

#### Reference Date: 05-July-2021

#### FOOD SECURITY SNAPSHOT

- Favourable start of 2021 main season and crops in good conditions
- Near-average aggregate food crop production estimated in 2020
- Cereal import requirements in 2020/21 marketing year estimated close to five-year average

# Favourable start of 2021 main season and crops in good conditions

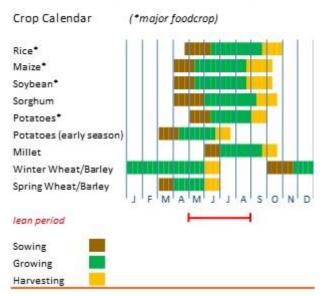
Sowing of the 2021 main season food crops, which account for about 90 percent of the annual output, was completed in June and harvesting is expected to start at the end of August. Weather conditions have been overall favourable since April, facilitating planting activities and resulting in above-average vegetation conditions as of mid-June (ASI map).

# Near-average aggregate food crop production estimated in 2020

Harvesting of the 2020 main season crops was completed in September/October 2020 and, based on official data, the output is estimated close to the five-year average at 5.1 million tonnes (cereal equivalent and paddy terms). A 5 percent increase compared with average levels in the area harvested partially offset yield losses caused by excessive soil moisture and waterlogging, following the passage of several typhoons and heavy rainfall from early August to mid-September 2020. The key producing provinces of South and North Hwanghae, South Pyongan as well as South and North Hamgyong, collectively known as the country's "Cereal Bowl", registered yields well below the five-year average. Rice production is estimated at 2.1 million tonnes (in paddy terms), 10 percent below the five-year average. The output of the main season maize crop is estimated at 2.2 million tonnes, close to the five-year average, while the production of soybeans slightly above-average at 230 000 tonnes. The 2020/21 minor early season winter/spring crops, including wheat, barley and potatoes, have been recently harvested and the output is officially estimated at an above-average level of 466 000 tonnes.

Overall, the 2020/21 aggregate food crop production is forecast at a near-average level of 5.6 million tonnes.

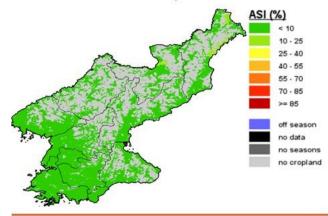
#### Democratic People's Republic of Korea



Source: FAO/GIEWS, FAO/WFP CFSAM 2008.

Democratic People's Republic of Korea - Agricultural Stress Index (ASI)

from start of season 1 to dekad 2, June 2021



Source: FAO/GIEWS Earth Observation System.

# Cereal import requirements in 2020/21 estimated close to five-year average

The total domestic utilization of cereals, soybeans and potatoes structurally exceeds the domestic availability and the total import requirements (in cereal equivalent) are estimated at a near-average level of 1.1 million tonnes for the 2020/21 marketing year (November/October). With commercial imports officially planned at 205 000 tonnes, the uncovered food gap is estimated at about 860 000 tonnes, equivalent to approximately 2.3 months of food use. If this gap is not adequately covered through commercial imports and/or food aid, households could experience a harsh lean period from August to October, when the 2021 main season crops will be available for consumption.

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### Democratic People's Republic of Korea

#### **Cereal Production**

	2015-2019 average	2020 forecast	change 2020/21 from average
	000 tonr	nes	percent
MAIN SEASON	5 216	5 095	-2.3
Paddy	2 351	2 113	-10.1
Maize	2 225	2 214	-0.5
Other cereals	171	161	-5.8
Potatoes	244	377	54.5
Soybeans	225	230	2.2
EARLY SEASON	396	466	17.7
Wheat & Barley	96	146	52.1
Potatoes	300	320	6.7
Total	5 612	5 561	-0.9

Note: percentage change calculated from unrounded data. Source: CBS 2020/2021 early season crop mission forecast



#### Reference Date: 26-October-2020

#### FOOD SECURITY SNAPSHOT

- Excess precipitation and floods characterized 2020
  main season
- Food insecurity prevails for large number of people

# Excess precipitation and floods characterized 2020 main season

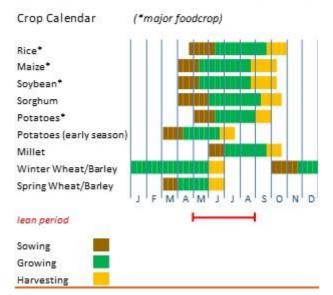
Harvesting of the 2020 main season crops, planted between April and June, is nearing completion. Main season crops include rice and maize, accounting for almost 90 percent of the total main season crop output, plus small quantities of soybeans, potatoes, millet and sorghum.

The rainy season normally starts in April and about 80 percent of the annual precipitation occurs between July and September. The spatial and temporal distribution of the 2020 seasonal rains was erratic over most cropping areas of the country. In April, rainfall amounts were below average and did not adequately replenish soil moisture deficits due to limited snow melting following poor snowfall between December 2019 and February 2020. This had a negative impact on land preparation and planting activities of the 2020 main season crops. Rains improved between May and July allowing the completion of plantings and had a positive impact on crop growth in most parts of the country. A succession of typhoons from early August to early September brought heavy rains, strong winds and triggered severe flooding that affected standing crops at maturity stage, just one month before the harvest. According to remote sensing data, surface soil moisture in August was close to the ten-year maximum in the key cereal producing provinces of North and South Hwanghae and North and South Pyongan. Although no precise crop damage estimates are available, it is likely that waterlogging stress due to excess soil moisture at the final stages of crops' development may have significantly reduced yields. These rains, however, may have benefited crops in the areas not affected by the floods and contributed to replenishing water levels in the main reservoirs, increasing the availability of irrigation water for the 2021 winter wheat and barley crops, currently being planted.

# Food insecurity prevails for large number of people

A large number of people in the country suffers from low levels of food consumption and poor dietary diversity. The economic constraints, exacerbated by the global impact of the COVID-19

### Democratic People's Republic of Korea



Source: FAO/GIEWS, FAO/WFP CFSAM 2008.

GIEWS global information and early warning system on food and agriculture

pandemic, have increased the population's vulnerability to food insecurity. The recent floods and typhoons have caused the loss of human lives, affected large number of people and damaged housing and infrastructure.

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#### Reference Date: 13-May-2019

FOOD SECURITY SNAPSHOT

- Production prospects of 2018/19 early season crops unfavourable
- Aggregate crop production in 2018 estimated at ten-year low due to unfavourable weather conditions and limited supplies of agricultural inputs
- Cereal import requirements estimated at elevated level
- About 40 percent of population estimated to be food insecure and in urgent need of assistance

# Prospects for 2018/19 early season crops unfavourable

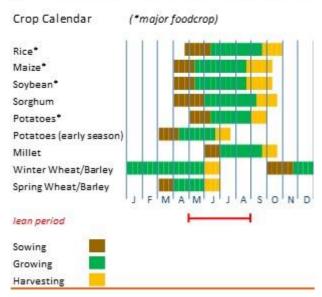
The harvest of the early season crops (winter/spring wheat and barley, and potatoes) is expected to start in early June. Precipitation since the beginning of the season in November have been below average with erratic spatial and temporal distribution over most of the country. Limited snow coverage, due to exceptionally low snowfall during the winter months, exposed wheat and barley to freezing temperatures, with consequent loss of germinated crops. In addition, below-average spring rains in March and April, critical months for crop development, coupled with reduced soil moisture that normally comes from snow melting, further affected vegetation conditions of already weak crops (see VCI map).

According to a joint FAO/WFP Rapid Food Security Assessment Mission (for full report visit <u>GIEWS website</u>), conducted from 29 March to 12 April, the production of early crops is forecast at 307 000 tonnes, 24 percent below the 2017 above average level. In addition to the unfavourable weather conditions, the expected decrease is attributed to shortages of irrigation water and other agricultural inputs, including fertilizers and crop protection materials. Rains remained below average in April and, if they do not improve in the next two dekads of May, the final output for early season crops may be even lower.

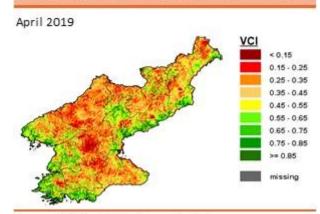
# Aggregate food crop production in 2018 estimated at ten-year low

Harvesting of the 2018 main season crop was completed in September/October last year. An extended period of below-average rains, coupled with abnormal high temperatures (up to 40°C) from mid-July to mid-August 2018 and shortage of water for irrigation, affected the 2018 main season crops during the critical pollination stages, resulting in crop losses and sharply

#### Democratic People's Republic of Korea



Source: FAO/GIEWS, FAO/WFP CFSAM 2008.



Democratic People's Republic of Korea-Vegetation condition index (VCI)

Source: FAO/GIEWS Earth Observation System.

reduced yields. The effects of the dry weather conditions were compounded by shortages of fuel and electricity, which negatively affected water pumping, as well as by reduced supply agricultural inputs. According to official estimates, the 2018 main food crop production, mostly rice, maize and soybeans, has decreased throughout the whole country. The highest losses were registered in the main producing provinces, namely North and South Hwanghae, North and South Phyongan and South and North Hamgyong, collectively known as the country's "Cereal Bowl". Heavy rains in late August to the first dekad of September, triggered flash floods in parts of the main crop producing areas of North and South Hwanghae provinces, causing damage to crops just before the harvest. As a result, the 2018 main season food crop production (in cereal equivalent and paddy terms) is officially estimated at a low level of 4.5 million tonnes, 11 percent below the 2017 average output.

Overall, the 2018 aggregate food crop production, including the ongoing 2018/19 early season crops, is estimated at 4.9 million tonnes, 12 percent below the previous year's near-average level and the lowest since 2008/09.

# Cereal import requirements in 2018/19 estimated at elevated level

Total cereal import requirements in 2018/19 (November/October) are estimated by the FAO/WFP Rapid Food Security Assessment Mission to reach 1.59 million tonnes, three times higher than the previous five-year average. This is mainly the result of the reduced production and higher-than-usual post-harvest losses, as shortages of fuel and electricity hampered the timely transport and processing of crops as well as the ventilation of stocks. With commercial imports officially planned at 200 000 tonnes and food assistance (already received or pledged) set at about 21 200 tonnes, the uncovered deficit is estimated at an elevated level of about 1.36 million tonnes.

# About 40 percent of population estimated to be food insecure and in urgent need of assistance

According to the FAO/WFP Rapid Food Security Assessment Mission, large numbers of people suffer from low food consumption levels and poor diet, with a reduced intake of animal and vegetable proteins. Most of interviewed households reported severe food-related coping strategies, including reducing consumption by adults for children to eat and reducing meal sizes. Urban households, who normally rely on relatives in rural areas to access food and diversify their consumption, are no longer able to do so to the same extent, due to increasing food shortages faced in the rural areas.

Overall, the FAO/WFP Rapid Food Security Assessment Mission estimated that 10.1 million people (40 percent of the total population) are food insecure and in urgent need for food assistance. The situation could further deteriorate during the lean season between May and September, if no proper and urgent humanitarian actions are taken.

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### Democratic People's Republic of Korea

#### Food Crop Production

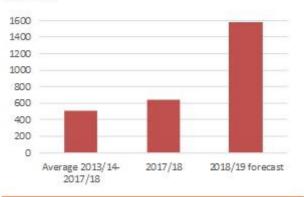
	2013-2017			change
	average	2017	2018	2018/2017
		000 tonnes		percent
MAIN SEASON	5 178	5 105	4 5 4 6	-11.0
Paddy	2 479	2 383	2 088	-12.4
Maize	2 207	2 200	1876	-14.7
Other cereals	117	151	197	30.5
Potatoes	166	148	249	68.2
Soybeans	210	223	135	-39.5
EARLY SEASON	345	404	307	-24.0
Wheat&barley	61	83	57	-31.3
Potatoes	284	321	250	-22.1
Total	5 5 2 3	5 509	4 853	-11.9

Note: percentage change calculated from unrounded data. Source: CBS 2018/2019 early season crop mission forecast.

### Democratic People's Republic of Korea

#### Cereals Imports

000 tonnes



Note: Includes rice in milled terms. Split year refers to individual crop marketing years (for rice, calendar year of second year shown).

Source: FAO/GIEWS Country Cereal Balance Sheets.



#### Reference Date: 24-January-2018

#### FOOD SECURITY SNAPSHOT

- Favourable weather conditions at start of 2017/18 winter cropping season
- Main season cereal production in 2017 estimated at below-average level
- Cereal import requirements in 2017/18 forecast at above-average level

# Favourable weather conditions at start of 2017/18 winter cropping season

Planting of the 2017/18 minor winter wheat and barley crops was completed in November 2017. Remote sensing data indicates near-average precipitation since October 2017 over most of the country, which facilitated planting activities and early crop development. Assuming normal weather conditions for the remainder of the cropping season, current prospects for the 2017/18 winter crops are generally favourable.

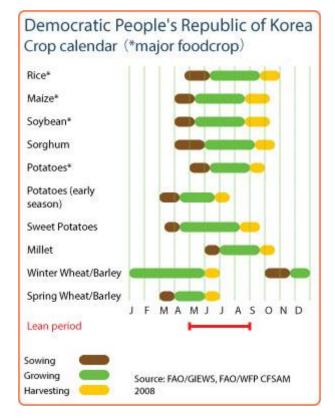
# Main season cereal production in 2017 estimated at below-average level

Harvesting of the 2017 main season cereal crops was completed in October. A severe dry spell from April to June constrained planting activities of the 2017 main season crops and affected the yields of early-planted crops. Rains resumed in late July 2017 over most cropping areas, significantly improving growing conditions for maize, but were too late to reverse the damages already inflicted by the earlier dry weather to the rice crop. Overall, main season cereal production in 2017 is estimated to be below the average of the previous five years.

# Cereal import requirements in 2017/18 forecast at above-average level

The total cereal import requirements in 2017/18 (November/October) are preliminarily forecast at above-average level.

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#### Reference Date: 25-July-2017

#### FOOD SECURITY SNAPSHOT

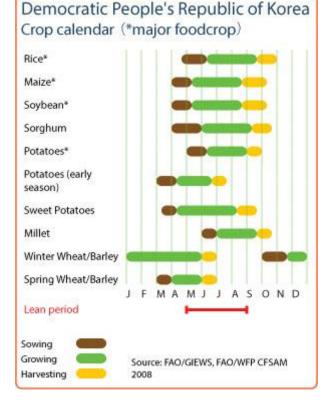
- Unfavourable prospects for 2017 main season food production
- The 2016/17 aggregate food production increased from previous year's reduced level
- Severe drought raises serious food security concerns for large numbers of people

# Unfavourable prospects for 2017 main season food<sup>1</sup> production

A severe dry spell from April to June has acutely constrained planting activities for the 2017 main season and adversely affected yield potential of the early-planted crops. Provinces of South and North Pyongan, South and North Hwanghae and Nampo City, which collectively account for close to two-thirds of the overall main cereal production, were the most affected. Although a detailed assessment of the crop damage is not yet available, early official estimates, provided by the National Coordinating Committee (NCC) on 23 June, indicate that about 50 000 hectares of cropland have been severely affected by the prolonged dry spell. This includes about 30 000 hectares of paddy fields and over 20 000 hectares of maize. Although the early estimate of the drought-affected area amounts to only around 5 percent of the total national planted area for the main season paddy and maize crops, these figures are likely to have increased significantly due to poor rains until the end of June. Other 2017 main season crops, including spring potatoes and soybeans, are also expected to be adversely affected by the drought.

