

**2020 VIRTUAL ROUNDTABLE ON DPRK
AGRICULTURE**
*Office of Agricultural Affairs
U.S. Embassy Seoul
September 11, 2020 (Friday)
Webinar*

Venue: Webinar (Ara Room, Four Seasons Hotel for Speakers)

September 11, 2020 (Friday)

- 09:20 Welcome by Mr. Ron P. Verdonk, Minister Counselor for U.S. Embassy
Agricultural Affairs Office
- 09:30 P1: [Securing Food Systems and Mitigating the Effects of COVID-19 and Climate Change on Food Security](#) by Mr. Hyoung-Joon Lim, Representative & Country Director WFP Korea on behalf of Mr. Praveen Agrawal, WFP Country Director and Representative in Pyongyang
-
- 10:00 P2: ["Changes Taking Place in North Korea's Financial System"](#) by Dr. Yoojin Rhee, Research Fellow, Korea Development Bank (KDB)
- 10:30 Coffee Break
- 10:40 P3: ["North Korea's Trade with China in the first half of 2020"](#) by Dr. Jangho Choi, Research Fellow, Korea Institute for International Economic Policy (KIEP)
- 11:10 General Discussion moderated by Dr. Tae Jin Kwon/Director of Center for North Korea & Northeast Asian Studies, GS&J
(Panels: Mr. Hyoung-Joon Lim; Dr. Jangho Choi; Dr. Yoojin Rhee; Dr. Dath Mita)
- 12:10 Closing Webinar
- 12:30 Lunch with Speakers and Moderator

Simultaneous interpretation will be provided.



World Food Programme

Securing Food Systems and Mitigating the Effects of COVID-19 and Climate Change on Food Security

Hyung-Joon Lim
Director, WFP Seoul on behalf of
Mr. Praveen Agrawal,
Representative/Country Director of
WFP Pyongyang

Roundtable Discussion on Agriculture in the Democratic People's Republic of Korea

Seoul, September 2020





TABLE OF CONTENTS

COVID-19 Impact Channels on the Global Food Security

COVID-19 Preventive Measures in DPR Korea and Food Systems

WFP's COVID-19 Response: Immediate Needs

Three Pillars of WFP's COVID-19's Global Response

Climate Change and DPRK Food Security

WFP's Nutrition Assistance in DPR Korea

Disaster Risk Reduction and Resilience Activities

COVID-19's Impact Channels On The Global Food Security



COVID-19 IMPACT ON THE GLOBAL FOOD SECURITY

- The COVID-19 crisis unfolds at a time when the number of acutely food insecure people in the world had already risen nearly 70 percent over the past four years, largely due to man-made conflicts, climate change and economic downturn.
- The spill-over effects of COVID-19 will further increase the number of people facing acute hunger due to three primary “impact channels”:
 - 1) loss of jobs;
 - 2) decline in remittances;
 - 3) disruption of food systems.
- Low and middle-income countries will be disproportionately affected by three primary “impact channels”.

THE GROUPS HIT HARDEST BY DISRUPTION OF FOOD SYSTEMS

Households already in acute food insecurity pre-COVID-19	Nutritionally vulnerable groups and people with chronic illness at risk of inadequate nutrition	Households dependent on income from the informal sector – including many in urban areas	Households with migrant workers and dependent on remittances and/or seasonal migration	Small farmers and informal workers in rural areas affected by COVID-19 movement restrictions	Migrants and displaced populations likely to be left out of national social protection systems and often living in densely populated conditions.	Additional groups face punctual food security challenges, including persons in quarantine or under lockdown prevented from accessing their regular sources of income and food
---	--	---	--	---	---	---



Three Pillars of COVID-19's Global Response



PILLAR 1

National Social Protection Systems

WFP is helping governments to adapt, design and implement **social assistance interventions that respond to COVID-19 and to strengthen shock-responsive social protection** systems.



PILLAR 2

Basic Service Delivery

WFP is continuing to provide **direct or technical assistance to school children through school feeding programmes, even amid school suspensions**. In many cases, this has meant adjusting the delivery modality, by providing take-home rations, for example.

WFP also continues to deliver **lifesaving nutrition programmes** in the majority of cases, often with modified modalities.



PILLAR 3

Food Systems

WFP is sustaining, protecting, and improving **food systems** during the crisis, to **reduce economic and food insecurity risks**.

In many countries, WFP **has modified asset creation activities** to ensure that beneficiaries still receive support.





COVID-19's Preventive Measures In DPR Korea and Food Systems

The DPR Korea Preventive Measures in respect to COVID-2019:

- Closure of international borders for entries by humans
- Restricted travels and other movements within the country
- Restricted cross-border overland and sea cargo traffic
- Tight regulation of foreign trade by one entity - the Central Emergency Anti-Epidemic Headquarters
- Extended holidays for child institutions (nurseries, kindergartens, schools etc) from January to 3 June
- In the end July the government has re-introduced the restrictions related to and group gatherings, as well as other anti-epidemic requirements.

THE COVID-19 PANDEMIC and DPR Korea FOOD SYSTEM

- No confirmed COVID-19 cases in-country, yet **the impact is expected** due to the Global Pandemic and National Government Preventive Measures
- **No data yet to estimate the impact, only anecdotal evidence**, but following impact channels can be identified

• The impact on agricultural production

- ✓ Access to imported inputs (seeds, fertilizer, agro-chemicals, plastic etc) – no evidence
- ✓ Availability of labour force for agricultural works – no evidence

• The impact on nutrition:

- ✓ Institutional feeding (meals for children at nurseries, kindergartens and schools) were **not available for over 5 months**.
- ✓ All programs have been **impacted by restricted movement and shutdown of institutions**, where **the majority of the population receives their daily in takes** – this is case for schools, nurseries etc. **WFP's nutritional assistance fortified with micronutrients is ready to respond with in country stocks**, and has been doing so in a limited manner.

• The impact on coping opportunities:

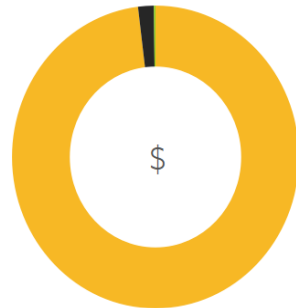
- ✓ **Reduced access to kinship exchanges, markets and foreign trade** due to travel restrictions and closure of borders.

WFP's COVID-19's Response: Immediate Needs



DPR Korea:

- The DPR Korea COVID-19 financial requirements are estimated in the **Global Humanitarian Response Plan** at **\$ 40 million**.
- **WFP** has proposed **\$ 2.1 million** for **food security interventions through resilience building, and USD 2 million for nutrition support to vulnerable populations** impacted by COVID-19 as a result of lockdown and supply chain disruptions.

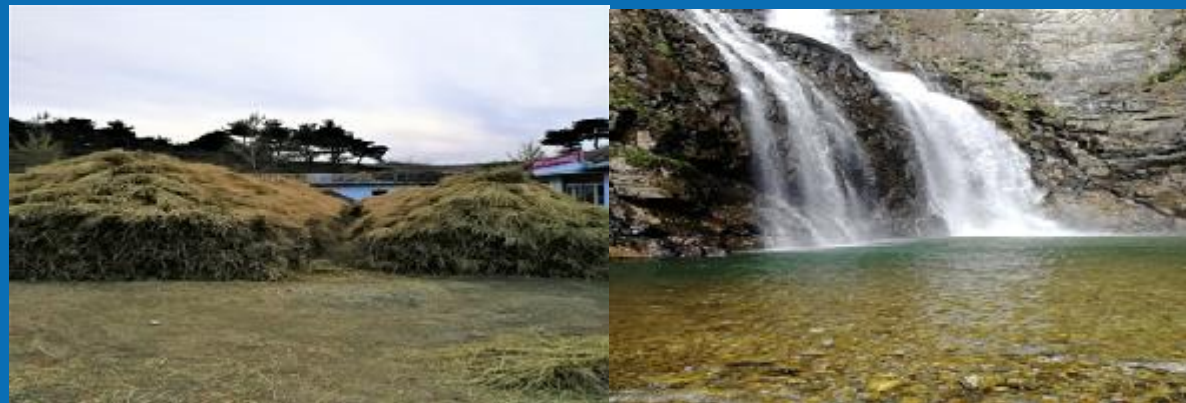


WFP's IMMEDIATE RESPONSE

- The evolution of COVID-19 and containment measures **remains unpredictable**.
- The impact of the COVID-19 crisis on the **most vulnerable populations requires more than ever that WFP sustains critical assistance** and wherever possible **continues to safeguard investments in resilience**.
- As part of the DPRK GHRP – **19m was for direct health activities and with ref to indirect 5.1m was assigned to Food Security and Nutrition**; WFP due to the lack of information WFP proposed 2.1m of the 5.1 to address needs in targeted counties.
- The quarantine measures and **longer turnaround time at ports as a result of COVID-19 are expected to increase the cost of sea charter and containerized cargo by as much as 30 percent**
- These increasing costs to deliver exacerbate preexisting resource shortfalls for WFP operations.
- **WFP seeks to mitigate supply chain interruptions and minimize rising operational costs.**

**All \$ values shown throughout are in USD.*

Climate Change and DPR Korea Food Security



OVERVIEW

- DPR Korea is **highly vulnerable to increasing climate risks and recurrent natural disasters: droughts, heat waves and flash floods**

* The INFORM Global Risk Index ranked DPR Korea at position **39 out of 191** countries in terms of their level of disaster risk

- Climate-related disasters in DPR Korea have **profound humanitarian impacts on both food production and people's access to food**, undermining progress towards achieving Sustainable Development Goal (SDG) 2.
- ✓ **The food production levels significantly fluctuate from year to year due to climatic factors**
- ✓ **2018** – worst yield in a decade mainly due to climatic factors (4,9 million mt)
- ✓ **2019**--the Government reported a record high harvest of over 6,6 million mt – not yet assessed by WFP.

