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Sustainable Development Goals and Urban Development in Korea

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1 Sustainable Development

Sustainable Development

“Sustainable development is the development that meets the needs of the present generation without compromising the ability of the future generation to meet their needs”

– the Our Common Future (1987)

UN SDGs 2015

- **The 2030 Agenda for Sustainable Development was adopted by all UN Member States in 2015.**

– SDGs Knowledge Platform (<https://sustainabledevelopment.un.org>)

2 UN SDGs

SUSTAINABLE DEVELOPMENT GOALS



Source: <https://www.un.org/sustainabledevelopment/news/communications-material/>

2 UN SDGs

- 17 Goals, 244 Indicators
- 232 separate indicators by excluding 12 overlapped indicators.

SDGs	Targets	Indicators
Goal 1: no poverty	7	14
Goal 2: no hunger	8	14
Goal 3: good health	13	26
Goal 4: quality education	10	11
Goal 5: gender equality	9	14
Goal 6: clean water and sanitation	8	11
Goal 7: renewable energy	5	6
Goal 8: good jobs and economic growth	12	17
Goal 9: industry, innovation and infrastructure	8	12
Goal 10: reduced inequalities	10	11
Goal 11: sustainable cities and communities	10	15
Goal 12: responsible consumption	11	13
Goal 13: climate action	5	8
Goal 14: life below water	10	10
Goal 15: life on land	12	14
Goal 16: peace and justice	12	23
Goal 17: partnerships for the goals	19	25
Total	169	244

Source: <https://unstats.un.org/sdgs/indicators/indicators-list/>, retrieved on Jan. 15, 2019.

2 Overview of SD Policies in ROK

2.1 | Milestones of Sustainable Development Policies



Year

- | | |
|------|---|
| 2000 | <ul style="list-style-type: none">• Presidential National Commissions on Sustainable Development• Millennium National Environmental Vision Declaration |
| 2006 | <ul style="list-style-type: none">• First National Strategy for Sustainable Development (2006-2010) |
| 2007 | <ul style="list-style-type: none">• Framework Act on Sustainable Development enacted |
| 2010 | <ul style="list-style-type: none">• Framework Act on Low Carbon, Green Growth enacted• Act on Sustainable Development |
| 2011 | <ul style="list-style-type: none">• Second National Strategy for Sustainable Development (2011-2030) |
| 2016 | <ul style="list-style-type: none">• Third National Strategy for Sustainable Development (2016-2035)
- 4 goals, 14 strategies with 50 implementation tasks |
| 2018 | <ul style="list-style-type: none">• Formation of K-SDGs |

3 SD Performance in ROK (2nd NSSD)



3.1 | Society

Categories	Items	indicators	Performance (2010-2014)
1. Equity	1-1 poverty	1) Poverty headcount ratio	++
		2) Gini coefficient	+
		3) Unemployment rate	++
	1-2 labor	4) Working hour	+
		5) Wage ratio(irregular/regular)	--
	1-3 gender equality	6) Wage ratio(female/male)	+
		7) Economically active rate(female)	++
2. Health	2-1 Nutrition	8) Nutrition state (youth)	-
	2-2 death rate	9) Death rate (infant)	++
	2-3 life expectancy	10) life expectancy	+
	2-4 water	11) penetration rate of water supply (farm and fishing village)	++
	2-5 Health	12) Ratio of public fund to medical expense	--
		13) Social welfare expenditure	++
		14) Vaccine (youth)	+

3 SD Performance in ROK (2nd NSSD)

3.1 | Society



Categories	Items	indicators	Performance (2010-2014)
3. Education	3-1 Education level	15) net graduate rate(secondary)	+
		16) Students per class (primary)	++
		17) Expenditure of public education	0
4. House	4-1) living environment	18) House below minimum level	++
		19) Number of houses (per 1,000)	++
		20) House price ratio to income	--
5. disaster	5-1 crime and disaster	21) Crime rate	--
		22) Damage by natural disaster	++
6. Population	6-1 population change	23) Population growth rate	-
		24) Population density	-
		25) Population ratio of the old	-