# The 2016/17 food production<sup>2</sup> increased from previous year's reduced level

The aggregate 2016/17 food crop production is estimated by the FAO at 5.96 million tonnes (in cereal equivalent and paddy terms), 10 percent higher than the 2015/16 reduced level. The 2016 main season food crop production is estimated at 5.44 million tonnes, a 14 percent rebound from the 2015 drought-reduced level. The year-on-year increase is mostly attributed to a 30 percent recovery in 2016 paddy output, estimated at 2.54 million tonnes. At this level, however, paddy output in 2016 is still well below the output gathered between 2012 and 2014. Similarly to paddy, the output of other crops also rebounded from the last year's low level. The 2016 production of soybeans is officially estimated to have increased by 28 percent to 282 000 tonnes, while the output of the 2016 main season



# Democratic People's Republic of Korea

Food crops production		2016/17 estimate	change 2015/16 2016/17
	000 tonnes		percent
Rice (paddy)	1 946	2 5 3 6	30
Maize (including sloping land)	2 491	2 3 9 8	-4
Wheat and barley	133	60	-55
Others	859	962	-17
Total	5 4 2 9	5 956	10

1 Includes rice, cereals, soybeans and potatoes in cereal equivalent. Note: percentage change calculated from unrounded data. Source: FMO/GIEWS Country Cereal Balance Sheets

potatoes is set at 274 000 tonnes, more than 60 percent above the level of 2015. Output of other crops, including sorghum, millet and buckwheat, remained close to last year's high level. The 2016 maize output is officially estimated to have decreased by 4 percent to 2.2 million tonnes, as a result of a small contraction in the area planted and yields, mainly due to flood damages in the North Hamgyong province. As for the 2016/17 early season, the prolonged period of dry weather from April to June 2017, a critical period of grain filling, has negatively affected maturing crops, considerably reducing yields. Pending a more detailed official assessment, the FAO lowered the initial production forecast and currently estimates the 2016/17 early season crop production at 310 000 tonnes (cereal equivalent), over 30 percent less than in 2016. The early season potato production is estimated by the FAO at 250 000 tonnes, 20 percent down from the previous year's level, while the small wheat and barley harvest is forecast at about 60 000 tonnes, less than half of the last year's level.

#### Severe drought raises serious food security concerns for large numbers of people

FAO forecasts the total cereal import requirements in 2016/17 (November/October) at 458 000 tonnes. Assuming the official import target of 200 000 tonnes of cereals is met, there is an uncovered deficit of 258 000 tonnes for the current marketing year. This food gap is lower than the level of the 2015/16 marketing year, but still higher than the 2012/13 and 2014/15 levels.

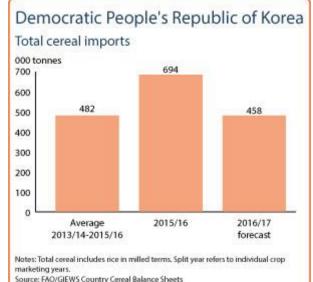
The Public Distribution System (PDS) remains the main source of food for around 18 million people, 70 percent of the total population. Given the dependence on national cereal production, the drop in the 2016/17 early season output worsened the food insecurity for a large proportion of the population. Although the early season harvest is relatively small, accounting for about 10 percent of the total annual cereal production, these crops are an important source of food during the lean season, which lasts from May to September. With expectations of reduced production of the main 2017 season crop, the food security situation is likely to deteriorate in the 2017/18 marketing year.

#### Immediate assistance

Most of the country's population is critically dependent on agriculture for their livelihoods. At this point, it is vital that farmers receive appropriate and timely agricultural input assistance, including irrigation equipment, such as water pumps and sprinklers to safeguard the planted fields of the main 2017 crop season. It is also recommended to start as soon as possible with the rehabilitation and upgrade of irrigation schemes. This will minimize losses of water, increasing timely water availability. Increased food imports, commercial and/or through food aid, would be required during the three lean months (July to September) until the harvest of the 2017 main season from the end of September to October, in order to ensure adequate food consumption for the most vulnerable people.

<sup>1</sup> Includes rice, cereals, soybeans and potatoes in cereal equivalent. <sup>2</sup> Concerns the 2016 main season crops harvested in September and October 2016, and 2016/17 early season crops harvested by June 2017.

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#### Reference Date: 16-December-2016

#### FOOD SECURITY SNAPSHOT

- Favourable weather conditions at start of 2016/17 early cropping season
- Main season cereal crops in 2016 partially recovered from last year's reduced level
- Higher cereal imports in 2015/16 marketing year (November/October)
- Floods in late August negatively impacted livelihoods and food security of affected households

# Favourable weather conditions at start of 2016/17 early cropping season

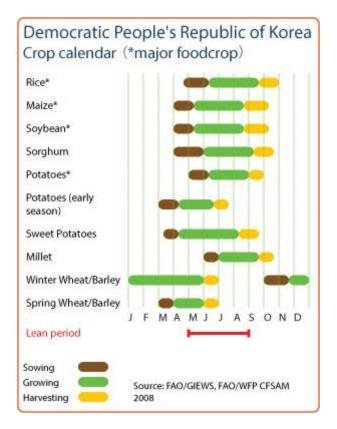
Planting of the 2016/17 minor winter wheat and barley crops was completed in November. Remote sensing data indicates nearaverage precipitation since October over most of the country, which facilitated planting activities. Improved water availability in the main reservoirs, following good rains during the July-August rainy season, is also expected to benefit crop development.

# Main season cereal crops in 2016 partially recovered from last year's reduced level

Harvesting of the 2016 main season crops was completed in October. After a reduced cereal output in 2015 due to dry weather conditions, abundant rainfall during the cropping season and improved water availabilities for irrigation benefitted the 2016 main season crops. However, excessive precipitation in late August in northeastern parts of the country triggered localized flooding causing damage to about 28 000 hectares of standing crops (mostly paddy and maize), representing around 2 percent of the total area planted to the main season crops (see map). In addition to crop losses, floods caused severe damage to housing, infrastructure and the agriculture sector. Pending final official information, FAO estimates the 2016 rice production at 2.4 million tonnes, a recovery of 23 percent from last year's drought-affected output but still below the previous three-year average. Maize output in 2016 is estimated at near-average levels.

# Higher cereal imports in 2015/16 marketing year

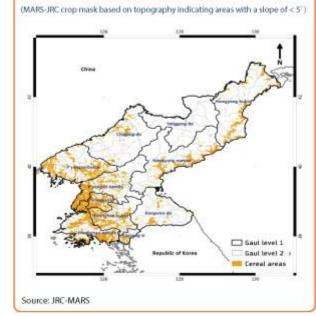
FAO estimates the cereal imports for the 2015/16 marketing year (November/October) at 694 000 tonnes. This figure is almost four times larger than in 2014/15, mainly as a result of the reduced output in 2015.

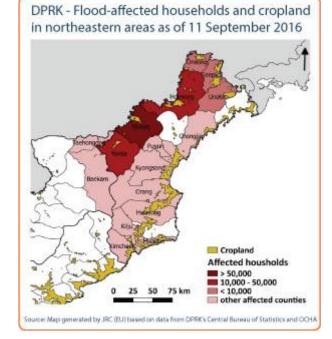


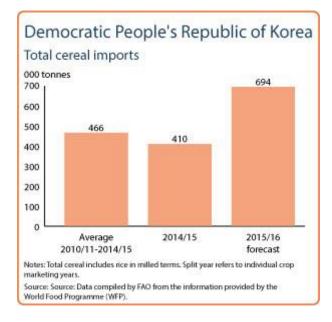
# Severe localized floods affected large number of people in northeastern parts

Reports indicate that, following late August and early September floods, at least 107 000 people were displaced and some 140 000 people were estimated in urgent need of relief assistance. Particularly affected were the areas in the North Hamgyong Province along the Tumen River and its tributaries. Official information indicates severe losses of stored crops and seeds, as well as small livestock, including pigs and poultry. Furthermore, standing crops from kitchen gardens, which contribute significantly to the Democratic People's Republic of Korea's household nutrition and income, were also significantly affected. The adverse impact of the floods is expected to further deteriorate the already dire food security situation of the affected households.

#### DPRK - Main cereal areas











#### Reference Date: 19-September-2016

#### FOOD SECURITY SNAPSHOT

- Main season cereal crops in 2016 expected to partially recover from last year's reduced level
- Higher cereal import requirement in 2015/16 marketing year (November/October)
- Floods in late August negatively impacted livelihoods and food security of affected households

# Main season cereal crops in 2016 to partially recover from last year's reduced level

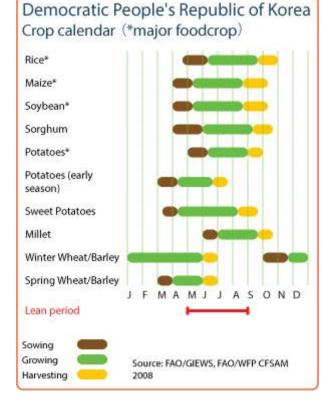
Harvesting of the 2016 main season crops is ongoing and will continue until mid-October. Generally favourable weather conditions during the season benefitted crops, although excessive precipitation in late August in northeastern parts of the country triggered localized flooding, causing loss of lives, as well as severe damage to housing, infrastructure, and the agriculture sector. A comprehensive evaluation of the crop damage is not yet available, but preliminary official estimates indicate that 27 411 hectares of standing crops (mostly paddy and maize), representing only 2 percent of the total area planted to the main season crops (see map), have been damaged. Prior to the floods, the 2016 rice production was forecast by FAO at 2.4 million tonnes, a recovery of 23 percent from last year's drought-affected output but still below the previous three-year average. Similarly the 2016 maize output was expected at near-normal levels.

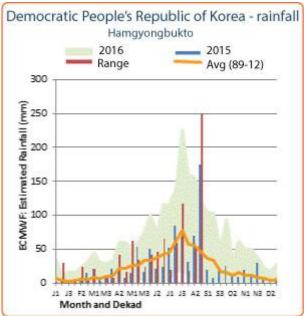
# Higher cereal import requirement in 2015/16 marketing year

FAO estimates the cereal import requirement for the 2015/16 marketing year (November/October) at 694 000 tonnes. This figure is almost four times larger than in 2014/15, mainly as the result of the reduced output in 2015.

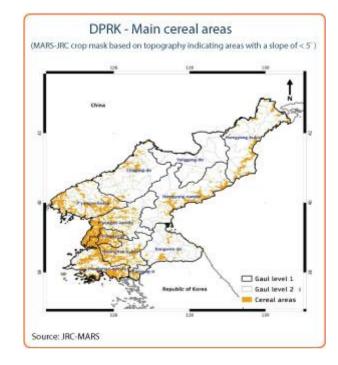
# Severe localized floods affected large number of people in the northeastern parts

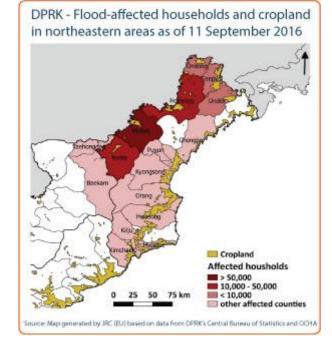
Reports indicate that following late August and early September floods at least 107 000 people were displaced and some 140 000 people are estimated in urgent need of relief assistance. Particularly affected were the areas in the North Hamgyong province along the Tumen River and its tributaries. In the most affected areas, severe losses of stored crops and seeds, as well as small livestock, including pigs and poultry, are reported. Furthermore, standing crops from kitchen gardens, which

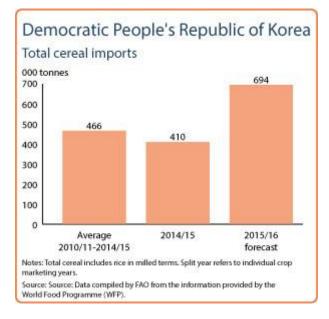




contribute significantly to the Democratic People's Republic of Korea's household nutrition and income, were also significantly affected. The adverse impact of the floods is expected to further deteriorate the already dire food security situation of the most affected households. At this point, it is critical that affected farmers receive appropriate and timely agricultural assistance. This should include wheat, barley and potato seeds for planting of the imminent winter/spring season crops; fertilizers; equipment for planting and harvesting; drying nets and post-harvest equipment, as well as water and pest-resistant storage containers for seed storage. Urgent restocking of livestock is also required to avoid a further fall in animal protein intake.











#### Reference Date: 16-June-2016

#### FOOD SECURITY SNAPSHOT

- Early prospects for 2016 main season cereal crops favourable
- Aggregate food crop production in 2015 declined due to prolonged dryness
- Higher cereal import requirement forecast by FAO for 2015/16 marketing year (November/October)
- Food rations sharply reduced since July 2015

# Early prospects for 2016 main season food crops favourable

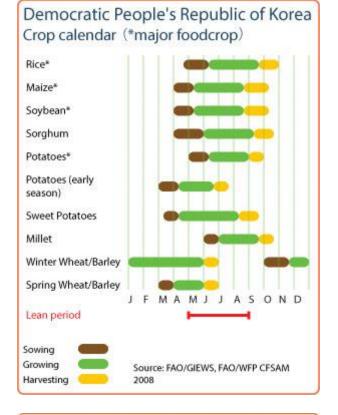
Planting of the 2016 main season food crops, including rice, maize, soybeans and potatoes, normally starts in April and continues until mid-June. Normal to above-normal rainfall since April over central and southern "food-basket" provinces of the country, coupled with improved supplies of irrigation water, benefitted planting operations and early crop development. Assuming favourable precipitation for the remainder of the season, the 2016 main season cereal output is expected to recover from the drought-affected harvest of 2015.

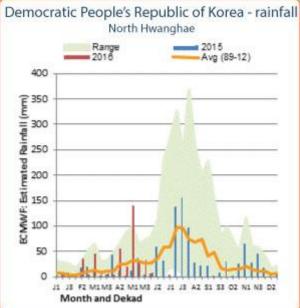
### Production of 2016 early season crops expected to recover from last year's sharply reduced level

Latest official production forecasts from the Ministry of Agriculture (MoA) put the 2016 early season potatoes, wheat and barley crops, currently being harvested, at 363 000 tonnes (cereal equivalent), 21 percent higher than the sharply-reduced 2015 level. The expected production gain is the result of favourable weather during the cropping season and improved water availability in the main reservoirs that boosted yield prospects. Early season potato production in 2016 is forecast by FAO at 297 000 tonnes, 27 percent above the previous year's level, while the combined production of wheat and barley is expected to almost double from last year's level and reach 66 000 tonnes.

### Food<sup>1/</sup> crop production declined in 2015 due to poor rains and reduced availability of water for irrigation

The aggregate 2015 food crop production is estimated 5.42 million tonnes, 9 percent down from 2014. This number includes estimates from MoA for the 2015 main season, and FAO's forecasts for the 2016 early season crops. As the MoA





estimate does not include cultivated area from sloping land and household gardens, FAO, based on the estimates from previous Crop and Food Security Assessment Missions, has added 550 000 hectares of sloping land and 25 000 hectares of household gardens.

The 2015 main season food crop production is estimated at 4.78 million tonnes, 11 percent below 2014's output. The decrease is mostly attributed to a 26 percent drop in paddy production, estimated at 1.95 million tonnes, due to lingering precipitation deficits and low water availabilities for irrigation. Similarly, despite an expansion in plantings, the 2015 maize output is officially estimated to have decreased by 3 percent to 2.29 million tonnes, due to the prolonged dry spell. By contrast, the output of more drought-resistant minor crops, such as soybeans, millet and sorghum, increased in 2015 as a result of both larger plantings and higher yields. The production of sloping land and household gardens, which is not included in the official data, is estimated by FAO at 228 000 tonnes for maize and 50 000 tonnes for potatoes (cereal equivalent), respectively.

