HIGHLIGHTS

- **Cereal production in DPRK dropped substantially between 2014 and 2015**: According to Government data, cereal production in 2015 dropped by 11.4 percent compared to 2014, while the decline between 2013 and 2014 was 4.5 percent. However, FAO’s analysis, which also includes cereal production estimates from sloping lands and kitchen gardens, shows food production in 2015 decreased by 9 percent compared to 2014.

- **Paddy rice suffered the biggest production loss**: Paddy rice production faced a 26 percent decrease in 2015 compared to 2014, according to Government data, declining by 0.68 million mt to 1.95 million mt.

- **The 2016 Public Distribution System (PDS) ration continues to drop**: In the first three months of the year the PDS ration was an average of 370 grams/person/day, representing a 10 gram reduction from the last quarter of 2015. In April, the ration further decreased to an average of 360g/p/d, the lowest April ration since 2009. Rations are consistently lower than the Government average target of 573g/p/d.

### Decreased cereal production

According to Government data, the total cereal production in 2015, for both the early harvest and main crops\(^1\), was 5.06 million mt. This is 0.65 million mt, or 11.4 percent, less than the 5.71 million mt in the previous year (2014). According to the Ministry of Agriculture, much of this loss was attributed to the 2015 drought. The overall cereal production in 2015 in comparison to 2014 in 11 provinces is shown in Figure 1. Only Pyongyang province has reported a production increase compared to 2014. Map 1 on page 2 shows the production change by county. As can be seen in the map, almost 75 percent of the counties/districts reported a production loss compared to 2014.

Paddy rice, which is the country’s main crop in terms of total production share, has suffered a drop of 0.68 million mt (25.9%) to 1.95 million mt in 2015, compared to the 2014 production figure of 2.63 million mt.

### Comparing FAO and official Government data

FAO’s latest GIEWS report shows that food production in 2015 decreased by 9 percent compared to 2014, while Government data shows an 11.4 percent decrease. The difference is due to different methodologies, with FAO figures including food production estimates from ‘sloping lands’ and ‘kitchen gardens’ in the total figure, which is excluded from official Government data.

Further FAO estimates indicate that the decrease in food production in 2015 compared to 2014, is the first reduction since 2010, while Government data points to a 4.5 percent decrease between 2013 and 2014. These different figures are also explained by the inclusion of sloping lands and kitchen gardens in FAO’s food production figures.

Overall, food production in 2015 decreased, which is mainly attributable to the 2015 drought. The declining trend in productivity needs to be reversed to ensure food security in DPRK.

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\(^1\)Main crops are paddy rice and maize, while the early crops are potato, wheat and barley.
Agricultural output comparison between 2014 and 2015

<table>
<thead>
<tr>
<th></th>
<th>2013/14 (mt)</th>
<th>2014/15 (mt)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cereal production</td>
<td>5,713,286</td>
<td>5,061,886</td>
<td>-11.4</td>
</tr>
<tr>
<td>Storage loss</td>
<td>97,240</td>
<td>58,620</td>
<td>-39.7</td>
</tr>
<tr>
<td>Shortfall (food gap)</td>
<td>891,508</td>
<td>1,147,150</td>
<td>28.7</td>
</tr>
</tbody>
</table>

Figure 2: Agricultural output comparison
Source: DPRK, Ministry of Agriculture

- The decrease in cereal production was counterbalanced slightly by the improvement in post-harvest management, leading to almost a 40 percent decrease in storage loss.
- Nevertheless, the shortfall in food, or ‘food gap’, increased by 28.7 percent in 2015. The increased food gap helps to explain the decrease in the 2016 PDS ration.
- Contrary to the Government cereal deficit figures that are depicted in Figure 2, FAO’s GIEWS report estimates the 2015-2016 food gap at 394,000 mt, instead of 1.14 million mt. The lower forecasted deficit by FAO can be explained by the optimal per capita consumption rate used by the Government of 207 kg per person per year, while FAO uses a minimum per capita consumption rate of 175 kg per person per year.
- By FAO’s estimates, the food gap is almost four times larger than in 2014/2015 and the highest since 2011/2012.

