Overview

The Democratic People’s Republic of Korea (DPRK) experienced a progressive improvement in food security between 2000 and 2005 due to increased domestic agricultural production and large-scale food assistance. In 2006 and 2007, the country suffered some negative developments in terms of domestic food availability, including two consecutive years of summer flooding. For the 2007/08 marketing year (November/October), FAO estimated the cereal deficit to be over 1.6 million tons, the largest food gap since 2000/01.

The country’s ability to cover the food gap with external supplies also decreased during this period. Food imports were significantly lower during the 2005/06 and 2006/07 marketing years and food aid supplies fell sharply with the Government’s August 2005 decision to halt humanitarian assistance. Imports from the Republic of Korea (ROK) under a concessional loan arrangement were also lower and in 2008 no food deliveries from the ROK have taken place. Cereal imports from China were at less than half the 2004/05 level for two consecutive years. While the early months of 2008 saw an increase in import levels, from April 2008 Chinese export restrictions on cereal appear to have significantly curtailed official exports.

Redistribution of food inside the country during 2006 and 2007 also faced constraints due to infrastructural damage from floods, inadequate fuel supplies and tightened restrictions on market trade. Food accessibility for vulnerable groups like children and pregnant and lactating women, and the remote north-eastern provinces appeared to be further at risk, leading to concerns that already high malnutrition rates could deteriorate.

The Rapid Food Security Assessment (RFSA) was carried out by 14 international WFP and FAO experts with the support of national DPRK staff over a three-week period in June 2008 in 53 selected counties across eight of the country’s ten provinces (Ryanggang, North Hamgyong, South Hamgyong, Kangwon, North Hwanghae, South Hwanghae, South Phyongan and Pyongyang.) A similar survey was conducted in the two other provinces, western Chagang and North Phyongan, by five US NGOs ahead of their planned commencement of distributions in those locations.

The objectives of the RFSA were to:

i) qualitatively assess the food security situation of particular populations groups in terms of food availability, access and utilization; and,

ii) to determine food assistance requirements in terms of location, quantity, type and timing of assistance.

The methodology included primary data collection through 375 structured household interviews and discussions with key informants in county offices and hospitals; observational visits to hospitals, orphanages and cooperative farms; as well as secondary data review.

What is the State of Food Security in DPRK? (Availability, Accessibility, Utilization)

The RFSA concluded that the food security of vulnerable populations has deteriorated significantly over the past year both in terms of food availability, accessibility and utilization. Two successive years of flooding, crop losses and decreases in external food imports and aid have caused a sharp reduction in food availability across DPRK. Yields from the spring crop in May/June 2008 are predicted to be modest despite increased double cropping and are only likely to cover household food needs for about a month.

The lack of sufficient chemical fertilizer assistance in time for the spring planting season is likely to negatively affect the main harvest in October/November 2008; FAO forecasts a reduction of 25 – 30 percent of normal harvest yield. In addition, DPRK remains vulnerable to adverse weather conditions and natural disasters that can negatively affect domestic food production.

Food accessibility is also deteriorating in DPRK, RFSA respondents reported progressive reductions in food rations through the Public Distribution System (PDS), starting from 500 grams per person per day in November 2007 to 150 grams in June 2008. In some provinces, cooperative farm rations had also been reduced in November 2007.
The cost of food in the markets has sky-rocketed over the past 12 months with rice now costing 2.5 - 3 times more than one year ago while the price of maize is now four times higher. Household incomes seem unable to keep up with these rampant price increases; official salaries remain almost stagnant and informal incomes are suffering the effects of tightening restrictions on market activities.

The RFSA found that household food utilization has been negatively affected by the food shortages. Over two thirds of assessed households have reduced their food intake and more than half are now consuming only two meals per day. When compared to the 2003 – 2005 period, consumption of wild foods has increased by nearly 20 percent and dietary diversity was found to be very poor among 80 percent of interviewed households.

While a traditional Korean diet consists of rice, vegetables, wild foods, soybeans, meat and oil, most families now consume mainly maize and a combination of vegetables and wild foods. Oil is used in very small amounts in only a few households, while beans and other proteins are nearly absent from the diet. The quality of diet consumed by PDS-dependent households was found to be poorer now than during the 2004-2005 period.

Who is Food Insecure?