CLIMATE FACTORS AFFECTING FOOD SECURITY IN 2020

DRY SPELL:

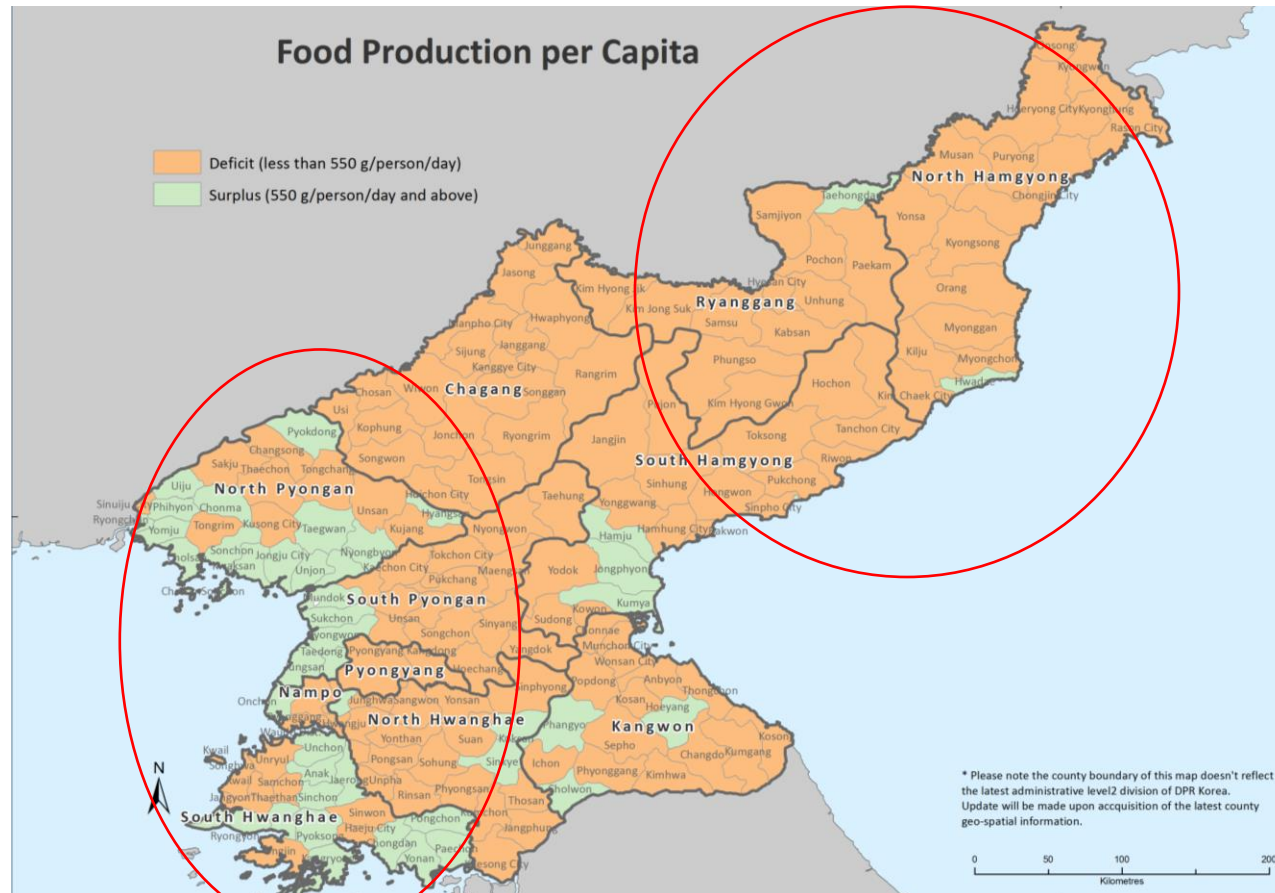
General weather conditions remained unfavorable: According the **satellite data in March main cereal-producing regions (southern, southwestern, and western) received 40-60 percent less rainfall**, while **in less fertile northern region and east coast areas rainfall exceeded the average by 60 to 80 percent**. From the end of March to early April, a dry spell prevailed over most of the country.

RAINS and STORMS:

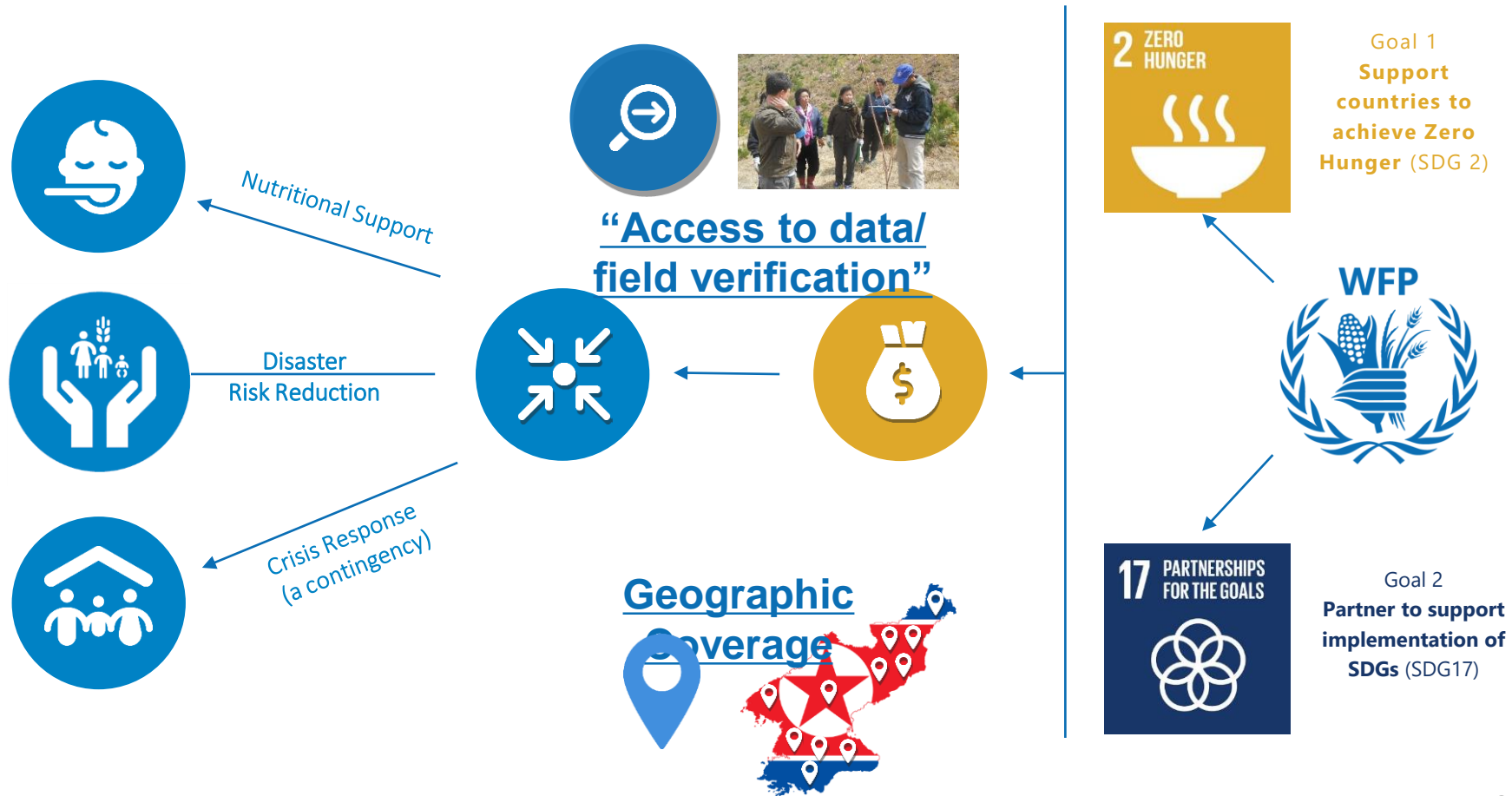
Torrential rains and storms in July/August have inflicted **a substantial damage: flooded hundreds of houses and vast areas of agricultural land in southern rice-producing areas of DPRK**. The impact of on the main crop harvest and resulting food balance is unclear, the **government has responded with internal resources**. Impact from Tropical cyclone BAVI-20 which hit the country at the end August is pending review, rains were the heaviest in the northwestern regions.

Highly vulnerable and recurrent disasters

- **Droughts, heat waves and flash floods** (Global risk index 39th out of 191)
- **Dry spell:** according to **satellite data in march**, main cereal producing regions (southern, s-western, western) **received 40-60% less rainfall**, while in less fertile northern region/east coast - rainfall **exceeded the average by 60-80%**. From end March to early April, dry spell prevailed over most of the country