3 SD Performance in ROK (2nd NSSD)

3.2 | Environment



categories	items	indicators	Performance (2010-2014)
1. Air	1-1 climate change	26) GHGs emissions	-
		27) GHG emissions per capita	-
		28) GHG intensity to GDP	+
	1-2 ozone	29) Consumption of ozone depletion material	-
	1-3 air quality	30) Air quality in metropolitan	-
2. Land	2-1 agriculture	31) Farming land area	+
		32) eco-friendly certified agricultural products	--
		33) Food self-sufficiency	--
		34) chemical fertilizer usage	--
		35) Agricultural pesticides	-
	2-2 forests	36) Forests ratio	-
		37) Per capita city park area	+
		38) Lumbering degree	-
	2-3 urbanization	39) Urbanization rate	0
		40) Population intensity in capital	-

3 SD Performance in ROK (2nd NSSD)

3.3 | Economy



categories	items	indicators	Performance (2010-2014)
1.Economic Structure	1-1 economic change	53) GDP	++
		54) Per capita GDP	++
		55) Economic growth rate	0
		56) Net investment rate to GDP	--
		57) CPI	0
	1-2 trade	58) Trade balance	0
	1-3 fiscal status	59) Tax burden ratio	0
		60) Foreign debt ratio to GDP	++
61) ODA to GNI		++	
2. consumption/ production	2-1 consumption	62) Resource productivity	++
	2-2 energy usage	63) Per capita energy consumption	--
		64) Total energy supply	0
		65) Renewable energy usage	++
		66) Energy intensity (TOE/mill. won)	+

3 SD Performance in ROK (2nd NSSD)

3.3 | Economy



categories	items	indicators	Performance (2010-2014)
2. Consumption / production	2-3 waste management	67) Life and general wastes	--
		68) Designated wastes	--
		69) Radioactive wastes	++
		70) Recycling rate of wastes	+
	2-4 traffic	71) Traffic transportation rate	+
		72) Bicycle road	++
		73) Traffic accidents	++
3. Information	3-1 information access	74) high-speed internet subscribers	++
		75) PC-owned household ratio	--
	3-2 information infra	76) on-line applicable civil complaints	-
		77) R&D expenditure to GDP	++

5 3rd NSSD in ROK (2016-

4.1 | Main Structure



Vision		
Harmonious Development of Environment, Society and Economy		
Goals	Strategies	Tasks
1. Health Land and Environment	<ul style="list-style-type: none"> 1-1. High quality environmental service, 1-2. Value increase of ecosystem services, 1-3. Clean Water and Efficient Management 	10
2. Integrated Safe Society	<ul style="list-style-type: none"> 2-1. Socio-economic integration and gender equality, 2-2. Reduction of regional disparity, 2-3. Strengthening of preventive health services, 2-4. Expansion of safety infrastructure 	16
3. Inclusive Innovative Society	<ul style="list-style-type: none"> 3-1. Inclusive growth and high-quality jobs, 3-2. Eco-friendly circular economy, 3-3. Formation of sustainable and safe energy system 	12
4. Globally Responsible Country	<ul style="list-style-type: none"> 4-1. Partnership strengthening for 2030 sustainable development agenda, 4-2. Active response on climate change, 4-3. Cooperation strengthening in environment in Northeast Asia 	8

5 3rd NSSD in ROK (2016)

4.2 | SDGs and 14 strategies in the 3rd NSSD



Goals	14 strategies
Goal 1: no poverty	2-1
Goal 2: no hunger	2-2 & 2-3:
Goal 3: good health	2-3
Goal 4: quality education	2-1
Goal 5: gender equality	2-1
Goal 6: clean water and sanitation	1-3
Goal 7: renewable energy	3-3
Goal 8: good jobs and economic growth	3-1
Goal 9: industry, innovation and infrastructure	3-1
Goal 10: reduced inequalities	2-1
Goal 11: sustainable cities and communities	1-1 & 2-4
Goal 12: responsible consumption	3-2
Goal 13: climate action	4-2
Goal 14: life below water	1-2
Goal 15: life on land	1-2
Goal 16: peace and justice	Strengthening implementation infrastructure of SD
Goal 17: partnerships for the goals	4-1 & 4-3
Total	