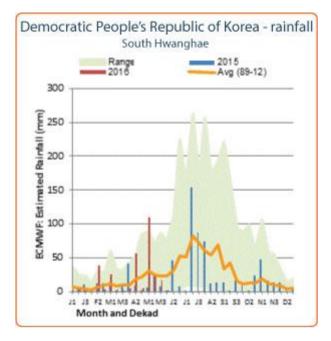
# Higher cereal import requirement forecast by FAO for 2015/16 marketing year

Total food requirements for the 2015/16 marketing year (November/October) are forecast by FAO at 5.49 million tonnes in cereal equivalent (rice in milled terms), resulting in a cereal import requirement of 694 000 tonnes. Assuming the official import target of 300 000 tonnes of cereals is met, an uncovered deficit of 394 000 tonnes for the current marketing year is forecast. This gap is almost four times larger than in 2014/15 and the highest since 2011/12.

### Food rations sharply reduced since July 2015

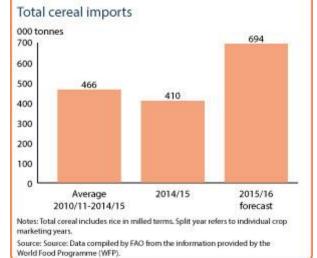
The Public Distribution System (PDS) is the main source of cereals for at least 70 percent of the total population (around 18 million people). Given the strong dependence on national cereal production, PDS ration sizes tend to vary by season and by month during the year. The monthly average rations since July 2015 were below those distributed during the same period in 2014 and the average level between 2011/12 and 2013/14. PDS rations, set at 370 grams/ person/day between January and March 2016, were reduced to 360 grams/person/day since April. This is the lowest rate since 2010/11 (see Fig. 1), and well below the Government's target of 573 grams/person/day, mainly due to an overall shortage of food in the country.

 $\underline{1}/$  Includes rice, cereals, soybeans and potatoes in cereal equivalent.

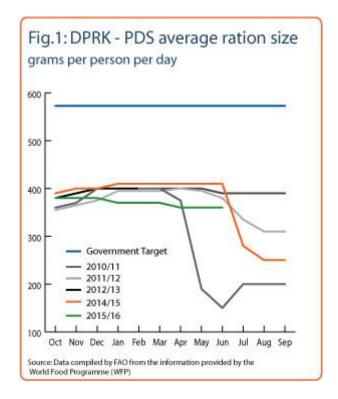


#### DPRK: National aggregate food production (in cereal equivalent 2013/14 - 2015/16 (000 tonnes)

	2013/14	2014/15	2015/16	Change 2015/16 over 2014/15
Paddy	2 900.9	2 626.4	1945.8	-25.9%
Maize	2 002.0	2 349.1	2 287.8	-2.6%
Others	1 025.4	967.9	1 185.6	22.5%
Total including sloping land and gardens	5 928.3	5 943.1	5 419.2	-8.8%



### Democratic People's Republic of Korea



### **Democratic People's Republic of Korea**



Reference Date: 09-September-2015

#### FOOD SECURITY SNAPSHOT

- Main season 2015 cereal production forecast to decline sharply from last year, due to prolonged dry spell
- Sharply reduced 2014/15 early season crops for second consecutive year
- Drastic reduction in food rations distributed in July and August
- Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

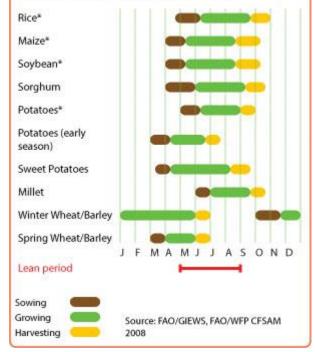
### Despite some rains in July and early August, drought damage to 2015 main season cereal crops still serious

Harvesting of the 2015 main season maize, soybeans and sorghum has just started and would continue until mid-October. Harvesting of the rice crop is expected to start from late September. Severe rainfall deficits between mid-April and mid-July, coupled with short supplies of irrigation water, resulted in area reductions of the 2015 staple rice crop. The yield potential of the early-planted crops, including maize and soybeans were also adversely affected.

North and South Hwanghae, which together normally account for more than one-third of the main season cereal production, were the most affected by the dry weather. Rainfall improved between the second dekad of July to the first dekad of August over most of the country (see rainfall charts), providing some relief to crops, but were rather too late to reverse the damage already inflicted by the dry weather. The heavy rains reportedly triggered some localized floods across North Hamgyong and Rason provinces, located in the northeastern part of the country, causing severe damage to housing, infrastructure, including schools, roads and bridges. In addition, losses to stored food are likely to be high. A detailed assessment of the crop damage is not yet available, but preliminary official estimates, as of early September, indicate that only about 700 hectares of standing crops were adversely affected by floods and 125 hectares were lost, representing less than 1 percent of the area planted to the main season crops. According to remote sensing data, rains from mid-August returned to below-average levels over the main cereal producing areas, including the provinces of South and North Hwanghae and South and North Pyongan.

FAO's forecast for the 2015 rice production remains at low of 2.3 million tonnes, 12 percent below last year's drought-affected output.

### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)



DPRK: Production of the 2014 and 2015 early season and main season food crops (\*tonnes, \*\* 600 tonnes)

Early Season*	2010-2014	2013/14	2014/15	Change
Wheat and Barley	114517	76 587	54 000	-30%
Potatoes	277 916	289 580	232 889	-20%
Main Season**	2010-2014	2014	2015	Change
Paddy	2 6 2 2	2 6 2 6	2 300	-12%

# Early season crops sharply reduced for second consecutive year

Latest estimates, released by the Ministry of Agriculture in August, put the 2014/15 main early season potatoes at 232 889 tonnes, 20 percent down from last year, while the total winter wheat and barley harvest is estimated at 36 084 tonnes, a decrease of 32 percent compared to the previous year. Accordingly, FAO reduced its earlier forecast for the 2014/15 aggregate wheat and barley production, including also small amounts of spring wheat and barley, to 54 000 tonnes, down 30 percent year-on-year. The sharp contraction for the early season crops reflects reduced area due to shortages of seeds, following the reduced harvest of the previous year and lower yields stemming from the dry weather between April and July, which affected the crops at their final development stage.

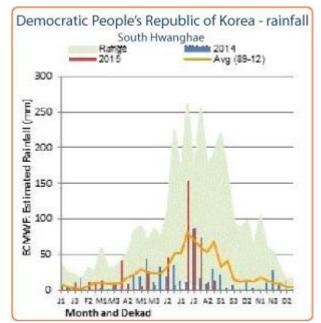
# Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

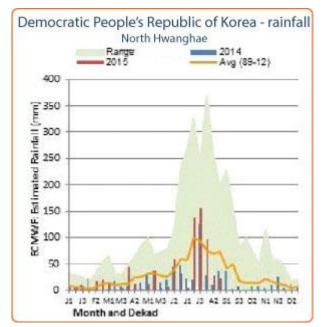
With total cereal equivalent requirements for the 2014/15 marketing year (November/October) estimated by FAO at 5.49 million tonnes, there is an import requirement of about 421 000 tonnes. With an expected Government import of about 300 000 tonnes of cereals, an uncovered deficit of 121 000 tonnes is forecast for the 2014/15 marketing year.

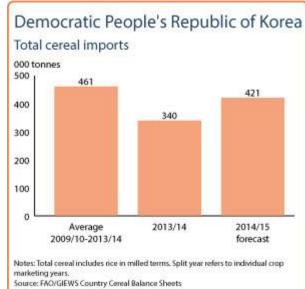
# Drastic reduction in food rations distributed in July and August

The Government has reduced the food rations for households dependent on the Public Distribution System (PDS) twice during July from 410 grams/person/day distributed between January to June 2015 to 310 grams/person/day for the first part of July and to 250 grams/person/day since mid-July (see Figure 1). While it is not unusual that the Government changes the PDS rations within a year reflecting food availability, the rations in July and August were below the three-year average and well below the food rations distributed during the same period in 2013 and 2014. This drop could be explained by the considerable reduction in the output of the early season crops. The PDS is the main system of availing food to at least 70 percent of the total population (around 18 million people).

With drought conditions and floods this season, the food security situation is likely to deteriorate from that of the previous years, when most households were already estimated to have borderline and poor food consumption rates.

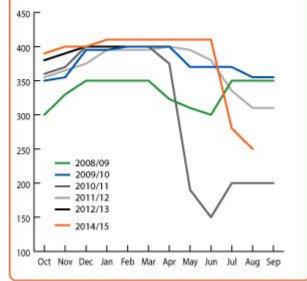












### **Democratic People's Republic of Korea**



#### Reference Date: 09-August-2015

#### FOOD SECURITY SNAPSHOT

- Main season 2015 cereal production forecast to decline sharply from last year, due to prolonged dry spell
- Sharply reduced 2014/15 early season crops for second consecutive year
- Drastic reduction in food rations distributed in July and August
- Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

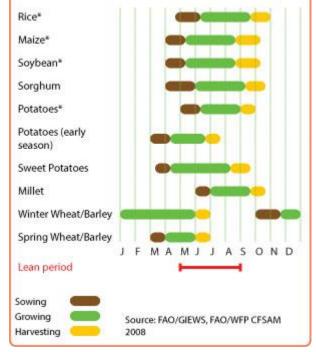
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Harvesting of the 2015 main season maize, soybeans and sorghum has just started and would continue until mid-October. Harvesting of the rice crop is expected to start from late September. Severe rainfall deficits between mid-April and mid-July, coupled with short supplies of irrigation water, resulted in area reductions of the 2015 staple rice crop. The yield potential of the early-planted crops, including maize and soybeans were also adversely affected.

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FAO's forecast for the 2015 rice production remains at low of 2.3 million tonnes, 12 percent below last year's drought-affected output.

### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)



DPRK: Production of the 2014 and 2015 early season and main season food crops (\*tonnes, \*\* 000 tonnes)

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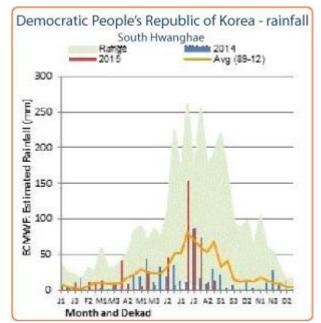
# Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

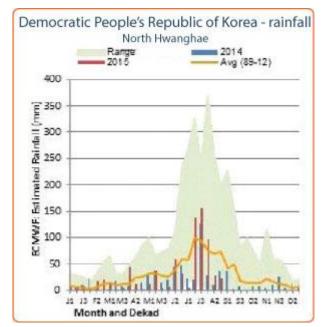
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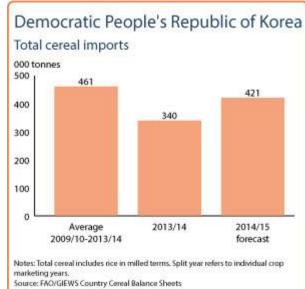
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With drought conditions and floods this season, the food security situation is likely to deteriorate from that of the previous years, when most households were already estimated to have borderline and poor food consumption rates.

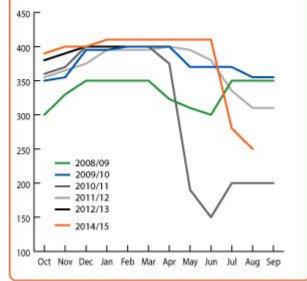




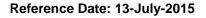








### **Democratic People's Republic of Korea**



#### FOOD SECURITY SNAPSHOT

- Prolonged dry spell affected plantings and yield potential of 2015 food crops
- Sharply reduced 2014/15 early season crops for second consecutive year
- Government reduced the food rations for first distribution in July
- Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

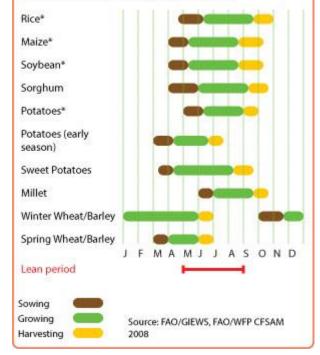
# Main season 2015 cereal production forecast to decline sharply from last year

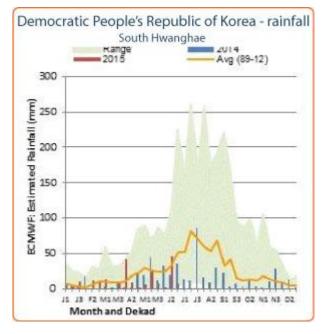
Planting of the 2015 main season rice and maize crops normally starts in April and continues until mid-June. Remote sensing data indicates well below-average rains from mid-April to early-July over the central and southern "food basket" provinces of the country. The poor precipitation, coupled with low levels of irrigation water in wells and reservoirs, has reportedly resulted in a reduction in planted area of the 2015 staple rice crop and adversely affected yield potential of the early-planted crops, including also maize and soybeans. Although rains improved during the second dekad of June over the main growing areas of the country (see rainfall charts on the right), including the provinces of South and North Hwanghae and South and North Pyongan, more precipitation are still needed to allow late planting and support normal development of the crops. A detailed assessment of the crop damage is not yet available, but early official estimates provided by the National Coordinating Committee (NCC), as of 8 June, indicate that only 441 562 hectares of rice crop or 81 percent out of the planned area of 545 498 hectares were transplanted, with 34 339 hectares lost to dry weather. In addition, 136 245 hectares, accounting for some 31 percent of the transplanted area are reported to be adversely affected. Considering the reductions in planted area and expected reduced yields, FAO tentatively forecasts the 2015 rice production at 2.3 million tonnes, 12 percent below the last year's drought-affected output.

Reports indicate that the transplanting of maize, which normally starts earlier in the season, is mostly completed. While area planted reductions are not reported, maize yields are expected to be lower than last year's good levels when, despite dry weather during the cropping season, the Government's efforts to provide supplementary irrigation, through mass mobilization of people resulted in higher maize yields. However, this year's reports indicate extreme low levels of irrigation and ground water reserves following two consecutive years of dry weather, which is expected to negatively affect irrigation activities. Assuming a decrease in yields and average plantings, FAO tentatively forecasts the 2015 maize production at 2.2 million tonnes, a drop of 15 percent from last year's good level.



### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)





# Sharply reduced 2014/15 early season crops for second consecutive year

The dry spell in the past months has also seriously affected the 2014/15 early season crops (minor winter/spring barley and wheat and main potato crops), currently being harvested. Water deficits, at the final development stage (April-May), are expected to have negatively affected yields. No precise information on the full extent of the damage is yet available. FAO's early forecast in February 2015 had already indicated an unfavourable outlook for the 2014/15 early crops production, due to a significant reduction in plantings compared to the previous year, as a result of shortages of seeds following the reduced harvest in 2013/14. As a result, FAO's forecast has been revised downwards, with potato production set at 220 000 tonnes, or 24 percent down from the 2013/14, while the winter wheat and barley harvest is expected at 57 000 tonnes, a decline of 26 percent.

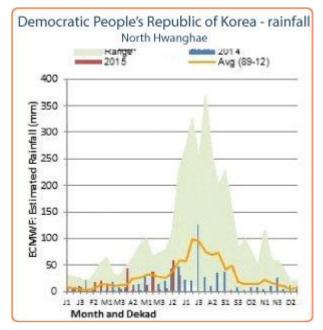
# Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

With total cereal requirements for the 2014/15 marketing year (November/October) set by FAO at 5.49 million tonnes of cereal equivalent, there is an import requirement of 431 000 tonnes. The Government is expected to import 300 000 tonnes of cereals, leaving an uncovered deficit of 131 000 tonnes for the current marketing year. The estimated food gap is larger than the 2013/14 level of 40 000 tonnes, reported by the 2013 joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM), partly due to higher post-harvest losses following changes in the estimation methodology.