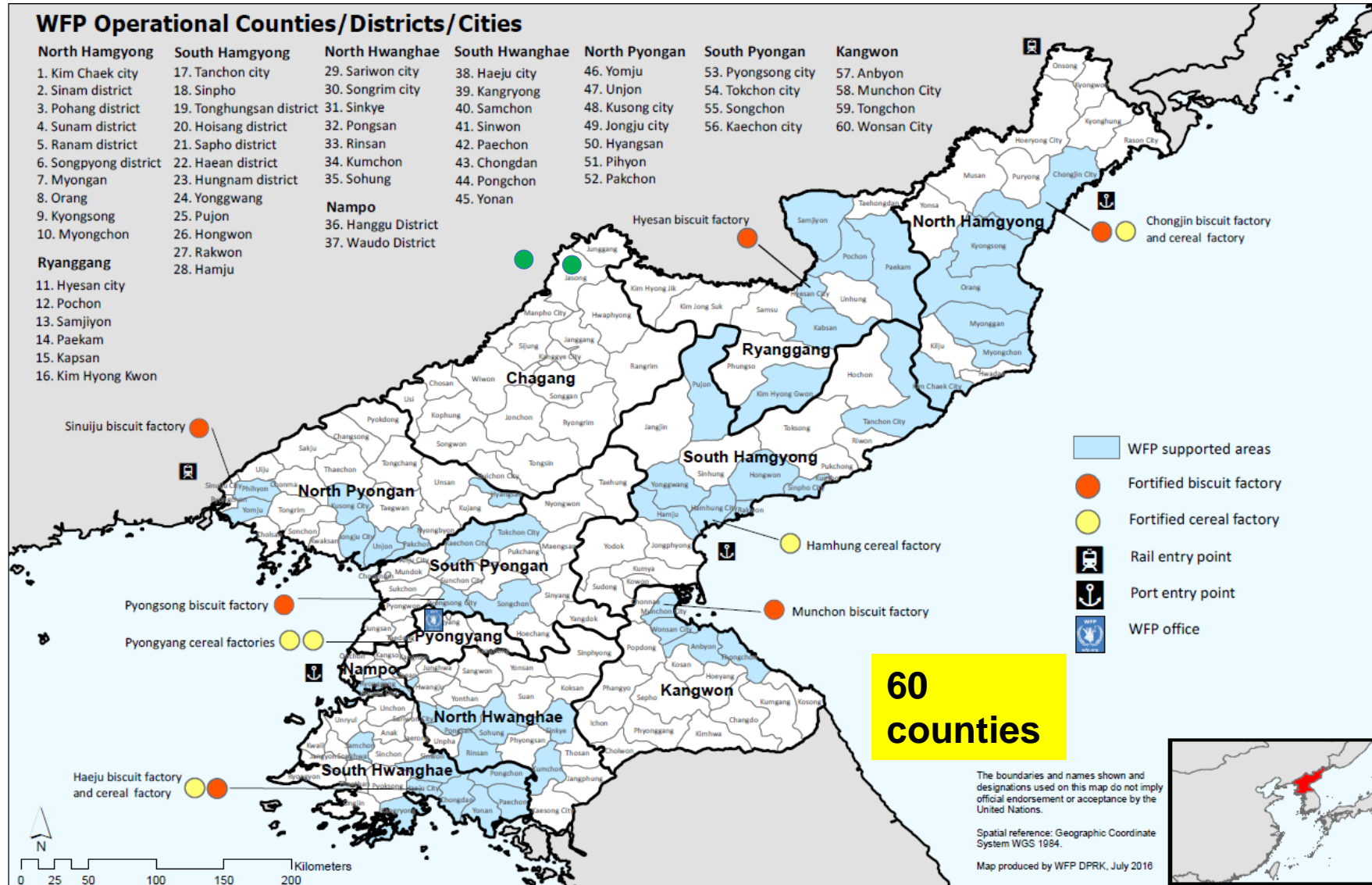


Towards achieving Zero Hunger (SDG 2)



60/210 operational areas and 9/11 provinces

Supports local factories for fortified cereals & fortified biscuits





Nutrition Assistance

**WFP Interim Country Strategic Plan
2019-2021**

Total Requirement - \$161 million

Pregnant and Lactating Women	Children in nurseries	Children in kindergartens	Children in boarding schools	Patients in hospitals/paediatric wards and tuberculosis patients
------------------------------	-----------------------	---------------------------	------------------------------	--



Through nutrition activities WFP provides beneficiaries with **nutritious fortified cereals and biscuits** which help to prevent malnutrition by providing for their macronutrient and micronutrient needs.

The food items distributed in the **children's institutions are consumed as snacks in-between main meals** and are usually prepared **as bread, pancakes and porridge** depending on the children's preferences. The food distributed to **pregnant and lactating women and girls (PLWG) complemented their regular diets to meet their daily nutrient requirement** for healthy growth and development.

In addition, WFP distributes **hygiene and nutrition-related messages, printed on beneficiary cards and WFP logbooks**, to beneficiary institutions in order to increase beneficiary understanding on healthy diets and hygiene practices.

In 2019, WFP provided **nutrition assistance to 662,573 beneficiaries, with children aged 6-59 months and PLWG** as the largest categories.

From February to June 2020 **child institutions have been on extended holidays and not accessible for distributions. Institutions reopened on 3 June** however, kindergartens continue to be on vacation – expected to open in September.

In 2020, WFP has carried out **distributions, to some 448,000 beneficiaries in child institutions** (boarding schools, nurseries, paediatric wards and hospitals, as well as, to **pregnant and lactating women in nine provinces**, using **prepositioned fortified biscuits and cereals produced in local factories**.



Hidden Hunger – 1st 1000 days



nourished

undernourished

If children don't receive **nutritious** food in their **first 2 years**, they may be stunted for life.



wfp.org

CHRONIC MALNUTRITION



NAME	Age (in Years)	Weight (Kg.)	Height (cms.)	Status
Johnny	11.3	28	120	SEVERE MALNUTRITION
Glenda	9	21	117	MODERATE MALNUTRITION
Daniel	5.8	19	112	NORMAL



Hamhung CMB Factory



Sinuiju Biscuit Factory





- **Invest \$1 in nutrition, one can save average \$45 and up to \$166 (health cost etc)**
- **Invest \$1 in nutrition, ROI (Return on Investment) is 16.**
- **Impact to National GDP: 2~3% and up to 11% in case of some African and Asian countries.**



Disaster Risk Reduction and Resilience Activities

WFP Interim Country Strategic Plan 2019-2021
Total Requirement - \$161 million

In 2018-2019, climate conditions remained challenging:
-Winter 2018-2019: low snow coverage, lack of soil moisture
-September 2019: Typhoon Lingling inundated thousands of hectares of farmland and crops, causing serious damage to irrigation infrastructure, human settlements, rail-tracks, roads, schools and hospitals.

Through **the Food assistance for assets (FFA) activities** WFP responds to climatic challenges, reinforcing household and community resilience, builds and rehabilitates productive and protective assets, providing conditional food transfers (maize).

WFP **significantly expanded FFA activities in 2019** compared to previous years:
 -resumed activities suspended since autumn 2018
 -launched **five additional projects in the areas hit by Typhoon Lingling** (distribution of 5 mt biscuits – immediate response)
 -provided **working tools to participants** (including stretchers, shovels and pick-axes)

ACTIVITIES

Rehabilitation of damaged river embankments	Desilting of riverbeds and community water reservoirs	Restoration of adequate irrigation water for agricultural production, protection of public infrastructure and communities along the rivers	Fruit and wood tree planting
--	--	---	-------------------------------------



2019 OUTCOMES/FIGURES
 -improved the food security situation to **268,080 household members** (*distributed 5,251 mt of maize maize rations in return for work*);
 -**3,949 hectares of agricultural land** benefitted from rehabilitated irrigation schemes
 -**12.94 million fruit and wood trees were planted across 3,350 hectares**

2020
 despite continued restrictions, WFP continues to support vulnerable beneficiaries of resilience activities. In July, WFP distributed **over 1,170 mt of maize to about 95,000 beneficiaries.**



WFP's
assistance to
Republic of
Korea



○韓國政府代表(右)與WFP代表(左)在東京簽署援助協定。

每日經濟新聞

本報社址：東京市丸の内區千代田
電話：3141
發行所：東京市丸の内區千代田
電話：3141
訂價：每月1000日元
零售：每份100日元
每日經濟新聞社
1965年 7月10日

- 社 長
1. 佐藤誠實
2. 實業部長
3. 營業部長
4. 編輯部長

△三江流域綜合農業開發會 刊

WFP 世界食糧計劃 援助協定に調印

總事業費43億圓以上

4道15郡78面に27萬町步選定

WFP代表(左)と韓國政府代表(右)が東京で援助協定を調印する様子。

【東京10日電】世界食糧計劃(WFP)と韓國政府は、東京で援助協定を調印した。この協定は、WFPが韓國政府に、4道15郡78面に27萬町步の農地を援助する。事業費は43億圓以上と見られる。WFPは、この協定に基づき、韓國政府に、食糧、肥料、農具、農機具などを提供する。また、WFPは、韓國政府に、農業技術の指導と訓練を提供する。この協定は、WFPと韓國政府の間で、初めての協定である。WFPは、この協定に基づき、韓國政府に、食糧、肥料、農具、農機具などを提供する。また、WFPは、韓國政府に、農業技術の指導と訓練を提供する。この協定は、WFPと韓國政府の間で、初めての協定である。

總有 1천3백94만名

中央選管委 選舉人名簿완사

【ソウル10日電】中央選舉管理委員會は、今日、第11回総選挙の選挙人名簿を完了させた。この名簿には、1千3百94万9千4百92名が登録されている。これは、前回の選挙に比べて、約100万人増加している。この名簿は、選挙の公正性を確保するために、厳格な審査を受けた。また、この名簿には、海外在住の韓国人も含まれている。中央選管委は、この名簿に基づき、選挙の準備を進めている。選挙は、11月15日に実施される予定である。

Koreans
received
WFP food aid
until 1984





**Food for Work
취로/사방사업
(새마을운동 with
WFP from 1971)**

Food for Assets



(FAO/Boonserm, 1968)



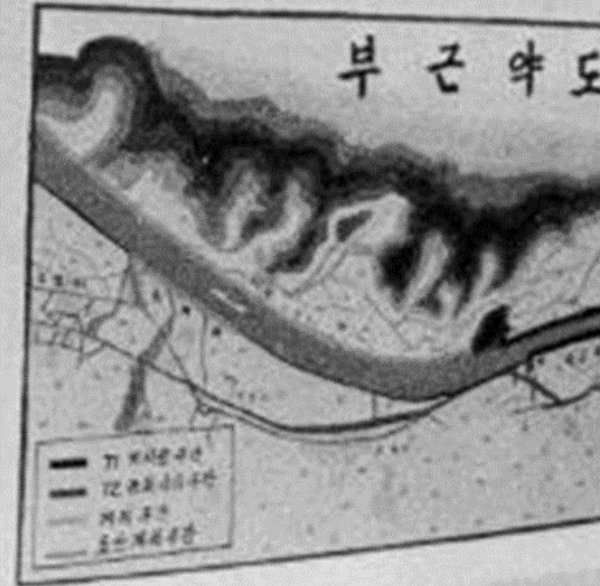
Land Reclamation and Cultivation 간척 및 개간

From 1964 to 1975, WFP provided food assistance to people engaged in eight land reclamation and cultivation projects in the ROK.

ROK graduated from WFP assistance in 20 years, became a major donor only after one generation!

3차 W.F.P. 지원차 FLOOD CONTROL PROJECT OF 3RD WF.

