Democratic People's Republic of Korea

Voluntary National Review

On the Implementation of the 2030 Agenda

2021

Democratic People's Republic of Korea

Voluntary National Review

on the Implementation of the 2030Agenda for the Sustainable Development

Prepared by the Government of the Democratic People's Republic of Korea

in consultation with

National Partners in
the Democratic People's Republic of Korea

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ACRONYMS

2030 Agenda	2030 Agenda for Sustainable Development
AMS	Academy of Medical Science
AoA	Academy of Agriculture
CBS	Central Bureau of Statistics
CEDAW	Convention of the Elimination of all forms of Discrimination against Women
CRPD	Convention on the Rights of Persons with Disabilities
DPRK	Democratic People's Republic of Korea
DRRP	disaster risk reduction plan
EM-DAT	International Disaster Database
ESCAP	Economic and Social Commission for Asia and the Pacific
EUPS	European Union Project Support Office
FAO	United Nations Food and Agricultural Organization
GFATM	Global Fund against AIDS, Tuberculosis and Malaria
GFS	gravity fed water supply system
GHG	greenhouse gas
GMP	good manufacturing practice
ICNR	Institute of Children's Nutrition Research
ICPD	International Conference on Population and Development
ICT	information, communication and technology
MDGs	Millennium Development Goals
MMR	maternal mortality ratio
MoA	Ministry of Agriculture
MoEER	Ministry of External Economic Relations
MoEPI	Ministry of Electric Power Industry
MoF	Ministry of Finance
MoFA	Ministry of Foreign Affairs
MoFishery	Ministry of Fisheries
MoForestry	Ministry of Forestry
MoII	Ministry of Information Industry
MoLEP	Ministry of Land and Environmental Protection
MoPH	Ministry of Public Health
MoPS	Ministry of Public Security
MoR	Ministry of Railways
MoSNRD	Ministry of State Natural Resources Development
MoUM	Ministry of Urban Management
MPODS	Montreal Protocol on the Ozone Depleting Substances
NCCAS	National Climate Change Adaptation Strategy
NCCC	National Communications on Climate Change
NDRRS	National Disaster Risk Reduction Strategy
NDG	National Development Goal
NEPS	National Environmental Protection Strategy
NTA	National Tourism Administration
NTF	National Task Force for Sustainable Development
OCHA	United Nations Office for Coordination of Humanitarian Affairs
PHC	Population and Housing Census
PSDS	public supply and distribution system
SAoS	State Academy of Sciences
SCEDM	State Committee of Emergency and Disaster Management

SCST	State Commission of Science and Technology
SDGs	Sustainable Development Goals
SDHS	Socio-economic, Demographic and Health Survey
SHA	State Hydro meteorological Authority
SHB	State Hydro-meteorological Bureau
SPC	State Planning Commission
TC	Technical Committee under NTF
UNCBD	United Nations Convention on Bio Diversity
UNDP	United Nations Development Programme
UNDRR	United Nations Office of Disaster Risk Reduction
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNSC	United Nations Security Council
UNSF	United Nations Strategic Framework
UPR	Universal Periodic Review
VNR	Voluntary National Review
WASH	water, sanitation and hygiene
WFP	World Food Programme
WHO	World Health Organization

OPENING STATEMENT

On 25 September 2015, the United Nations Summit on Sustainable Development adopted the 2030 Agenda for Sustainable Development (2030 Agenda) committing to build the new world, by eradicating inequality and poverty at the global level and ensuring human dignity and its potential healthy lives, for not only this generation but also posterity.

The Government of Democratic People's Republic of Korea (DPRK) has recognized that the 2030 Agenda conform to the national development policy for building powerful socialist country, and expressed its full support. For implementation of the 2030 Agenda, the Government has set up the National Task Force for Sustainable Development (NTF) and also formed Technical Committee (TC). The NTF is responsible for localizing the global SDGs, targets and indicators to the national SDGs and indicators in conformity with the National Development Goals and coordinating activities towards implementation of SDGs throughout the country. The TC integrates and estimates data by indicator through national statistical system.

Based on the line of building the powerful socialist country and the 2016-2020 five year strategy in May 2016 and the new strategic line of concentrating all efforts on economic construction in April 2018 set forth by Comrade **Kim Jong Un**, President of the State Affairs of DPRK, the Government has finalized the country specific SDGs and indicators for implementation of the 2030 Agenda and prepared the first Voluntary National Review (VNR) to submit to the High-Level Political Forum (HLPF) for sustainable development.

The DPRK SDGs reflect, as the main contents, to consolidate the foundations of the self-supporting national economy by upholding the line of prioritizing science and education and provide people with more affluent and cultured life through directing the primary efforts to energy, agriculture, water, sanitation and hygiene (WASH) and environment as well as perfectly enforcing the people-oriented policies. The national SDGs, the successor of the Millennium Development Goals (MDGs), have been elaborated on the basis of off-tracked MDGs indicators and of successes and lessons learned during the progress towards implementation of the National Development Goals (NDG) and sector plans. The national SDGs' targets and indicators will be further updated according to the new plan of national development, surveys and assessment of the international practices.

This report describes the successes and lessons learned during the implementation of each goal as well as the challenges and planned priority activities. The continued sanctions and blockade on the DPRK, severe natural disasters that hit the country every year and the protracted world health crisis since 2020 are main obstacles to the Government's efforts to achieve the sustainable development of the country and improve the people's livelihood.

The Government, under the ideals of "The people are God", single-hearted unity and self-reliance, will dynamically advance along the road of Korean style socialism and accomplish its beautiful ideals and goals successfully, through maximum use of its own resources, technologies and internal force. The Government will also continue to work closely with the international community for implementation of 2030 Agenda.

Finally, I would like to thank the Secretariat of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) for rendering valuable cooperation in completing the first VNR of DPRK.

PAK Jong Gun
Vice Premier
Chairman of the State Planning Commission
Chair of the National Task Force for Sustainable Development

HIGHLIGHTS

The 2021 DPRK VNR is the first report submitted to the HLPF by the Government, illustrating the policies and efforts, challenges and priority plans of the Government to achieve SDGs in succession of MDGs.

The 2030 Agenda which is more comprehensive than the Millennium Declaration, announced 17 goals and 169 targets, covering all the sectors of economy, social and environment, and UN published the methodologies related to implementing the 2030 Agenda, 232 indicators measuring progress towards SDGs implementation and the guidelines for preparation of VNR.

Based on the experiences of localizing and implementing the MDGs, the DPRK Government has established the country specific SDGs through integration of the 2030 Agenda into NDGs and in line with the relevant national laws and regulations.

The NTF, chaired by Vice Premier and Chairman of the State Planning Commission (SPC), completed the SDGs nationalization in close collaboration with all the line agencies and coordinates implementation of the national SDGs. The TC under the NTF integrates and estimates data by indicator measuring the progress towards implementation of the goals through national statistical system.

The national SDGs framework consists 17 goals, 95 targets and 132 indicators, reflecting the Government's priorities.

Same as the MDGs localization, the NTF has localized the global SDG 1 for ending poverty as the continuous improvement of people's life, including the relevant national indicators in line with the Government policy and the country's context, ensuring the succession of MDGs to SDGs. In addition, as all the people enjoy learning and health services under the 12-year universal compulsory free education and the universal free medical care systems, the relevant goals and targets were updated to higher level according to the national development goals and sector plans.

During the selection of indicators, the related data collection and the preparation of the VNR report, the results of surveys including 2014 Socio-economic Demographic Survey (HDHS) and 2015 Malaria Awareness Survey that CBS conducted with line agencies, 2017 Multiple Indicators Cluster Survey (MICS) conducted by CBS in cooperation with the United Nations Children's Fund (UNICEF), as well as the technical inputs by UN experts and exchange of experiences with other countries at the Regional Workshop on VNR organized by the ESCAP in April 2019 and the participation in the regional workshop on the SDG indicators and the Northeast Asia Stakeholders Forum on the implementation 2030 Agenda in October 2019 were of great help.

The national SDGs progress was analyzed and reviewed and the future plans designed, on the basis of annual data collected from the national statistical offices and the results of sector surveys conducted by CBS together with the relevant agencies.

The global targets and indicators that confirm to the country's context will be further added to the national SDGs framework through necessary surveys and assessment of the international practices.

The continued sanctions and blockade on the DPRK, heavy natural disasters in consecutive years and the world health crisis are main obstacles in achieving the national SDGs, showing the off-track tendency in several indicators.

This report is prepared in combination of successes, experiences, challenges and further focused plans in the implementation of national SDGs with 2016-2020 five year plan.

1 INTRODUCTION

Overview: The DPRK is geographically situated in the northeast of Asia. The total land area is 123 138km[21], of which about 74% is mountainous and many of rivers and streams. It is one-nation country and population size is 25 448 350[2]. The country is administratively divided into 9 provinces and 4 municipalities (Pyongyang, Nampho, Rason and Kaesong), and its capital is Pyongyang.

In recent years, Juche-oriented and modernization of several sectors of the economy including electric power, metallurgy, coal, chemistry and light industry have been accelerated, thus increasing the self-reliant basis of the national economy.

Gross Domestic Product (GDP) in 2019 was 33,504 million US$[3], 1.2 times increase compared to 2015. The main sectors of economy include metallurgy, coal, electric power, mine, machinery, building materials, chemistry and light industry. The industry has the largest share in GDP, as 38.6%. In 2018, the Government, following the new strategic line of concentrating all efforts on economic construction, mobilizes all the human, physical and financial resources to provide people with more affluent and cultured life through making the economy on Juche-oriented and modern at a high level under the spirit of self-reliance, self-development and relying on science and technology.

The DPRK Government has affirmed that it will exert all its efforts to implement the 2030 Agenda. The NTF has set up the country specific SDGs, targets and indicators after intensive review of the global SDGs, targets and indicators, UN methodology and guidelines for the implementation of the 2030 Agenda, and coordinates the nationwide implementation of SDGs.

2 METHODOLOGY AND PROCESS FOR PREPARATION OF THE REVIEW

The DPRK Government integrated the global SDGs into the NDGs and sector plans and finalized the country specific national SDGs. Following the new strategic line of concentrating all efforts on economic construction in April 2018, the NTF actively pushed forward the localization of the SDGs and indicators. During the several thematic group discussions and the plenary meetings, the NTF analyzed and reviewed the global SDGs and indicators together with the success and experiences in achieving MDGs, and set up the national SDG goals, targets and indicators by integrating the global SDGs framework with the NDGs and sector plans. Moreover, the nationwide institutional mechanism with the NTF as a main axis and the TC as a supplement has been established to monitor, evaluate and coordinate the implementation of national SDGs by indicator.

The VNR report on the implementation of the 2030 Agenda was prepared involving all the relevant agencies. In March 2021, the TC integrated data through the national statistical system and submitted the results to the NTF. The NTF organized the consultation meetings under the six thematic areas of socio-demography, science and education, public health and water and sanitation (WASH), economy and energy, environment and ecosystem and disaster risk management (DRM), to discuss successes, experiences, challenges and actions forward, and drafted the report based on those reviews. Since 52% of the indicators measuring implementation of 2016-2020 five year plan are linked to the national SDGs framework, the statistical data on its implementation as well as the results of surveys including 2017 MICS conducted in collaboration with UN organizations are used as inputs in preparing the report.

[1] CBS, DPRK, 2018
[2] 2019 DPRK population census
[3] CBS, DPRK, 2020

Special attention was paid to design the VNR report in line with the international standards. The key members of the NTF and TC participated in the regional workshops on VNR organized by ESCAP and the Northeast Asia Stakeholders Forum on sustainable development in 2019 and acquainted in depth the issues like definition and calculation of indicators, report writing, the status of the Agenda implementation in other countries, etc. through the professional supports from the UN experts and the exchange of experiences with other countries.

Following the activation of the national emergency anti-epidemic system in February 2020, the NTF cancelled the national seminars planned for exchange of feedback on implementation of the 2030 Agenda and the draft VNR report, and decided to postpone the DPRK VNR presentation at the HLPF in July 2020 to July 2021. As the national emergency anti-epidemic system strengthened, the NTF arranged the thematic virtual meetings with staffs from the line ministries and relevant agencies to gather their comprehensive comments on the draft, and finalized the first report.

3 POLICY AND ENABLING ENVIRONMENT

(a) Creating ownership of the Sustainable Development Goals and VNRS

The DPRK Government has set up the country specific SDGs incorporating the global SDGs into the NDGs and according to the relevant national laws, and pushes ahead its implementation in nationwide scale.

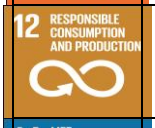
In March 2019, the NTF, through intensive consultations with the line ministries and agencies, has set up the national SDGs. The national SDGs have been included in the agenda items of the Cabinet together with implementation of the socio-economic development plan, and the nationwide system from the central to the lowest level has been established to assess and coordinate its progress.

(b) Incorporation of the Sustainable Development Goals in national framework

The DPRK Government has established and implements the national SDGs, incorporating the global SDGs into the goals for building the powerful socialist country and 2016-2020 five year plan. Priorities are given to energy, agriculture, WASH and environment in the national SDGs and 53% of the global SDGs targets are selected as the national SDGs or integrated with the NDGs. The 2021-2025 five year plan also integrated the national SDGs, ensuring the continuity of SDGs implementation.

Table 1. Inter-linkage between SDGs and NDGs

SDGs	UN	DPRK
NDG 1: Strengthen the people's government and display the people-first principle		
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Prepare all as intelligent workers
	Build resilient infrastructure, promote sustainable industrialization and foster innovation	Put national economy on a Juche and modern basis and modernize infrastructure
	Promote societies for sustainable development, provide access to justice for all and build accountable and inclusive institutions	Consolidate the Socialist System

SDGs	UN	DPRK
NDG 2: Develop all sectors based on science and education		
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Prepare all as intelligent workers
	Achieve gender equality and empower all women and girls	Consolidate gender equality and rights of all women and girls
	Build resilient infrastructure, promote sustainable industrialization and foster innovation	Put national economy on a Juche and modern basis and modernize infrastructure
	Ensure sustainable consumption and production patterns	Ensure sustainable consumption and production
	Conserve and sustainably use the oceans, seas and marine resources	Sustainably conserve and use coastal and sea resources
	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	Develop friendly partnership
NDG 3: Build self-supporting and knowledge-based economy		
	End poverty in all its forms	Improve people's livelihood
	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Develop sustainable agriculture and realize self-sufficiency of food
	Ensure healthy lives and promote well-being for all at all ages	Ensure healthy lives and promote well-being for all
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Prepare all as intelligent workers
	Ensure availability and sustainable management of water and sanitation for all	Ensure sustainable access to water and sanitation
	Ensure access to reliable and modern energy for all	Ensure access to sustainable and modern energy
	Promote sustainable economic growth, employment and decent work for all	Establish self-reliant and knowledge-based economy and provide employment
	Build resilient infrastructure, promote sustainable industrialization and foster innovation	Put national economy on a Juche and modern basis and modernize infrastructure
	Reduce inequality within and among countries	Enhance the position and role of all the masses as masters of state and society

SDGs	UN	DPRK
	Make cities and human settlements safe, resilient and sustainable	Ensure living conditions and environment for affluent and civilized life
	Ensure sustainable consumption and production patterns	Ensure sustainable consumption and production
	Take urgent action to combat climate change and its impacts	Combat climate change and its impacts reduction
	Conserve and sustainably use the oceans, seas and marine resources	Sustainably conserve and use coastal and sea resources
	Protect and restore terrestrial ecosystems, sustainably manage forests, reverse land degradation and halt biodiversity loss	Sustainably manage forests, restore land fertility and maintain biodiversity
NDG 4: Construct fully developed socialist culture		
	End poverty in all its forms	Improve people's livelihood
	Ensure healthy lives and promote well-being for all at all ages	Ensure healthy lives and promote well-being for all
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Prepare all as intelligent workers
	Build resilient infrastructure, promote sustainable industrialization and foster innovation	Put national economy on a Juche and modern basis and modernize infrastructure
	Combat climate change and its impacts	Combat climate change and its impacts reduction
	Conserve and sustainably use the oceans, seas and marine resources	Sustainably conserve and use coastal and sea resources
The common goals interlinked to all the NDGs		
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Prepare all as intelligent workers
	Achieve gender equality and empower all women and girls	Consolidate gender equality and rights of all women and girls
	Build resilient infrastructure, promote sustainable industrialization and foster innovation	Put national economy on a Juche and modern basis and modernize infrastructure

SDGs	UN	DPRK
	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	Develop friendly partnership

The global SDG 1 for ending poverty has been specifically localized same as the national MDGs as consistent improvement of the people's living standard in line with the Government policy and included the relevant national indicators,.

The national targets and indicators will be further updated in conformity with the country's reality and the international standards through surveys and assessments. The NTF, in collaboration with CBS and line agencies, conducts the work of including the global indicators fitting with the country's context in the national indicator framework through in-depth research and in consultation with UN agencies.

(c) Integration of the economic, social and environmental dimensions

2030 Agenda requires the balanced development of three dimensions of economy, social and environment. The national SDGs established by incorporating the global SDGs into the national goals for building the powerful socialist country and 2016-2020 five year plan reflect these three dimensions. The integration of three dimensions in perspective of the inter-linkages between the goals and targets are shown at the section 2, 6, 7 and 15 in Chapter 8 that describe the progress of each SDGs and targets.