# Government reduced the food rations for the first distribution in July

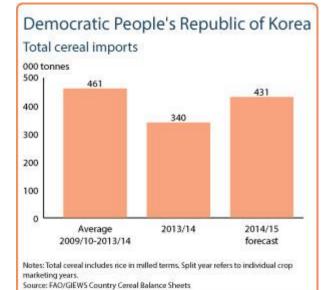
As a consequence of the sharp reduction in the 2014/15 early season crop, the Government has reduced the food rations for households dependent on the Public Distribution System (PDS) from 410 grams/person/day distributed between January to June 2015 to 310 grams/person/day for the first distribution in July (see Figure 1). The PDS is the main system to apportion food to at least 70 percent of the total population (around 18 million people).

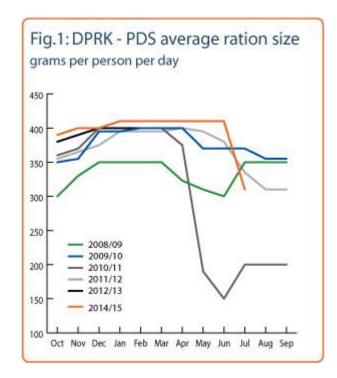
With drought conditions this season, the food security situation is likely to deteriorate from that of the previous years, when most households were already estimated to have borderline and poor food consumption rates. FAO will continue to closely monitor the weather situation and crop progress, particularly in view of the current development of the El Niño phenomenon, which is often associated with dry weather in the region.



PRK: Production of the 2014 and 2015 early season an nain season food crops. (\*tonnes, \*\* 000 tonnes)

Early Season*	2010-2014	2013/14	2014/15	Change
Wheat and Barley	114 517	76 587	57 000	-26%
Potatoes	277 916	289 580	220 000	-24%
Main Season**	2010-2014	2014	2015	Change
Paddy	2 6 2 2	2 6 2 6	2 300	-12%
Maize	2168	2 5 9 4	2 200	-15%





### **Democratic People's Republic of Korea**



Reference Date: 26-June-2015

#### FOOD SECURITY SNAPSHOT

- Prolonged dry spell affected plantings and yield potential of the 2015 food crops
- Sharply reduced 2014/15 early season crops for the second consecutive year
- More rains are urgently needed to avoid a significant decrease in 2015 cereal production and the deterioration of the food security situation
- Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

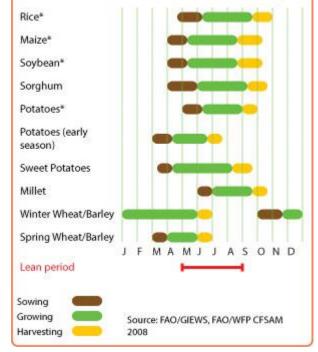
# Main season 2015 cereal production forecast to decline sharply from last year

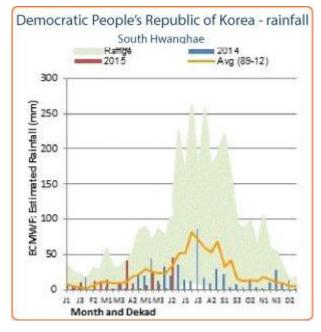
Planting of the 2015 main season rice and maize crops normally starts in April and continues until mid-June. Remote sensing data indicates well below average rains from mid-April to early June over the central and southern "food basket" provinces of the country. The poor precipitation, coupled with low levels of irrigation water in wells and reservoirs, has reportedly resulted in area planted reduction of the 2015 staple rice crop and adversely affected yield potential of early-planted crops, including also maize and soybeans. Although rains improved during the second dekad of June over the main growing areas of the country (see rainfall charts on the right), including the provinces of South and North Hwanghae and South and North Pyongan, more precipitation are still needed to allow late planting and support normal development of crops. A detailed assessment of the crop damage is not yet available, but early official estimates provided by the National Coordinating Committee (NCC), as of 8 June, indicate that only 441 562 hectares of rice crop or 81 percent out of the planned area of 545 498 hectares were transplanted, with 34 339 hectares lost to dry weather. In addition, 136 245 hectares, accounting for some 31 percent of the transplanted area are reported to be adversely affected. Considering the reductions in planted area and expected reduced yields, FAO tentatively forecasts the 2015 rice production at 2.3 million tonnes, 12 percent below last year's drought-affected output.

Reports indicate that the transplanting of maize, which normally starts earlier in the season, is mostly completed. While area planted reductions are not reported, maize yields are expected to be lower than last year's good levels when, despite dry weather during the cropping season, the Government's efforts to provide supplementary irrigation, through mass mobilization of people resulted in higher maize yields. However, this year's reports indicate extreme low levels of irrigation and ground water reserves following two consecutive years of dry weather, which is expected to negatively affect irrigation activities. Assuming a decrease in yields and average plantings, FAO tentatively forecasts the 2015 maize production at 2.2 million tonnes, a drop of 15 percent from last year's good level.

### Sharply reduced 2014/15 early season crops for

### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)





### the second consecutive year

The dry spell in the past two months has also seriously affected the 2014/15 early season crops (minor winter/ spring barley and wheat and main potato crops), currently being harvested. Water deficits, at the final development stage (April-May), are expected to have negatively affected yields. No precise information on the full extent of the damage is yet available. FAO's early forecast in February 2015 had already indicated an unfavourable outlook for the 2014/15 early crops production, due to a significant reduction in plantings compared to the previous year, as a result of shortages of seeds following the reduced harvest in 2013/14. As a result, FAO's forecast has been revised downwards, with potato production set at 220 000 tonnes, or 24 percent down from 2013/14, while the winter wheat and barley harvest is expected at 57 000 tonnes, a decline of 26 percent.

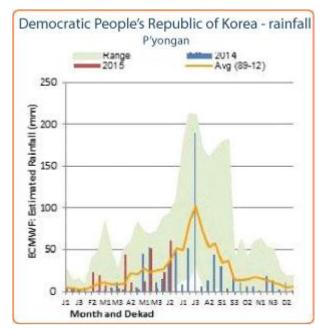
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# More rains are urgently needed to avoid a significant decrease in 2015 cereal production and the deterioration of the food security situation

More rains are urgently needed in the coming weeks to avoid a significant decrease in the 2015 cereal production. Should drought conditions persist, the food security situation is likely to deteriorate from that of the previous years, when most households were already estimated to have borderline and poor food consumption rates.

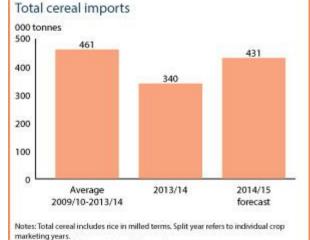
FAO will continue to closely monitor the weather situation and crop progress, particularly in view of the current development of the El Niño phenomenon, which is often associated with dry weather in the region.



#### OPRK: Production of the 2014 and 2015 early season and main season food crops (\*tonnes, \*\* 000 tonnes)

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Maize	2168	2 5 9 4	2 200	-15%

### Democratic People's Republic of Korea



marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

### **Democratic People's Republic of Korea**



Reference Date: 01-June-2015

#### FOOD SECURITY SNAPSHOT

- Early prospects for 2015 main season cereal crops uncertain as dry weather affects planting
- After three consecutive years of strong growth, aggregate 2014 food production estimated to remain stagnant
- Higher cereal import requirements forecast for 2014/15 marketing year (November/October)
- With stagnant harvest in 2014/15 food insecurity likely to remain high

# Planting of 2015 main season crops is underway amid dry conditions

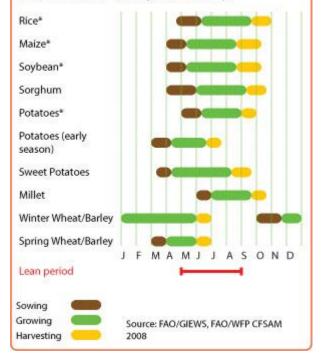
Planting of the 2015 main season rice and maize crops normally starts in April and continues until mid-June. Remote-sensed data indicate that the most of the country has received well below-average rainfall in April, which delayed planting/transplanting operations and is likely to have resulted in area reductions. Rains returned to more normal levels since early May, improving soil moisture for late planting and providing some relief to early sown crops as shown by the Vegetation Health Index maps. Most affected by the dry weather is maize, planting of which normally starts earlier and is grown under rainfed conditions. The high probability of an El Niño event this year is also causing concerns about the 2015 cereal production, as the phenomenon is often associated with below-average precipitation which may result in reduced yields of the ongoing 2015 main season cereal crops and/or affect planting and yields of the 2015/16 secondary irrigated crops. By early March, reports from the main meteorological and oceanic institutions declared the onset of a weak to moderate El Niño event. However, considerable uncertainty persists about the intensity and duration of the event.

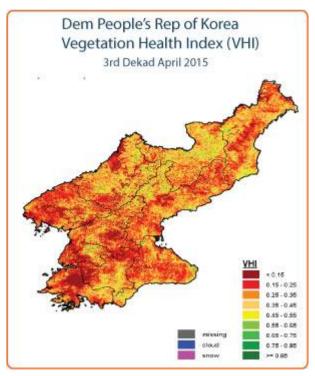
FAO/GIEWS will continue to monitor closely weather developments and crop situation.

# After increasing markedly for three consecutive years, 2014 food production estimated to remain stagnant

After three consecutive years of strong growth, the aggregate 2014 food production is estimated to remain stagnant at 5.94 million tonnes (in cereal equivalent and paddy terms). This includes MoA production estimates for the 2014 main season and projections for the ongoing 2014/15 early season crops from cooperative farms, as well as FAO's estimates of production from sloping land and households gardens. The 2014 paddy rice production, harvested by October 2014, is officially estimated at 2.6 million tonnes, 9 percent below the previous year's good level. The decrease is the result of a 4 percent decline in plantings and lower yields, following a shortage of water for irrigation due to low winter precipitation and a dry spell during July and August 2014. Despite a dry weather during the cropping season, maize production (including production from

### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)





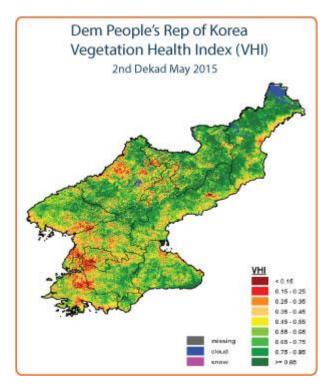
cooperative farms, slopping lands and kitchen gardens) is estimated to have grown by some 15 percent from the good level of 2013 to about 2.59 million tonnes. With just a marginal increase in the area sown, the higher output reportedly resulted from improved yields, following the Government's efforts to provide supplementary irrigation mainly through mass mobilization of non-farmer workers for hand watering of maize plants. FAO sets the 2014/15 production of wheat and barley, currently harvested, at 60 000 tonnes, some 22 percent below the reduced level in 2013/14.

# Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

With total cereal requirements for the 2014/15 marketing year (November/October) set by FAO at 5.49 million tonnes of cereal equivalent, there is an import requirement of 407 000 tonnes. The Government is expected to import 300 000 tonnes of cereals, leaving an uncovered deficit of 107 000 tonnes for the current marketing year. The estimated food gap is larger than the 2013/14 level of 40 000 tonnes reported by the 2013 joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM), partly due to higher post-harvest losses following changes in the estimation methodology.

# With stagnant harvest in 2014/15 food insecurity is likely to remain high

With a stagnant harvest in 2014, the food security situation in 2014/15 is likely to remain similar to that of the previous marketing year, with most households estimated to have borderline and poor food consumption rates as reported by the 2013 CFSAM. The mission also found that although acute malnutrition rates have improved in recent years, the chronic under-nutrition remains a public health problem.



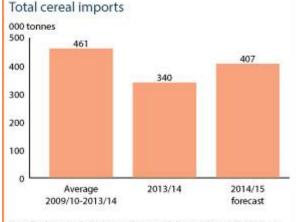
### Democratic People's Republic of Korea

#### Cereal production

	2009-2013 average	2013	2014 forecast	change 2014/2013
0	000 tonnes			percent
Rice (paddy)	2,564	2,901	2,626	-9
Maize	1,990	2,247	2,594	15
Wheat	81	57	45	-21
Others	83	105	82	-22
Total	4,719	5,310	5,347	1

Democratic People's Republic of Korea

Note: percentage change calculated from unrounded data. Source: FAO/GIEWS Country Cereal Balance Sheets



Notes: Total cereal includes rice in milled terms, Split year refers to individual crop marketing years. Source: FAOVGEWS Country Cereal Balance Sheets

#### Source: FAO/GIEWS Country Cereal Balance Sheet

### **Democratic People's Republic of Korea**



Reference Date: 12-February-2015

#### FOOD SECURITY SNAPSHOT

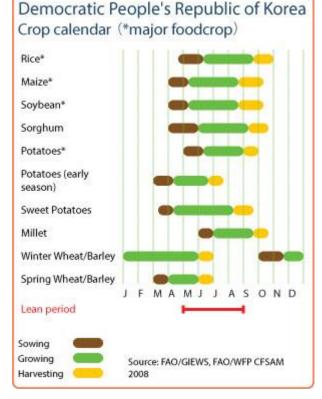
- Production of 2014/15 early season crops is forecast to decrease significantly
- Main season paddy production in 2014 was reduced • but maize output increased
- After three consecutive years of strong growth, • aggregate 2014/15 food production expected to remain stagnant
- Higher cereal import requirements forecast for • 2014/15 marketing year (November/October)
- With stagnant harvest in 2014/15 food insecurity is • likely to remain high

### Production of 2014/15 early season crops is forecast to fall considerably

Planting of the 2014/15 minor winter wheat and barley was completed in November, while that of the main early season potatoes will start in March and will continue until mid-April. Remote-sensed data indicates well below-average precipitation (snow and rainfall) between October and mid-February, particularly over the main cereal producing areas, including North and South Pyongan and North and South Hwanghae. If dry weather continues, it will reduce soil moisture levels for the winter wheat and barley crops, expected to break dormancy and resume growth in March. Taking into account official information, FAO estimates planted area to winter wheat and barley to have decreased considerably, mainly as a result of a shortage of seeds, following the reduced harvest of the previous year. FAO forecasts the 2014/15 production of wheat and barley at 60 000 tonnes, some 22 percent below the reduced level in 2013/14. Similarly, the 2014/15 production of the early season potato crop, to be harvested in June-July, is forecast by FAO to decrease to 241 000 tonnes, mainly as result of expected lower plantings. In aggregate, official forecasts from Ministry of Agriculture (MoA) put the 2014/15 early season crops, including potatoes, wheat and barley at 301 000 tonnes (cereal equivalent), 18 percent lower than in the previous season.

### After increasing markedly for three consecutive years, 2014/15 food production to remain stagnant

After three consecutive years of strong growth, the aggregate 2014/15 food production is expected to remain stagnant at 5.94 million tonnes (in cereal equivalent and paddy terms). This includes MoA production estimates for the main season and forecast for the forthcoming 2014/15 early season crops from cooperative farms, as well as FAO's estimates of production from sloping land and households gardens. The 2014 paddy rice production, harvested by October, is officially estimated at 2.6 million tonnes, 9 percent below last year's good level. The decrease is the result of a 4 percent decline in plantings and lower yields, following a shortage of water for irrigation due to low winter precipitation and a dry spell during July and August. Despite dry



### Democratic People's Republic of Korea

Cereal production

	2009-2013 average	2013	2014 forecast	change 2014/2013
	000	percent		
Rice (paddy)	2,564	2,901	2,626	-9
Maize	1,990	2,247	2,594	15
Wheat	81	57	45	-21
Others	83	105	82	-22
Total	4,719	5,310	5,347	1

weather during the cropping season, maize production (including production from cooperative farms, slopping lands and kitchen gardens) is estimated to have grown by some 15 percent from the good level of 2013/14 to about 2.59 million tonnes. With just a marginal increase in the area sown, the higher output reportedly resulted from improved yields, following the Government's efforts to provide supplementary irrigation mainly through mass mobilization of non-farmer workers for hand watering of maize plants.