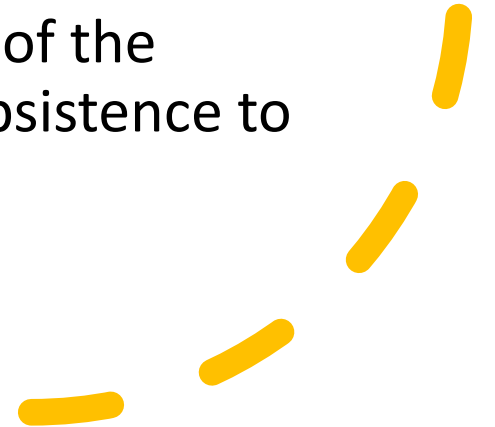
공사명 : 동천 개수공사
위치 : 경남 울주군 농소면 지내
공사개요 : 축제: 11.220M 배수문: 17개소
시행기간 : 1971~1974
효과 : 농토보호: 490ha. 인가보호: 170호
시행청 : 경상남도



Food For Community Development (FFCD) Activities in DPR Korea

FFCD is an important component of WFP's operations in DPR Korea. The immediate objectives of the FFCD projects are:

- **To provide food for household consumption for the food-insecure people.**
- **To enable increased agricultural production by improving irrigation infrastructures and increase area of cultivation**, as well as improved access to market places, so as to encourage agricultural activities.
- To rehabilitate and maintain community-based assets and infrastructure.
- To create temporary employment of the vulnerable people and provide subsistence to their livelihood.



FFW /FFCD activities in DPRK 2002-2011

Main activities	Unit	Output
Tree Planting	Ha	13,608
Tree Nursery	Seedlings	173,575,000
Land Reclamation /Rehabilitation	Ha	1,334
Embankment	Km	1,411
Excavation	Km	241
Dams or Reservoirs	No	23
Drainage systems	Km	20
Water supply systems	Km	955
Irrigation system rehabilitation	Km	285

Types of activities for WFP FFCD support

- **Tree planting** on degrade hillsides, to reduce the erosion and to increase the water infiltration in the soil.
- **Construction/rehabilitation of embankments**, to protect the lives/assets and arable land.
- Excavations/rehabilitation of beds of **small-scale drainage/irrigation canals/rivers** to prevent or mitigate flooding.
- **Irrigations system** rehabilitation.
- Land development/soil conservation activities



Tree Planting





Embankment Construction





Irrigation Systems



Micro-basins



**FFCD Midterm
Land Reclamation
in Sudong
Hamhung, S. Ha
7-Jun-0**

New Soil

2007 6 7



Basic Tool ("A" level)





Construction of Contour Ditches





Contour Ditches





Soil Conservation

WFP's Disaster Risk Reduction project activities in photos



Photo: Preparation for tree plantation.



Photo: WFP supported reforestation project.



Photo: DRR project participants waiting on a line to collect food ration.



Photo: DRR project participants collecting food ration.

Agroforestry

- Agroforestry is an **integrated and sustainable land management system** that **combines trees, crops and other economic grass plants, and livestock, making maximum use of the land** and increasing production while protecting the environment and **reducing natural disaster risks**.
- It is also an important **economic strategy to provide food, improve diet diversity and reforest the mountains**, and to contribute to overall environmental protection and disaster risks reduction.
- Alignment with the **National Environment Protection and Disaster Risk Reduction Strategy for 2019-2030** and agroforestry priorities
- Agroforestry activities (including the creation of hillside tree plantations and community orchards) – the focus will be placed on **supporting county tree nursery capacity, tree planting and intercropping**;
- Project areas
 - food deficit and insecure
 - in line with Government agroforestry priorities;
 - degree of degradation of sloping lands and readiness for afforestation; and
 - no support from other agroforestry initiatives.
- Have been in discussion with **Climate Change Center**





World Food Programme

Thank You



2020 DPRK Agriculture Roundtable

“Changes Taking Place in North Korea’s Financial System”

Yoojin Rhee, PhD, Research Fellow,
Korean Peninsula New Economy Center,
Korea Development Bank
yjrhee@kdb.co.kr

South vs North Korea's Financial System



- ✓ Most adults open bank accounts, have credit cards
- ✓ Convenient financial system



- ✓ Operation of Central Bank branches in regions across country
- ✓ Post offices for money transaction



North Korea's Financial System

Central Bank

Role of central bank + commercial bank

Operation branches in 12 regions

Branches take the role of Regional Commercial Bank

State Commercial
Bank

National Trade Bank, Kyoro Bank, Daesung Bank

Foreign Investment
Bank

Joint Venture Bank, Foreign Bank

Postal Savings
Agency

Nation wide, including Rural areas

Bank Loan in North Korea

Financial Products

- ✓ Regular savings
- ✓ Installment savings

} Interest rate varies
⋮
Low interest rates

Bank Loan

- ✓ Personal loan unavailable → Disallowed by low & legal system
- use Pawnshop
- ✓ Corporate loan available



Economic Improvement Measures on Agriculture

<i>July 1st Measures ('02)</i>	<i>June 28th Measures ('12)</i>	<i>May 30th Measures ('14)</i>
Working Unit Management System (Working Unit) - 10-25 people per unit	Working Unit Management System (Working Unit) - 4-6 people per unit (Distribution) State 70%, Small group 30%	Family unit Autonomous Management System (Provision) 1,000 pyung land per family member (Distribution) State 40%, Individual 60%

Changes in North Korea's Finance

Central Bank– Trade Bank
Electronic payment card

90s

Only foreigners in North Korea use card

2010s

Narae, Chunsung card etc. expansion of supply

Use of payment cards
increasing in NK!



Changes in North Korea's Finance

2010s

Narae, Chunsung card etc. expansion of supply



2015s

CD machines installed in major locations



Create environment to enhance
financial accessibility

Changes in North Korea's Finance

6 million mobile phone subscribers in NK



2015

E-commerce System

Mobile Payment System Developed

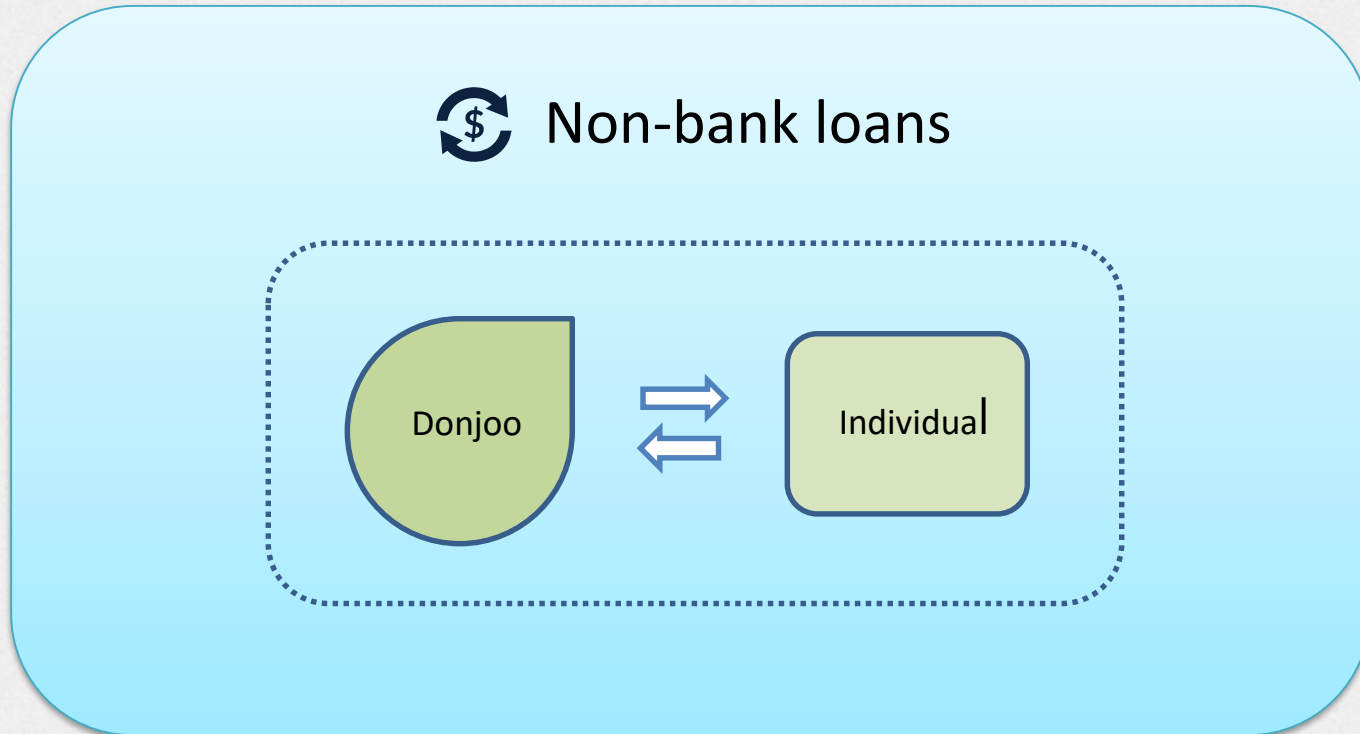


2018

Mobile payment app in NK



Non-bank Loans Portfolio



Non-bank loans portfolio

loans, investment, foreign exchange, deposits, bill payments

People involved in Non-bank Loans



Lessons



농업통합생산체계

농업생산과 관련된 모든 부문, 모든 단위별의 생산과 경영활동을 통합적으로 관리하고 최적조출하는 통합관리정보체계

특징

- 해당 지역의 기상기후조건과 토양조건, 영농용지보장조건에 맞게 농업생산을 최대한 높이기 위한 과학기술적대책 수립
- 농업생산전과정들을 철저단위로 합치하고 연결되는 기상조건과 영농용지보장조건에 맞게 다중단계 비배관리대책의 과학화
- 군정영위협침의 농정용지관리를 향상하여 생산자위와 경영관리의 신속성과 과학성 보장

구성


- 생산지위체계
농사직전, 조사감악, 영농지위, 종합분석
- 경영관리정보체계
계획작성, 재정보조, 로터관리, 자재관리, 설비관리, 행정업무
- 과학기술보급체계
과학기술자문보급, 기술교류, 시험포전관리

• 농사직전과 영농지위를 과학화하여 농업생산성 제고
• 생산과 경영활동의 연결관계를 실현하여 최대의 수익효과를 달성

정보체계



Thank you

 KDB산업은행

North Korea's Trade with China

In the first half of 2020

Jangho CHOI

Korea Institute for International Economic Policy

2020. 9. 11.