The RFSA concluded that the most vulnerable groups and regions are:

- **Socially vulnerable**: children in child institutions, elderly people and children in paediatric wards;
- **Physiologically vulnerable**: pregnant and lactating women, children under 5 and adolescents;
- **Geographically vulnerable**:
  - The North East: Ryanggang, North Hamgyong provinces; urban areas predominantly in counties with declined industrial activity;
  - In the South: counties affected by floods in recent years, and South Hamgyong due to economic remoteness.
The RFSA found that households were increasingly relying on a multitude of coping strategies to overcome the current food shortages. The most frequently employed strategies were to reduce food intake, eat less preferred foods, forage for wild foods and receive assistance from relatives. In North Hamgyong, there was a strong sentiment among many households that their coping strategies were about to be or had already been exhausted. Many of the strategies normally used by vulnerable households were failing since the current food shortages were affecting everybody.

The RFSA found that the nutritional situation was compromised due to reduced diet and low quality of food. More cases of malnutrition were observed and reported in hospitals and households. However, since the RFSA methodology did not include anthropometric measurements, it is not possible to confirm malnutrition levels. Interviews with hospital staff and households and observations indicate a high prevalence of stunting throughout all provinces. Wasting was observed in hospitals and residential child institutions and some RFSA teams came across individual cases of oedema (Ryanggang) and kwashiorkor (South Hamgyong). Diarrhoea caused by increased consumption of wild foods was reported to be one of the leading causes for malnutrition amongst children under 5, particularly in urban areas. Most hospitals and child institutions had limited ability to effectively treat malnutrition due to lack of fortified food for infants.

How is the DPRK food security situation classified?

The RFSA concludes that North Hamgyong, Ryanggang provinces and some counties in South Hamgyong are suffering an Acute Food and Livelihood Crisis due to insufficient food intake, poor dietary diversity, and indications of increasing wasting rates, diarrhoea and illnesses. It is feared these areas may suffer a Humanitarian Emergency in August-October as food stocks from the 2007/08 harvest are depleted and coping strategies become exhausted, unless additional external food assistance is provided in a timely manner.

Other assessed areas (predominantly Kangwon, parts of South and North Hwanghae and South Phyongan), are deemed as Chronically Food Insecure due to high stunting levels, unstable access/availability of sufficient food and chronic dietary diversity deficit. The food security situation in these areas may quickly degrade to an Acute Food and Livelihood Crisis unless food assistance is scaled up. While the RFSA appreciates that food shortages have affected all areas of the country to some extent, some counties in Pyongyang Province are considered to be Generally Food Secure.
Conclusions and Recommendations:

To prevent further deterioration of health and nutritional status, the RFSA recommends that supplementary humanitarian food assistance be urgently provided to the most vulnerable groups and geographical areas of the country. Food aid interventions should start before the spring crops are depleted at the end of July and should continue at least until the main harvest in October/November 2009. Suggested interventions are:

- Immediate distribution of cereals, pulses and oil through institutions and the Public Distribution System;
- A shorter to medium-term focus on providing fortified food commodities targeting vulnerable groups;
- Longer term interventions to strengthen agricultural productivity, household food security and nutritional status through Food for Community Development Projects, Mother and Child Health and Nutrition Programmes and marketization of food.

Due to the continued vulnerability to extreme weather events, it is recommended that the Government collaborate with the UN and other actors to ensure disaster preparedness and mitigation activities are integrated into national development policies.

In order to reduce the food balance deficit, agricultural production should be boosted by:

- expanding double-cropping of both spring and winter crops;
- substituting winter wheat and barley production with potatoes;
- expanding vegetable production as their relative importance in the North Korean diet has grown;
- continuing the existing trend of replacing grain-consuming livestock (pigs, chickens) with high-yielding species relying on natural vegetation (goats, rabbits);
- expanding integrated agro-forestry; and
- expanding conservation agriculture and Integrated Pest Management which have been recognized as making valuable contributions to higher farm productivity.

Short Term Recommendations include prioritisation and provision of essential agricultural inputs for the 2008/2009 harvests such as fertilizer, pesticides, wheat and barley seeds and plastic sheeting.

Longer-term recommendations include collaborations between the DPRK Government and FAO in:

- varietals improvement;
- eradication of pests attacking crops and forests;
- control of avian influenza and foot-and-mouth disease; and
- the rehabilitation or expansion of crop irrigation, particularly gravity-fed systems.

It is recommended that collaboration on income generating agro-forestry activities, pest control and forest assessment and management be expanded for improvement in hillside agriculture and reforestation.

Due to the high levels of vulnerability observed by the RFSA, an extensive food security monitoring system should be established with regular visits to all areas and institutions targeted for food assistance.

To complement the findings of this assessment, a FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) is recommended for September/October to forecast the 2008/2009 harvests. The RFSA also recommends that a Nutritional Survey be conducted in September/October 2008 to update the findings of the 2004 UNICEF/WFP/Government Nutritional Assessment.

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