(d) Leaving no one behind

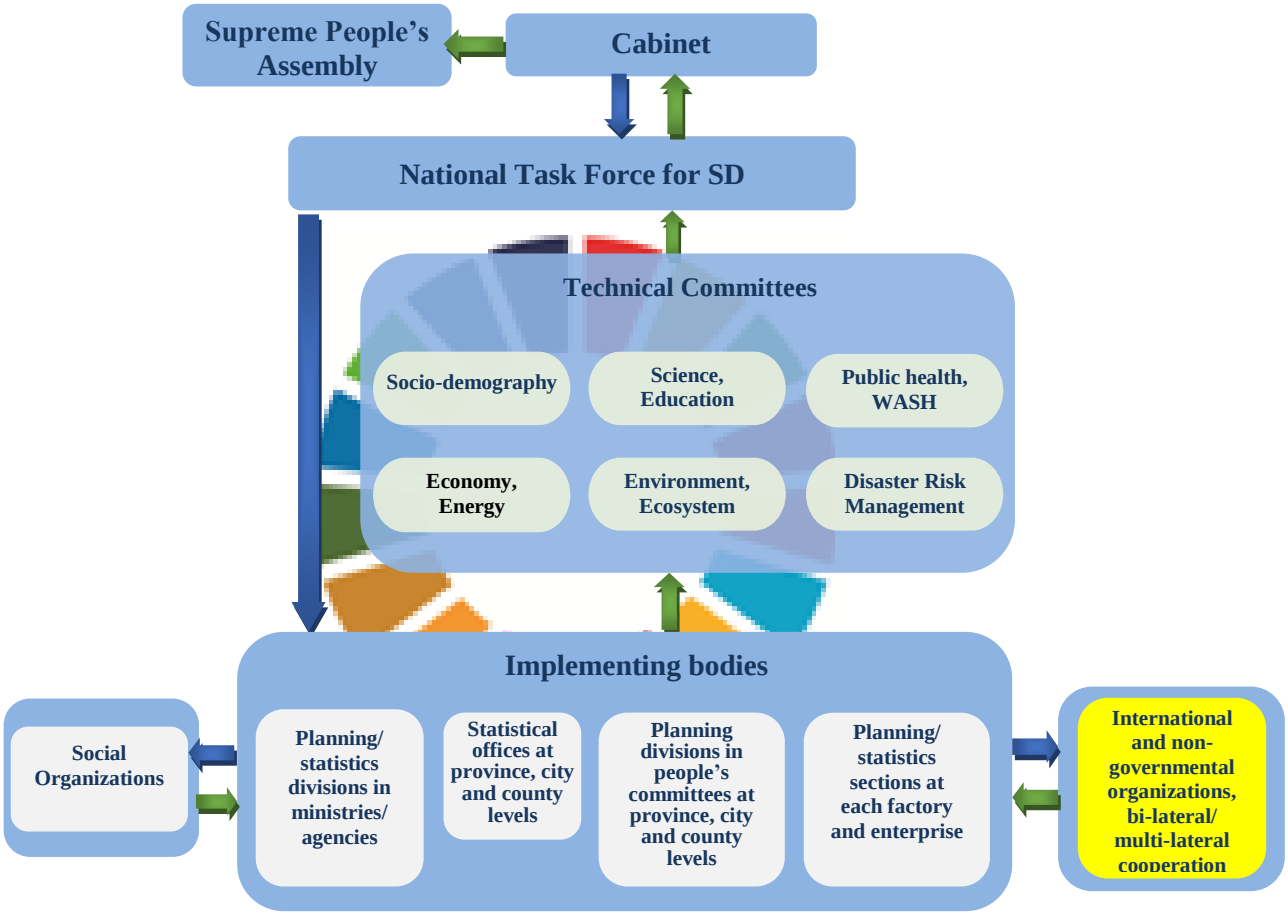
The DPRK is the people-centered socialist state where the people-first principle is the only lodestar in the state building and activities and where the masses of working people are the master of everything and everything of the society serves for their benefits. The State enforces the public supply and distribution system (PSDS) covering all the households in the country, social benefits, the universal free medical care, 12-year universal compulsory free education, employment system after education for all the working aged people, social insurance and security system, etc., ensuring all the people become the masters and beneficiaries of the sustainable development on the legal, institutional and practical basis.

(e) Institutional mechanisms

In August 2018, the NTF has been formed, chaired by the Vice Premier and Chairman of the SPC and vice-chaired by the Deputy Director-General of the CBS, and the officials nominated by the line ministries and agencies. The NTF is mandated to set up and update the national SDGs, targets and indicators as well as to coordinate the country-wide implementation through oversight and review of the progress in consultation with the line ministries, agencies and the People's Committees at each level.

The CBS plays the major role in data collection and assessment as the centre of the national statistical system. The TC, composed by CBS officials, submits to the NTF the results of assessment on the progress status by goal based on the aggregated statistics. The NTF reports the assessments and recommendations to its Chair. The SDGs progress is included in the agenda of the Cabinet for its periodic review in connection with the implementation of the ss and sector plans, and the relevant instructions are followed up for nationwide implementation under the coordination the NTF.

Figure 1. National system for the Sustainable Development



4 PROGRESS ON GOALS AND TARGETS

This chapter describes, by each of 17 national SDGs, the Government priorities, the progress, challenges and plans forward in combination with the national MDGs results. It tracks the tendency by each goal based on the current statistics collected by the national statistical offices and the results of surveys including 2012 Nutrition Survey, 2014 Socio-economic Demographic Health Survey (SDHS), 2015 Malaria Awareness Survey and 2017 MICS that CBS conducted in cooperation with the line ministries, agencies and UN organizations. The baseline year is 2015 and the data around 2015 are also used for some indicators.

4.1 Goal 1. Improving people's livelihood

4.1.1 Progress and challenges

The DPRK is the people-centred socialist state where the masses of working people become the master of everything and everything serves for their benefits. The "DPRK Socialist Constitution" (adopted on 27 December 1972, amended) stipulates that the State regards the improvement of the people's material and cultural life as a top principle in its activity and provides the working people with all the living conditions including food, clothing and housing[4].

The Government gives top priority to fully meeting the people's material demands through the

[4] "DPRK Socialist Constitution" Article 25

PSDS. The Government set the target of "by 2030, sufficiently meet material requirements of people through state supply and dwelling distribution systems" in this goal and selected "proportion of households living in shared dwelling" as its measuring indicator. The proportion households living in shared dwelling was 0.8% in 2015, 0.6% in 2018 and 0.5% in 2019.

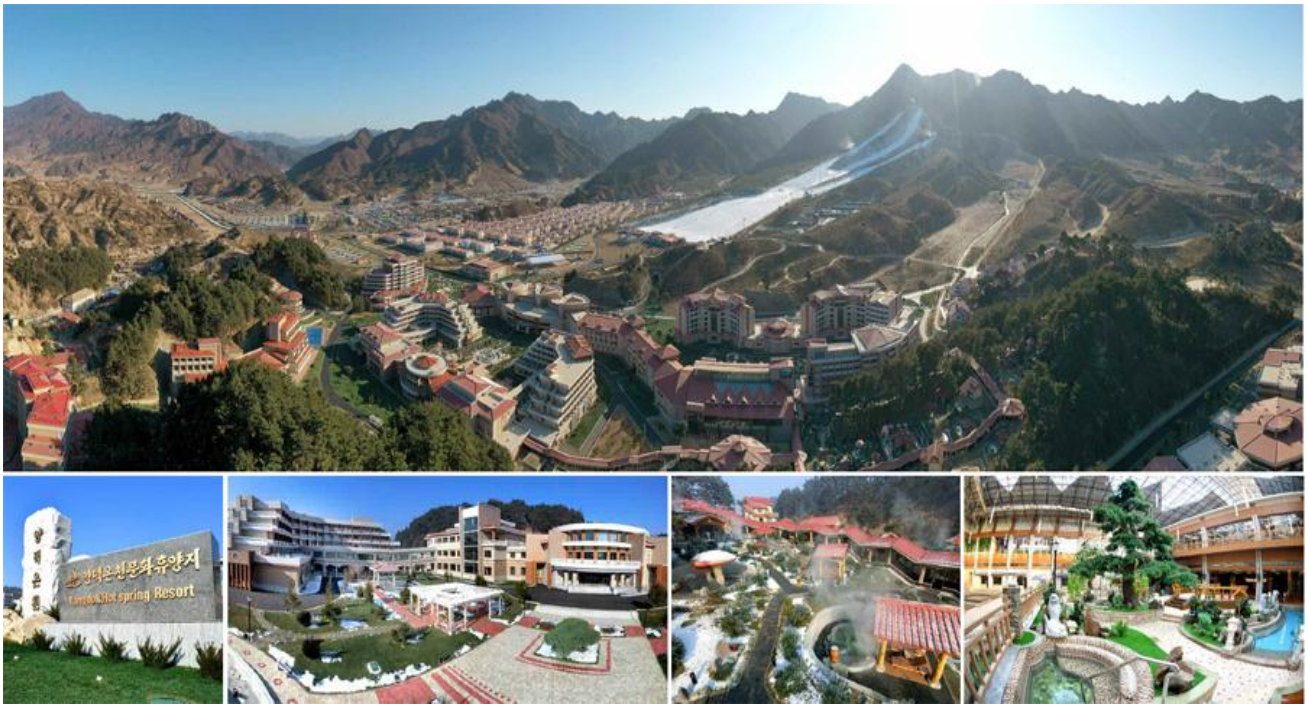
The Government pushes forward simultaneously the industrial construction to strengthen the economic foundation of the country and other constructions to satisfy the people's demands on materials. During the period of 2015-2020, Mirae Scientists' Street, Ryomyong Street and Wisong Scientists' Residential Area were fashionably built and the dwellings distributed free of charge to the residents in Pyongyang (about 9 500 dwellings in total), while Samjiyon City was transformed into a model of modern mountainous city (about 3 000 dwellings, 5 buildings of nursery and kindergarten, about 20 buildings of public service and city people's hospital). From March 2021, the dwelling construction has been launched on a full scale to complete within the same year, of 10 000 dwellings and of special 800 dwellings as Pothonggang Riverside Residential Area in terrace-style for labor innovators, merited persons, scientists, educators, writers, etc. Pyongyang basic foodstuff factory, Samjiyon potato powder factory in Ryanggang province, Kumsanpho fish pickling factory in South Hwanghae province and Jungphyong greenhouse farm in North Hamgyong province, as well as local factories such as child food processing factory and foodstuff factories in each province have been rehabilitated or newly built in modern and unique way to the region, contributing to the improvement of the people's livelihood.

After the severe natural disasters by typhoon and floods occurred annually from 2016 to 2020, the Government, mobilizing all the human and material resources for rehabilitation, built about 37 000 dwellings and distributed free of charge to the residents and repaired about 31 000 dwellings in the affected areas for their stable livelihood.

The state investment has been increased to the orphans and the elderly with no one to look after them. The Government set the target of "increase state investment to orphans and elderly with no one to look after them so as to live free from worries", and "number of orphans' primary school/baby home/ orphanage/rest home which are modernly rehabilitated", "population by type" as measuring indicators. The State has legally defined that those who are old-age, incapable to work due to illness or disability, and elderly or children with no caretaker have the right to get material

aids, and this right is ensured through free medical care system, increased health facilities like hospital and sanatorium, public social insurance and security system[5]. During 2015-2020, 67 units of baby home, orphanage, orphan's primary and secondary school and rest home were newly built or rehabilitated.

The bases for cultural and leisure activities for people are newly built and people-oriented policies being consolidated including paid leave, recuperation and relaxation at state expense. As stated in the socialist constitution to make all the working people fully enjoy the socialist culture and leisure life by arranging the modern bases for cultural activities[6], the Government set the target of "by 2030, increase systematically number of splendid, modern bases for cultural and leisure activities for people and further consolidate people-oriented policies including paid leave, recuperation and relaxation systems at state expense". Between 2013-2020, Masikryong Skiing Resort, Mirim Horse Riding Club, Munsu Wading Pool, Rungra People's Sports Park and Yangdok Hot Spring Resort were completed, indoor stadium and outdoor sports facilities newly built across the country and the construction of Wonsan-Kalma coastal tourist resort being in progress at the world standards.



In order to adapt with climate-related natural disasters, the national system of crisis management has been set up and relevant measures taken, however, challenges still prevail. In 2014, the State Committee of Emergency Disaster Management (SCEDM) was formed and institutional structure to response disasters established from the central to the lowest level; National Strategy of Disaster Risk Reduction (NSDRR) is under implementation and local DRR plans are

[5] "DPRK Socialist Constitution" Article 72
[6] "DPRK Socialist Constitution" Article 53

formulated, while other national DRR-related laws being revised. Severe natural disasters occurred every year during 2015-2020 effected several regions of the country. To cope with natural disasters, it needs to improve the infrastructures, conduct reforestation campaign as annually planned and mobilize domestic potentials, and to strengthen the international cooperation as well.

Measurement: The Government evaluates the status of people's living standard based on the data from the current statistics and the results of various surveys regularly conducted including MICS.

4.1.2 Plans

The DPRK gives priority to the following plans.

Fully demonstrate advantages of the socialist system: During the 2021-2025 five year plan, 50 000 dwellings will be constructed in Pyongyang to substantially resolve the housing issue of the citizens and the regional specific constructions in each county be pushed ahead in a planned way to provide the people with maximum social benefits and cultured living conditions.

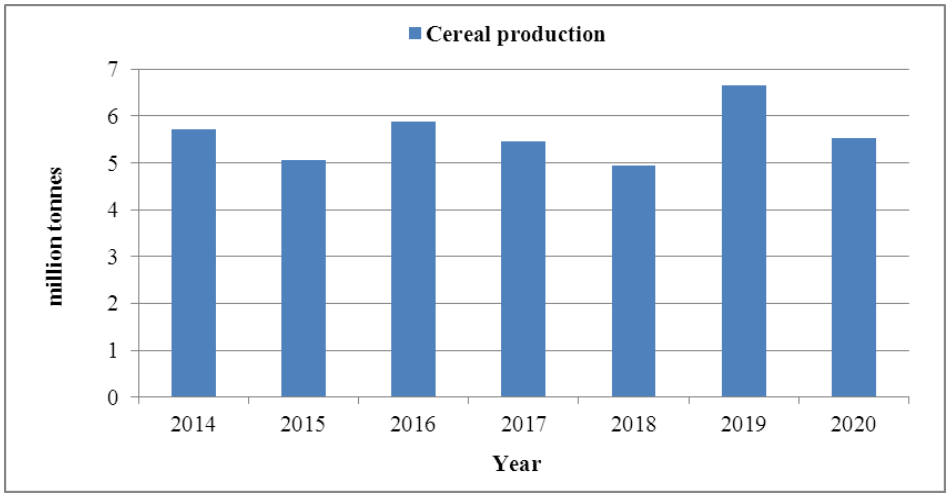
Reduce disaster risk: The national system of crisis management will be strengthened and the efforts be exerted for afforestation and water conservancy projects to minimize the disaster risks and provide people with safe living conditions

4.2 Goal 2. Sustainable development of agriculture, self-sufficiency of food

4.2.1 Progress and Challenges

The Government of DPRK gives the top priority to realize the sustainable development of agriculture and self-sufficiency of food. Despite of several positive measures to increase the cereal production, the national MDG target of cereal production of 7 million tons was not achieved. The production in 2018 was about 4.95 million tons, the lowest during the last 10 years. The main reasons of reduced production are the natural disaters and weak resilience, insufficient farming materials and low level of mechanization.

Figure 2. Annual cereal production



The Government waged an intensive drive for scientific farming and high yield and thus produced 6.65 million tons, the highest yield during the last 10 years. However, due to the natural disasters by consecutive typhoon and floods, the production was reduced to 5.52 million tons in 2020.

As the arable land is limited, the tideland reclamation is considered as important solution for agricultural development and improvement of the people's livelihood, and the national efforts

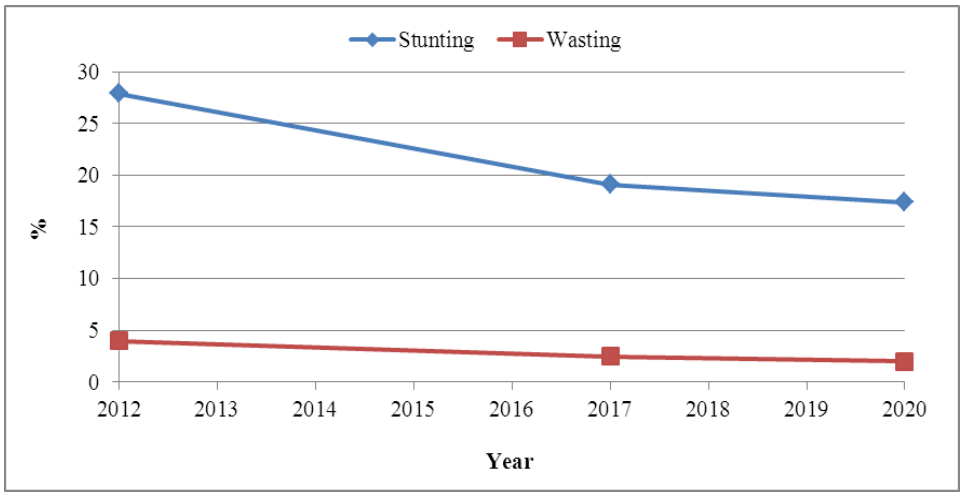
are paid to its implementation. The new land of about 13 000 hectares was reclaimed, as the results of completion of large-scale nature transforming project in April 2021 on reclamation of Honggondo and Ryongmaedo tidelands in the West Sea area commenced in 2012.