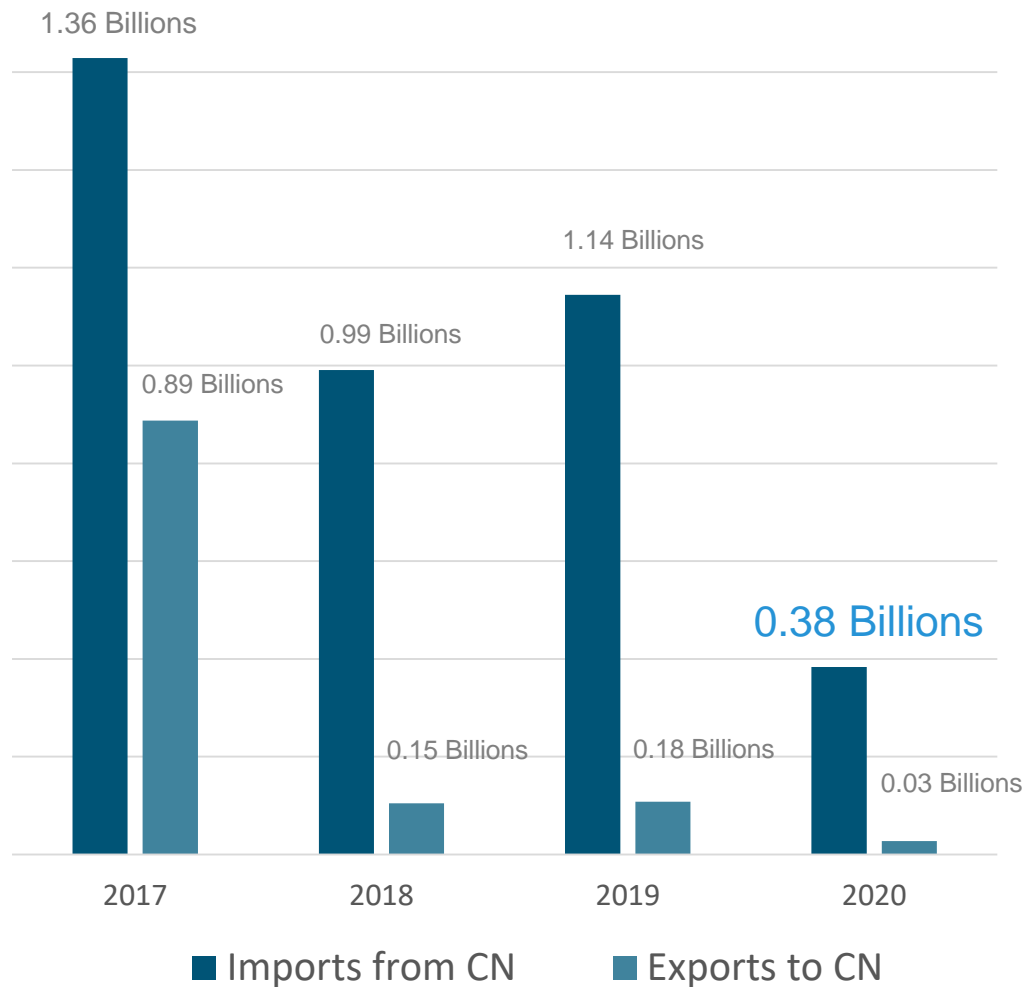
- 1 Overview
- 2 Imports from China
- 3 Exports to China
- 4 Trade analysis by Province and Industry
- 5 Conclusion

Overview

Border Blockade and Prolonged Trade Suspension

Imports and Exports, 1st Half of year

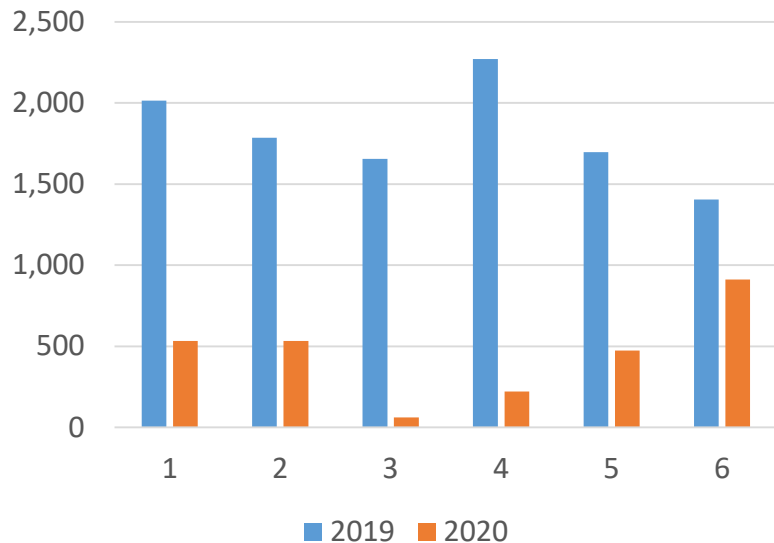
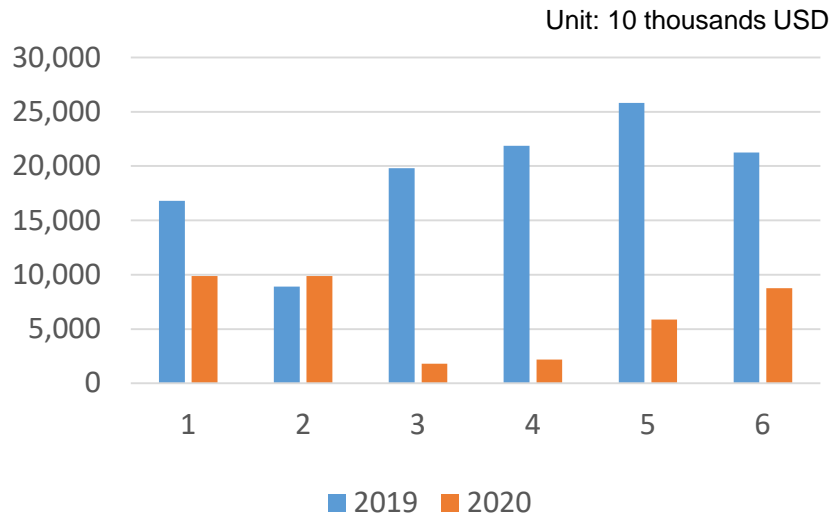
Unit: USD



- **Total Trade with CN: 67.2% decrease** (compared to 1st half of 2019)
 - 1.04 billions USD (2019) → 0.32 billions USD(2020)
 - 83.7% decrease (compared to 1st half of 2017)
 - **Imports from CN: 66.5% decrease** (compared to 1st half of last year)
 - 1.14 billions (2019) → 0.38 billions (2020)
 - 76.5% decrease (compared to 1st half of 2017)
 - **Exports to CN: 74.7% decrease** (compared to 1st half of last year)
 - 108 millions (2019) → 27.4 millions (2020)
 - 96.9% decrease (compared to 1st half of 2017)
 - **Balance of Trade: 65.6% decrease** (compared to 1st half of last year)
 - -1.04 billions (2019) → - 0.36 billions (2020)
 - Balance of trade in 2020 would be at the level before the sanctions.
- ※ average balance of trade (2010~2016): - 0.67 billions

Monthly Trend: Trade recovery between April ~June

Monthly with CN, 1st half, 2019~2020
Imports (top), Exports (bottom)



- **Imports from CN is recovered during April ~ June**

- Jan. & Feb. **average 98.6 mill. USD** → Mar 18 mill. → **June 87.8 mill.**
- Note that imports in June decreased by 59% (compared to 1st half, 2019)

- **Exports to CN is almost suspended.**

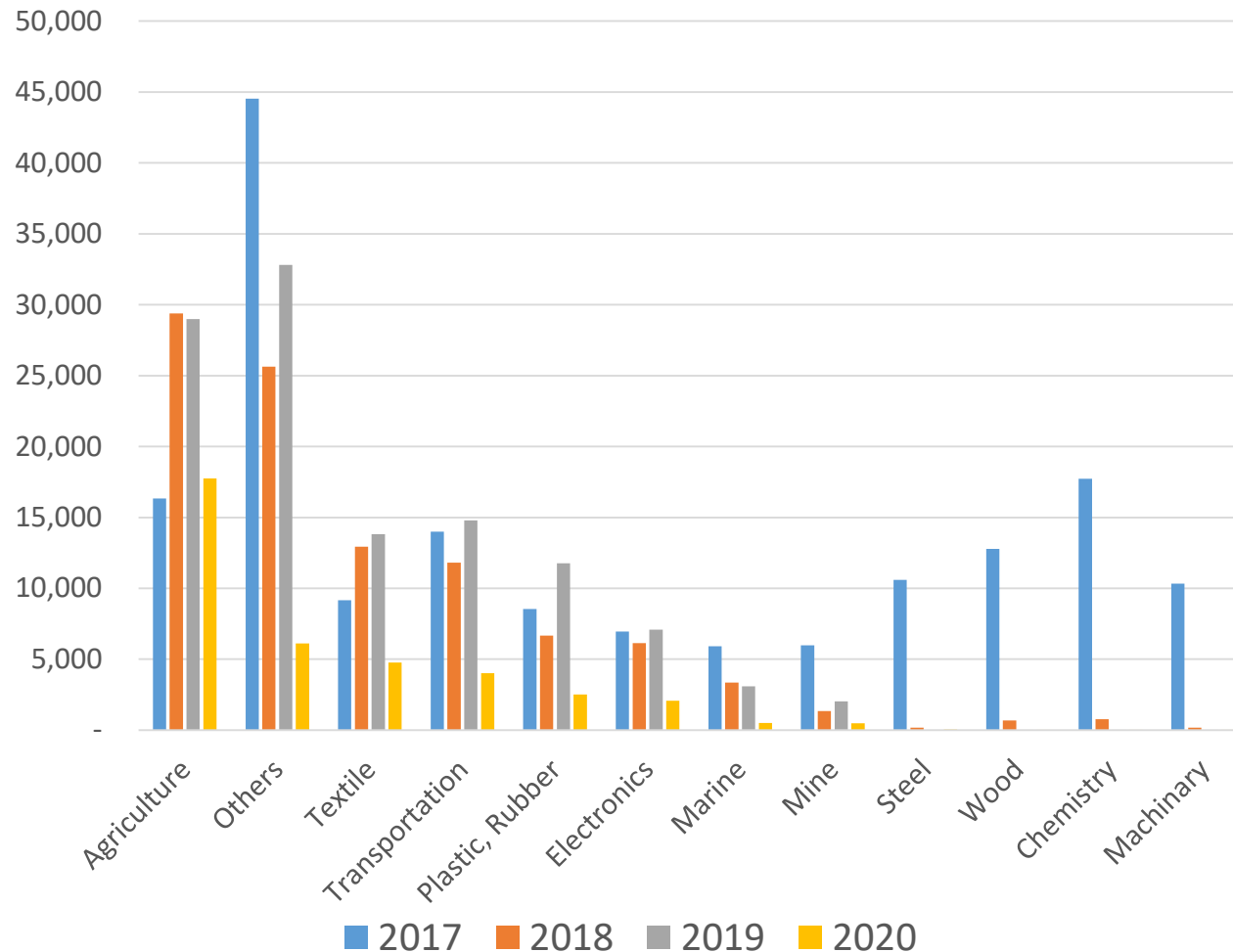
- **The recovery of trade with CN would be determined by the COVID19 situation in Liaoning Province**

