important to establish an open and stable broadband network environment

- Promote private investment along with ODA support for partner countries

Need to Consider how to Strengthen the Digital Value Chain

- Looking at the support for digital technology based on the ICT integrated classification system, it is concentrated in the fields of information and communication broadcasting equipment and software and digital contents

- Considering that the key to building a digital ecosystem lies in strengthening the value chain, it is necessary to carefully consider the elements of information and communications broadcasting service in the process of cooperation

THANK YOU