The efforts are focused on breeding of superior strains in larger numbers, increasing fertility of soil to ensure the sustainable food production system. Several scientific research results including high-yield seeds and suitable farming methods were introduced and about 20 new models of farming machineries invented and produced. However, challenges still remain in developing superior strains like seeds resistant to salt and cold, improving significantly the fertility of soil, preventing soil acidity and land loss by floods, etc.

Considerable efforts are directed to sustainably develop stockbreeding, vegetables, fruit farming and fishing culture. The joint stockbreeding by cooperative farms and the sideline stockbreeding by individual farmers are encouraged, and greenhouse culture, fresh-water and offshore fish farming widely conducted, while the offshore cultivation areas expanded.

Remarkable improvement has achieved in sharply reducing the malnutrition prevalence among children under 5 years of age and address the nutritional needs of all the women.

Figure 3. Prevalence of stunting and wasting among under 5 children (%)



Active cooperations with the international organizations have been conducted in the fields of food security and nutrition. The Government, in collaboration with the international organizations including UNDP, UNICEF, UNFPA, WFP, FAO and Non-Governmental Organizations (NGOs), implemented several projects on reduction of post-harvest loss, seed improvement, nutritional improvement, food for asset, etc and achieved a series of successes.

Measurement: The cereal production and the household consumption of food and subsidiaries are measured through the crops output estimation, nutrition assessment and MICS in the selected areas annually or per 3 to 5 years.

4.2.2 Plans

The DPRK gives priority to the following plans.

Realize the self-sufficiency of food: During the 2021-2025 five year plan, the goal of cereals production should be achieved by increase of per-hectare yield and expansion of crops cultivation area through putting efforts into seed production, scientific farming, increased output in low-yielding fields, cultivation of new land and tideland reclamation, pushing irrigation and mechanization of agriculture and strengthening state assistance to the rural economy; sustainable development should be ensured in animal husbandry, fishery, vegetables and fruit growing.

Develop agricultural science and technology. The agricultural development strategy should be revised and implemented on the sustainable basis. The industrialization of seed processing and quality control, improvement of wheat and barley strains for semi-annual crop, diversification of vegetable species, encouragement of organic farming method, industrialization of vegetable production, introduction of the advanced cultivation methods, establishment of the agricultural information system will be pushed forward.

4.3 Goal 3. Ensure healthy lives and promote well-being for all

4.3.1 Progress and challenges

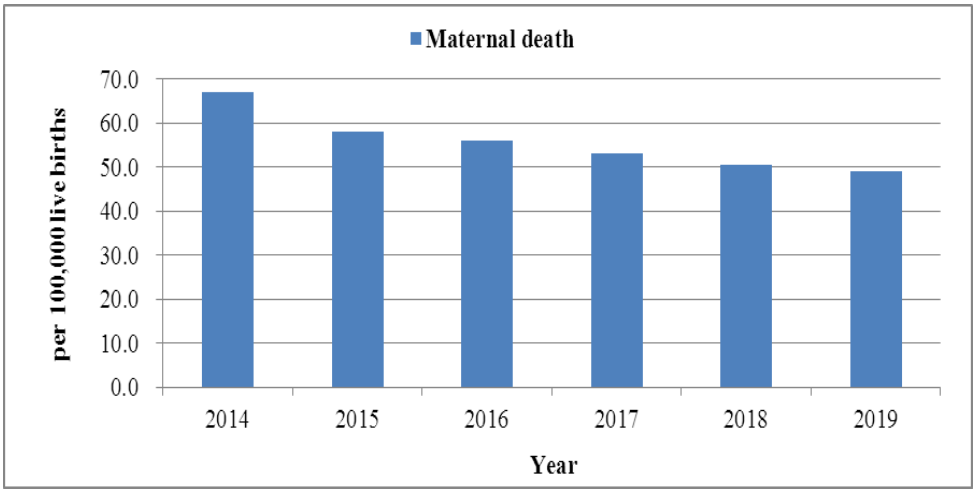
The DPRK Government ensures more cultured living conditions and constantly promotes their well-being. The State has legislated that the people's lives will be protected and the health of working people promoted through consolidation and development of universal free medical care system, strengthening of district doctor system and implementation of the policy on preventive medicine[7]. Thanks to the universal free medical care system, all the people have access to medical services without any charge, irrespective of sex, age, occupation or residence. The universal free medical care system was enforced from 1953 and the complete universal system from 1960. There are the health facilities from the central to the lowest level, medical university, health staff training centres including nurses' training school and the medical science and research institutes in every province. The district doctor system is operated and the prevention kept ahead of all medical services, to protect and promote the people's health.

The consolidation of material and technical foundations has been accelerated in the public health sector. Between 2012 and 2020, modern health facilities were established in a modern style, including Breast Tumor Institute of Pyongyang Maternity Hospital, Okryu Children's Hospital, Ryugyong General Ophthalmic Hospital, Ryugyong Dental Hospital and Myohyangsan Factory of Medical Appliances as well as health oxygen factories in Pyongyang and several provinces, thus the health services for the people have been consistently improved. In 2020, the government has started a new construction project, Pyongyang General Hospital, for the purpose of the comprehensive medical service to the people.

There has been considerable progress in protection of maternal life and health. The Government set the target to reduce the maternal mortality ratio to less than 40 per 100 000 live births by 2030.

[7] "DPRK Socialist Constitution" Article 56

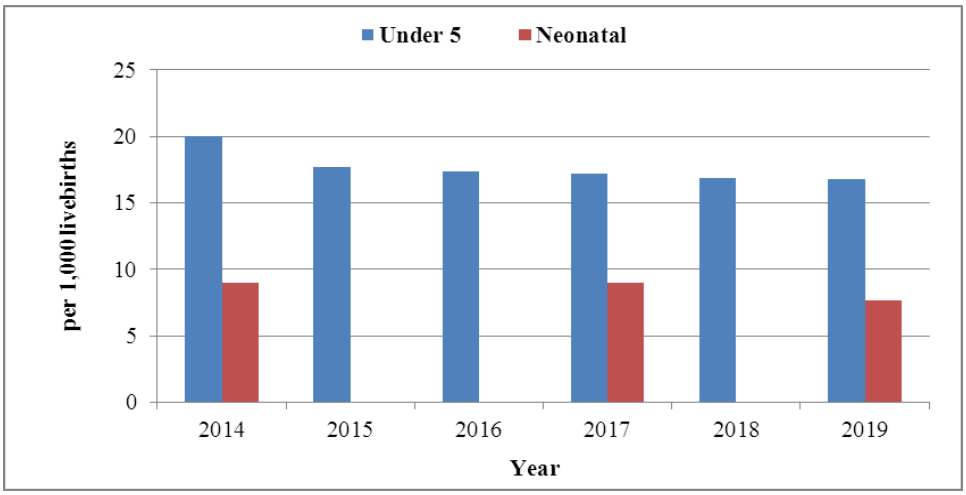
Figure 4. Maternal mortality per 100 000 live births



Proportion of births attended by skilled health personnel was increased from 97.3% in 2010 to 99.5% in 2017. Its target is to reach 100% by 2030.

Considerable progress has been made in reducing child mortality. The Government set the target of, by 2030, reducing the neonatal mortality rate per 1 000 live birth to less than 6 and under 5 mortality rate to less than 12.

Figure 5. Under 5 and neonatal mortality rates per 1 000 live births



The notable success achieved during MDG period was the malaria incidence reduction. Its incidence rate has been rapidly declined since 2010, from 0.52 in 2015 to 0.15 in 2020, and there was no direct death from the epidemic.

The tuberculosis (TB) incidence decreased from 451 in 2015 to 354 in 2018 but increased in 2019 to 376 and again decreased to 351 in 2020 and **Hepatitis B** from 6.8 in 2015 to 5.9 in 2020 per 100 000 population.

The supports from Global Fund against AIDS, TB and Malaria contributed to the reduction of malaria and TB incidence.

Suicide mortality does not rise as a social issue in the DPRK where the people are the master of everything and everything is geared to their benefits.

The Death rate by road traffic injuries per 100 000 population was 8.5 and 7.3 respectively in 2015 and 2020[8].

The Government set the target of, by 2030, reducing by one third **the premature mortality from non-communicable diseases** through improving the quality of the universal free medical care system and implementing preventive medical policy.

The reproductive health services have been improved. Proportion of women of reproductive age who have their need for family planning satisfied with modern methods was 89.6% in 2014 and 89.7% in 2017, and adolescent (aged 15-19) delivery rate per 1 000 women was 1[9].

Mortality rate attributed to household and ambient air pollution is not confirmed yet and the ambient density of PM2.5 increases gradually. However there are some difficulties including in measuring the PM and introducing clean fuel and combustion technologies.

Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene is not confirmed yet. Several measures were taken including the introduction of the gravity fed water supply system and pumping system powered by wind and/or solar energy.

The mortality rate attributed to unintentional poisoning per 100 000 population was 0.6 in 2015 and 0.4 in 2020[10].

The State acceded to the Framework Convention on Tobacco Control and raises awareness among the people on the harmful use of tobacco and "Cessation Law in DPRK" has been adopted in October 2020, but the prevalence of tobacco use is still high among persons aged 15 or over, as 46.3% in 2015 and 46.1 in 2017[11].

The lack of the capacity of health personnel, low technical foundation of pharmaceutical and medical appliance plants and shortage of essential medicines remain as challenges. Some of the pharmaceutical, vaccination and medical appliance plants do not reach at the level of GMP of WHO and not meet the local demand as well. Most vaccination is supplied through joint funding mechanism between the Government and GAVI, the Global Alliance.

Measurement: The MoPH collects routine data on morbidity by age, sex and cause from the central hospitals down to the lowest clinics. Data on well-treated and/or not-treated diseases in the particular hospitals or clinics, treatment methods, medicines and facility conditions are also compiled and comprehensively analyzed for the treatment of diseases. In addition, data are collected and aggregated through regular medical examination of household members by section doctors and physical examination of children and pupils at nurseries, kindergartens, baby homes, orphanages and primary schools in the country. Assessments are also done through surveys including MICS and RH survey in cooperation with UNICEF and UNFPA.

[8] Ministry of Social Security, DPRK
[9] 2017 DPRK Multiple Indicator Cluster Survey
[10] Ministry of Public Health, DPRK
[11] 2015 DPRK Non-communicable Disease Survey, 2017 National Smoking Survey

4.3.2 Plans

The DPRK gives priority to the following plans.

Stick to the policy on preventive medicine: With full implementation of the "Law on Public Health of the DPRK" (adopted on 3 April 1980, amended), it should increase the average life expectancy of the population, prevention rate of infectious diseases and other health indicators to the world's advanced level; by means of strong section doctor system, section doctors pay routine visit to households and workplaces under their charge to take preventive steps and cares of health with responsibility.

Consolidate the material and technical basis of the public health sector: It is to complete the Pyongyang General Hospital at the highest level, build Provincial People's Hospitals in a modern general style and modernize the curative and preventive facilities of the country like the Samjiyon City People's Hospital as a model. The basis for the provision of the materials should be firmly established including through renovation and modernization of the pharmaceutical factories such as Pyongyang Pharmaceutical Factory and the factories of the medical consumables.

Improve the quality of medical service: It is to improve the quality of medical service through perfect telemedicine and emergency medical care systems and introduction of quality management system of medical care. It is also to make traditional Koryo medicine more scientific and localize essential medical equipment and medicines at high level.

Construct the solid basis of the anti-epidemics. It is to thoroughly prevent the invasion of the communicable diseases from abroad by strict inspection and quarantine of personnel at every entry points and thorough measurement to detect the probable cases like feverish case in time as well as the strict system of disinfecting all imported goods. To cope with any global health crisis, the material and technical basis of the hygiene and anti-epidemic sector should be completed and the anti-epidemic system be strengthened to ensure the life and safety of the people.

4.4 Goal 4. Prepare all as intelligent workers

4.4.1 Progress and challenges

In the DPRK, all the people enjoy their learning thanks to the universal 12-year compulsory education system, the full-time higher education system and the study-while-working system. With the implementation of the policy on valuing education, the SDG targets of universal primary and secondary education enforcement, and the pre-school education provision were achieved long time ago**.**

The "Socialist Constitution of the DPRK" legalized the enforcement of one year pre-school

compulsory education and free-of-charge study for all pupils and students. The State introduced universal compulsory primary education from August 1956 and universal compulsory secondary education from November 1958, and abolished tuition fees in all education institutions from April 1959. The universal 10-year compulsory education and 1-year pre-school compulsory education system was introduced in April 1973 and the universal 12-year compulsory education system in September 2012.

Thanks to the universal 12 year compulsory education, the proportions of children at the end of lower secondary achieving at least a minimum proficiency level in reading and mathematics are 97.5% and 83.2% respectively, net enrolment rate in primary school 87.4％, participation rate in one year before the official primary entry age 97.1%, parity indices 1 and the literacy rate of the population between the age of 15 and 24 is 100％[12].

The Government focuses on improving environment and condition of education and raising the quality of education. Under the state investment and the sponsor organizations' support, the daily renovation of educational environment at primary and secondary school in the whole country proceeded, the content of education developed practical, comprehensive and updated and the classrooms and laboratories rehabilitated multifunctional in about 200 universities and colleges, and Pyongyang Teachers Training College was rebuilt as an excellent centre for training teachers.

Study-while-working education system has been consolidated. The State stipulates to develop regular education system together with the different types of study-while-working-system[13], thus, the working people receive high education according to their wishes through part-time study systems like factory, farm and fishermen's colleges. The tele-education system has been established and the Sci-Tech Complex was built in 2016 as a great temple of learning for all the people and a centre for disseminating the latest science and technology.

There remain challenges in improving content and method, condition and environment of education in line with the global trends of educational development. There exist issues like low level of innovating educational content and methods, prone to forms rather than improving educational environment according to the pedagogical requirements, distinction in secondary

[12] 2017 DPRK Multiple Indicator Cluster Survey

[13] "Socialist Constitution of the DPRK" Article 46

education between the rural and urban areas, etc.

Measurement: Education statistics including admission ratio are collected from the regular statistics of CBS and Education Commission (EC), population census and MICS. EC collects data on the indicators through Education Information System (EIS) on a regular basis.

4.4.2 Plans

The DPRK gives priority to the following plans.

Further improve education system: General secondary education system should be perfected, the overall higher education system improved including the establishment of the courses of the advanced and interdisciplinary science and the tele-education system expanded in order to offer larger number of working people accessible to higher education.

Constantly improve the educational environment, content and method. It is to bring constant improvement in the content and method of education and teaching management system and raise qualifications of teachers. Continued cooperation with international organizations including UNESCO and UNICEF is needed to improve educational environment, content and method.

Consolidate the material and technical foundations of the educational sector. It is to systematically increase investment to the educational sector, to promote the construction, rehabilitation and modernization of schools and encourage the sponsor organizations to assist educational institutions materially and morally.

4.5 Goal 5. Consolidate gender equality and rights of all women and girls

4.5.1 Progress and challenges

The DPRK has achieved gender equality long time ago, thus most of the targets of the global SDGs have been achieved. As the "Decree on Gender Equality" promulgated on July 30, 1946, women, who suffered restriction of feudalism and underwent fate of colonial slavery for centuries, could attend the state activities and social life with equal freedom and rights with men. It is legally regulated that women have the equal social status and rights with men, and women and children are

protected through paid maternity leave, shortened working time for women with several children, and other social benefits[14]. The DPRK has adopted several laws such as the "DPRK Law on the Protection and Promotion of the Rights of Women", the "DPRK Law on Labor Protection" so that the social standing and rights of women have been strengthened in all spheres of socio-economic life.

Women have also equal rights with men to vote and to stand for election for organs of state organs at all levels. The Government complies with the requirements of the "Convention on Elimination of Discrimination against Women" (CEDAW, accessed on 27 February, 2001) and submits regular reports to UN on its implementation.

The State is further strengthening the rights of women in all domains of political, economic and social life. Women accounted for 20.2% of the deputies elected for the 13th Supreme People's Assembly (SPA) in 2015 and 17.6% for the 14th in 2019, and more than 25% for the local people's assemblies.

The progress has been made in ensuring the Reproductive Health (RH) Service. Contraceptive prevalence rate was reported 78.2% and 70.3% respectively in 2014 and 2017 and **the unmet family planning rate** reached 7.0% and 6.6% in the same years. As agreed in the "Cairo Action Plan on Population and Development" and the final documents of the Beijing Forum, the Government in collaboration the UNFPA is implementing five year National RH Strategy since 2007.

Among the mobile phone subscribers aged between 15 and 49, men were 55.7% while women were 47.9%, in 2017.

Mental and physical violence is not a social issue in the DPRK where the people are masters of everything and everything serves for people.

Measurement: Data on gender equality are collected through the population and housing census, MICS and RH survey.

4.5.2 Plans

The DPRK gives priority to the following plan.

Ensure the empowerment of women: It is to properly implement the state laws related to gender equality and appoint more women to the leading positions of government and other organizations.

Promote the education for exertion of women's potential: It is to enhance different types of educations including compulsory, high-level, professional, specialized, technical, art and commercial service educations for women in various forms and methods so as to display their capacity and potential in appropriate jobs in accordance with their wishes.