- Trade w/ CN declined after the border closed in Jan. Recovered between April and June. But decrease in July Again.
- Last case of COVID19 in Liaoning was confirmed on August 2
- NK would try to recover imports from CN again from mid-September, 3~4 weeks after the last COVID19 patient in Liaoning Province
- Supplies deficient due to sanctions, COVID19, and flood must be procured via imports

Import trends by industries

Imports by industry, 1st half

Units: 10 thousands USD, %



- **Imports recovery, mainly in agriculture**
 - Imports decreased in all industries
 - Recovery accelerated as border blockade eases during May and June
- Imports by industry
 - **Agriculture: bigger than in 2017**
 - **Textile:** imports continued until March, but ceased from April.
 - **Electronics, Machinery, and Transportation:** Almost ceased due to sanctions

Imports from China

Agriculture

- The decline in agricultural imports from China is relatively small. No signs of urgent food crisis.

① What is the driving force? :

- maintained purchasing power of North Koreans despite sanctions. **Demand for processed foods is not declined.**

② Food localization and imports substitution Policy, by Chairman Kim Jong-un

- Minimize the decrease in imports of items that have a large impact on North Koreans' daily lives, even though industrial production is slowing down due to sanctions

Top 5 Agricultural Imports, 1st half

	2017			2018			2019			2020		
	Item	HS4	Value	Item	HS4	Value	Item	HS4	Value	Item	HS4	Value
1	Soybean oil and fractions	1507	4,875	Soybean oil and fractions	1507	5,727	Soybean oil and fractions	1507	5,300	Soybean oil and fractions	1507	5,297
2	Apple, Pear	808	2,051	Apple, Pear	808	4,355	Flour or Meslin powder	1101	3,597	Flour or Meslin powder	1101	3,380
3	Bird feathers, downy	505	1,254	Flour or Meslin powder	1101	3,962	Manufactured tobacco	2403	1,953	Sugar cane sugar	1701	1,928
4	Ethyl alcohol	2207	754	Manufactured tobacco	2403	2,266	Sugar cane sugar	1701	1,617	Manufactured tobacco	2403	1,817
5	Rice	1006	722	Sugar cane sugar	1701	1,184	Apple, Pear	808	1,522	Palm oil and fractions	1511	877

Medical Supplies

- **Increased medical imports**

- NK's medical imports have been increasing since 2018.
- The value in the 1st half of 2020 is similar to the 1st half of 2018.

- **Reasons for increasing medical imports**

- 1 **Preventing the spread of COVID19**
- 2 **Construction of Pyeongyang General Hospital**
 - Increase hospital equipment imports for the completion of Pyongyang General Hospital (Oct. 2020)
- 3 **International organization's medical supplies**
 - Humanitarian aid, which had been suspended due to nuclear test (2016-2018), resumed after the PyeongChang Olympics, and they are mainly medical supplies and food due to COVID
- 4 **Income improvement(quetionalbe)**
 - **NO evidence.** But some vitamins are being imported ?

Medical Supplies Imports (HS 8 digits, Top 5)

Unit: thousand USD

Rank	HS8	Item	2017	2018	2019	2020
1	30049090	Etc.	2,995	7,883	9,163	9,714
2	30042090	Etc.(including antibiotics)	550	1,582	2,705	2,118
3	30045000	Etc.(including Vitamins)	499	1,468	1,760	937
4	30022000	Vaccine	-	-	-	845
5	30046090	Etc.(including antimalarial vaccine)	-	-	-	395

Medical Equipment

- Medical equipment imports
 - therapeutic respirators and surgical X-rays for Pyongyang General Hospital and treatment of COVID19

Medical Equipment Imports (HS 4 digits, Top 3)

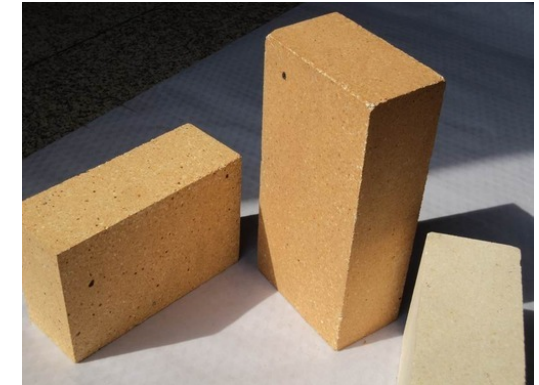
Unit: thousand USD

Rank	HS4	Item	2017	2018	2019	2020
1	9018	Devices for internal medicine, surgery, dentistry, and veterinary medicine	1,517	1,464	2,044	855
2	9019	Mechanical therapy, massage, psychological aptitude test, and other therapeutic respiratory devices	336	125	290	604
3	9022	Devices that use X-rays, alpha rays, beta rays, and gamma rays	49	82	43	209

Refractory Brick

- Significant increase in imports of refractory brick*
 - 3.2 millions USD was imported, only in June 2020.
 - 1st half of 2020: 33.7 millions. 1st half of 2019: 2.4 millions. 1st half of 2018: 1.4 millions. 1st half of 2017: 2.4 millions.
- * a brick that withstands high temperatures of 1,500~2,000°C used for fireproof purpose

- Construction and repair work of new facilities required for high heat
 - Construction of facilities for C1 chemical industry
 - Small and medium-sized hydropower plants**, steel mills
- ** Icheon County's Civil Hydro Power Plant (Gangwon Province)
and, Pihyeon No.2 Power Plant (Pyeonganbuk Province) completed in July



- What does this tell us?
 - From the New Year's address, the NK authorities have emphasized the construction of power plants and C1 chemical industry. Even though the border was closed due to COVID19, policy important items are being brought in.
 - One of small evidences that NK authorities are controlling the economy including agricultural and medical imports.

Chemistry

- Chemical imports can be classified into 4 categories
 - **Medical Materials, Soap/Detergent, Dye/Adhesive, Agricultural Materials**
 - analyzing the import of **industrial catalysts** will be the key to analyze industrial activities, but the detailed analysis is not possible yet, due to lack of relevant knowledge.
- Chemical imports declined, but medical imports increased

Classifying the top 10 chemical items by type

Medical materials	Soap/Detergent	Dye/Adhesive	Agricultural Materials
Medicines, Vaccines	Soap, organic surfactant, carbonate, shampoo, wax, hair spray, sodium hydroxide	Oxygen-functional amino compounds, paints, varnishes, adhesives for preparation	Nitrogen fertilizer, compound fertilizer, pesticide, herbicide

I Other items

- **Electronics/ Machinery/ Transportation**

- Imports are prohibited due to sanctions
- International organizations are bringing into NK for humanitarian aid (the volume is negligible)

- **Textile**

- Imports of textile intermediates continued to decline
- Unofficial trade of textile was almost stopped as border were blocked to prevent COVID

Exports to China

Top 5 Export Items

Top 5 export items, 1st half of year

Unit: 10 thousand USD, %

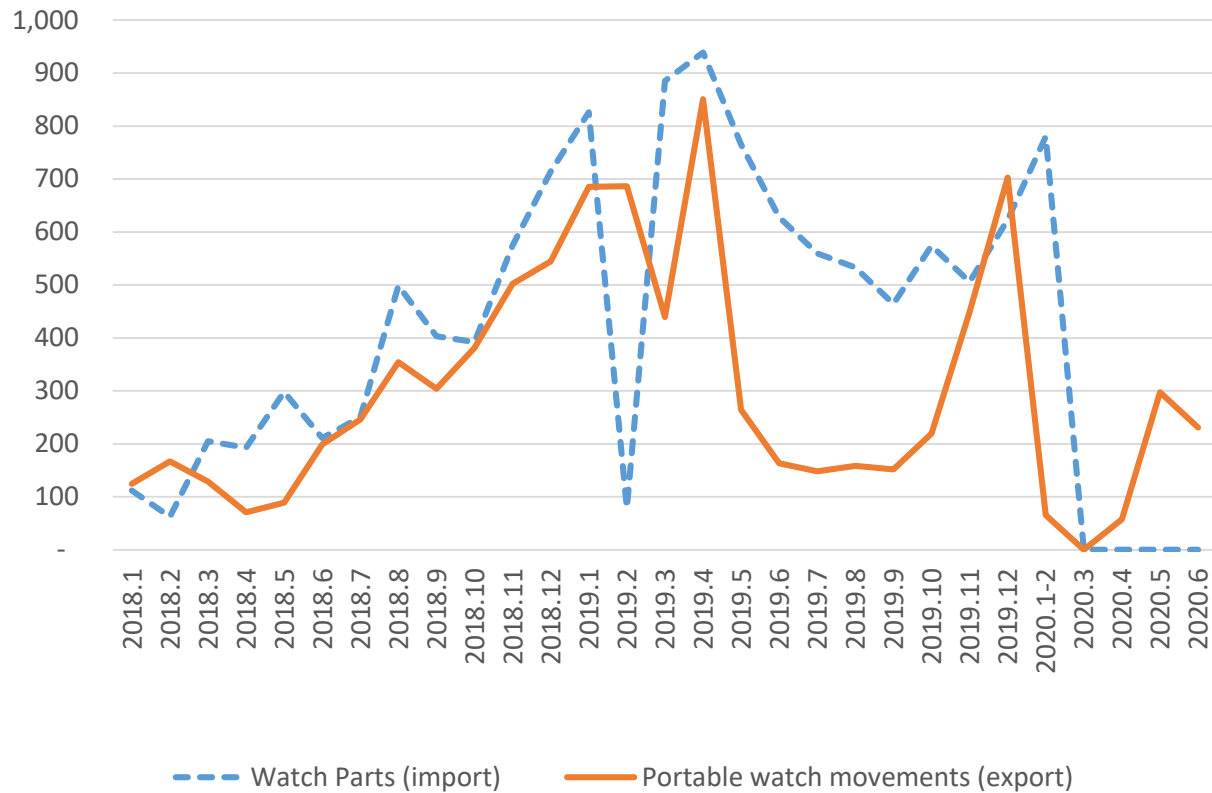
Rank	Items	HS4		2017	2018	2019	2020
1	Portable watch movement	9108	Value	-	779	3,089	651
			Growth rate		-	297	-79
2	Electricity	2716	Value	477	346	532	507
			Growth rate		-27	54	-5
3	Ferroalloy	7202	Value	991	1,169	1,393	292
			Growth rate		18	19	-79
4	Wig, beard, eyebrows	6704	Value	275	993	1,279	218
			Growth rate		261	29	-83
5	Tungsten ores and concentrates	2611	Value	37	889	693	205
			Growth rate		2302	-22	-70
6	Items carried by individuals	9804	Value	3,891	1,305	372	200
			Growth rate		-66	-71	-46