MAP: Total Cereal Production Change in 2015 compared to 2014

Legend
- More than 20,000 MT decrease
- 10,000 MT to 20,000 MT decrease
- 5,000 MT to 10,000 MT decrease
- 2,000 MT to 5,000 MT decrease
- Upto 2,000 MT decrease
- Upto 10,000 MT increase
- More than 10,000 MT increase

The boundaries and names shown and designations used on this map do not imply official endorsement or acceptance by the United Nations. Spatial reference: Geographic Coordinate System WGS 1984. Map Produced by WFP DPRK April 2016
Drop in average PDS ration
The Government’s PDS cereal rations - consisting of rice, maize, potatoes, wheat and barley – saw a drop at the turn of the year. The Government determines PDS ration sizes on the basis of production estimates and planned imports. PDS rations are consistently lower than the Government average target of 573 grams/per person/day (g/p/d), as shown in Figure 3. The average ration for January-March 2016 was 370 g/p/d, down from 380g/p/d between October-December 2015. In April, the PDS ration decreased further, down to 360g/p/d. An average cereal ration of 360g/p/d provides approximately 63 percent of daily calorie requirements, with reference to the 2,100 calorie requirement for adults. This is the lowest rate for April since 2009. Following previous trends, rations may drop further during the lean months of August and September, when rations were down to 250g/p/d between 2013 and 2015.

Figure 3: 2016 PDS ration is the lowest since 2009

Source: WFP DPRK

Humanitarian partners launch 2016 Needs and Priorities
In April, humanitarian partners released the 2016 DPR Korea Needs and Priorities plan seeking financial support for humanitarian response activities in DPRK, including US$ 23.3 million for food security and US$ 54.7 million for nutrition. Adequate funding for these activities is essential.

Impact of sanctions
The adoption of UN Security Council Resolution 2270, coupled with additional bilateral sanctions, are further increasing the pressure on DPRK. While the newly adopted UN sanctions are not intended to negatively affect humanitarian assistance, a few international shipping companies show hesitation to accept shipments to DPRK ports due to concerns about costly inspections in international waters while in transit. In addition, some international suppliers are now reportedly hesitant to provide goods to humanitarian organizations in DPRK.

To date, no humanitarian shipments have been stopped for inspections related to the sanctions. Nevertheless, the above concerns must be urgently addressed to ensure that sanctions do not further aggravate the humanitarian situation in the DPRK.
BOX 1: Key Baseline Information on Food Security and Agriculture in DPRK

Food Security:
- The estimated percentage of households dependent on the Public Distribution System (PDS) is 70% (approximately 18 million people). PDS dependent households are considered more food insecure than cooperative farmers in terms of food access.
- The average household consumes below acceptable food diversity on a regular basis and has a lack of micronutrients, fats and proteins in their daily diet.
- Percentage of households with access to piped water: 90% (CBS 2010).
- Percentage of households that treat water before drinking: 20% (CBS 2010).
- Percentage of population using improved sanitation facilities: 83% (CBS 2010).

Climate:
- DPRK has a continental climate with a relatively short cropping season with long and bitter cold winters. Summers are short, hot, humid and rainy.
- Approximately 60% precipitation occurs between June and September with the remaining 40% of precipitation being less reliable. Droughts are common in spring, winter and autumn with typhoons almost every summer.
- Temperature rise in DPRK in the last 100 years (1918-2000) is 1.9°C, while the global rise is 0.89°C.

Agriculture:
- Total cultivated area: 20,000 km² (17%), cereal cultivated area: 14,000 km²
- Total average cereal production (2012-2015) was 5.55 million mt, with 2.53 million mt of rice, and 2.17 million mt of maize.
- Major cereal producing provinces are South Hwanghae, North Pyongan, South Pyongan and South Hamgyong.
- The contribution of early crops to the total cereal production in 2014 is 6%.

Food Security and Agriculture Sector Working Group members, DPRK

- EUPS 1 - Premiere Urgence Internationale
  French Cooperation Office
- EUPS 2 - Save the Children
  Italian Development Cooperation Office
- EUPS 3 - Concern Worldwide
  Swiss Agency for Development and Cooperation (SDC)
- EUPS 4 - Deutsche Welthungerhilfe
  United Nations Children's Emergency Fund (UNICEF)
- EUPS 5 - Triangle Génération Humanitaire
  World Food Programme (WFP) – Co-chair
- Food and Agriculture Organization (FAO) – Co-chair