[14] "Socialist Constitution of the DPRK" Article 76

4.6 Goal 6. Ensure sustainable use and management of water and sanitation

4.6.1 Progress and challenges

The DPRK Government takes active measures to ensure safe drinking water and clean sanitation for all people, but the progress is slow. The "DPRK Law on Public Hygiene" (adopted on 15 July 1998, amended) regulated the system and order in the public hygiene including for air protection, water and sanitation (WASH), dwelling, public buildings and establishments.

In the country, the gravity fed water supply system (GFS) has been proven effective and introduced widely, contributing to drinking water supply to the residents. As the GFS is energy-saving water supply system with effective use of water resources and supply drinking water on a sustainable basis, and thus recognized suitable to the country's real situation. Several projects for the standard supply of drinking water through the GFS are in progress in different provinces, cities and counties. In those regions where the GFS is introduced, every household is free from worries on drinking water as this system provides non-stop drinking water everyday regardless of seasons. In 2018, a provision to give priority to GFS in construction of water supply systems was added to the detailed enforcement regulation of the "Law on Water Supply", and the effectiveness of GFS is advocated broadly through the mass media.

Table 2. Proportions of population access to safe drinking water/safely managed sanitation facilities, 2017 (%)

Population access to safe drinking water	Area		Population access to safely managed sanitation facility	Area	
	Urban	Rural		Urban	Rural
60.9	71.3	44.5	47.5	70.8	11.4

Special attention should be paid to improve the water quality. In recent years, due to the imperfect technical conditions of the sewage disposal plants and lack of equipment and reagents, the industrial and household wastewater are released to the rivers and streams and drained to soil without full treatment in some regions, thus resulting pollution.

Challenges remain in increasing the effectiveness of water use and supplying enough water. In the agricultural sector, the irrigation facilities should be regularly maintained so as to reduce loss of water, and the production processes of factories and enterprises converted to water saving type.

Projects are underway for integrated water resources management (IWRM) in cooperation with neighboring countries. According to the 2020 UNEP indicator assessment criteria, the national score for IWRM implementation was around 65. The law on IWRM was adopted, relevant institutions created, and infrastructure for rational use of water resources is built according to the plan. Protection of the ecosystem and environment, use of water, loss of arable land and other matters are settled through discussions based on the principle of joint management and use of water in River Amrok zone between the DPRK and the People's Republic of China.

Measurement: The data related to the access to the safe drinking water is collected through surveys including MICS. It is necessary to introduce international standard in assessing indicators related to sewage and waste treatment. The system for monitoring water resources and quality is not in full operation due to the technical limitation.

4.6.2 Plans

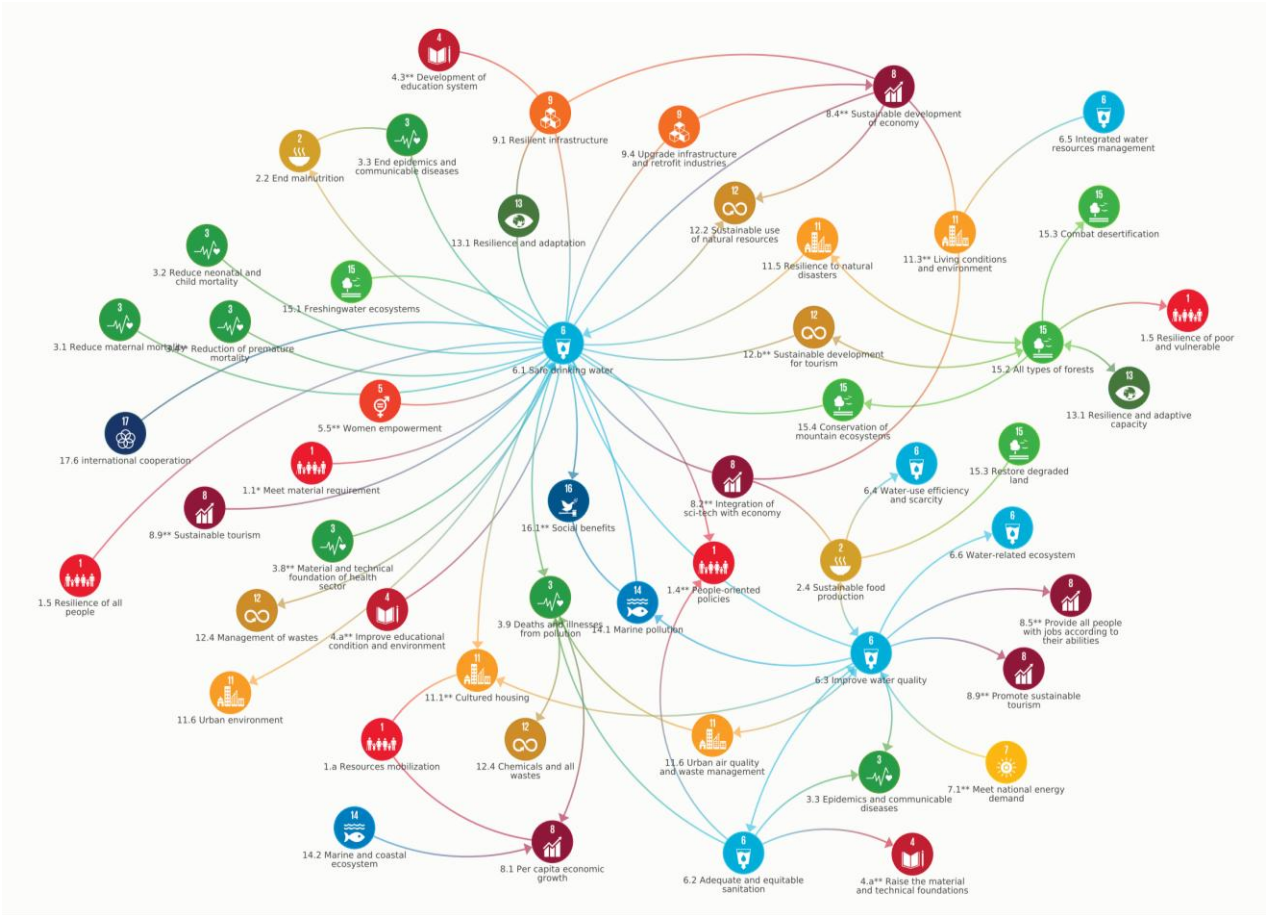
The DPRK gives priority to the following plans.

Ensure enough safe drinking water for all: It is important to implement the "DPRK Law on Water Supply" (adopted on 25 November 2009) and give top priority to ensuring the normal supply of

drinking water to the people. Further introduction of GFS in cooperation with UNICEF and other international organizations is expected in this regard.

By 2030, ensure 100% disposal of households and industrial wastewater in line with the national environmental protection criteria: Water-related laws should be thoroughly implemented including the "DPRK Law on Sewage System" (adopted on 10 December 2009), "DPRK Law on Antipollution of River Taedong" (adopted on 23 September 2008, amended), and "DPRK Law on Antipollution of Sea" (adopted on 22 October 1997). The overall wastewater disposal treatment plants and networks should be modernized, repaired and properly maintained for regular operation; 100% collection and disposal system of households and industrial wastewater should be established in urban and rural areas, and a nationwide system for monitoring water pollution be established. Meausures should be taken by steps for ensuring sustainable and effective use of water and management and technologies introduced for effective management of disaster risks.

Achieve sustainable development of protection of water resources: The national economy should be converted to water-saving type. The agricultural sector should actively introduce water-saving farming methods and the industrial sector reduce volume of water usage and increase the recycling rate of waste water. In view of climate change, it is necessary to adjust demand for water and prevent water shortage according to changes in water resources and develop facilities and devices for water preservation. The measures to ensure the sustained and effective water usage and management should be taken by step and the technologies relevant to effective DRM be introduced.



4.7 Goal 7. Ensure access to sustainable and modern energy for all

4.7.1 Progress and challenges

The proportion of population accessed to the national power grid was 99.7% in 2017[15] and yet, the increasing electricity demand has not been fully met. According to the results of survey on energy demand and resource assessment in 15 communities of 6 counties in 2016 conducted under the UNDP SES[16] project, the index of access to electricity supply in the households is 2.24[17] and the proportion of population using electricity is 97.6% on average, and the index of access to electricity in the rural areas are low. In order to ensure index of access to electricity supply being 5, it is above all to expand and improve electricity supply. The power generation of the country has been decreased and much influenced by seasonal and climatic impacts, and the power generation per capita is also being decreased against increased population. Hydro and thermal are the main power sources and renewable energy is being actively introduced.

The Government of DPRK gives top priority to solving energy issue. "DPRK Law on Energy Management" (adopted on 4 February 1998, amended several times) stipulates that energy supply plan should be correctly designed and implemented; technical regulations and standard operation methods observed in equipment operation; highly efficient equipment and technical processes introduced; the construction of small and medium sized power stations accelerated and their operation normalized; and alternative energy should be actively mobilized. Since 2015, the construction of several power stations and large scale multi-stage hydropower stations with total generation capacity of 950MW is actively pushed forward, and in 2018, the technical improvement and capacity expansion of thermal power stations were carried out. The integrated management of national grid system is established and the LED bulbs introduced to every unit and household. The heat wave and drought continued since 2016 affected negative impacts on the power generation.

The proportion of population with primary reliance on clean fuels and technology remains low

[15] MoEPI, DPRK, 2017
[16] UNDP project "Sustainable Energy Solutions for Rural Livelihoods in DPRK", 2015-2019
[17] This value is calculated according to the metadata of Indicator 7.1.1 and its references of "The SE4ALL Global Tracking Framework Report (2013)" and "The SE4ALL Global Tracking Framework Report (2015)"

and its progress is off-track. The proportion of households using electricity and/or gas and central heating system for heating and cooking in 2014 were respectively 12.4% and 12.4% in urban, 0.5% and 2.4% in rural[18] and the proportion of the population with primary reliance on clean fuels and technology in 2017 was 10.3% in the country, 15.8% in urban and 1.5% in rural[19]. Most of households in urban area use coal for cooking and heating while most of households in the rural area depend on firewood and agro-residues. It is necessary to take active measures to use clean fuel and technologies.

The renewable energy share in the total final energy consumption is decreasing gradually. Though the renewable energy consumption increases, the ratio of the renewable energy was 14.5% in 2015 and did not meet the world level of 18% and it shows tendency of decline to 11.4% in 2019. The Government encourages the introduction of the renewable energy equipment and technologies, and in recent years, the solar PV technology is actively introduced. In 2014, the hybrid renewable energy power station with the capacity of 875kW was piloted and the national wind resource map and wind resource browsing system developed. Solar heating, biogas generating, geothermal heating systems and rice husk gas generating systems were developed and introduced. The pilot tidal power station with capacity of 1,200kW is in operation and the construction of 300MW tidal power station is underway.

Key challenges in satisfying electricity needs are of raising the outputs of power generating equipment at their maximum by improving the improper generation processes and equipment in the thermal power stations and of increasing the efficiency of hydropower equipment.

Measurement: The Ministry of Electric Power Industry (MoEPI) and the CBS analyze synthetically the situation of supply and use of electricity with data collected from the power distribution stations located in the local areas. Information of household access to electricity supply and fuels used for cooking and heating by household are collected through household survey including the MICS. It is necessary to apply the international standard in adopting indicators.

4.7.2 Plans

The DPRK gives priority to the following plans.

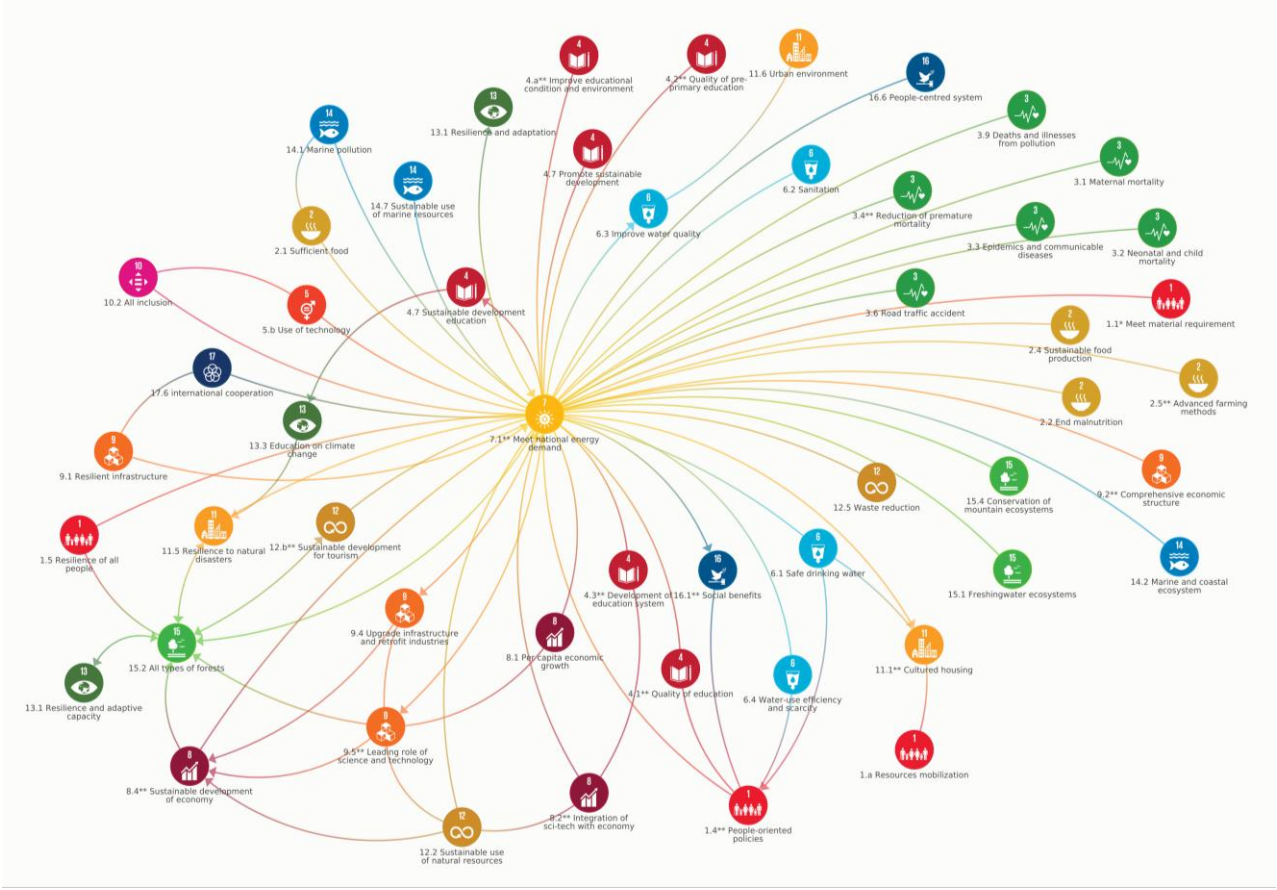
Achieve the targets of power generation in the five year plan: During 2021-2025 five year plan, the target of the power generation should be achieved, including through raising the outputs of power generating equipment at their maximum by improving the improper generation processes and equipment in the thermal power stations, and through stepping up the construction of hydroelectric power stations and increasing the efficiency of the equipment.

Construct power generating bases of the country in a far-sighted way, increase the usage of renewable energy: The national energy demand should be satisfied by itself by giving priority to the hydropower, rationally combining the thermal and raising proportion of the atomic and tidal power generation and actively using renewable energy.

Convert the national economy to energy saving type: The establishment of the integrated national grid control system should be completed and operated effectively. The energy saving methods in transmission, distribution and use should be introduced while the advanced ways of production introduced. Zero energy, zero carbon and green construction technologies in the construction sector should be applied and at the same time, the electricity and thermal energy saved as much as possible in all life space.

Promote the introduction of clean fuel and technologies: The research and development of household fuel should be strengthened and their achievements actively introduced. It is necessary to take measures for using biomass as fuel and introduce biogas systems.

[18] 2014 DPRK Socio-economic Demography and Health Survey
[19] 2017 Multiple Indicator Cluster Survey



4.8 Goal 8. Establish self-reliant and knowledge-based economy, and ensure work for all

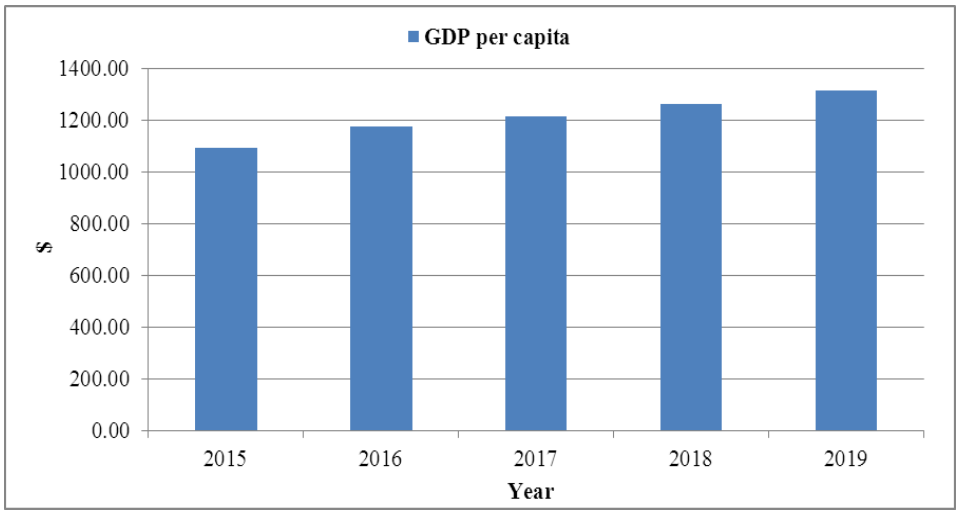
4.8.1 Progress and challenges

The DPRK strives to implement the strategic line of concentrating all efforts on the economic construction. The economic sector failed to hit the expected strategic goals between 2016 and 2020, but the foundation for making sustained economic development by own efforts was established. A breakthrough was made in putting the metallurgical industry and chemical industry on a Juche and self-supporting basis and a series of achievements were made in the technical preparations and laying of foundations for shoring up the sectors of electric power, coal and machine industries and rail transport and for developing IT.