- Analyzing exports is **NOT meaningful** because of the small amount of exports to CN.
 - There is hardly any export
- Exports of **processed items** are **gradually increasing**.
 - Exports of portable watch movements, wigs, beards, and eyebrows increased after border closure eased in Jun.
 - Portable watch movement
 - : 3.0 million USD (May) → 6.5 million USD (June)
 - Wigs, beards, and eyebrows
 - : Suspension of exports (Jan. Feb.) → Resumption (Jun)
- Resumed export of **some minerals**
 - Almost stopped in Jan. and resumed in Jun.
 - Ferroalloy: 1.8 millions (Jan. Feb.) → 3.0 millions (June)
 - Tungsten ores: 0.5 millions (Jan. Feb.) → 2.1 millions (Jun.)

Import of Watch Parts & Export of Portable Watch Movements

Watch parts and Portable watch movements

Units: 10 Thousand USD



- Import of watch parts were suspended since April, but export of Portable watch movements continued.
 - Portable watch movements are manufactured and exported using imported raw materials in the 2nd half of 2019



Trade Analysis by Province and Industry

Imports by Provinces of China

- Mainly from Liaoning**

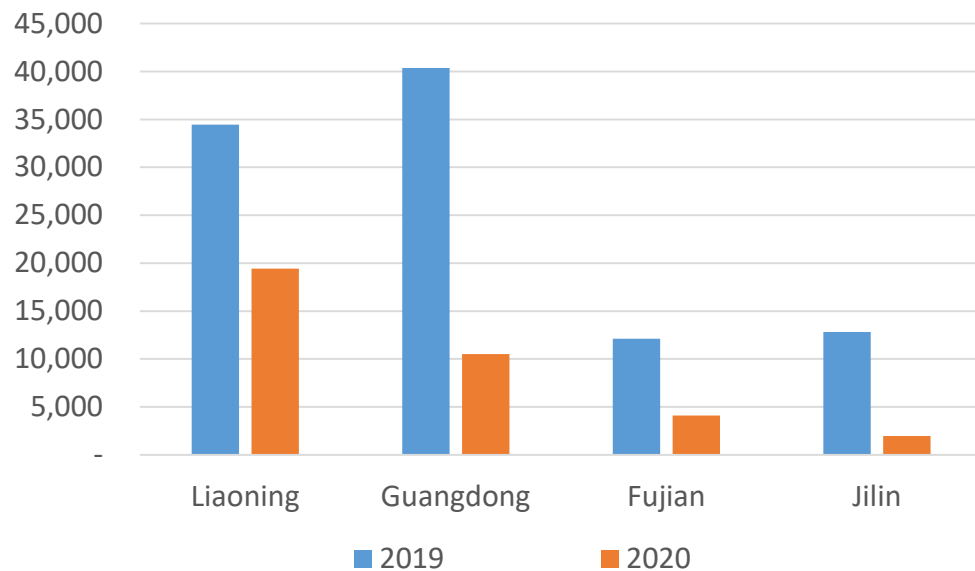
- In response to sanctions, NK diversified import regions from Liaoning & Jilin to Guangdong & Fujian during 2018-2019
- As COVID19 spreads, imports concentrated in Liaoning

- Major imports by Province**

- Liaoning/ Guangdong: **Agriculture/ Chemistry/ Textile/** Plastic/ Rubber
- Fujian: **Textile/** Wood
- Jilin: Other items which is not classified by HS code

Imports by provinces, 1st half of year

Unit: 10 thousands USD



Rank	2017		2018		2019		2020	
	Province	Value	Province	value	Province	value	Province	value
1	Liaoning	52,847	Guangdong	35,830	Guangdong	40,371	Liaoning	19,433
2	Jiangxi	35,655	Liaoning	32,953	Liaoning	34,445	Guangdong	10,504
3	Zhejiang	17,986	Jilin	7,565	Jilin	12,805	Fujian	4,114
4	Jilin	14,815	Hebei	4,869	Fujian	12,128	Jilin	1,970
5	Guangdong	7,296	Jiangsu	4,594	Beijing	3,550	Shangdong	941

Imports by province and industry

Import share by province and industry, 1st half of year

Unit: %

Industry	Liaoning		Jilin		Guangdong		Fujian	
	2019	2020	2019	2020	2019	2020	2019	2020
Agriculture	37.5	55.6	22.5	14.0	24.7	4.3	13.3	17.8
Chemistry	14.9	15.9	7.0	5.5	6.8	45.9	4.4	11.2
Electronics	0.0	0.0	-	-	0.0	6.2	-	-
Others	1.9	3.4	37.1	39.1	10.1	5.8	10.5	11.2
Textile	20.7	7.9	20.2	29.6	32.3	20.2	49.5	41.6
Machinery	0.0	0.0	-	-	0.0	0.0	-	-
Marine	3.2	2.2	4.1	1.3	3.1	0.4	-	-
Mine	0.7	0.3	2.9	5.6	2.0	1.3	2.7	0.3
Plastic/Rubber	18.3	12.5	5.3	2.8	12.9	8.1	10.9	2.4
Steel	0.0	0.0	-	-	0.0	0.0	-	-
Wood	2.5	2.1	1.0	2.2	8.1	7.8	8.6	15.5
Transport	0.0	0.0	-	-	-	-	-	-
Total	100	100	100	100	100	100	100	100

- **Guangdong Province: import decrease since COVID19**

- Guangdong ranked 1st in 2018-2019
- NO evidence, but suspected that NK engaged in unofficial textile trade with Guangdong since 2018
- However, since spread of COVID19, unofficial textile trade was stopped.

- **Jilin Province: Others**

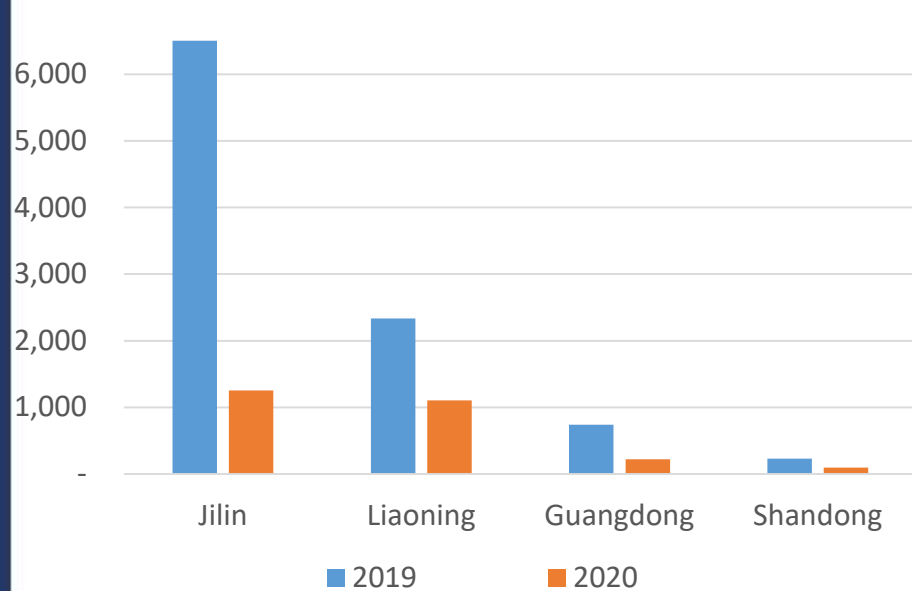
- Portable watch movements, and textile intermediates

Exports by Province of China

- Mainly to Liaoning and Jilin

Exports by provinces, 1st half of year

Unit: 10 thousand USD



Rank	2017		2018		2019		2020	
	Province	Value	Province	Value	Province	Value	Province	Value
1	Liaoning	29,833	Jilin	4,692	Jilin	6,803	Jilin	1,254
2	Jilin	23,324	Liaoning	4,089	Liaoning	2,332	Liaoning	1,106
3	Shangdong	13,965	Guangdong	932	Guangdong	738	Guangdong	221
4	Guangdong	8,138	Shangdong	341	Anhui	526	Shangdong	96
5	Jangsu	3,230	Sichuan	192	Shangdong	232	Zhejiang	26

Analysis on Broad Economic Categories

- Industrial production is slowing down due to sanctions and COVID19
 - Total imports declined, especially **capital and intermediate goods**.
 - Imports of intermediate and consumption goods in 2019 were increased in 2020
 - Corona has a negative impact on the NK economy
 - Overall, the economy is adversely affected. While the public sector including SOE is becoming difficult, private sector maintained purchasing power to some degree

Imports by BEC, 1st half of year

Unit: 10 thousands USD, %

		2017	2018	2019	2020
Intermediate Goods	Value	62,903	42,297	55,014	15,240
	Growth rate	-	- 32.8	30.1	- 72.3
Consumption Goods	Value	35,820	32,249	33,106	13,082
	Growth rate	-	- 10.0	2.7	- 60.5
Capital Goods	Value	21,900	1440	732	264
	Growth rate	-	- 93.4	- 49.2	- 64.0

Conclusion

Conclusion

- Sanctions have adversely affected the NK economy, **but COVID19 has a serious impact on the NK economy**
 - North Korea blocked the border between North Korea and China on January 22, 2020 to prevent the spread of Corona 19
 - Despite increasing economic difficulties, NK has not yet opened its borders. Why?
 - Resumption of import is inevitable due to goods not produced in NK.
 - On the one hand, NK is trying to block the influx of corona because NK cannot manage the virus.
 - On the other and, the NK economy is still within the control of the authorities meaning that food shortage is not serious enough to shake down NK society based on analysis of the 1st half of NK's trade.(NO evidence)
- However, **structural change has been witnessed since August.**
 - Severe flooding occurred due to typhoons and rainy seasons during August.
 - It will be difficult for NK economy to withstand the three things: sanctions, COVID19, and flood.
 - Whether NK can produce 4.5 million tons of grain seems to be the key by the end of 2020.
If it fails, a serious food shortage would occur in the spring of 2021.