# Higher cereal import requirements forecast for 2014/15 marketing year (November/October)

With total cereal requirements for the 2014/15 marketing year (November/October) set by FAO at 5.49 million tonnes of cereal equivalent, there is an import requirement of 407 000 tonnes. The Government is expected to import 300 000 tonnes of cereals, leaving an uncovered deficit of 107 000 tonnes for the current marketing year. The estimated food gap is larger than the 2013/14 level of 40 000 tonnes reported by the 2013 joint FAO/WFP Crop and Food Security Mission (CFSAM), partly due to higher post-harvest losses following changes in the estimation methodology.

# With stagnant harvest in 2014/15 food insecurity is likely to remain high

With a stagnant harvest in 2014, the food security situation in 2014/15 is likely to remain similar to that of the previous marketing year, with most households estimated to have borderline and poor food consumption rates. The 2013 CFSAM found that although acute malnutrition rates have improved in recent years, the chronic under-nutrition remains a public health problem.

#### Democratic People's Republic of Korea Total cereal imports 000 tonnes 500 461 407 400 340 300 200 100 0 2014/15 Average 2013/14 2009/10-2013/14 forecast

Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

### **Democratic People's Republic of Korea**



#### Reference Date: 08-July-2014

#### FOOD SECURITY SNAPSHOT

- The 2014 early season crops affected by dry weather
- The 2013 cereal harvest was estimated good •
- Larger harvest in 2013 reduces cereal import • requirements in the 2013/14 marketing year (November/October)
- Despite the improved harvest, severe food insecurity • persists

### The 2014 early season crops affected by dry weather

Harvesting of the 2014 early season's potatoes and minor cereal crops of wheat and barley, is currently underway and will continue until the end of June. Generally favourable weather conditions during October and mid-March over much of the country supported planting and early development of winter cereals and early season potato crops. However, a prolonged dry spell during mid-March and late April resulted in severe soil moisture deficits affecting crops at a critical growing stage in the main producing provinces, including South Hwanghae, South Pyongan, North Pyongan and farmed areas of Pyongyang City. These provinces collectively contribute to the largest share of total national output. As a result, FAO latest estimate puts the 2014 wheat production at 74 500 tonnes, marginally above last year's low level and almost 30 percent below the five-year average. No precise information on the full extent of the damage on the early season crops is yet available, but water deficits are expected to have negatively affected yields of the potato crops the most.

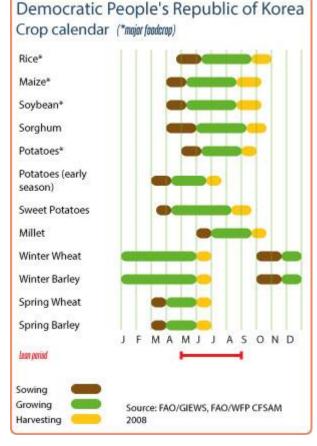
Planting of the 2014 main season rice and maize crops normally starts in April and continues until mid-June. Rains resumed more normal patterns from the first dekad of May over the main cropproducing areas improving soil moisture and allowing maize and rice transplanting to take place. However, the delayed sowing and re-planting in parts, due to the insufficient rains in April, will likely negatively affect yields of the 2014 main season crops.

### The 2013 cereal harvest was estimated good

The aggregate cereal harvest in 2013 was estimated around 5.3 million tonnes, 4 percent up on the previous year's aboveaverage output. This mainly reflected improved agricultural inputs availability, increased prices paid to farmers by the State Procurement Agency and generally favourable weather during the main cropping season. However, the 2013 production remained well below the levels achieved in the late 1980s.

### Lower cereal import requirements forecast for the 2013/14 marketing year (November/October)

According to the FAO/WFP Crop and Food Security Assessment Mission (CFSAM) report published in November, cereal import requirements are forecast at 340 000 tonnes in the 2013/14 marketing year (November/October). This food gap is the narrowest



### Democratic People's Republic of Korea Cereal production

	2008-2012 average	2012	2013 estimate	change 2013/2012	
	000 tonnes			percent	
Rice (paddy)	2,388	2,681	2,901	8	
Maize	1,932	2,285	2,247	-2	
Wheat	105	73	75	3	
Others	96	89	97	9	
Total	4,521	5,128	5,320	4	

in many years and is mainly due to successive years of increased cereal production, coupled with only a marginal increase in population. As of late March, total cereal imports (both through commercial channels and as food aid) were estimated at 25 200 tonnes.

# Despite the improved harvest, chronic food insecurity persists

The Mission found that although acute malnutrition rates have improved in recent years, the chronic under-nutrition remains a public health problem. The Mission, therefore, recommends that international support be focused on improving diet diversity and feeding practices for young children and women through different strategies such as behavioral change, market reform, and encouraging livestock and fish production; strengthening treatment of severe and moderate acute malnutrition and improving hygiene and sanitation practices. Furthermore, additional cereal imports, commercial or food aid, would be required during the next three months of the lean period to help maintain the food rations through the public distribution system.

#### Democratic People's Republic of Korea Total cereal imports 000 tonnes 496 500 399 400 340 300 200 100 0 2012/13 2013/14 Average 2008/09-2012/13 forecast Notes: Total cereal includes rice in milled terms, Split year refers to individual crop

marketing years. Source: FAD/GIEWS Country Cereal Balance Sheets

GIEWS global information and early warning system on food and agriculture

### **Democratic People's Republic of Korea**



Reference Date: 12-December-2013

#### FOOD SECURITY SNAPSHOT

- 2013 cereal harvest forecast to increase •
- Larger harvest reduces cereal import requirements in 2013/14 marketing year (November/October)
- Despite the improved harvest, severe food insecurity persists

### 2013 cereal harvest forecast to increase

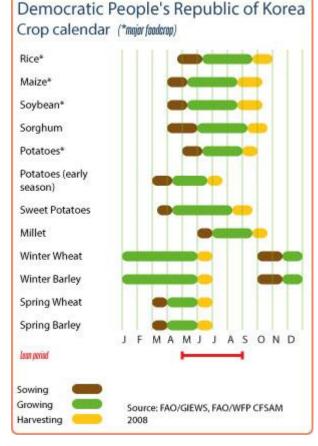
Harvesting of the 2013 main season crops, mainly rice and maize, was completed by November. The start of the season was characterised by drier than normal weather in many parts of the country, which resulted in localized replanting of maize. This was followed by a period of heavy rainfall from beginning of July to August over much of the country, which caused some localised flooding. Heavy rains followed by good drying and ripening weather boosted the 2013 paddy production, which is estimated at 2.9 million tonnes, some 8 percent over last year's output. By contrast, the heavy rains adversely affected the pollination of maize. Maize also suffered from a shortage of sunshine hours throughout the summer as cloudy conditions tended to prevail. As a result, the 2013 maize crop is estimated to decline by about 2 percent from last year's above-average level. Similarly, the 2013 soybean production decreased by 3 percent compared to last year's level, due to heavy rains at the time of pollination. This follows a reduction of 31 percent in 2012 compared with 2011. Soybean prices are less attractive to farmers compared to other grains. According to the FAO/WFP Crop and Food Security Assessment Mission (CFSAM) report published in November, the aggregate cereal harvest in 2013/14 (including paddy, cereals, soybeans, and cereal equivalent of potatoes) is forecast at 5.98 million tonnes, 5 percent up on previous year's above-average output. This figure includes estimates for the 2013 main season and forecast for the 2014 early season crops produced on cooperative farms, and production from sloping land, home gardens and kitchen gardens. This marks an increase for a third year in a row.

### Larger harvest reduces cereal import requirements in 2013/14 marketing year

Based on the Mission's estimate of total utilization needs of 5.37 million tonnes of cereal equivalent (rice in milled terms), the Mission estimates a cereal import requirement of 340 000 tonnes for the 2013/14 marketing year (November/October). This food gap is the narrowest in many years, and is mainly due to the higher 2013 production coupled with only a marginal increase in population.

### Despite the improved harvest, chronic food insecurity persists

The Mission found that although the acute malnutrition rates have improved in recent years, the chronic under-nutrition remains a public health problem. The Mission therefore recommends that international support be focused on improving diet diversity and feeding



### Democratic People's Republic of Korea Cereal production

	2008-2012 average	2012	2013 forecast	change 2013/2012
	000	percent		
Rice (paddy)	2 388	2 681	2 901	8
Maize	1 932	2 285	2 247	-2
Wheat	104	72	74	3
Others	95	81	96	19
Total	4 5 1 9	5 1 1 9	5 318	4

practices for young children and women through different strategies such as behavioral change, market reform, and encouraging livestock and fish production; strengthening treatment of severe and moderate acute malnutrition and improving hygiene and sanitation practices.

#### Democratic People's Republic of Korea Total cereal imports 000 tonnes 496 500 399 400 340 300 200 100 0 Average 2012/13 2013/14 2008/09-2012/13 forecast Notes: Total cereal includes rice in milled terms. Split year refers to individual crop

marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

GIEWS global information and early warning system on food and agriculture

## **Democratic People's Republic of Korea**



### FOOD SECURITY SNAPSHOT

- Prospects for the 2012/13 early season crops generally favourable
- Relatively good 2012 main season harvest gathered last October-November
- Despite good production cereal import requirements for 2012/13 (November/ October) remain at fairly high level of 507 000 tonnes
- About 2.8 million vulnerable people estimated as facing facing severe food insecurity situated mainly in the northeast provinces of the country

# Prospects for the 2012/13 early season crops generally favourable

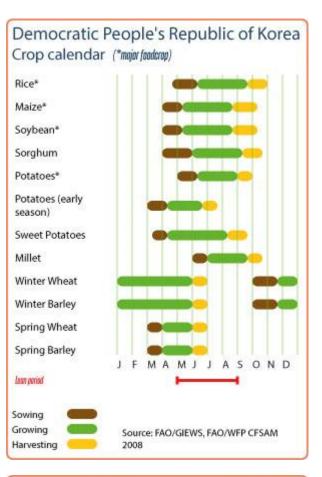
Harvesting of the 2012/13 early (winter and spring) crops, including wheat, barley and potatoes, will start in June. The weather conditions during the growing season have been generally favourable so far. Seedbed preparation for the 2013 main season crops, mainly rice and maize, is underway with the bulk of transplanting activities expected to begin shortly.

# Relatively good 2012 main season harvest gathered last October-November

The 2012 main season crops were harvested in October-November. The joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) estimated the staple food production in 2012/13 to increase by about 10 percent over the above-normal production in 2011/12. The impact of the prolonged dry spell in the first half of the season was largely mitigated by increased irrigation efforts including mass mobilization of people to water maize plants. Similar to 2011, localized flooding in July-August caused some damage to paddy crop in the main grain producing provinces. However, timely availability of key inputs and an increase in the official procurement prices resulted in an overall increase in the main season crop harvest. Soybean production, on the other hand, decreased this year by over 30 percent, primarily due to the dry spell.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for: (i) increased production of protein commodities, namely soybean cultivation and fish pond development, (ii) revitalization of the double-cropping programme by providing inputs (e.g. seeds and fertilizer for the early crops wheat, barley and potatoes), improved mechanization and sufficient incentives to cooperative farms, and (iii) general assistance for household garden production. In the medium to longer term, adoption of incentive system through relevant changes in agricultural marketing would help elevate production and improve the country's food security.

## Despite good production cereal import requirements for 2012/13 (November/October)



# Democratic People's Republic of Korea

Cereal production

	2007-2011 average	2011*	2012 <sup>×</sup> forecast	change 2012/2011
	000 tonnes			percent
Rice (paddy)	2 226	2 477	2 681	8
Maize	1 705	1 935	2 285	18
Wheat	115	49	112	129
Others	115	70	107	53
Total	4 161	4 531	5 185	14

Note: percentage change calculated from unrounded data.

\*Includes a small amount of early season crops (wheat, barley and potatoes) harvested in the following year; i.e. 2012 refers to production in 2012/13.

Source: FAO/GIEWS Country Cereal Balance Sheets



## remain at fairly high level of 507 000 tonnes

Based on the Mission's estimate of total utilization needs of 5.43 million tonnes of cereal equivalent (rice in milled terms), the Mission estimated cereal import requirement of 507 000 tonnes for the 2012/13 marketing year (November/October). Assuming the official target of 300 000 tonnes of food imports, an uncovered food deficit of 207 000 tonnes for the 2012/13 marketing year is expected. According to the latest available information, as of mid-April, total commercial imports into the country are estimated only at 12 400 tonnes, primarily rice from China and maize from Argentina. In addition, only 6 800 tonnes of food aid, in total, has been received in this marketing year. More imports, commercial and food aid, would be required during the next four months of lean season to help maintain the PDS rations.

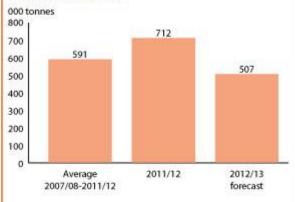
### Some 2.8 million vulnerable people are estimated to face severe food insecurity in the northeast provinces of the country

The Mission found that the acute malnutrition rates have improved this year due to better food rations and a consistent food assistance pipeline but the chronic under-nutrition remains a public health problem. The Mission therefore recommended that international support be focused on expanding and developing nutrition programmes specifically targeted to about 2.8 million vulnerable people (children, pregnant and lactating women, elderly and disabled or chronic ill) in five provinces in the North-East of the country.

According to the latest official data the public food distribution system (PDS) average rations distributed were around 400 grams per person per day, close to the previous year's level and well above the previous five-year average (see Figure 1 from WFP).

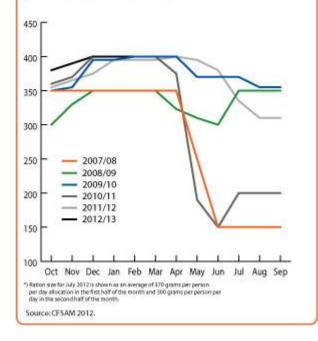
## Democratic People's Republic of Korea

Total cereal imports



Notes: Total cereal includes rice in milled terms, Split year refers to individual crop marketing years. Source: FMO/GIEWS Country Cereal Balance Sheets

# Fig.1: DPRK - PDS average ration size grams per person per day



## **Democratic People's Republic of Korea**



#### Reference Date: 20-November-2012

#### FOOD SECURITY SNAPSHOT

- Despite localised dry spell and floods in the country improved harvest of 2012 main season food crops is estimated
- Cereal import requirements for 2012/13 (November/ October) are estimated to be the lowest in several years but still remain fairly high at 507 000 tonnes
- About 2.8 million vulnerable people are estimated to face severe food insecurity situated mainly in the northeast provinces of the country

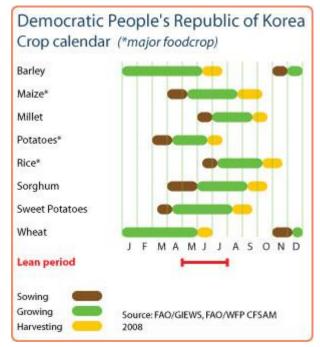
# Despite localized dry spell and floods in the country improved harvest of the 2012 main season food crops is estimated

Harvesting of the 2012 main season crops (mainly rice, maize, potatoes and soybeans) is completed. The joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) visited all nine agricultural provinces of the country from 24 September to 8 October 2012 and concluded that the staple food production in 2012/13 is estimated to increase by about 10 percent over the revised above-normal production in 2011/12 reflecting improved yields. The impact of the prolonged dry spell in the first half of the season was largely mitigated by increased irrigation efforts including mass mobilization of people to water maize plants. Similar to the year before, localized flooding in July-August caused some damage to paddy crop in the main grain producing provinces. However, timely availability of key inputs and an increase in the official procurement prices resulted in an overall increase in the main season crop harvest. Soybean production, on the other hand, decreased this year by over 30 percent, primarily due to the dry spell.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for: (i) increased production of protein commodities, namely soybean cultivation and fish pond development, (ii) revitalization of the double-cropping programme by providing inputs (e.g. seeds and fertilizer for the early crops wheat, barley and potatoes), improved mechanization and sufficient incentives to cooperative farms, and (iii) general assistance for household garden production. In the medium to longer term, adoption of incentive system through relevant changes in agricultural marketing would help elevate production and improve the country's food security.