The DPRK sets the goal of building a modern and self-reliant socialist and knowledge-based economy. It set the target to sustain above 5% GDP growth per capita per annum by accelerating the effective use of national resources, providing raw materials and fuels from local resources, building a self-supporting economy that satisfies energy, power and food demands on its own and putting the national economy on a modern and IT footing. The GDP per capita in 2015 was US$27,412 million and US$33,504 million in 2019. Annual average growth rate of GDP in 2015-2019 is 5.1% and annual average growth rate of GDP per capita 4.6%. Continued sanctions and blockade, severe natural disasters that hit the country every year and the protracted world health crisis that broke out last year are serious obstacles to the economic development, resulting adverse impacts on achieving SDGs.

The Government makes its efforts to ensure balanced and sustainable development of the economy, by 2030, through effective use of domestic resources. The Government announced the "DPRK Law on Underground Resources" (adopted on 8 April, 1993, amended) and makes the national resources be used with the maximum efficiency for the development of national economy and improvement of people's livelihood.

Figure 6. Real GDP per capita



The Government provides all the working aged people with jobs after education. It legalized that the formal working age of citizen is from 16, child labour prohibited, and all citizens should be provided with decent jobs and secure working conditions according to their wish and abilities[20]. After graduation from school, all can get their jobs according to their knowledge, qualifications and wishes. Every person with a job will be paid according to the "DPRK Law on Work Norms" (adopted on 10 December, 2009, amended) and the "DPRK Law on Labour Protection" (adopted on 8 July, 2010,

[20] "DPRK Socialist Constitution" Article 31, Article 70

amended). **Thus, the SDG targets 8.5 and 8.6 to provide all women and men with stable and decent jobs, education and/or training have already been achieved long time ago.** As the youth unemployment, forced labour and child labour which are common problems in the world do not exist in the DPRK, **the SDG target 8.7 had already been achieved.**

The Government has taken active measures to develop tourism. The Masikryong Ski Resort was constructed at the world level and the construction of Wonsan-Kalma coastal tourist area is actively underway. Tourism is vitalized in several areas including Pyongyang City, Mt. Myohyang, Mt. Kumgang, but the share of tourism income in GDP is low and the potential for tourism has not been developed properly.

It is important to reduce the distinctions between the economy sectors and increase the efficiency of the economic management. There exists material and technical distinctions and imbalance between the economic sectors and the production is not stable due to lack of energy and raw materials. It is important to improve planning, pricing, monetary and financial management and raise the efficiency of economic administration, in line with the socialist economic law.

Measurement: It is necessary to conduct labor forces survey disaggregating working population by occupation and educational attainment. It is also necessary to classify the economic sectors and processes, determine indicators and establish regular data collection system according to the international standards for measuring indicators of the economic growth.

4.8.2 Plans

The DPRK gives priority to the following plans.

Implement the five year plan: Investment should be focused on the metal and chemical industry so as to normalize production in all sectors of the national economy, consolidate the material and technical foundations of the agriculture and supply enough raw and other materials to light industry for increased production of consumer goods.

Improve economic management: It is to fully ensure the unified guidance of the state in the economic work, strengthen nationwide unified system of statistics, improve planning and management conditions of factories and properly use economic leverages including financing, monetary and price administration, so as to ensure rational management of the economy.

Innovate geological prospecting and develop natural resources: Through development of prospecting science and technology, the underground resources of the country should be investigated completely and mineral deposits secured ahead of demand by type and grade.

4.9 Goal 9. Put national economy on a Juche-oriented and scientific basis and modernize infrastructure

4.9.1 Progress and challenges

The Government of DPRK focuses its efforts to constantly rehabilitate and perfect a self-supporting economic structure capable of satisfying, through domestic production, the material demands of the economic development and people's livelihood. It is important for the factories, enterprises and cooperatives to properly establish management strategies in line with the requirements of the socialist enterprise responsibility management system, to run the business on active and creative basis and to modernize production processes based on science and technology and own resources.

Figure 7. Manufacturing value added as a proportion of GDP and per capita

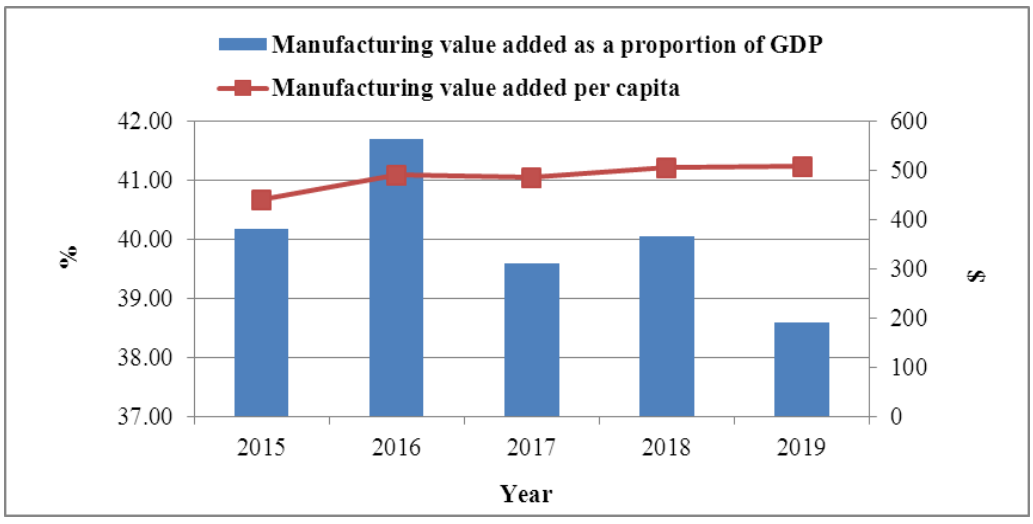


Table 3. Manufacturing employment as a proportion of total employment (%)

Indicator	2015	2018
Manufacturing employment as a proportion of total employment	26.1	28

The environmental protection work is being improved, the natural resources protected, the infrastructure modernized and the management and operation of the industry enhanced. Despite these efforts, the emission of carbon dioxide has been increased as compared to 2015, while the consumption of Ozone depleting substances reduced by 10.3% annually[21]. The industrial sector is being developed towards balancing demand and production, minimizing pollutants, and protecting resources.

Table 4. CO_2 emission per unit of value added (t/1 000US$)

Indicator	2015	2020
CO_2 emission per unit of value added	9.7	9.4

Science and technology level of the country was analyzed comprehensively and the goals, ways and means in developing science and technology set up, and advancement of science and technology propelled. The Government systematically increases expenditure on science and technology development and the number of researchers in the sci-tech sector, meanwhile, the state administrative guidance and management system is correctly established and scientific research results shared so as to enhance the leading role of science and technology in socio-economic development.

The average annual growth rate of number of researchers per million population is 2.9%. The Pyongyang Teachers Training College was rebuilt as a model of education institutions and a revolution in the education sector is underway. The investment in the science and education sectors has been increased and the conditions for research improved, so as to increase the number of

[21] SAoS, DPRK, 2018

graduates; the work of making all the people well-versed in science and technology pushed forward through the study-while-you-work system and the system of disseminating the latest science and technology.

Modernization of the infrastructure is a key challenge. The country's roads and railways are, in general, not in standard condition. The targets of modernizing and rehabilitating the roads and railways in line with the international standards and requirements of the "DPRK Law on Road" (adopted on 17 September 1997, amended), "Intergovernmental Agreement on the Asian Highways" (acceded on 9 August 2012) and the "Intergovernmental Agreement on the Trans Asian Railways" (acceded on 4 September 2012) are off-track. Measures are taken to enhance the technical conditions of motorways and bridges between Pyongyang-Kaesong, Pyongyang-Wonsan, Pyongyang-Hyangsan, and Pyongyang-Nampho. Most of the safety railings and road signboards should be reinstalled. International railway lines in the eastern and western coasts including Pyongyang-Sinuiju and Pyongyang-Namyang should also be modernized in line with the international standards.

Measurement: It is necessary to adopt the method of collecting data on proportion of the rural population who live within 2 km from an all-season road and data on passengers and freight volumes according to the mode of transport.

4.9.2 Plans

The DPRK gives priority to the following plans.

Put the national economy on a Juche and modern basis and ensure affluent and cultured living conditions for the people: The self-supporting structure of the national economy should be perfected, the proportion of dependence on imports lowered, and the people's livelihood stabilized.

Improve environmental protection, protect and increase resources, modernize infrastructure: The "DPRK Law on Environmental protection" (adopted on 9 April 1986, amended) should be fully implemented and the overall lines of roads and railways rehabilitated and modernized by step according to the international standard in a long-term basis.

Reduce GHGs emissions: In line with the Voluntary GHGs Reduction Plan by 2030 announced in 2016 and the revised plan, all mitigation measures should be implemented. Exact statistics on GHG emission should also be prepared in line with the United Nations Framework Climate Change Convention (acceded on 5 December 1994) and the cooperation with UN agencies in implementing the mitigation measures are expected.

Increase the number of researchers: Great importance should be attached to talented personnel and ensure that all the people are well-versed in science and technology. The national dissemination network will be established with the Sci-Tech Complex as its centre and all the science and technology dissemination rooms connected to the Complex and ensure regular operation, serving to raise the scientific and technological level of the workers and contributing to the IT development of relevant units. The proportion of the research and development expenditure in the Government budget should be increased systematically.

4.10 Goal 10. Enhance the position and role of all the masses as masters of state and society

4.10.1 Progress and challenges

The DPRK provides everyone with the rights to social, economic and political inclusion to the full. The State legally ensures every citizen equal rights in all sectors of social activities, those over 17 years old including military service persons have rights to vote or stand for election without

discrimination of sex, ethnicity, occupation, period of residence, property, intellectual level, party affiliation, political view and religion[22]. It provides with every possible political freedom and rights and socio-economic rights including rights to vote or stand for election, rights to labor and rights to learn and intensifies institutional measures to eradicate any factor of inequality in conformity with the "DPRK Decree on Gender Equality" (adopted on 30 July 1946), the "DPRK Law on the Protection of Persons with Disabilities" (adopted on 18 June 2003), the "DPRK Law on the Protection and Promotion of Women's Rights" (adopted on 22 December 2010, amended) and the "DPRK Law on the Protection of the Rights of Children" (adopted on 22 December 2010).

The DPRK fulfills its commitments[23] under the "Convention on the Rights of the Child (CRC, acceded on 21 September 1990), the "Convention on the Elimination of Discrimination against Women" (CEDAW, acceded on 27 February 2001) and the "Convention on the Rights of Persons with Disabilities" (CRPD, acceded on 23 November 2016). It also stakes all possible measures to protect women, children, elderlies and persons with disabilities and ensure their rights according to the "DPRK Law on Social Security" (adopted on 9 January 2008, amended) and the "DPRK Law on the Protection of the Elderly" (adopted on 26 April 2007, amended). It regularly submits the Universal Periodic Review (UPR) reports to the UN for review[24].

The State strengthens social protection measures. The "DPRK Law on Public Health" (adopted on 3 April 1980, amended), the "DPRK Law on Protection of Persons with Disabilities" (adopted on 18 June 2003), etc., legally ensure social protection and welfare for persons incapacitated and/or retired.

Active measures are being taken to reduce differences between the urban and rural area. There exist distinctions between the urban and rural area in the fields of industry, agriculture, public health, education and infrastructure. The State takes every measure to improve the people's living standards in line with the nature requirement of the socialist society. It is developing the city and county as the political, economic and cultural center and turning them into developed regions with their own unique characteristics, and strengthening the State support to rural areas.

Measurement: The data on socio-economic indicators including GDP per capita are regularly reported to the CBS through national statistics system. Data collection and analysis system of socio-economic indicators should be more disaggregated and completed in accordance with international standards.

4.10.2 Plans

The DPRK gives priority to the following plans.

Consolidate the political system of the state: The Government organs at each level should ensure that people enjoy political rights as masters of the state and society through active participation in the state management and socio-political activities.

Reduce differences between urban and rural area: State support to rural areas should be strengthened and urban factories and enterprises should further assist rural cooperative farms and units. It is important to implement effective projects by step to improve living standards of the rural population and material and technical foundation of rural economy by ensuring energy supply, improving environment, material and fuel supply, and increasing agricultural production.

[22] "Socialist Constitution of the DPRK" Article 65, 66
[23] The 5-6th Report of the DPRK on the implementation of CRC was submitted to UN in 2017
[24] The 3rd cycle report of the DPRK on UPR was submitted and reviewed in 2019

4.11 Goal 11. Ensure living conditions and environment for more affluent and civilized life

4.11.1 Progress and challenges

The DPRK distributes dwellings to the people free of charge. In order to meet the increased housing demand of people, the Government has made remarkable progress in recent years through construction of dwellings in large scale in the country.

The Government strives to expand transportation, increase road safety and provide the people with safe and convenient public transportation system. Modern underground and railway trams, trolleybuses have been manufactured domestically and supplied to the cities and the Pyongyang Metro are under rehabilitation ensuring convenience to the users. With the increase in traffic volume and heavy-duties, activities to reconstruct roads and bridges are being implemented according to plan, while roads are being paved with concrete and soil stabilizers introduced so as to ensure safety of transport and prevent environmental pollution. Improvement of road and railroad conditions, modernization of railways and development of rational modes of transport should be accelerated.

The urbanization is continued in the DPRK. As the residential and public service quarters and infrastructures have been widely constructed since 2000s, the arable land has been reduced and the urban population increased. It rises as an important issue to construct infrastructure including water supply and drainage system, electricity and communication, roads in line with the long term plan to build environment-friendly cities. The ratio of land consumption rate to population growth rate was 1.26 in 2015, 0.67 in 2018 and 0.67 in 2019[25].

Special attention has been paid to protect national cultural heritages. The heritages of national culture are protected and carried forward according to the "DPRK Law on the Protection of Heritage of National Culture" (adopted on 7 August 2012, amended). The Complex of Koguryo mural tombs (2004) and the Historic Monuments and Sites in Kaesong (2013) were inscribed on the World Heritage list. The heritage of national culture, national scenic sites and natural monuments are being protected and used for tourism and recreation, contributing to the people's cultural life and health.

[25] CBS, DPRK

Continued climate-related natural disasters inflicted serious damage to the socio-economic development of the country and the people's living. The typhoon during the period of 29 August and 2 September 2016 flooded the River Tuman resulting huge economic losses. The heat wave and drought that continued for months in 2018 seriously affected agricultural production, and between 2019 and 2020, tens of thousands of dwellings and infrastructures including roads, railroads and bridges were badly damaged by typhoons and floods. It is important to enforce the disaster response capacity of the country.

The implementation of the NDRRS and the local disaster reduction plans is off-track. In order to strengthen the resilience to continued natural disasters, the Government set up the Disaster Prevention Bureau under the SPC in 2012 and promoted it to the SCEDM in 2014, following by institutionalized nationwide system from the central down to the Counties. At the same time, it has developed disaster risk management projects in cooperation with UNDP, ESCAP, FAO and UNDRR. It has set up the NDRRS (2019-2030) and the Action Plans to 2020, 2026 and 2030, but challenges remain in implementing them. Adoption and implementation of local disaster risk reduction plans by 2030 are in progress. It is necessary to strengthen international cooperation in the disaster risk management.

Urban and regions are developed in line with the urban and regional development plans. Urban and regional development plans including that of land, city and rural construction are being encouraged to be drawn up and implemented in consideration of the geographical conditions, resources and the development level of economy. Not only factories and enterprises but also dwellings, cultural amenities, public and all other buildings are being constructed in accordance to the urban and regional development plans, thus strengthening economic, social and environmental links between urban, peri-urban and rural areas.

Measurement: It is necessary to introduce data collection and analysis methods on the proportion of population that has convenient access to public transport. No data on the proportion of urban solid wastes regularly collected and with adequate final discharge by cities are yet available, and introduction of international standards and cooperation is expected. Due to insufficient measuring devices, there are challenges in collecting data on yellow sand and fine particulate matter. Necessary measures are taken to install equipment in all environment observation stations across the country.

4.11.2 Plans

The DPRK gives priority to the following plans.

Solve issues of housing and drinking water: The issue of housing and drinking water for people should be solved satisfactorily through the construction of dwellings and water supply systems as planned. During the 2021-2025 five year plan, 50 000 dwellings will be built in Pyongyang, so as to completely solve the housing issue in the capital.

Improve transportation system: Railway and ship transportation should be developed and the problem of public transportation solved. It should provide the people with convenient access to transportation by increasing the production of public means of transport such as new-type underground trains, trolley buses, trams and passenger buses, and modernizing roads and railways.

Pay continued attention to the protection of heritage of national culture: It should preserve, protect and manage the Complex of Koguryo mural tombs and the Historic Monuments and Sites in Kaesong inscribed on the World Heritage list.