Thank you

Biography of 2020 Roundtable on DPRK Agriculture

Mr. Hyoung-Joon Lim:

Hyoung-Joon Lim, a Korean national, is Head of WFP Korea office as of November 2011. Hyoung-Joon joined WFP in January 2002 as a JPO (Junior Professional Officer) and served in Honduras, Guinea Bissau, Lao PDR, managing complex emergency operations as well as development projects.



After his missions in the field, he moved to WFP HQ in Rome, Italy to serve as a donor relations officer in charge of Asia region until he was reassigned to his homeland, Korea.

In his 20s, Hyoung-Joon backpacked over 80 countries around the world for over a span of 3 and half years. He has been engaged in several publications: published his own travel essay “I swallowed earth” in 1999, was featured at a book “Global Young Korean” in 2008, given his appearance at KBS’s 60 minute TV documentary and also published “Let’s smile together,” a children’s book in May 2012 to tell global hunger and activities of WFP based on his personal experience.

Hyoung-Joon also contributed to newspapers, including a weekly column to Hankyoreh, one of major Korean Dailies from 1997 to 1998 and a monthly column to Hanwooln in mid 2000s. He is often invited to give lectures and speeches at various institutions, including Government ministries, Universities, research institutes. From March to June 2015, he was a visiting professor to Seoul National University to teach an English class, “International Development Practice”.

Hyoung-Joon received a B.A in language and diplomatic science, M.A in political science from H.U.F.S and MPA (Master of Public Administration) from John F. Kennedy School of Government, Harvard University. He is married with one son.

Yoojin RHEE, Ph.D.



Dr. Yoojin Rhee serves as Research Fellow at the Korea Development Bank's (KDB) Korean Peninsula New Economy Center. She is a political economy expert specializing in North Korea's finance, industry, and economic development needs. She is also a Standing Committee Member of the National Unification Advisory Council (NUAC), Expert Committee Member of the Presidential Committee on Northern Economic Cooperation, and a Korea member of the Council for Security Cooperation in the Asia-Pacific (CSCAP). Her most recent paper was "First Step for North Korea Development in Transition," presented at the conference, *Privatization of the Countries in Transition*, held in Prague, Czech Republic. Her recent publications include *North Korea's Industry* and *Korean Marshall Plan A&B in the Unification Era* (co-author) in addition to numerous research papers in the journals, *KDB North Korea Development* and *Journal of North Korean Studies Review*. Currently, she is working on the titles, "Current Situation on North Korea's Commercial Bank & Implications from Transition Countries," and "Thirty Years of Inter-Korean Economic Cooperation." Dr. Rhee can be reached at yjrhee@kdb.co.kr.



Jangho CHOI

Jangho CHOI is a research fellow (joined in 2014) in **Head of International Cooperation for Korea Unification Team**, Korea Institute for International Cooperation (KIEP), and focuses on **North Korea's trade, economy, and international relationship, and economic cooperation in North East Asia**. Prior to joining KIEP, Dr. CHOI has a bachelor's and a master's degrees from the Seoul National University (South Korea), both in economics, and a Ph.D. degree in Economics from Oregon State University (U.S.A). As for Ph.D. thesis, Dr. CHOI analyzes the impact of trade liberalization on multi-product firm's productivity via the adjustment of the number of, and amount of products.

Dr. Tae Jin Kwon:

Status Citizen of the Republic of Korea



Education

Ph.D. in Agricultural Economics May 1993

Washington State University, Pullman, WA, U.S.A

Field: Production Economics, Farm Management, Resource Economics,
and Applied Econometrics.

Dissertation: Bioeconomic Decision Rules for Weed Management in Wheat, Barley, and Peas:
An Econometric Approach.

M.A. in Economics, Aug. 1985.

Seoul National University, Seoul, Korea

Field: Farm Management and Production Economics.

Thesis: Economies of Size in Paddy-rice Production

B.S. in Agronomy, Feb. 1980.

Seoul National University, Seoul, Korea

Professional Experience

Present Director, Global Rural Development Center, GS&J Institute

Director, Center for North Korean and Northeast Asian Studies, GS&J Institute

Executive Committee Member, North Korean Policy Forum

Previous Vice President, Korea Rural Economic Institute (KREI)

Director, Global Agricultural Cooperation Center, KREI

Visiting Scholar, Washington State University

Adjunct Professor, Washington State University

Other Experience

Present Advisory Committee Member for Korea Meteorological Administration

Member, Inter-Korean Agricultural Cooperation Committee at NAFF

Consulting activities for NGOs(World Vision, Korean Sharing Movement etc.)

Publications

Strategies for Agricultural Reform Process in North Korea and Inter-Korean Cooperation, Korea Rural Economic Institute, 2004

A Study on Agricultural Development Cooperation between Two Koreas, Korea Rural Economic Institute, 2007

Integration between Overseas Agricultural Development and Global Agricultural Cooperation, Korea Rural Economic Institute, 2010

Study on the Governmental System for Unification of Korean Peninsula, Seoul National University, 2012.

Analysis of Major Factors Affecting Trade between North Korea and China, Korea Development Institute, 2013

Kim Jong-Un Era's New Economic Operating System, 2018.

Assessment of 2018 North Korean Economy, Korea Institute for Industrial Economics and Trade, 2019

Dath K. Mita, PhD:

Title: Senior Global Crop Analyst, Technical Lead and Satellite Imagery Archives Manager, in the Office of Global Analysis (OGA), Foreign Agricultural Service (FAS) United States Department of Agriculture (USDA)

Education: Earned PhD and Master of Science (MSc) degrees in Natural Resources Management from North Dakota State University (1995-2006) with emphasis in Landscape Ecosystems Modeling, Geospatial Modelling & Mapping Agricultural Systems and Wetlands, and GIS-Remote Sensing of Agriculture and Vegetation. Bachelor of Science degree (BSc) in Agricultural Sciences at the University of Malawi, Africa

Current Lead Responsibilities: Over 11 years of experience as a regional agricultural crop analyst, currently responsible for East Asia (China, Japan, South Korea, North Korea, Taiwan), prior to the current portfolio was responsible for South Asia (Australia, India, Pakistan, Nepal, Bangladesh, and Sri Lanka). The primary responsibility is to provide near-real-time crop conditions, agricultural information (forecasts and estimates of planted area, yield, production), and agricultural production systems analysis. The information is provided to the USDA World Agriculture Outlook Board (WAOB) for the monthly production and publication of the World Agricultural Supply and Demand Estimates (WASDE) and the World Agricultural Production (WAP). Also serve as a Technical Lead and Satellite Imagery Archives Manager for the International Production Assessment Division (IPAD) of USDA. The key responsibility is to provide expertise in the enhancement of the operational applications of the science and technology in satellite earth observation systems, geographic information systems (GIS) and crop assessment and monitoring models.

Prior professional engagements include (1) **Research Associate** at the University of Mississippi GeoInformatics Center (2006-2008), conducted research involving the integration and applications of NASA research results into operational natural resources management models; (2) **GIS-Remote Sensing Specialist** (2000-2005) for North Dakota State University and North Dakota Agricultural Statistics Service, conducting state-wide annual identification-classification-interpretation of land use and land use change detection for the development of crop statistics and estimates, provided GIS- remote sensing technical support to faculty, staff, and students; (3) Served as a **Land Resources Conservation and Evaluation Officer** for the Ministry of Agriculture, in Malawi-Africa (1988-1995).

BIOGRAPHY OF PRAVEEN AGRAWAL
REPRESENTATIVE & COUNTRY DIRECTOR
WFP DPRK

Praveen Agrawal is the Representative of the UN World Food Programme (WFP) in DPR Korea, managing a \$52.4 million programme focused on food security, nutrition and emergency preparedness.

Prior to his current appointment in the DPR Korea, he was the WFP Representative in Philippines from 2013-2017 and Colombia from 2007-2013;

As WFP representative he has been working to ensure that two WFP goals: mission and mandate are clear; the critical role WFP plays in continuing to respond to emergencies anywhere in the world with scale and speed; the ability to procure, build and deliver for the hungry and when needed or requested for other members of the humanitarian community; and secondly, to align WFP's work around government-led objectives, targets and efforts, as part of the United Nations Development System, ensuring we all do business together but differently; the SDGs sets forth an ambitious, people-centred framework of action for achieving sustainable development, and requires moving beyond saving lives to changing lives, focusing first on the people in greatest need

He has been seeking to eliminate hunger within our lifetimes by making food systems sustainable, by focusing on ending hunger and building revitalized partnerships with national governments, donor government, the private sector and others to achieve the SDGs.

Has been managing timely and effective responses to complex extremely volatile situations including climatic shocks with rapidly changing needs and high risks for emergencies.

Spearheaded and managed the Philippines Country office USD 130m response the Haiyan Crisis in 2013/14.

Prior to 2007 he was the Team Leader in Donor Relations Division at the headquarters in Rome, Italy where from 2003 to 2007 he worked, managed and built relationships with Governments, private sectors, civil society and foundations to raise awareness and funds for WFP worldwide. Specific responsibilities were in liaison with Latin America and the Caribbean, Spain, Portugal, Germany, Russian Federation, Switzerland amongst others.