### Cereal import requirements for 2012/13 are estimated to be the lowest in several years but still remain over half a million tonne mark

Based on the Mission's estimate of total utilization needs of 5.43 million tonnes of cereal equivalent (rice in milled terms), the Mission estimates cereal import requirement of 507 000 tonnes for the 2012/13 marketing year (November/October). Assuming the official target of 300 000 tonnes of food imports, the Mission estimates an



# Democratic People's Republic of Korea

	2007-2011 average	2011*	2012* forecast	change 2012/2011
	000	percent		
Rice (paddy)	2 226	2 477	2 681	8
Maize	1 705	1 935	2 285	18
Wheat	115	49	112	129
Others	115	70	107	53
Total	4 161	4 531	5 185	14

Note: percentage change calculated from unrounded data.

"Includes a small amount of early season crops (wheat, barley and potatoes) harvested in the following year; i.e. 2012 refers to production in 2012/13. Source: FAO/GIEWS Country Cereal Balance Sheets uncovered food deficit of 207 000 tonnes for the 2012/13 marketing year. This food gap is the narrowest in many years mainly due to the improved harvests.

## Some 2.8 million vulnerable people are estimated to face severe food insecurity in the northeast provinces of the country

The Mission found that the acute malnutrition rates have improved this year due to better food rations and a consistent food assistance pipeline but the chronic under-nutrition remains a public health problem. The Mission therefore recommended that international support be focused on expanding and developing nutrition programmes specifically targeted to about 2.8 million vulnerable people (children, pregnant and lactating women, elderly and disabled or chronic ill) in five provinces in the North-East of the country.

#### Democratic People's Republic of Korea Total cereal imports 000 tonnes 800 712 700 591 600 507 500 400 300 200 100 0 2011/12 2012/13 Average 2007/08-2011/12 forecast

Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

## **Democratic People's Republic of Korea**



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#### Reference Date: 31-July-2012

#### FOOD SECURITY SNAPSHOT

- Severe dry spell in southwest and central provinces threatens 2012 crop production
- Cereal import requirements for 2011/12 (November/ October) are expected to be revised upwards
- More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

# Severe dry spell in southwest and central provinces threatens 2012 crop production

Harvesting of the 2012 "early season" cereal crops (mainly wheat, barley and potatoes), was completed by mid-July. The main season maize and other coarse grains, sown from April onwards, are currently at the critical growing stage.

The country received generally favourable rains from November to mid-April, which benefited development of "early season" crops. However, a prolonged dry spell since the first dekad of May stretching for five dekads affected crops when they were at the maturing stage resulting in crop losses and low yields. The dry spell has also negatively affected the 2012 maize crop of the "main season" in the largest crop producing provinces, namely North Hwanghae, South Hwanghae, North Pyongan, South Pyongan, and farmed areas of Pyongyang City.

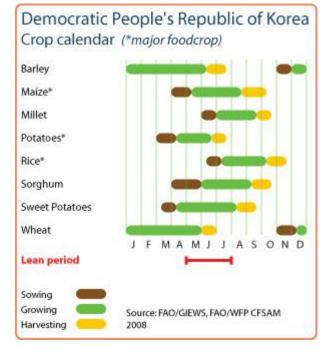
The insufficient rains and shortages in irrigation supplies resulted also in delayed planting of the 2012 "main season" rice crop. Although above normal rains from the second dekad of June over the main crop producing areas provided relief to crops and allowed rice transplanting to take place, the late start of the planting period may have an effect on potential yields.

A detailed assessment of the full extent of the crop damage is not yet available but preliminary official estimates indicate that, as of end of June, some 287 896 hectares of cropland have been affected by the dry spell. This represents about 20 percent of total national area cultivated to food crops, including cereals, potatoes and soybeans.

An FAO/WFP Crop and Food Security Assessment Mission (CFSAM) will visit the country in late September to estimate the 2012 food production and import requirements for 2012/13 (November/October), including food aid.

# Cereal import requirements for 2011/12 are expected to be revised upwards

Total cereal import requirements for 2011/12 marketing year (November/October), prior to the current dry spell, were estimated by the 2011 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) at 739 000 tonnes based on the forecast of 2012 "early season" crops at 500 000 tonnes. Any drop in production is likely to add to the shortfall of food supplies and worsen food insecurity in



## Democratic People's Republic of Korea

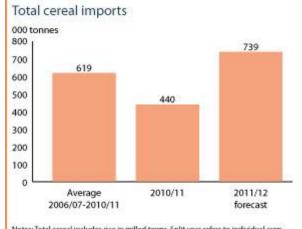
Cereal produ	2006-2010 average	2010	2011 estimate	change 2011/201
	000	) tonnes		percent
Rice (paddy)	2 226	2 4 2 6	2 479	2
Maize	1 7 1 1	1858	2 0 3 2	9
Wheat	145	83	127	53
Others	138	55	104	89

4 2 2 0

Democratic People's Republic of Korea

Note: percentage change calculated from unrounded data. Source: FAO/GIEWS Country Cereal Balance Sheets

Total



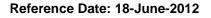
Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FNO/GIEWS Country Cereal Balance Sheets the country. As of mid-July, total commercial imports into the country are estimated at 337 800 tonnes. Only 111 192 tonnes of food aid, in total, has been received in the current marketing year. More imports, commercial or food aid, would be required during the next three lean months, until the harvest of the main season in October-November, to help maintain the food rations through the public distribution system.

## More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

The 2011 FAO/WFP mission concluded that 3 million vulnerable people, mainly living in the five most food-insecure provinces of Ryanggang, Chagang, North Hamgyong, South Hamgyong and Kangwon, are in need of international food assistance, due to an inadequate food production and commercial imports. The mission recommended provision of 120 000 tonnes, in cereal equivalent, of fortified blended food, fortified biscuits, and other high protein food commodities for distribution to the most vulnerable including children, pregnant and lactating women, and the elderly without support.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for -(i) inputs, in particular plastic sheets and seeds for the early crops wheat, barley and potatoes, (ii) support for conservation agriculture (CA) and (iii) general assistance to private household garden production.

## **Democratic People's Republic of Korea**



#### FOOD SECURITY SNAPSHOT

- Severe dry spell in southwest and central provinces threatens 2012 threatens crop production
- Cereal import requirements for 2011/12 are expected to be revised upwards
- More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

# Severe dry spell in southwest and central provinces threatens 2012 crop production

Harvesting of the 2012 early season's cereal crops (mainly wheat, barley and potatoes), will continue into July and planting/transplanting of the 2012 main season crops (rice, maize and other coarse grains) began in April and is expected to last until July.

The country received generally favourable rains during November and mid-April, which benefited development of early season crops. However, a prolonged dry spell since the first dekad of May stretching for four dekads has affected early season crops, when they were in maturing stage, currently being harvested. The dry spell has also affected the transplanted maize crop of the main season in the largest crop producing provinces, namely North Hwanghae, South Hwanghae, North Pyongan, South Pyongan, and farmed areas of Pyongyang City.

According to the initial estimates of the National Coordinating Committee (NCC) some 196 882 hectares of cropland, including 37 221 hectares of early crops have been affected. The total area affected represents about 17 percent of total national area under main season cultivation of food crops, including cereals, potatoes and soybeans. No precise information on the full extent of the damage is yet available but the moisture deficit is expected to negatively affect yields of the early crops, as well as already transplanted maize. No serious damage to the paddy crop has been reported yet.

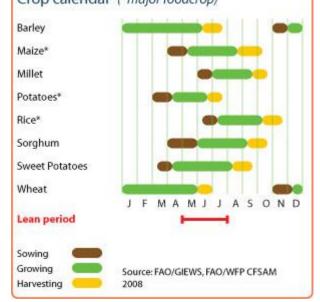
Rains, however, resumed more normal pattern during the first dekad of June over South and North Pyongan which could help restart the main season crop plantings. By contrast, North and South Hwanghae provinces continue to experience below average rains.

The FAO/WFP Crop and Food Security Assessment Mission (CFSAM) in November 2011 estimated the 2012 food production at 4.66 million tonnes (including milled rice, other cereals, and cereal equivalent of potatoes and soybeans). This included the forecast of 2012 early crops at 500 000 tonnes. The recent weather hazards are expected to lead to a downward revision of the total cereal production.

## Cereal import requirements for 2011/12 are



### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)

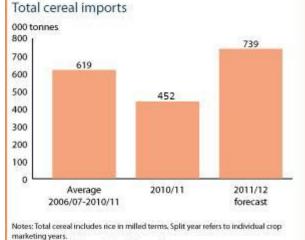


# Democratic People's Republic of Korea

	2006-2010 average	2010	2011 estimate	change 2011/2010
	000	percent		
Rice (paddy)	2 2 2 6	2 4 2 6	2 479	2
Maize	1 7 1 1	1858	2 0 3 2	9
Wheat	145	83	127	53
Others	138	55	104	89
Total	4 220	4 4 2 2	4 7 4 2	7

Note: percentage change calculated from unrounded data Source: FNO/GIEWS Country Cereal Balance Sheets

Democratic People's Republic of Korea



Source: FAO/GIEWS Country Cereal Balance Sheets

## expected to be revised upwards

Total cereal import requirements for 2011/12 marketing year (Nov/Oct), prior to the current dry spell, were estimated by the FAO/WFP Crop and Food Security Assessment Mission (CFSAM) at 739 000 tonnes based on the forecast of early season crops at 500 000 tonnes. Any drop in production is likely to add to the shortfall of food supplies and worsen food insecurity in the country. As of Mid-May, total commercial imports into the country are estimated at 333 300 tonnes, primarily rice from China and maize from Ukraine, Argentina and the EU. Only 83 500 tonnes of food aid, in total, has been received in this marketing year. More imports, commercial or food aid, would be required during the next four lean months until the harvest of the main season in October-November, to help maintain the food rations through the public distribution system.

### More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

The FAO/WFP mission had concluded that 3 million vulnerable people, mainly living in the five most food-insecure provinces of Ryanggang, Chagang, North Hamgyong, South Hamgyong and Kangwon, are in urgent need of international food assistance, due to an inadequate food production and commercial imports. The mission recommended provision of 120 000 tonnes, in cereal equivalent, of fortified blended food, fortified biscuits, and other high protein food commodities for distribution to the most vulnerable including children, pregnant and lactating women, and the elderly without support.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for - (i) inputs, in particular plastic sheets and seeds for the early crops wheat, barley and potatoes, (ii) support for conservation agriculture (CA) and (iii) general assistance to private household garden production.

## **Democratic People's Republic of Korea**



#### FOOD SECURITY SNAPSHOT

- Near normal rains recorded for the early season winter crops
- Despite floods in parts, higher aggregate cereal harvest estimated for 2011
- Cereal import requirements remain high but are estimated to fall in 2011/12
- More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

# Near normal rains recorded for the early season winter crops

Planting of the 2011/12 early season crops, mainly wheat, barley and potatoes, was completed by December. Following favourable rains at the very start of the 2011/12 agricultural season, a period of below- average rains followed from late November to January. Production of early season crops amounts to less than ten percent of the annual total cereal and potatoes (in cereal equivalent) production.

# Despite floods in parts, higher aggregate cereal harvest estimated for 2011

According to the FAO/WFP Crop and Food Security Assessment Mission (CFSAM) report published in November, a total of about 5.5 million tonnes of staple food (cereals, soybeans and potatoes in cereal equivalent) production from cooperative farms, individual plots on sloping land and household gardens for 2011/12 is expected. This includes estimates for the 2011 main season harvest (rice in paddy terms) and forecast for the 2012 early season crops. This is about 8.5 percent higher than the revised and near normal production in 2010/11, reflecting higher plantings and yields. When paddy is converted to milled rice and potatoes and soybeans to cereal equivalent, the above total production comes to 4.66 million tonnes.

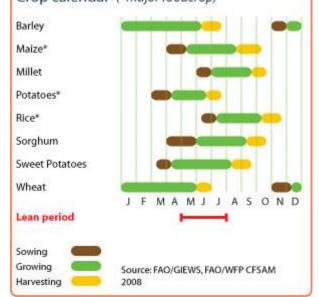
Despite the July-August floods, which affected paddy crop and the subsequent typhoons which particularly impacted the maize crop mainly in North and South Hwanghae, two of the important grain producing provinces in the country, higher use of fertilizer, and other inputs such as diesel and electricity, resulted in the improved harvest.

# Cereal import requirements remain high but are estimated to fall in 2011/12

Given the Mission's estimate of total cereal utilization of 5.4 million tonnes, the total cereal import requirements for the 2011/12 marketing year (November/October) are calculated at 739 000 tonnes, substantially below the 2010/11 estimate of 1.086 million tonnes provided by the Rapid Security Assessment (RFSA). The Government currently plans to import 325 000 tonnes of cereals for



## Democratic People's Republic of Korea Crop calendar (\*major foodcrop)

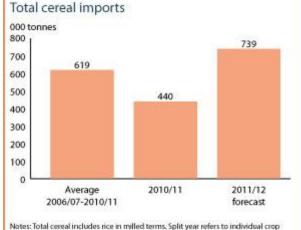


# Democratic People's Republic of Korea

	2006-2010 average	2010	2011 forecast	change 2011/2010
	000	percent		
Rice (paddy)	2 2 2 6	2 4 2 6	2 479	2
Maize	1 7 1 1	1858	2 0 3 2	9
Wheat	145	83	127	53
Others	138	55	104	89
Total	4 220	4 4 2 2	4 7 4 2	7

Note: percentage change calculated from unrounded data Source: FAO/GIEWS Country Cereal Balance Sheets

Democratic People's Republic of Korea



Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FNO/GIEWS Country Cereal Balance Sheets

the upcoming marketing year. Consequently, the Mission estimates an uncovered food deficit of 414 000 tonnes for the 2011/12 marketing year.

## More than 3 million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

The FAO/WFP mission had concluded that 3 million vulnerable people, mainly living in the five most food-insecure provinces of Ryanggang, Chagang, North Hamgyong, South Hamgyong and Kangwon, are in urgent need of international food assistance, due to an inadequate food production and commercial imports. The mission recommended provision of 120 000 tonnes, in cereal equivalent, of fortified blended food, fortified biscuits, and other high protein food commodities for distribution to the most vulnerable including children, pregnant and lactating women, and the elderly without support.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for -(i) inputs, in particular plastic sheets and seeds for the early crops wheat, barley and potatoes, (ii) support for conservation agriculture (CA) and (iii) general assistance to private household garden production.

## **Democratic People's Republic of Korea**



#### Reference Date: 07-December-2011

#### FOOD SECURITY SNAPSHOT

- Despite floods in parts, higher aggregate cereal harvest estimated for 2011
- Cereal import requirements remain high but are estimated to fall in 2011/12
- More than three million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

# Despite floods in parts, higher aggregate cereal harvest estimated for 2011

Harvesting of the 2011 main season crops, mainly rice and maize, is completed. According to the FAO/WFP Crop and Food Security Assessment Mission (CFSAM) report published in November, a total of about 5.5 million tonnes of staple food (cereals, soybeans and potatoes in cereal equivalent) production from cooperative farms, individual plots on sloping land and household gardens for 2011/12 is expected. This includes estimates for the 2011 main season harvest (rice in paddy terms) and forecast for the 2012 early season crops. This is about 8.5 percent higher than the revised and near normal production in 2010/11, reflecting higher plantings and yields. When paddy is converted to milled rice and potatoes and soybeans to cereal equivalent, the above total production comes to 4.66 million tonnes.