Prevent air, river, stream, lake and sea pollutions: Strict observance of the national laws related to the prevention of air, stream, river, lake and sea pollutions is vital. Sewage disposal plants should be modernized and industrial and household wastewater should be thoroughly filtered.

Enhance the resilience capacity to disasters: The nationwide system of managing disasters and crisis should be strengthened and the capacity to cope with disasters enhanced by putting efforts into afforestation and water conservation and infrastructure rehabilitation.

4.12 Goal 12. Ensure sustainable consumption and production

4.12.1 Progress and challenges

The Government of DPRK set forth sustainable consumption and production as a key policy in economic development. In order to ensure sustainable energy production and consumption, the Government is pushing ahead with the plan to meet the energy requirement by focusing mainly on hydropower and rationally combining it with thermal power to generate electricity, increasing the proportion of atomic power and using various renewable energy resources. It has been expanding the introduction of piloting zero energy, zero carbon construction technology and intelligent construction technology during 2016 to 2020; in the agricultural sector, organic and protected farming methods are expanded; and the use of renewable energy and energy efficiency improved.

The Government of DPRK endeavors to realize sustainable management and effective use of natural resources. In order to strengthen independence of the national economy, the Government enacted the "DPRK Law on Underground Resources", ensures natural resources exploration and exploitation under the national unified system of examination and approval.

Reuse and recycle of the industrial and household wastes are vigorously pushed ahead across the country. The "Law on Recycling in the DPRK" (adopted on April 12, 2020) is now under implementation and as part of it, reusable items are being collected from families through procurement system. The flying ash and slag are recycled to building materials, coal ash to fertilizer and building materials. Waste paper, waste wood and waste plastics are also mostly recycled and all agricultural waste and livestock waste except poisonous waste are composited for use as manure. However, the recycling level of the country is still low.

Particular attention is paid to safely treat unusable and hazardous wastes. The projects are underway to implement the Vienna Convention on the Protection of Ozone Layer (acceded on 5 May 1995), Montreal Protocol on the Depleting Substances of Ozone Layer (acceded on 6 May 1995),

Stockholm Convention on Persistent Organic Pollutants (acceded on 19 August 2002), Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (acceded on 6 February 2004) and Basel Convention on Control of Transboundary Movement of Hazardous Wastes and their Disposal (acceded on 10 July 2008).

The Government encourages the development of tourism. The domestic tourism on scenic spots such as Mt. Kumgang, Mt. Myohyang, and Mt. Chilbo is actively conducted. The work to complete the Wonsan-Kalma coastal tourist area is pushed forward actively.

Measurement: The measurement system is not well established for the domestic materials footprint, generation and treatment of hazardous chemicals, industrial and household wastes. The measurement on the national recycling rate and tons of material recycled is inadequate. It is necessary to exchange with other countries on experiences, technologies and methods related to waste listing, survey and recycling.

4.12.2 Plans

The DPRK gives priority to the following plans.

Ensure sustainable consumption and production: It should construct power bases under long term programme, firmly ensuring energy production ahead of economic growth. The energy production method should be improved and the national economy turned into energy saving type.

Increase the rate of localization through exploitation and recycling of natural resources: It is important to raise the rate of locally available raw materials and products by developing and using domestic resources and promoting the recycling, and to sustainably develop the productivity by enlargement of raw materials, fuels and power bases relying on own natural resources.

Develop local industry unique to the region: Efficient technical processes for production should be introduced in order to promote sustainable consumption and production in local industries and the production of consumer goods based on local resources, agricultural products and sideline products as raw materials increased to meet the local demands.

Implement the National Environmental Protection Strategy: The legal framework for solid waste management should be improved, the institutional and technical capacities on collection, analysis, evaluation and management of solid waste data strengthened and comprehensive solid waste management strategy completed. The waste disposal plants should be expanded and the capacity of environment monitoring, measurement and evaluation strengthened.

Ensure sustainable development of tourism: Sustainable tourism strategy should be established, Kangwon Province converted as tourism area and tourism goods actively developed.

Establish green growth strategy: National green growth strategy and action plan should be established and dry building method, zero energy, zero carbon architectural and intelligent construction technologies introduced. Organic farming should be encouraged, production cycle established and consistent efforts made for rehabilitating the forests according to the yearly plan.

4.13 Goal 13. Combat climate change and its impacts

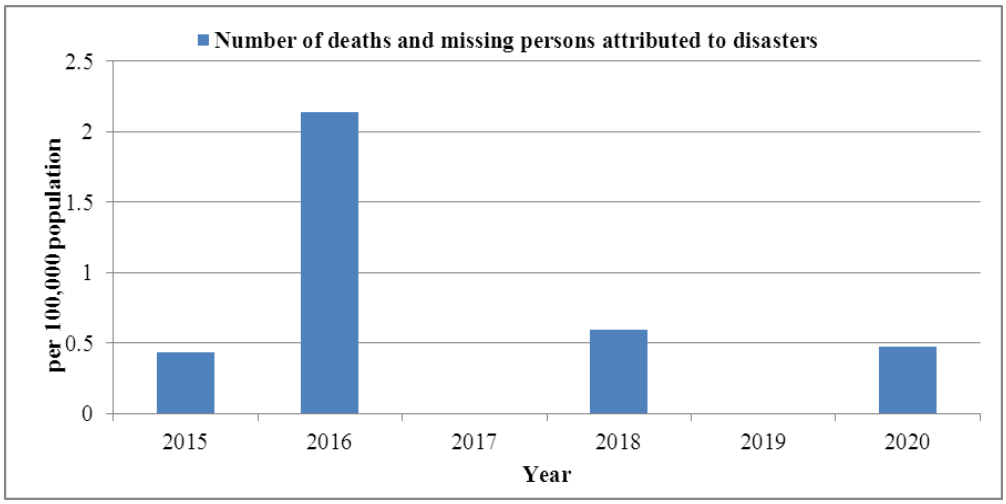
4.13.1 Progress and challenges

The DPR Korea has suffered damages from climate-related natural disaster in consecutive years. Continued natural disasters by flood, drought, typhoon and heat wave have affected severe impacts on the people's life and health and economic development. In 2015, the temperature was high, precipitation was low and droughts and heavy rains happened. Annual average temperature was 9.7 ℃, i.e., 1.0 ℃ higher than average, recording the second highest since meteorological observation.

Sandy dust phenomena occurred 6 times, affecting the most part of the country. There were two typhoon impacts. There was hails with 5 to11mm in diameter witnessed in the west coast, central and northern inland areas, and some areas in South Hamgyong Province, from April to June and from August to October. It rained most heavily since observation in the Tuman River basin by typhoon between 29 August and 2 September 2016 and the Tuman River flooded, causing severe damage to the surrounding area. The heat wave, typhoons and floods continued during several tens of days annually from 2018 to 2020 had caused human loss, severely affected agricultural production and damaged infrastructure. In the whole country, according to EM-DAT[26], the natural disasters frequently occurred between 1990 and 2020 were by flood and storm, the highest number of deaths was caused by floods, the highest number of victims by droughts and floods, and the greatest damage in value was by floods and storms.

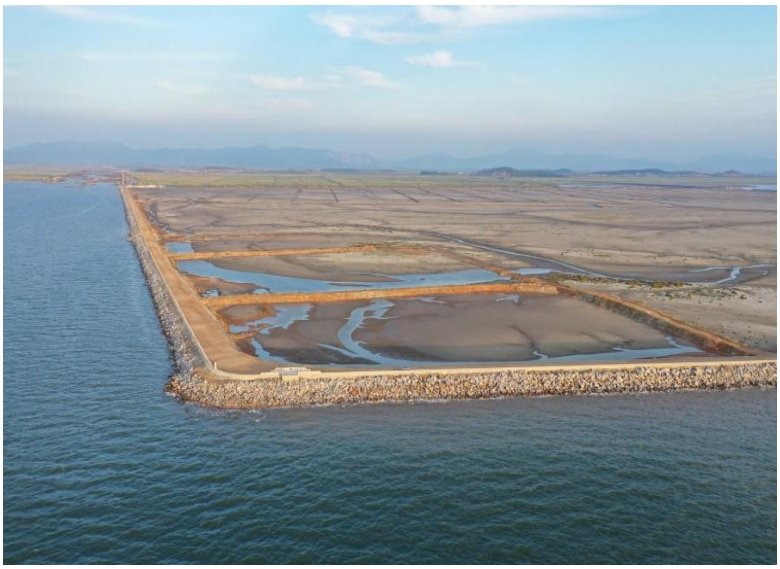
The DPRK, as one of the countries where the frequency of extreme climate change is being high, is exposed to negative impacts such as reduction in agricultural production, destruction of agricultural infrastructure, degradation of soil and water resources. The popular natural disasters are by heavy rain, flood, drought and storm and, in particular, natural disasters by heavy rain, storm, thunder and hail influenced by tropical typhoon occur frequently during the rainy season. The heavy rain is normally accompanied with flood and landslide. More than one natural disaster occurred annually during the last ten years.

Figure 8. Deaths and missing persons due to disaster per 100,000 population



The DPRK is under implementation of the 2019-2030 National Disaster Reduction Strategy (NDRS). The DPRK has set up and is implementing the NDRRS by 2030 to protect human health and life and reduce disaster risks. It also designed and is carrying out the Action Plans to 2022, 2026 and 2030, according to the NDRRS. The primary objective of the Strategy is to complete the rapid response system for minimizing the disaster risks by institutionalizing the nationwide disaster management, raising the public awareness and enhancing the material supply capacity. In 2020, nationwide crisis management system was established and provided early warnings and real time information on potential disasters through mass media, leading to substantial improvement of the country's crisis response capacity and minimal damage of disaster.

[26] EM-DAT, when the criteria are satisfied, that more than 10 persons died was reported, that more than 100 persons damaged reported, emergency situation declared, or international assistance needed, will record it as disaster.



The DPRK is implementing sincerely the UNFCCC and the Paris Agreement by integrating the measures for reducing the impacts of climate change and disastrous climate into the state strategy and plans. The 1st GHG emission reduction plan was announced in 2016, and next plan revised until 2030 is under preparation. The plan envisages, by 2030, a total of 15.63 % (36,003,000 tons) GHG emission reduction below the level of normal economic activities or 50.34 % (156,947,000 tons) reduction given the international assistance. This means almost a two times increase in terms of reduction level as compared with the 1st reduction plan, representing the government's will to implement the UNFCCC. The GHG emission reduction plans are reflected in the National Forestation Strategy (2015-2044), the National Environmental Protection Strategy (2019-2030) and National Disaster Reduction Strategy (2019-2030) and sector strategies and annual national economic plans for implementation. To cope with tidal wave and typhoon frequent in the seashore areas, the project to move coastal vulnerabilities to safe areas and the annual plans to protect the western seashore and its areas of economic importance from disaster risks are put into practice; sea dikes and breakwaters are built and tideland in the western seashore reclaimed on a long-term basis.

The DPRK is enhancing the education and awareness-raising on adaptation to climate change, its impact reduction and early warning and improving human and institutional capabilities. The conceptual contents on negative impacts of climate change are included in the curriculum of primary and secondary schools; climate change mitigation, adaptation and early warning taught in universities and colleges; negative impacts of climate change regularly highlighted through mass media; and publication and distribution of reference books for disaster management officials, books and booklets on early warning and methods to cope with various disasters are contributing to awareness-raising.

Measurement: There is a need to implement successfully the UNFCCC and Paris Agreement and to establish a proper system for data collection and processing aimed to execute, monitor and evaluate the correct tracing and reduction activities of GHG emissions and absorption in the forests and land.

4.13.2 Plans

The DPRK gives priority to the following plans.

Implement the National Disaster Risk Reduction Strategy (NDRRS): It is important to implement the 2019-2030 NDRRS, Action Plans by 2022, 2026 and 2030, and establish local disaster risk reduction plans and fully implement them.

Implement National GHG Emission Reduction Plan: The climate change mitigation and adaptation programmes set forth in the Voluntary GHG Emission Reduction Plan should be implemented and updated on a long term basis as the climate changes rapidly, together with enhanced international cooperation.

Raise awareness on climate change: Systematic education on mitigation and adaptation to the climate change should be conducted at each education level and awareness-raising and capacity for mitigation and adaptation to climate change enhanced among all the officials and broad masses from

the center down to the lowest echelons.

4.14 Goal 14. Conserve and sustainable use the coast, sea and marine resources

4.14.1 Progress and challenges

The Government of DPRK is strengthening legal framework to protect coast, sea and marine resources. With the inaction of the "DPRK Law on Environmental protection" (adopted on 9 April 1986, amended), the "DPRK Law on Protection of Sea Pollution" (adopted on 22 October 1997, amended), the regulation of coast and territorial waters management (2020), etc., the Government has laid down legal foundations to protect coastal and sea eco-environment and resources and develop economy in the coastal areas.

The Government is taking active measures to protect sea and increase marine resources. The DPRK has abundant aquatic and submarine mineral resources. There is no big change in the varieties of sea fishes (over 600 species). For the sustainable use of the marine resources, the Government set the policy to combine fishing and cultivation, so as to protect and increase marine resources. In 2019, the Government set the protection of marine resources as one of the state's policy and implements the plan of marine resources protection and increase.

The measures are taken to prevent marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution. The legal control and supervision are being strict on the wastewater discharge from the factories near the seashore and the waste discharge from the ports and ships. The Government has signed the "Action for the clean sea" in 2019; conducts the activities concentrated to collect and remove the floating plastic and other debris in the seas and coasts during the period of the national mobilization campaign of land management (2 months per year); and advances the all-society movement to prevent the pollution of the rivers, especially streams near to the sea.

In consistence with the relevant national and international laws and based on the best available scientific information, the conservation of at least 10% of the coastal and marine areas is ongoing in a sustainable manner. For protection of useful animals and plants, several coastal areas suitable to habitation were selected as the special protected areas of marine resources, territorial waters down to 20 meters deep of the East Sea and the West Sea as the protected areas of coastal resources and the continental shelf to 200 meters deep of the East Sea as the protected areas of coastal waters resources; and the usage of dragnets is restricted to protect the habitat environment of settled species. Nampho City is selected as the pilot area of the integrated coastal management and Wonsan City as its extended area to proceed the regional development and protection of coastal biodiversity with the main stress on the tourism in a planned way. Many regions including the coastal areas in Nampho, Kangwon and South Hwanghae provinces were designated as protected marine areas.

There are challenges to sustainably manage and protect marine and coastal ecosystems and to minimize the impacts of sea acidification. The scientific methodology related to marine and coastal ecosystems management is not established and the sea acidification is not measured on the regular basis at the most of places.

Measurement: Indicators of SDG 14 are measured partly in the selected places and the measurement for the relevant indicators in monitoring marine environment does not reach the required standard.

4.14.2 Plans

The DPRK gives priority to the following plans.

Expand the protected areas in the coast and territorial waters: It is to implement the plan to achieve the target of at least 10% of the coasts and territorial waters as protected areas set forth during the 10th COP of United Nations Convention of Biodiversity in October 2010.

Prevent pollution of air, rivers, streams, lakes and sea. The system of evaluating environmental effects should be improved and the criteria on wastewater discharge and water environment updated and the practical plan, management methods and purification technologies of pollution prevention introduced.

Protect and breed marine and aquatic resources. The protection of marine resources and the fishery production should be balanced, advanced technologies of increasing fishery stocks be introduced and the legal control for natural protection and proliferation be strengthened.

Establish observation, evaluation and measurement system. New observation stations to observe and measure the coastal environment including coastal eutrophication (ICEP), floating plastic debris density, and average sea acidity should be set up and capacity of data collection, analysis and interventions be enhanced.

Build capacity for integrated coastal management. It is important to strengthen infrastructures and the institutional system of integrated coastal management in coastal areas and to take adaptation measures including evaluation of dangerous coastal areas where disasters often occur, establishment of early warning system for coastal disaster, protection and creation of marine resources. It is to check the safety of sea dukes and breakwaters and repair them according to annual plans, able to minimize the disaster risks. Windbreak forest should be created in the coastal areas to reduce the typhoon and strong wind impacts on the crops and the breeds able to cope with climate change be selected and cultivated.

4.15 Goal 15. Sustainable management of forests, reverse land degradation, maintenance of biodiversity

4.15.1 Progress and challenges

The DPRK makes its effort to ensure conservation restoration and sustainable use of territorial and inland freshwater ecosystems, in particular forests, wet lands, mountains and dry lands, in line with obligations under the international agreements including the United Nations Framework Convention on Climate Change, the United Nations Convention on Biodiversity and the United Nations Convention on Prevention of Desertification.

The forest recovery campaign was declared in 2015 and is being conducted as mass movement, resulting in decreasing non-forest tree land area from 10.6% in 2010 to 5.5% in 2019 and increasing the forest tree land area by 1.7% at an annual average between 2015 and 2020. Prevention of the forest destruction and sustainable management of the forest are directly linked to the living standards, food and energy of the residents in rural and mountainous areas, however, their solutions become the main challenges.

The biosphere reserves are increased. The ratio of biosphere reserve area was 4.6% in 2015. Mt. Paektu (1989), Mt. Kuwol (2004), Mt. Myohyang (2009), Mt. Chilbo (2014) and Mt. Kumgang (2018), the most famous mountains in DPRK have been designated for inclusion in the World Network of Biosphere Reserves; the cycling felling method, agroforestry, farming and livestock production cycle and other sustainable farming and advanced management methods are actively introduced. The mountain green cover rate was 89% in 2015. The management of biosphere reserves and already registered national protected areas of natural objects, animals and plants have improved, while animal protected areas are expanded and management system streamlined.