6 K-SDGs

4.1 | Institutional Framework for K-SDGs

- Joint Working Group (Private, public and academia)

SDGs	total	1,10	2	3	4	5	6	7, 13	8, 9	11	12	14	15	16	17
total	192	8	10	10	18	10	11	28	18	11	21	11	12	11	13
Private	87	4	4	6	8	3	5	14	8	7	10	11	12	11	13
Public	72	3	3	3	7	6	4	10	5	2	10	6	5	2	6
academia	33	1	3	1	3	1	2	4	5	2	1	2	2	4	2

Source: Related Government Agencies (2018. 7. 27)

4 K-SDGs

3.1 | Institutional Framework for K-SDGs

- 2018. 5-: K-MGos (Korea-Major Groups and Other Stakeholders)
 - Review Draft version reported by the working group
 - Submit their position through collecting the public opinion (multi-stake holders)
 - Total 14 groups with 132 teams

SDGs	total	women	teenager	farmer	laborer	industry	NGO	S&T	Local gov.	academic	disability	Local co.	immigrant	An. welfare	youth
total	132	13	4	3	6	7	27	3	13	11	21	11	12	11	13
Institutions	90	8	3	3	3	7	17	3	4	4	17	12	2	2	5
Public	42	5	1	0	3	0	10	0	9	7	2	4	1	0	9

4 K-SDGs



4.1 | Institutional Framework for K-SDGs

- K-SDGs Targets and Indicators

SDGs	total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Targets	147	6	9	9	8	9	5	6	12	6	4	9	11	5	7	12	13	16
(new)	23	2	3	2	-	1	3	3	-	3	-	2	2	-	2	-	-	-
Indicators	265	12	13	22	16	25	10	8	12	8	4	17	13	10	10	25	39	21
(new)	33	4	7	7	3	6	6	4	-	6	-	5	2	-	3	-	39	-



- Removed SDGs indicators from K-SDGs
 - 1-1. eradicate extreme poverty on less than \$1.25 a day
 - 3-8. achieve universal health coverage
 - 6-5. implement integrated water resources management
 - 9-3. increases the access of small-scale industrial and other enterprises
 - 10-6. ensure enhanced representation and voice for developing countries
 - 9-c. significantly increase access to information and communication technology



- New Indicators to K-SDGs

- 2.3. increase income of farm households
- 3.1. enhanced management for chronic disease
- 3.8. preparation for low fertility and aging
- 6-3. improvement of water-cycle and vitalization of water re-usage
- 7-3. reduction of polluting materials in generation sector
- 7-4. expansion of eco-friendly cars
- 9-2. industrial diversification
- 12-8. increase of budget on environmental education
- 14-4. expansion of designated area of marine protected area

1) Need to identify challenges for the country and the world

- Dashboard: challenges SDGs 5, 12, 13, 15, 17 → challenges in trends: SDGs 13 and 15

2) Indicator Consistency?? : UN SDGs & K-SDGs

- UN SDGs : 17 targets with 244 indicators
- Country-specific SDGs, for example, K-SDGs
- Necessary to add country-specific indicators to manage its own stage of SD.
- Necessary to compare the level of SD with common indicators
- Need to construct own SDGs but without removing original UN SDGs.

3) Find own SD status and relative global position of our SDGs to compare the status across countries



- 4) Institutional Frameworks are not sustainable: too political**
 - **SD committee and Green Growth Committee: under president or under Prime minister or Minister**

5 SDGs and Urban Development

1) MDGs and SDGs

- **MDG 7 target 11: refers to improving the live of at least 100 million slum dwellers: local governments absent from formal process, top-down by excluding people.**
- **SDGs: Goal 11: cities are recognized as “pathways to SD, more expsnaive role for urban planning, design and architecture, local governments are still absent with no formal role but more involved in advocacy**
- **Source: Klopp and Petretta (2017)**

5 SDGs and Urban Development

2) SDGs Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 By 2030, ensure access for **all to adequate, safe and affordable housing and basic services and upgrade slums**

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

5 SDGs and Urban Development

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