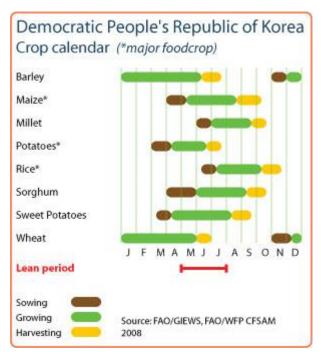
Despite the July-August floods, which affected paddy crop and the subsequent typhoons which particularly impacted the maize crop mainly in North and South Hwanghae, two of the important grain producing provinces in the country, higher use of fertilizer, and other inputs such as diesel and electricity, resulted in the improved harvest.

# Cereal import requirements remain high but are estimated to fall in 2011/12

Given the Mission's estimate of total cereal utilization of 5.4 million tonnes, the total cereal import requirements for the 2011/12 marketing year (November/October) are calculated at 739 000 tonnes, substantially below the 2010/11 estimate of 1.086 million tonnes provided by the Rapid Security Assessment (RFSA). The government currently plans to import 325 000 tonnes of cereals for the upcoming marketing year. Consequently, the Mission estimates an uncovered food deficit of 414 000 tones for the 2011/12 marketing year.

## More than three million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country

The FAO/WFP mission had concluded that 3 million vulnerable people, mainly living in the five most food-insecure provinces of Ryanggang, Chagang, North Hamgyong, South Hamgyong and Kangwon, are in urgent need of international food assistance, due to

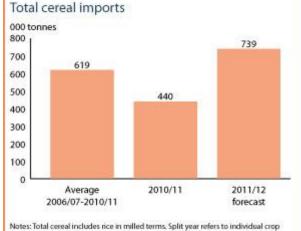


## Democratic People's Republic of Korea

	2006-2010 average	2010	2011 forecast	change 2011/2010
	000	percent		
Rice (paddy)	2 2 2 6	2 4 2 6	2 479	2
Maize	1 7 1 1	1858	2 0 3 2	9
Wheat	145	83	127	53
Others	138	55	104	89
Total	4 220	4 4 2 2	4 7 4 2	7

Note: percentage change calculated from unrounded data. Source: FMO/GIEWS Country Cereal Balance Sheets





Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FMO/GIEWS Country Cereal Balance Sheets

an inadequate food production and commercial imports. The mission recommended provision of 120 000 tonnes, in cereal equivalent, of fortified blended food, fortified biscuits, and other high protein food commodities for distribution to the most vulnerable including children; pregnant and lactating women; elderly without support.

In order to improve food security in the short to medium term, the Mission also recommended national and international support for - (i) inputs, in particular plastic sheets and seeds for the early crops wheat, barley and potatoes, (ii) support for conservation agriculture (CA) and (iii) general assistance to private household garden production.

## **Democratic People's Republic of Korea**



#### Reference Date: 08-August-2011

#### FOOD SECURITY SNAPSHOT

- Heavy rains affect standing crops of the 2011 main season.
- Winter wheat, spring barley and spring potato harvests in 2011 estimated to be lower by about 232 000 tonnes than earlier forecast due to the severe winter this year.
- Rise in international prices of cereals, especially maize, has reduced the country's ability to import needed quantities.
- More than six million vulnerable people are estimated to face food deficit as chronic food insecurity continues throughout the country.

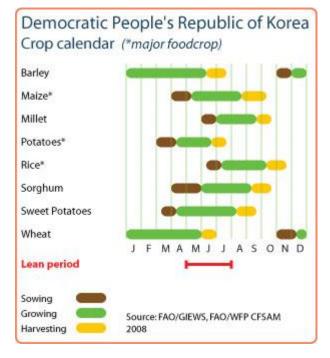
# DPRK affected by serious floods following torrential rains in July

The Democratic People's Republic of Korea was hit by excessive rains during the second and third dekad of July causing severe flooding and localised crop damage to standing crops of the 2011 main season in the cereal bowl of the country. The counties reporting serious damage were Chongdan, Jaeryong, Anak and Unchon in South Hwanghae Province and Hoichang and Pyongwon from South Pyongan Province. Although the initial area damage is officially put at 59 340 ha, no precise crop loss estimates are yet available. Paddy crop, currently at the initial growing stage, is likely to be affected the most in the low lying areas. Damage to agricultural infrastructure was also reported. However, the abundant rains are likely to benefit crops in surrounding areas. The net effect on the national production would need to be assessed later in the season.

In February/March a WFP/FAO/UNICEF Mission visited the country to re-assess the food security situation in view of the potential losses to winter wheat and spring potatoes due to severe cold weather. The mission revised the winter/spring wheat/barley and potato production (in cereal equivalent) for the 2010/11 marketing year (Nov/Oct) downwards to 180 000 tonnes and 414 000 tonnes, respectively. The revised total supply for the current marketing year is estimated at 4.25 million tonnes of staple food including milled rice, other cereals, potatoes in cereal equivalent and soybeans. This is similar to the low production of 2009/10 but some 232 000 tonnes less than the earlier estimates by the joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) in November 2010.

# Cereal import requirements are forecast to rise further

The revised total cereal import requirements are raised to 1.086 million tonnes. According to the report, the commercial import capacity of DPRK in 2010/11 has been reduced as a result of reductions in export earnings, as well as higher international food and fuel prices. The government currently plans to import 200 000 tonnes of cereals, a reduction of 125 000 tonnes from the 325 000 tonnes that was informed to the CFSAM mission in October 2010. As of mid July, the government had imported some 146 000 tonnes

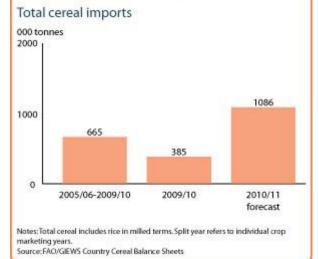


## Democratic People's Republic of Korea

	2006-2010 average	2010	2011 forecast	change 2011/2010
	000	percent		
Rice (paddy)	2 2 2 6	2 4 2 6	2 460	1
Maize	1676	1 683	1 700	1
Wheat	154	130	170	31
Others	79	34	34	0
Total	4 200	4 3 2 3	4 4 3 4	3

Note: percentage change calculated from unrounded data, Source: FMO/GIEWS Country Cereal Balance Sheets

## Democratic People's Republic of Korea



and received 34 500 tonnes of food aid.

### Food insecurity in the country worsening

The WFP/FAO/UNICEF mission had concluded that 6.1 million vulnerable people are in urgent need of international food assistance, due to a substantial reduction of agricultural production and commercial imports, as well as a decrease or curtailment of bilateral assistance. Most vulnerable to food insecurity are: children; pregnant and lactating women; elderly; large families with a high dependency ratio (i.e. few income earners, but many children and elderly dependants); people unable to work because of prolonged or chronic illnesses, particularly those with tuberculosis (TB); and people with disabilities.

Following the UN mission, WFP has started an emergency operation (EMOP) which appeals for a distribution of food aid of 310 500 tonnes to an estimated 3.5 million most vulnerable and food insecure people for 2011/12 (April/March) period. Also, there has been an appeal for donor funding in the order of USD 82.4 million for 2011 to respond to key humanitarian priorities, including USD 7 million for agriculture and food security projects.

## **Democratic People's Republic of Korea**



#### Reference Date: 23-May-2011

#### FOOD SECURITY SNAPSHOT

- Winter wheat, spring barley and spring potato harvests in 2011 are estimated to be lower by about 232 000 tonnes than the earlier estimates due to the severe winter this year
- Rise in international prices of cereals, especially maize, has reduced the country's ability to import needed quantities
- Chronic food insecurity continues throughout the country

### Severe winter has affected 2011 winter crops

A WFP/FAO/UNICEF Mission visited the country in February/March to re-assess the food security situation in view of the potential losses to winter wheat and spring potatoes due to severe cold weather. The mission revised the winter/spring wheat/barley and potato production (in cereal equivalent) for the 2010/11 marketing year (Nov/Oct) downwards to 180 000 tonnes and 414 000 tonnes, respectively. The revised total supply for the current marketing year is estimated at 4.25 million tonnes of staple food including milled rice, other cereals, potatoes in cereal equivalent and soybeans. This is similar to the low production of 2009/10 but some 232 000 tonnes less than the earlier estimates by the joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) in November 2010.

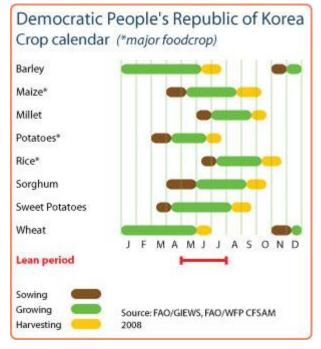
# Cereal import requirements are forecast to rise further

The revised total cereal import requirements are raised to 1.086 million tonnes. According to the report, the commercial import capacity of DPRK in 2010/11 has been reduced as a result of reductions in export earnings, as well as higher international food and fuel prices. The government currently plans to import 200 000 tonnes of cereals, a reduction of 125 000 tonnes from the 325 000 tonnes that was informed to the CFSAM mission in October 2010. As of end-January, the government had imported only 40 000 tonnes.

### Food insecurity in the country worsening

The WFP/FAO/UNICEF mission had concluded that 6.1 million vulnerable people are in urgent need of international food assistance, due to a substantial reduction of agricultural production and commercial imports, as well as a decrease or curtailment of bilateral assistance. Most vulnerable to food insecurity are: children; pregnant and lactating women; elderly; large families with a high dependency ratio (i.e. few income earners, but many children and elderly dependants); people unable to work because of prolonged or chronic illnesses, particularly those with tuberculosis (TB); and people with disabilities.

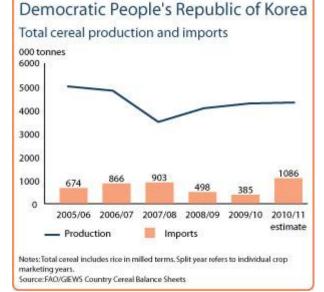
Following the UN mission, WFP has started an emergency operation (EMOP) which appeals for a distribution of food aid of 310 500 tonnes to an estimated 3.5 million most vulnerable and food insecure people for 2011/12 (April/March) period. Also, there has been an appeal for donor funding in the order of



## Democratic People's Republic of Korea

	2005-2009 average	2009	2010 estimate	change 2010/2009
0	000 tonnes			percent
Rice (paddy)	2257	2336	2426	4
Maize	1751	1705	1683	-1
Wheat	166	143	130	-9
Others	164	97	84	-13
Total	4338	4281	4323	1

Note: percentage change calculated from unrounded data. Source: FAO/GIEWS Country Cereal Balance Sheets



USD 82.4 million for 2011 to respond to key humanitarian priorities, including USD 7 million for agriculture and food security projects.

## Democratic People's Republic of Korea Total cereal imports 000 tonnes 2000 1000 665 385 0 2005/06-2009/10 2009/10 2010/11 forecast Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FAD/GIEWS Country Cereal Balance Sheets

## **Democratic People's Republic of Korea**



#### Reference Date: 15-March-2011

#### FOOD SECURITY SNAPSHOT

- Severe winter is expected to affect winter wheat and spring potato harvests in 2011 and increase the food deficit further
- Rise in international prices of cereals, especially maize, is said to have reduced the country's ability to import needed quantities
- Chronic food insecurity continues throughout the country .

### Severe winter is expected to reduce 2011 winter harvest

A WFP/FAO Mission was in the country in February/March to reassess the food security situation in view of the potential losses to winter wheat and spring potatoes due to severe cold weather. The mission is completed its field work covering more provinces and counties than before and is expected to produce a report shortly. The food security has become a serious concern given the lack of sufficient commercial imports in the face of high international export prices of cereals and also due to reduced flows of food aid.

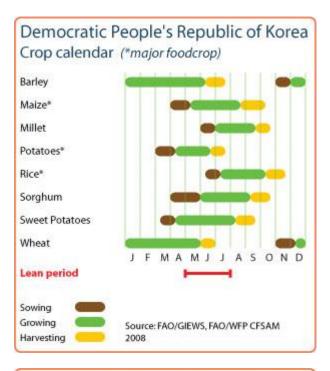
A joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) that visited DPRK in September-October 2010 had estimated the 2010/11 marketing year (November/October) total food supply of a 5.33 million tonnes of staple food production including paddy rice, other cereals, potatoes in cereal equivalent and soybeans. This is about 3 percent higher than in 2009/10. When paddy is converted to milled rice, the above total production comes to 4.48 million tonnes. On the basis of this supply the country faces a cereal import requirement for the current marketing year of an estimated 867 000 tonnes. The Government had plans to import commercially only about 325 000 tonnes, leaving 542 000 tonnes as an uncovered food deficit. The production and food estimates are likely to be slightly revised in view of the bad prospects for the 2011 wheat and potato crops which were only forecast at the time of the Mission.

### Cereal import requirements remain high

Despite the relatively good harvest, based on the Mission's estimate of total utilization needs of 5.35 million tonnes of cereal equivalent (rice in milled terms), there is an import requirement of 867 000 tonnes for the 2010/11 marketing year (November/October).

## Food insecurity in the DPRK could be worsening

Given that the overall food production situation in 2010/11 is not expected to improve significantly, the CFSAM Mission recommended the provision of international food assistance to about 5 million most vulnerable people (including groups with special needs such as children, pregnant and lactating women and the elderly with no support and PDS dependent populations in high malnutrition and mountainous regions), amounting to 305 000 tonnes of cereals. The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and has great difficulties meeting the needs of its population. The



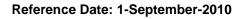
#### Democratic People's Republic of Korea Total cereal production and imports 000 tonnes 6000 5000 4000 3000 2000 903 866 867 1000 674 498 385 0 2005/06 2006/07 2007/08 2008/09 2009/10 2010/11 estimate Production Imports

Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

Government has indicated that its ability to import food is even more constrained given the recent increases in international prices of cereals, especially maize.

The **Overview Funding Document** requires in total **USD 82.4 million** for 2011 to respond to key humanitarian priorities, including USD 7 million for agriculture and food security projects.

## **Democratic People's Republic of Korea**



#### FOOD SECURITY SNAPSHOT

- Due to widespread flooding in the main rice producing areas of the country outlook for the 2010 cereal crops is unfavourable
- Cereal import requirements for 2009/10 and 2001/11 (Nov/Oct) marketing year remain high.
- Chronic food insecurity continues throughout the country

### The 2010 winter wheat season delayed due to cold weather

Given the relatively favourable rainfall conditions in June and July, a favourable harvest of the main season crops was anticipated. However, torrential rains in July caused severe flooding submerging estimated 14 850 hectares of farmland in South Hwanghae, North and South Phyongan and South Hamgyong provinces. No precise food production estimates are yet available. A Joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) has been planned to take place at the end of September 2010.

Due to the unusually cold temperatures in the month of April, coupled with heavy rains may delay development of the winter wheat crop resulted in yield reduction. Typically a very short time window is available as transplanting of the main season paddy crop needs to be carried out around mid-June shortly after harvesting of wheat. Delayed season may mean either reduction in planting of paddy or abandoning the wheat crop. However, wheat accounts for only about 3 to 5 percent of the annual total cereal harvest.