There remain challenges in reducing the degradation of natural habitats, halting the loss of biodiversity and, by 2020, protecting and preventing the extinction of threatened species. The analysis of the "Red List Index of the DPRK"[27] shows that the threatened species of animals and plants are 8 critically endangered, 7 endangered, and 9 vulnerable. The threatened species of aquatic vertebrates are; 3 extinct, 14 endangered, and 26 vulnerable[28]. Red list index are; plants 0.408, animal 0.507. Threatened species of plants in 2016 are; 47 extinct, 71 endangered, 94 vulnerable, 85 near threatened, 80 data deficient, totaling 377[29]. The threatened species of animals in 2016 are; 1 extinct in the wild, 8 extinct, 19 endangered, 37 vulnerable, 11 near threatened, 34 least concern, 3 data deficient, totaling 113[30]. Red list index are; plants 0.546 and animals 0.675.

Sustainable efforts are made to end poaching and trafficking of protected species of flora and fauna and to prevent the introduction of invasive alien species. Poaching is prohibited by law, and so are illegal hunting, and hunting and picking of animals and plants under protection. Invasive species are prevented or controlled as stipulated by law on border quarantine of animals and plants, law on quality supervision, law on protection of useful animals, law on safety of genetically modified organisms and law on natural reserves. The government signed the Cartagena Protocol on Biodiversity and established an institutional structure for its implementation. Though the DPRK is not a party to the Convention on International Trade on Endangered Species of Wild Flora and Fauna, it has established the system for stringent control of trade in wild flora and fauna and their specimens.

Measurement: As the data related to the forest area rates are referred to different times of collection and variance, different definitions and criteria, it is important to evaluate in line with the international standard methodology. It needs to introduce standard method in determining Red List Index.

4.15.2 Plans

The DPRK gives priority to the following plans.

Achieve 2015-2024 forest recovery targets: The Government plans to afforest about 1.4 million ha of mountain by 2024, thus greening most of deforested mountains. This will newly create GHG emission reduction capacity of more than 10 million tons per annum. The central and provincial tree nurseries should produce saplings on a scientific, industrialized and intensified basis and achieve the

[27] The DPRK Red List Index (plants), MAV National Committee, 2004
[28] Protection and Sustainable Use of Biodiversity, Encyclopedia Publishing House, DPRK, 2013
[29] Rare Plants of Our Country, Encyclopedia publishing House, DPRK, 2016
[30] Endangered Animals, Science-Technology Publishing House, DPRK, 2016

target, pushing forward afforestation and protection simultaneously.

Implement the National Forest Construction Strategy, Biodiversity Strategy and Action Plan: The Government plans to survey on a regular basis the species and inhabitant conditions of animals and plants in the mountains and river basins, to protect species including animals and plants at risk of extinction and rare species, to ensure biodiversity and to select properly and expand by step the protected areas.

Strengthen sustainable forest management. It is, by 2025, to regularly investigate, monitor and evaluate biodiversity of all forest ecosystem protected areas including through surveys and researches on natural succession of forest ecosystems and variation trend and adaptation processes of biodiversity according to environmental changes such as global warming; and there should be introduced of the environment friendly methods and technologies including cyclic felling method, forest and agriculture compound management and organic farming system.

Strengthen hi-tech research and knowledge dissemination for sustainable protection, management and use of ecosystem, forests and biodiversity. The Government plans to conduct the national survey on the ecosystem environment from 2020 and set up database of sustainable protection, management and use of ecosystem, forests and biodiversity in order to promote the dissemination and development of science and technologies. Paying due attention to ecological changes of forests, the Government also plans to transform the forests by introducing the species of economic and high valued, complete technical preparation to fight outbreaks of insects harmful to forests and realize the sustainable management of the insects by use of biological agricultural medicines.

4.16 Goal 16. Consolidation of Socialist System

4.16.1 Progress and Challenges

The DPRK implements a consistent policy of thoroughly implementing the people-first policy in its State activities and all fabrics of social life. The State legally ensures that state power belongs to the workers, peasants, soldiers, intellectuals and the working masses exercise sovereignty through the SPA, the representing organ of themselves, and the local People's Assemblies at all levels and ensures all citizens with genuine democratic rights and freedom, adequate material and cultural life[31].

The State guarantees the status and role of the popular masses as the masters of the state and society, consistently maintains the popular socialist health system and education system and other popular policies. People-first policy consistently prevails so that the single-hearted unity of the Party and the masses is achieved and the political stability prevails. Under the slogan of "Everything for the people and everything by relying on them!", the people's interests are given the highest and absolute priority and everything is directed towards the people's welfare without spare. Intensive struggle is waged against practices that infringe upon the people's interests such as abuse of power, bureaucracy and corruption.

The State legally ensures every citizen with the rights to appeal and petition[32]. Well-regulated appeal system is established in the people's government at each level, gives an ear to people's voices and opinions and holds fast to the principle of giving priority to their rights and conveniences. The public service facilities, as well as the health and education installments, have opinion boxes to improve their services.

Birth registration system is well established. As shown in the results of the PHC, MICS and others, 100% of new births are registered[33].

All forms of violence against children, abuse, exploitation, human trafficking, and bribery are legally prohibited, and do not arise as social problems.

Measurement: For indicators measuring SDG 16, there are needs to build capacities of relevant agencies for regular data collection and processing and to develop survey and computation methodology.

[31] "Socialist Constitution of the DPRK" Article 4 and 64
[32] "Socialist Constitution of the DPRK" Article 69
[33] 2017 DPRK Multiple Indicator Cluster Survey

4.16.2 Plans

The DPRK gives priority to the following policies.

Uphold the people-first principle: It is important to wage all activities of the people's government in accordance with the will and creativity of the masses of the people and fully demonstrate the advantages and vitality of social benefits and measures.

Provide people with maximum social benefits: It is important to provide the people with the conditions for leading an affluent and cultured life; decent working and enough rest, and ensure the maximum social benefits provision. There should pay close concern to orphans' primary and secondary schools, baby homes, orphanages and rest homes so that the orphans and the elderly with no one to look after them can live free from worries.

Consolidate and develop the state and social system: It is important to strengthen the popular nature of the state in line with the essential characteristics of the people-centred socialist system, realize unified, scientific and strategic management, and thoroughly establish a law abiding spirit throughout society as befits the requirements of a socialist law-governed state. Intensive struggle will be waged, as ever, among state civil servants to fight against practices that infringe upon the people's interests such as abuse of power, bureaucracy and corruption.

4.17 Goal 17. Development of friendly partnership

4.17.1 Progress and challenges

The DPRK government is acting proactively to develop friendly relations with all countries that respect its sovereignty and to build a new world of peace and justice. The government is expanding and developing exchanges and partnerships with other countries and strengthening bonds and solidarity with people around the world that aspire independence. The government develops external economic relations with other countries, giving priority to the expansion and development of an independent economy. The government has enacted "DPRK Law on Joint and Contractual Ventures", "DPRK Law on Economic and Trade Zones", and "DPRK Law on Foreign Investment", thus laying a basis for facilitating bilateral and multilateral partnerships.

Intranet is encouraged in access to IT. In 2017, intranet access rate among females aged between 15 and 49 are a) 5.2% during the last 3 months and b) 3.7% at least once a week during the last 3 months, while the rate among males aged between 15 and 49 are a) 11.6% during last 3 months, b) 7.9% at least once a week during the last 3 months[34].

[34] 2017 DPRK Multiple Indicator Survey

The DPRK government has acknowledged the position and role of statistics in the national economic development and implementation of the SDGs, and attaches importance to the development of statistics. National statistics offices ensure that statistics entirely contributes to socio-economic development by strengthening the unified system of statistics and amending and supplementing the main laws and relevant regulations on statistics.

The sustainable development in the DPRK are conducted under sanctions and blockade. Peace and development is the common aspiration of the era and a peaceful environment is essential for improving the people's living by concentrating all efforts on economic construction. However, due to the continued hostile military actions, smear campaigns and hostile policies against the DPRK, the DPRK's sovereignty and right to development are faced with grave challenges.

Measurement: International exchanges are necessary to assess the global indicators that are not included in the national SDG 17 and introduce those that conform to the country's context.

4.17.2 Plans

The DPRK gives priority to the following plans.

Strengthen bilateral and multilateral cooperation: Bilateral and multilateral cooperation programmes will be developed and implemented to support the Government in achieving SDGs.

Develop IT: The technical modernization of the telecommunication infrastructure will be enhanced and the mobile telecommunication developed so as to shift towards next generation.

Strengthen centralization of the state statistics system: It is important to enhance the role of statistics offices from central to city/county and the statistics cells of all agencies, further strengthen statistics under the unified guidance of the CBS, and to propel socio-economic development by ensuring comprehensive, objective, scientific and timely statistics. Also the statistics development plan for the implementation of the new five year plan should be set and carried out according to annual plans.

5 MEANS OF IMPLEMENTATION

The DPRK has established country specific SDGs, closely combining the global SDGs with the national development goals. The funds for achieving the national SDGs are reflected in the government budget of the fiscal year together with other budgets needed to achieve the national development plans, and disbursed in a planned manner upon the approval by the SPA. In addition to the government budget, domestic cooperative enterprises also provide funds for the activities to achieve the national SDGs of their concern. The Government mobilizes every Government ministries, institutions, people's committees at all levels, enterprises and companies to the achievement of the SDGs through strengthened awareness-raising activities. Together with the bilateral aids, the UN Agencies, and the EUPS, IFRC, ICRC operating in the country and other organizations contribute to the government's effort in achieving the national SDGs.

The main actor in achieving SDGs is the Government and the bilateral and multilateral cooperation play supplementary role. However, due to the continued sanctions and blockade, the assistance which is of development nature is banned and the support to the DPRK is restricted to the humanitarian aid. This has clearly resulted limited contribution to the overall achievement of the national SDGs. The continued sanctions and blockade creates serious obstacles to the DPRK government in achieving the SDGs.

The Government will achieve the SDGs by increasing the common and correlative effectiveness

of the national development strategies and sector plans with the national SDGs, making effective use of its own financial resources, technologies and natural resources and actively conducting mass campaigns. The effectiveness of the financial investment will be increased through the strengthened monitoring system and regular evaluation on financial flow and utilization, and the vitalization of the domestic bank loans will promote the people`s livelihood and economic development. All-people campaigns that are vigorously conducted in forest rehabilitation, land management, environmental protection, disaster management, education and other sectors are important means for achieving the SDGs. The NTF will track the progress and challenges through regular M&E and take necessary measures accordingly.

6 CONCLUSION AND NEXT STEPS

The DPRK government exerts all possible efforts to implement Sustainable Development Agenda based on the experiences and lessons learnt during the implementation of MDGs. As a consecutive process for achieving Sustainable Development Agenda, it has established country specific SDGs in line with the new strategic line of concentrating all efforts on the economic construction and is harmonizing them with the implementation of the national development plans. The DPRK government will focus investments to the priority areas including metallurgy, chemistry, energy, construction, light industry, agriculture, and environment.

The Government will supplement the country specific SDG indicators with the global indicators that fit with the national context and implement them according to the base year data and the data necessary to be further defined. The NTF will enhance coordination among all units to implement national SDGs in close combination with the 2021-2025 five year plan and the progress made in each goal will be included as an agenda for the Cabinet for regular review and further actions. The Government takes measures to accelerate the implementation of development goals through the full readjustment and restructuring of internal force based on the assessment on the experiences and lessons in implementing 2016-2020 five year strategy and the impacts of world pandemic situation on the overall socio-economic sectors.

The important issues in the next step are to achieve the national SDGs through optimizing the use of its own resources, technology and internal force under the ideals of "The People are God", self-reliance and single-minded unity while intensifying the emergency anti-epidemic campaign to cope with the protracted worldwide health crisis for the safety of the country and the people. Bringing the advantages of people-centered socialism into full play, the Government will make its every possible effort to achieve the SDGs through the rational use of national resources and all-people, all-society campaign.

The CBS capacity should be further enhanced as the centre of integration and analysis of national statistics and the nationwide unified system of statistics be strengthened. The role of the national statistics will be ensured in a way as to establish M&E system for tracking progress towards SDGs implementation, regularly review the attainment of each indicator and decide on the right directions to achieve the goals. International standard indicators and methodologies will be further adopted.

It is essential to raise awareness on SDGs and promote partnership with international communities. The NTF will disseminate the review of SDG progress to the ministries, agencies, people`s government at all levels, research institutes and civil society to inform them of the current status, challenges and priorities in future. This will be the opportunity of policy making and fund raising. In addition, the bilateral and multilateral cooperation will be enhanced to develop and implement such plans of accelerating the national SDGs achievement.

The Government of DPR Korea will overcome all challenges and difficulties by the concerted efforts of the masses of people and further strengthen collaboration with the international community in the course of implementing Sustainable Development Agenda.

Annex I The DPRK Sustainable Development Goals, Responsible Agencies (2015–2030)

National SDG	Targets	Responsible Agencies
1. Consistently improve the people's living standard	1.1* By 2030, sufficiently meet material requirements of people through state supply and dwelling distribution systems	SPC MoF MoA MoLI Each level
	1.2* Increase state investment to orphans and elderly with no one to look after them so as to live free from worries	SPC MoF MoL EC
	1.3 Implement nationally appropriate social protection systems and measures for all	SPC MoL
	1.4** By 2030, increase systematically number of splendid, modern bases for cultural and leisure activities for people and further consolidate people-oriented policies including paid leave, recuperation and relaxation systems at state expense	SPC MoF MoL MoPH
	1.5** By 2030, build the perfect national system and take measures to protect all the people from climate-related extreme events and natural disasters	MoLEP MoUM SCEDM Each level
	1.a Ensure significant mobilization of finance from a variety of sources	MoF MoFA MoEEA
2. Achieve self-sufficiency of food through increased agricultural production and improve nutrition	2.1 By 2030, ensure access by all people through increased and sustainable agricultural production, to safe, nutritious and sufficient food all year round	MoA MoF Each level
	2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	SPC MoPH
	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to disasters and that progressively improve land and soil quality	SCEDM MoF MoA MoLEP MoUM
	2.5** By 2020, breed superior strains in larger numbers and increase production of seeds that meet local demands for specific varieties, and introduce advanced farming methods	MoA AAS
3. Ensure healthy lives and promote well-being for all	3.1 By 2030, reduce the maternal mortality ratio to less than 40 per 100,000 live births	MoPH
	3.2 By 2030, reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortality to at least as low as 25 per 1,000 live births	MoPH
	3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable	MoPH Each level

National SDG	Targets	Responsible Agencies
	diseases	
	3.4** By 2030, reduce by one third premature mortality from non-communicable diseases through improved quality of universal free medical service and preventive medical care, and promote mental health and well-being	MoPH Each level
	3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	MoPH
	3.6 By 2020, halve the number of deaths and injuries from road traffic accidents	MoPH MoPS
	3.7 By 2030, ensure universal access to sexual and reproductive health-care services, and the integration of reproductive health into national strategies and programmes	MoPH
	3.8** Boost district doctor system and renovate county people's hospitals as medical service centres for the particular area and supply adequate materials to Ri people's hospitals and clinics so as to protect lives of people and improve their health	MoPH Each level
	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	MoLEP MoCI
	3.a Strengthen the implementation of the WHO Framework Convention on Tobacco Control as appropriate	MoPH
	3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases, provide access to essential medicines and vaccines, provide access to medicines for all	MoPH AMS
	3.c Ensure increased investment to public health sector and training of health workers, and improved quality of health service	MoF MoPH
4. Prepare all the members of society as intelligent workers with the intellectual level of a university graduate	4.1** Constantly improve quality of universal 12-year compulsory education	EC
	4.2** Increase the quality of early childhood development, care and pre-primary education so that all girls and boys are ready for primary education	EC
	4.3** Constantly complete vocational education system, improve teacher training system and further expand and develop study while working system	EC Each level
	4.4** Provide young and adults with jobs according to their abilities.	MoL MoII
	4.5** Further improve the content and methods of education so as to bring up the younger generations with comprehensively developed talents, prepared politically and ideologically, highly creative, morally sound and physically fit	EC
	4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development	EC
	4.a** Raise the material and technical foundations of the education sector to the world level through a radical	EC

National SDG	Targets	Responsible Agencies
	overhaul of the educational conditions and environment	
5. Consolidate gender equality and rights of women and girls in all sectors	5.1** Consolidate gender equality in all sectors	EC MoL Each level
	5.3** Eliminate nonage marriage	MoPS
	5.5** Ensure women's rights at all sectors of political, economic and public life	Each level
	5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences	MoPH Each level
	5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	MoII Each level
6. Ensure sustainable use and management of water and sanitation for all	6.1 By 2030, achieve universal and equitable access to safe drinking water for all	MoUM Each level
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all	MoUM Each level
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated waste water and substantially increasing recycling and safe reuse	MoUM Each level
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	MoUM Each level
	6.5 By 2030, implement integrated water resources management at all level, including through transboundary cooperation as appropriate	MoUM MoFA
	6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	MoLEP MoUM
	6.a By 2030, expand international cooperation in WASH	MoFA MoUM
	6.b Strengthen the participation of local communities in improving water and sanitation management	MoUM Each level
7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.1** By 2030, Prioritize hydropower rationally combining with thermal power to generate electricity, increase the proportion of atomic and tidal power generation, so as to meet the national energy demand	MoPI MoMI SAOS
	7.2** By 2030 increase capacity for generating wind, solar and expand the use of natural energy resources	MoMI SAOS
	7.3 By 2030, double the global rate of improvement in energy efficiency	SPC SAOS Each level
8. Establish self- reliant knowledge- based economy and ensure decent and	8.1 Sustain per capita economic growth at least 5 per cent gross domestic product growth per annum	SPC Each level

