

# FOOD SECURITY AND NUTRITION ASSESSMENT

AMONG CHILDREN AT WFP-SUPPORTED NURSERIES IN DPR KOREA

#### **EXECUTIVE BRIEF**

The World Food Programme (WFP) is currently implementing a Protracted Relief and Recovery Operation 200532 "Nutrition Support for Children and Women" in DPR Korea, covering the period July 2013 to June 2016. The operation plans to assist 1.8 million children and women with the aim of reducing malnutrition by providing blended cereals and biscuits fortified with vitamins and minerals. Targeting was guided by the results of the 2012 national nutrition survey which showed a stunting prevalence of 27.9% and a wasting prevalence of 4%.

In October 2015, WFP conducted a food security and nutrition assessment, together with the Government of DPR Korea, in order to generate updated information about WFP's primary beneficiary group: children aged 6-59 months. In WFP operational counties, 61% of children in this age group are registered in nurseries. During the month of the assessment, WFP assistance was provided to 488,492 nursery children, attending 9,380 nurseries.

This brief presents the main findings of the assessment, which will be used to guide the design of WFP's new operation.

## **ASSESSMENT METHODOLOGY**

The assessment took place 15-30 October 2015 and captured information on:

- the nutrition status of nursery children (anthropometric measurements); and
- the overall foods ecurity context of children (i.e. at home and at the nursery).

The target population included all children registered at WFP-supported nurseries in 85 counties, spanning eight provinces.

For the nutrition component, anthropometric measurements (weight, height, and mid-upper arm circumference) were taken from 4,747 children attending 144 nurseries, across 24 counties. County selection was based on a multi-stage cluster survey approach. The DPRK Central Bureau of Statistics selected the nurseries and was responsible for taking the child measurements. WFP observed measurements in one third of the nurseries (48), and validated the data-entry process.

Anthropometric measurements were taken from the children attending the nursery. As such, sick children who stayed away were not included in the sample. This may have resulted in an underestimation of malnutrition among children in WFP-supported nurseries.

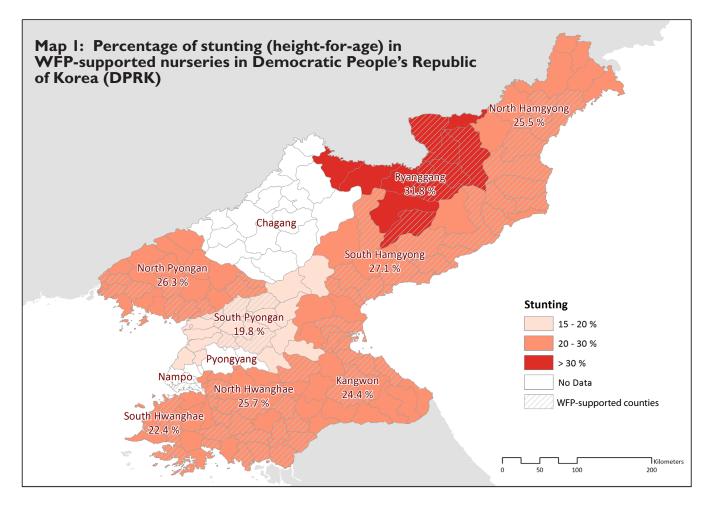
For the food security component, WFP interviewed staff at all 48 nurseries visited, and 96 mothers. Given the importance of the first 1000 days of life, mothers of the younger nursery children (6-23 months) were selected for interviews.

Due to the small household sample, the findings on the food security situation at home can only be treated as indicative.

### MAIN FINDINGS

#### Nutrition

The assessment found stunting prevalence in WFP-supported nurseries to be at moderate to high levels at 25.4% overall. The prevalence of wasting was found to be low at 1.1%. For children in the WFP-supported nurseries, stunting was most commonly found in Ryanggang province (31.8%). The lowest incidence was observed in the province of South Pyongan (19.8%).



A rapid increase in stunting prevalence in the first three years of life was observed among the children measured. This shows the need for prevention of stunting to target the first 1000 days.

Little difference was found in the nutritional outcomes of boys and girls.

## Food consumption

The children covered by the assessment consume most of their daily food in the nurseries (on average 81% for all children aged 6-59 months). Daily food consumption typically comprises of rice, soy milk, fruit and vegetables, and WFP's fortified blended food (FBF)<sup>1</sup>.

The findings show that with the inclusion of the WFP fortified blended food mixture, nursery children are consuming a generally adequate diet through the addition of key nutrients and minerals. Without FBF, the children would not have met their daily fat intake requirements from the foods consumed – although it should

On days when FBF is provided, all children had access to their required amount of food energy, protein and fat. However, the protein in the food items consumed is mainly plant based and contains no or little high quality animal protein, except that provided through the FBF. For one micro-nutrient (iodine), FBF was identified as the only source for children up to 23 months, providing 39% of daily recommended intake.

For households with a child aged 6-23 months, the assessment found that food consumption at home is limited in quantity and quality. The average household consumes below acceptable food diversity on a regular basis and this has not changed significantly over the past 5 years. Diets are generally poorer in urban settings where fewer households have access to 'kitchen gardens' and rely more on support from relatives and friends in rural areas.

Markets are becoming increasingly important for accessing food.

child's diet.

be noted that the assessment did not consider any fats received from breastmilk.

<sup>1</sup> WFP fortified blended food consists of: cereal grains such as wheat, corn or rice (energy); soya beans (plant protein); milk powder (animal protein); oil (fat source); sugar, and, a premix containing 19 vitamins and minerals intended to contribute key nutrients and minerals to the

#### **KEY RECOMMENDATIONS**

- Stunting rates are at moderate to high levels in WFP supported nurseries and show an increase in the first 3 years of life due to the cumulative nature of the stunting process. Given that stunting reduction interventions are most effective during the first 1000 days, it is recommended to focus on this period to further reduce chronic malnutrition rates. Nurseries provide a good opportunity of reaching children to prevent undernutrition.
- Wasting levels in the nurseries are very low and it may be that wasted children remain outside the nursery system. In collaboration with the Government and UNICEF, other avenues need to be explored to identify and reach these children.
- The findings suggest that WFP should redesign its current food basket to better match the food needs of the children at nurseries. The provision

- of FBF alone (excluding WFP-provided ration items of pulses and oil) appears sufficient in meeting the gaps in the average nursery child's diet. FBF was shown to contribute importantly to children's overall micronutrient, fat and high quality protein intake.
- To obtain a more complete picture of the nutrition situation of children in DPR Korea, a nationally representative nutritional survey should be conducted during the upcoming lean season in May-August 2016, marking four years since the previous national survey. The process should follow international standards for the implementation of nutrition surveys, and include an assessment of the water, hygiene and sanitation environment in nurseries and households.