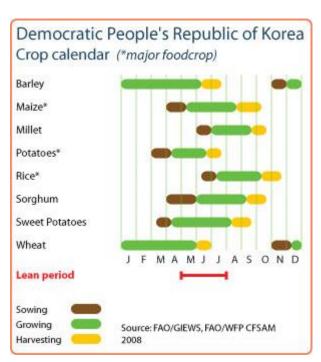
## Reduced 2009 cereal production

The 2009 paddy crop harvested last October-November was officially estimated at 2.34 million tonnes, about 3.5 percent above the near-average output of the previous year. Total cereal harvest in 2009 at 4.32 million tonnes (3.52 million including rice in milled terms) showed no improvement over the low output levels in recent years. In spite of favourable rainfall, shortages of critical inputs such as fertilizer, fuel, improved seeds, tillage power, among others, affected the overall productivity. According to the Ministry of Agriculture the total NPK fertilizer application during 2009 was 446 000 tonnes which is the lowest since 1989.

## Cereal import requirements remain high

Using the apparent per capita cereal consumption of about 140 kg per year in recent years and a population of about 24 million, the country requires about 3.36 million tonnes for human consumption. Considering other uses such as seed, feed, post-harvest losses and some stock changes, FAO estimated import requirements of 1.10 million tonnes for the marketing year 2009/10 (November/October). However, given the ongoing economic constraints it is unlikely that this deficit could be covered by commercial imports. Only a small fraction of this has been recorded as commercial imports or food aid. Thus a significant amount of international food aid is needed to meet the shortage.





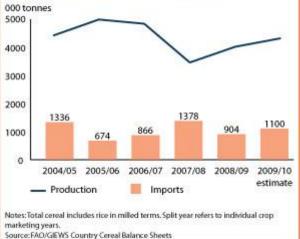
### Democratic People's Republic of Korea Cereal production

	2005-2009 average	2009	2010 forecast	change 2010/2009
0	00	percent		
Rice (paddy)	2257	2336	2000	-14
Maize	1751	1705	1700	0
Wheat	171	169	160	-5
Others	147	112	112	0
Total	4327	4322	3972	-8

ste:percentage change calculated from unrounded data Source: FAO/GIEWS Country Cereal Balance Sheets

## Democratic People's Republic of Korea

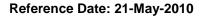
Total cereal production and imports



## **Chronic food insecurity continues**

The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and has great difficulties meeting the needs of its about 24 million people. The FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) conducted in the late 2008 confirmed a significant deterioration in food security in most parts of the country in recent years. The poor, especially those living in urban areas, continue to be affected by soaring food prices. It is very likely that the financial and economic situation of most households has worsened after recent monetary measures taken by the government to replace the devalued currency by a new legal tender for all transactions.

## **Democratic People's Republic of Korea**



#### FOOD SECURITY SNAPSHOT

- Outlook for the 2010 minor wheat crop uncertain
- Despite good weather reduced cereal harvest gathered in 2009
- Cereal import requirements for 2009/10 (Nov/Oct) marketing year remain high but very little imports sourced so far only Chronic food insecurity continues throughout the country

# The 2010 winter wheat season delayed due to cold weather

Unusually cold temperatures in the month of April, coupled with heavy rains may delay development of the winter wheat crop and may result in yield reduction. Typically a very short time window is available as transplanting of the main season paddy crop needs to be carried out around mid-June shortly after harvesting of wheat. Delayed season may mean either reduction in planting of paddy or abandoning the wheat crop. However, wheat accounts for only about 3 to 5 percent of the annual total cereal harvest.

## **Reduced 2009 cereal production**

The 2009 paddy crop harvested last October-November was officially estimated at 2.34 million tonnes, about 3.5 percent above the near-average output of the previous year. Total cereal harvest in 2009 at 4.32 million tonnes (3.52 million including rice in milled terms) showed no improvement over the low output levels in recent years. In spite of favourable rainfall, shortages of critical inputs such as fertilizer, fuel, improved seeds, tillage power, among others, affected the overall productivity. According to the Ministry of Agriculture the total NPK fertilizer application during 2009 was 446 000 tonnes which is the lowest since 1989.

# Cereal import requirements in marketing year 2009/10 estimated to remain high

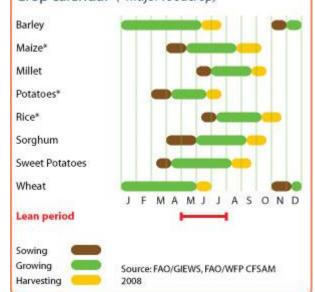
Using the apparent per capita cereal consumption of about 140 kg per year in recent years and a population of about 24 million, the country would require about 3.36 million tonnes for human consumption. Considering other uses such as seed, feed, post-harvest losses and some stock changes, FAO estimates that the country would have import requirements of 1.10 million tonnes for the marketing year 2009/10 (November/October). However, given the ongoing economic constraints it is unlikely that this deficit could be covered by commercial imports. As of April 2010 only 177 000 tonnes of cereals have been recorded/declared/pledged as imports, commercial and food aid. Thus a significant amount of international food aid is needed to meet the shortage.

## Chronic food insecurity continues

The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and has great difficulties meeting the needs of its about 24 million people. The FAO/WFP Crop



### Democratic People's Republic of Korea Crop calendar (\*major foodcrop)



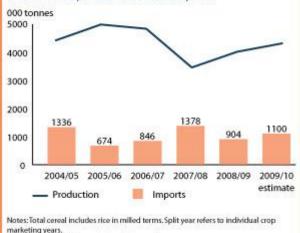
# Democratic People's Republic of Korea

	2005-2009 average	2009	2010 forecast	change 2010/2009
	00	percent		
Rice (paddy)	2257	2336	2400	3
Maize	1751	1705	1700	0
Wheat	171	169	160	-5
Others	147	112	112	0
Total	4327	4322	4372	1

Note:percentage change calculated from unrounded data Source:FAO/GIEWS Country Cereal Balance Sheets

Democratic People's Republic of Korea

Total cereal production and imports



marketing years. Source:FAO/GIEWS Country Cereal Balance Sheets and Food Supply Assessment Mission (CFSAM) conducted in the late 2008 confirmed a significant deterioration in food security in most parts of the country in recent years. The poor, especially those living in urban areas, continue to be affected by soaring food prices. It is very likely that the financial and economic situation of most households has worsened after recent monetary measures taken by the government to replace the devalued currency by a new legal tender for all transactions.

## **Democratic People's Republic of Korea**



### Reference Date: 02-February-2010

### FOOD SECURITY SNAPSHOT

- Despite good weather below average cereal harvest
   estimated this year
- Cereal import requirements for 2009/10 (Nov/Oct)
   marketing year forecast to remain high
- Chronic food insecurity continues throughout the country

# Despite good weather, below average cereal harvest estimated this year

Harvesting of the 2009 rice and maize, the two most important cereal crops is completed. Rainfall this year was relatively favourable; however, shortages of critical inputs such as fertilizer, fuel, improved seeds, tillage power, among others have affected the overall productivity. According to the Ministry of Agriculture the total NPK fertilizer application during 2009 was 446 000 tonnes which is the lowest since 1989. Official estimate of 2009 total cereal production is 4.32 million tonnes (including 2.34 million tonnes of paddy. When paddy is converted in to milled rice total production of cereals amounts to 3.52 million tonnes. Although this would indicate a slight improvement over the last year's poor harvest, it is still below average. Maize crop estimated at 1.71 million tonnes, was affected by a dry spell of more than three weeks since mid-July in the northern cereal bowl region of the country. Winter and spring wheat and barley harvests, gathered in February 2009 and included in the totals above, were also below average.

# Cereal import requirements in marketing year 2009/10 estimated to remain high

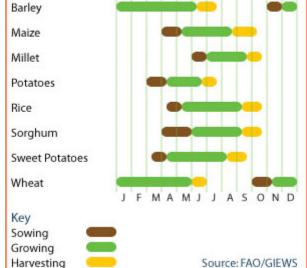
Using the apparent per capita cereal consumption of about 148 kg per year in recent years for its population of about 24 million, the country would require about 3.54 million tonnes for human consumption and additional estimated amount of 1.2 million tonnes for seed, feed, industrial use, post-harvest losses and some stock changes. Thus FAO estimates that the country would have import requirements of 1.25 million tonnes for the marketing year 2009/10 (November/October). However, given the ongoing economic constraints it is unlikely that this deficit could be covered by commercial imports. This implies that a significant international food aid will be needed.

## Chronic food insecurity continues

The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and has great difficulties meeting the needs of its over 23 million people. The FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) conducted in the late 2008 confirmed a significant deterioration in food security in most parts of the country. The poor, especially those living in urban areas, continue to be affected by soaring food prices. It is very likely that the financial and economic situation of most households has worsened after recent monetary measures taken by the government to replace the devalued currency by a new legal tender for all transactions.

**GIEWS** global information and early warning system on food and agriculture

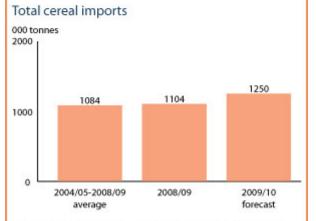




# Democratic People's Republic of Korea

	2004-2008 average	2008	2009 forecast	change 2009/2008
	00	0 tonnes	0	percent
Maize	1756	1711	1705	0
Rice (in milled terms)	1494	1333	1541	16
Wheat	173	175	169	-3
Others	154	115	112	-3
Total	3577	3334	3527	6

Note:percentage change calculated from unrounded data.



Notes: Total cereal includes rice in milled terms. Split year refers to individual crop marketing years. Source: FAO/GIEWS Country Cereal Balance Sheets

## **Democratic People's Republic of Korea**

GIEWS 💓

Reference Date: 12-November-2009

#### FOOD SECURITY SNAPSHOT

- Despite good weather below average cereal harvest estimated this year
- Cereal import requirements for 2009/10 (Nov/Oct)
   marketing year forecast to remain high
- Chronic food insecurity continues throughout the country

# Despite good weather below average cereal harvest estimated this year

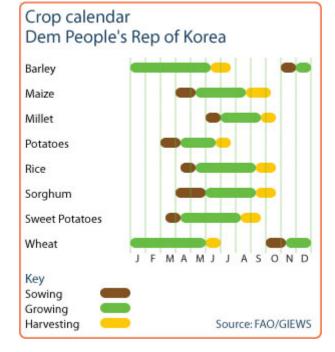
Harvesting of the 2009 rice and maize, the two most important cereal crops is completed. Rainfall this year was relatively favourable; however, shortages of critical inputs such as fertilizer, fuel, improved seeds, tillage power, among others have affected the overall productivity. According to the Ministry of Agriculture the total NPK fertilizer application during 2009 was 446 000 tonnes which is the lowest since 1989. Official estimate of 2009 total cereal production is 4.32 million tonnes (including 2.34 million tonnes of paddy. When paddy is converted in to milled rice total production of cereals amounts to 3.52 million tonnes. Although this would indicate a slight improvement over the last year's poor harvest, it is still below average. Maize crop estimated at 1.71 million tonnes, was affected by a dry spell of more than three weeks since mid-July in the northern cereal bowl region of the country. Winter and spring wheat and barley harvests, gathered in February 2009 and included in the totals above, were also below average.

# Cereal import requirements in marketing year 2009/10 estimated to remain high

Using the apparent per capita cereal consumption of about 148 kg per year in recent years for its population of about 24 million, the country would require about 3.54 million tonnes for human consumption and additional estimated amount of 1.2 million tonnes for seed, feed, industrial use, post-harvest losses and some stock changes. Thus FAO estimates that the country would have import requirements of 1.25 million tonnes for the marketing year 2009/10 (November/October). However, given the ongoing economic constraints it is unlikely that this deficit could be covered by commercial imports. This implies that a significant international food aid will be needed.

### Chronic food insecurity continues

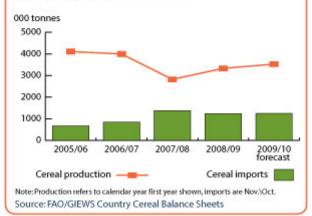
The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and remains reliant on external food assistance to meet the needs of its over 23 million people. The FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) conducted in the late 2008 confirmed a significant deterioration in food security in most parts of the country. The poor, especially those living in urban areas, continue to be affected by soaring food prices.



## Cereal production and imports Democratic People's Republic of Korea

Cereal production	2004-2008 average	2008	2009 forecast	change* 2009/2008
	000	0 tonnes		percent
Maize	1756	1711	1705	-0.4%
Rice (milled)	1494	1333	1542	15.7%
Wheat	173	175	169	-3.4%
Other	170	115	112	-2.6%
Total Cereals	3576	3334	3528	5.8%

\* Percentage change calculated from unrounded data.



## **Democratic People's Republic of Korea**

Reference Date: 07-October-2009

#### FOOD SECURITY SNAPSHOT

- Despite good weather below average cereal harvest expected this year
- Cereal import requirements forecast to increase
- Chronic food insecurity continues

# Despite good weather below average cereal harvest expected this year

Harvesting of the 2009 rice, the most important cereal, is currently underway. Rainfall this year has been relatively favourable; however, shortage of critical inputs such as fertilizer, fuel, improved seeds, tillage power, among others is expected to bring down the productivity. For example, according to the Ministry of Agriculture's estimates total NPK fertilizer application at 446 000 tonnes is lowest since 1989. No official estimate is available yet but FAO preliminarily puts production forecast of paddy at about 1.8 million tonnes or equivalent milled rice at 1.19 million tonnes. Although this would indicate a slight improvement over the last year's poor harvest, it is still 18 percent below the average of the previous five years. Similarly maize crop has been affected by a dry spell of more than three weeks since mid-July in northern cereal bowl region of the country and consequently the 2009 production is likely to be similar to last year's low output. Winter and spring wheat and barley harvests, gathered in February 2009, were also below average. Thus an aggregate cereal production for 2009 including milled rice is forecast at about 3 million tonnes.

# Cereal import requirements in marketing year 2009/10 estimated to increase

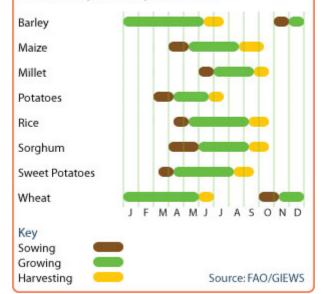
Given the poor harvest prospects for the main season crops and relatively small share of the secondary crop (to be planted now and harvested early next year), the import requirements for the marketing year 2009/10 (November/October) are likely to be significantly higher than in previous years. To maintain the apparent consumption levels of past few years, the total cereal requirements are estimated at about 1.65 million tonnes. However, given the ongoing economic constraints it is unlikely that this deficit could be covered by commercial imports. This implies that a significant international food aid will be needed.

## Chronic food insecurity continues

The country continues to suffer from chronic food insecurity, high malnutrition rates and economic problems, and remains reliant on external food assistance to meet the needs of its over 23 million people. The FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) conducted in the late 2008 confirmed a significant deterioration in food security in most parts of the country. The poor, especially those living in urban areas, continue to be affected by soaring food prices.

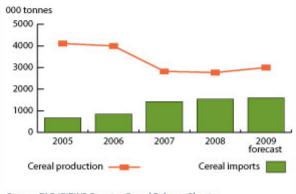


## Crop calendar Dem People's Rep of Korea



## Cereal production and imports Democratic People's Republic of Korea

Cereal production	2004-2008 average	2008	2009 forecast	change 2009/2008
	000 tonnes			percent
Maize	1696	1411	1500	6.3%
Rice (milled)	1446	1094	1188	8.6%
Wheat	163	125	150	20%
Other	170	139	164	18%
Total Cereals	3463	2769	3002	8.4%



Source: FAO/GIEWS Country Cereal Balance Sheets