National SDG	Targets	Responsible Agencies
productive work for all		
	8.2** Enhance integration of science and technology with economy	SPC SCST SAOS
	8.4** By 2030, establish production and technical processes for supplying raw materials and fuel from local resources, and ensure sustainable development of economy	MoSNRD Each level
	8.5** Provide all people with jobs according to their abilities	MoL Each level
	8.8 Promote safe and secure working environments for all workers	MoL Each level
	8.9** By 2030, devise and implement policies to promote sustainable tourism by promoting unique development of local industries and cooperative enterprises	SPC NTA Each level
9. Put national economy on a high level of Juche and modern basis and modernize infrastructure	9.1 Develop reliable, sustainable and resilient infrastructure, to support economic development and human well-being	SPC MoLEP MoR MoLST
	9.2** Constantly improve and perfect the multi-faceted and comprehensive economic structure, through domestic production, so as to meet the material demands of economic development and people's livelihood	SPC Each level
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes	SPC MoLEP MoPI MoSNRD SAOS
	9.5** By 2030, steadily increase expenditure on the development of science and technology and number of researchers, and ensure science and technology play leading role in the socio-economic development	MoF SCST EC
10. Enhance the position and role of all the masses as the master of state and society	10.2 By 2030, empower and promote the social, economic and political inclusion of all	Each level
11. Provide people with conditions and environment for leading more affluent, satisfactory and civilized life	11.1** By 2030, ensure access for all to adequate, convenient, hygiene, cultured housing and living conditions	SPC MoF Each level
	11.2 By 2030, provide access to safe, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport	SPC MoLEP
	11.3** Provide people with affluent and civilized life conditions and environment through enhanced construction of modern dwelling houses and streets based on the city master plan	SPC MoCA
	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	MoLEP MoC
	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 GDP caused by disasters including water-related disasters	MoLEP MoA MoUM SCEDM Each level

National SDG	Targets	Responsible Agencies
	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	MoLEP MoUM SAOS Each level
	11.7** By 2030, build sufficient numbers of, and more splendid, modern bases for cultural and leisure activities for all	SPC MoCA Each level
	11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	SPC Each level
	11.b By 2020, substantially increase the number of cities adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement holistic disaster risk management at all levels	SPC SCEDM HB Each level
12. Ensure sustainable consumption and production patterns	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	SPC MoSNRD
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	MoCI MoUM Each level
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	MoUM SAOS
	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and life styles in harmony with nature	EC
	12.b** Ensure sustainable development for tourism through, including construction of Wonsan Kalma Coastal Tourist Area	NTA
13. Wage mass movement to combat climate change and its impacts	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters	SCEDM Each level
	13.2 Integrate climate change measures into national policies, strategies and planning	SPC MoLEP
	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	EC
14. Conserve and sustainably use coasts, seas and marine resources for sustainable development	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	MoLEP SAOS Each level
	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience	MoLEP Each level
	14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	SCST Each level

National SDG	Targets	Responsible Agencies
	14.4 By 2020, effectively regulate harvesting and end illegal fishing and implement science-based management plans, in order to restore fish stocks in the shortest time feasible	SPC MoSI Each level
	14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	MoLEP SCST
	14.7 By 2030, increase the economic benefits from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism	SPC MoFishery NTA
15. Sustainably manage and restore forests and promote sustainable use of ecosystems, biodiversity and reverse land degradation	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland fresh water ecosystems and their services, in particular forests, wetlands, mountains and dry lands, in line with obligations under international agreements	MoLEP MoForestry Each level
	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation nationally	MoLEP MoForestry Each level
	15.3 By 2030, restore degraded land and soil, including land affected by drought, floods and heat wave	MoA Each level
	15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity for sustainable development	MoLEP
	15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	MoLEP
	15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	MoLEP MoA SCST Each level
	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes and accounts	MoLEP Each level
	15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	MoLEP Each level
16. Turn the whole society into a large and harmonious family through strengthening of people-centered Korean style socialist system	16.1** Provide people with conditions for leading an affluent and cultured life, working safely and taking enough rest, and make sure that they enjoy maximum social benefits	Each level
	16.6 Develop popular institutions at all levels	Each level
	16.7** Ensure that people take an active part in state administration and socio-political activities, fully exercise their political rights as masters of the state and society at all levels	Each level
	16.9 Provide legal identity for all, including birth registration	MoPS
17. Develop friendly and	17.6 Enhance North-South, South-South and triangular	SCST

National SDG	Targets	Responsible Agencies
cooperative relations with all countries friendly to us under the ideals of independence, peace and friendship, and promote South-South cooperation	regional and international cooperation on science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, in particular at the United Nations level, and through a global technology facilitation mechanism	MoII CBS MoFA MoEER

* Target newly added

** Target integrated with NDGs

Annex II The DPRK Indicators and Values (2015–2030)

Indicators	Unit	2015	2018	2020
1.1.3* Proportion of households living in shared dwelling	%	0.8	0.6	0.5
1.2.1* Rehabilitated/modernized orphans' primary and secondary schools, baby homes, orphanages and rest homes	unit	29		67
1.3.1 Proportion of population covered by social protection systems	%			
1.4.1 Proportion of population living in households with access to basic services	%			
1.5.1 Number of deaths and missing persons attributed to disasters per 100,000 population Death Missing	total person person	0.43 0.34 0.09	0.59 0.29 0.3	0.47 0.42 0.05
1.5.2 Direct economic loss attributed to disasters				
1.5.3 National disaster risk reduction strategy	year	-	2019	
1.5.4 Proportion of local disaster risk reduction plan adopted in line with national strategy	%	0	0	100
1.a.1* Official Development Assistance	Million US$			
2.1.1* Food deficiency	1,000t	1,147	1,486	
2.2.1 Prevalence of stunting among children under 5 (height for age <-2)	%	27.9	19.1	17.4
2.2.2 Prevalence of malnutrition among children under 5 (weight for height >+2 or <-2)	%	- (2012)	4.8 (2017)	4.5
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	%	95	96	95
2.5.1 Number of genetic resources for food and agriculture secured	species	168	265	
2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction	species	60 374 (2014)	86 268	
3.1.1 Maternal mortality ratio per 100,000 live births	person	58	50.4	49 (2019)
3.1.2 Proportion of births attended by skilled health personnel	%	99.9 (2014)	99.5 (2017)	
3.2.1 Under-five mortality rate per 1,000 live births	person	17.7	16.9	16.8 (2019)
3.2.2 Neonatal mortality rate per 1,000 live births	person	9 (2014)	9 (2017)	7.7 (2019)
3.3.1 Number of new HIV infections per 1,000 uninfected population	person	0	0	0
3.3.2 Tuberculosis incidence per 100,000 population	person	451	354	351
3.3.3 Malaria incidence per 1,000 population	person	0.52	0.29	0.15
3.3.4 Hepatitis B incidence per 100,000 population	person	6.8	6.4	5.9
3.3.5 Number of people requiring interventions against neglected tropical diseases	person	0	0	0
3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	%			

Indicators	Unit	2015	2018	2020
3.4.2 Suicide rate per 100,000 population	person			
3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption	L			
3.6.1 Death rate due to road traffic injuries per 100,000 population	person	8.5	8.4	7.3
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	%	89.6 (2014)	89.7 (2017)	
3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	%	0 (2014)	1 (2017)	
3.8.1 Coverage of essential health services (index)			84 (2017)	
3.9.1 Mortality rate attributed to household and ambient air pollution	%			
3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene	%			
3.9.3 Mortality rate attributed to unintentional poisoning per 100,000 population	person	0.6	0.5	0.4
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	%	46.3	46.1 (2017)	
3.b.1 Proportion of the target population covered by all vaccines in national programme	%	97.7	93.2	94.5
3.b.2 ODA to medical research and basic health sectors	million US$	23.5		
3.b.3 Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis				
3.c.1 Health worker density and distribution per 1,000 population Doctors(including dentists) Nurses, midwives Pharmacists Others	person (total)	98 37 43 4 14	99 37 43 4 15	100 38 44 4 15
3.c.2* Proportion of government expenditure to the public health sector	%	6.4 (2014)	7 (2017)	
4.1.1 Proportion of children and young people achieving at least a minimum proficiency level in reading and mathematics in grades 2/3 at the end of primary at the end of lower secondary	 % % %		(2017) 93.5, 83.4 97.5, 89 97.5, 83.2	
4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	 % % %		(2017) 87.7(total) 86.2(M) 89.2(F)	
4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex	 % % %		(2017) 97.1(total) 97.9(M) 96.3(F)	(2019) 99.9(total) 99.8(M) 99.9(F)
4.3.1 Participation rate of youth and adults in formal and non-formal education and training	%			
4.3.2** Participation rate of youth and adults in study-while-	%			

Indicators	Unit	2015	2018	2020
working system				
4.4.1 Proportion of youth and adults with ICT skill (age between 15 and 19)	% %		(2017) 61.6 (F) 63.7 (M)	
4.5.1 Parity indices for all education indicators 1) female/male adjusted net attendance ratio -primary, lower secondary, upper secondary 2) lowest (20%)/highest(40%) (wealth index) adjusted net attendance ratio -primary, lower secondary, upper secondary 3) rural/urban adjusted net attendance ratio -primary, lower secondary, upper secondary			(2017) 1, 0.97, 1 1, 1, 1 1, 0.99, 1	
4.7.1 Extent to which education for sustainable development is mainstreamed in education policies				
4.a.1 Proportion of schools with access to: (a) Electricity (b) Intranet for education of young people (c) Computers for education of young people (d) Infrastructure and materials for school children and students with disabilities (e) safe drinking water (f) single-sex basic sanitation facilities (g) basic hand washing facilities	 % %	 100 80	(2017) 100 100	 100 100
5.1.1 Legal frameworks on gender equality "Law on Sex Equality"		1946.7.30		
5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	%		- (2017)	
5.5.1 Proportion of seats held by women in (a) Supreme People's Assembly (b) local People's Assembly	 % %	 20.2 27		 17.6 (2019)
5.5.2 Proportion of women in managerial positions	%			
5.6.1 Informed decisions on reproductive health Proportion of contraceptive use Proportion of unmet demand for family planning	 % %	(2014) 78.2 7.0	(2017) 70.3 6.6	
5.6.2 Laws and regulations that guarantee full and equal access to women and men aged 15 years and older to reproductive health care, information and education (5 year National RH Strategy)		2011.1.30	2017.1.30	
5.b.1 Proportion of individuals aged 15-49 who own a mobile telephone, by sex	% %		55.7(M) 47.9(F) (2017)	
6.1.1 Proportion of population using safely managed drinking water services	%		60.9 (2017)	
6.1.2* Proportion of households access to gravity-fed water supply system	%			
6.2.1 Proportion of population using safely managed sanitation services	%		47.5 (2017)	
6.3.1 Proportion of wastewater safely treated	%			
6.3.2 Proportion of bodies of water with good ambient water quality	%			
6.4.1 Change in water-use efficiency over time				

Indicators	Unit	2015	2018	2020
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	%			
6.5.1 Integrated water resources management				
6.5.2 Trans boundary water cooperation				
6.6.1** Eco-recovered rivers(km)	km			
6.a.1 ODA to water and sanitation				
6.b.1 Proportion of local administrative units for participation in water and sanitation management				
7.1.1 Proportion of population with access to electricity	%	36.6	36	34.6 (2019)
7.1.2 Proportion of population with primary reliance on clean fuels and technology	%		10.3 (2017)	
7.2.1 Renewable energy share in the total final energy consumption	%	12.1 (2016)	9.3	10.8
7.3.1 Energy intensity measured in terms of primary energy and GDP	GJ/ 1,000$	35	31.5	28.7
8.1.1 Annual growth rate of real GDP per capita	%	4	4.0	4.3 (2019)
8.2.1 Annual growth rate of real GDP per employed person	%	7.4 (2016)	4.0	1.4 (2019)
8.2.2* Proportion of research and development in government expenditure	%	8.8	9.3	9.9
8.4.2 Domestic material consumption				
8.5.1* Employment-to-population ratio	%	53.8 (2014)		55.3 (2019)
8.8.1 Occupational injuries	%			
8.9.1 Tourism direct GDP as proportion of total GDP and in growth rate	%	0.16 (2016)	0.23	0.0063
9.1.1 Proportion of rural population within 2 km of an all season road	%			
9.1.2 Passenger and freight volumes by mode of transport				
9.2.1 Manufacturing value added as a proportion of GDP	%	40.18	40.06	38.60 (2019)
9.4.1** CO2 emission per GDP	kg/$	9.7		9.4
9.5.1 Research and development expenditure as a proportion of GDP	%	8.2	8.7	9.6
9.5.2 Researchers per million inhabitants	person	2 326	2 534	2 966
10.2.1* Adoption of relevant national laws, accession to international conventions Law on the Protection of Persons with Disabilities Law on the Protection of the Rights of Children Law on the Protection and Promotion of the Rights of Women CRPD CRC CEDAW		 2003.6.18 2010.12.22 2010.12.22 2016.11.23 1990.9.21 2001.2.27		
11.1.1* Proportion of households living in shared dwelling	%	0.8	0.6	0.5 (2019)
11.2.1 Proportion of population that has convenient access to public transport				
11.3.1 Ratio of land consumption rate to population growth	%	1.26	0.67	0.67

Indicators	Unit	2015	2018	2020
rate				
11.4.2* Number of natural protection area	number	4	4	4
11.4.3* Number of natural monument	number	415	429	429
11.5.1 Number of deaths and missing persons attributed to disasters per 100 000 population Death Missing	total person person	0.43 0.34 0.09	0.59 0.29 0.3	0.47 0.42 0.05
11.5.2 Direct economic loss in relation to GDP, attributed to disasters				
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	%			
11.6.2 Annual mean levels of fine particulate matter in cities PM 2.5 micrograms PM 10 micrograms	per m^3			
11.7.1 Average share of the built-up area of cities that is open space for public use				
11.a.1 Proportion of population living in cities	%	61	62,3 (2019)	
11.b.1 National disaster risk reduction strategy	year	-	2019	
11.b.2 Proportion of local disaster risk reduction plan adopted in line with national strategy	%	0	0	100
12.2.2 Domestic material consumption				
12.4.1 Compliance to international agreements on hazardous waste Basel Montreal Rotterdam Stockholm				
12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated				
12.5.1 National recycling rate, tons of material recycled				
12.8.1 Extent to which education for sustainable development is mainstreamed in education policies				
12.b.1 Number of sustainable tourism strategies or policies and implemented action plans				
13.1.1 Number of deaths and missing persons attributed to disasters per 100 000 population Death Missing	total person person	0.43 0.34 0.09	0.59 0.29 0.3	0.47 0.42 0.05
13.1.2 National disaster risk reduction strategy	year	-	2019	
13.1.3 Proportion of local disaster risk reduction plan adopted in line with national strategy	%	0	0	100
13.2.1 Number of national plan for greenhouse gas emissions biennial update report submitted		2nd report (2012)	1st report FNDC (2016)	Updating NDC (2021)
13.3.1 Integration of climate change in education				
14.1.1 Index of coastal eutrophication and floating plastic debris density (km^2)	km^2			
14.2.1 Proportion of national exclusive economic zones	%	-		

Indicators	Unit	2015	2018	2020
managed using ecosystem-based approaches				
14.3.1 Average marine acidity (pH)	pH			
14.4.1 Proportion of fish stocks within biologically sustainable levels	%			
14.5.1 Coverage of protected areas in relation to marine areas	%	0.7 (2016)		
14.7.1 Sustainable fisheries as a proportion of GDP	%			
15.1.1 Forest area as a proportion of total land area	%	67.3	69.9	73.6
15.1.2 Proportion of important sites for terrestrial and fresh water biodiversity that are covered by protected areas, by ecosystem type	%			
15.2.1 Progress towards sustainable forest management a) Proportion of forest areas protected b) Increased rate of forest area per year c) Volume of accumulation of forest per hectare	 % % m^3/ha	 67.3 46	 69.9 1.3 (2015~2018) 44	 73.6 1.7 (2015~2020) 44
15.3.1 Proportion of land degraded over total land area	%	9.7	8.1	7.2 (2019)
15.4.1 Coverage by protected areas of important sites for mountain biodiversity	%	4.6		
15.4.2 Mountain Green Cover Index	%	89		
15.5.1 Red List Index Animals Plants Plants of lower order Threatened species		 0.89 0.94		
15.8.1 Relevant national legislation for prevention or control of invasive alien species "DPRK Law on Animals and Plants Quarantine at Borders" "Cartagena Protocol on Bio Safety"		 1997.3.2 2003.7.29		
15.9.1 Integration of biodiversity value development planning	%	10		
15.a.1 Government expenditure on conservation and sustainable use of biodiversity and ecosystems				
16.1.4 Proportion of population that feel safe walking alone around the area they live	%			
16.6.2 Proportion of population satisfied with public services	%			
16.7.2 Proportion of population trust in decision-making	%			
16.9.1 Birth registration of children under 5	%	100	100	100
17.6.1 Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation	pcs	9	7	8 (2019)

* Indicator newly added

** Indicator integrated with NDGs