



World Food Programme

SAVING
LIVES
CHANGING
LIVES

Rice Fortification

Low dietary diversity and intake of nutrient-rich foods remain a challenge in Bangladesh; and micronutrient deficiencies in vitamins A, B1 and B12, iron, zinc and folic acid are widespread, especially among the poor. Rice fortification offers a unique opportunity to substantially improve nutrition and, as such, the health and economic status of a large number of people, and at a relatively low cost.

Rice is the main staple of Bangladesh, where people consume more than 367 grams per day on average. Among the poor, vegetables and spices are often the only additions to rice-based meals. According to the 2019 Fill the Nutrient Gap analysis, combining fortified rice with other interventions can help to significantly reduce the non-affordability of nutritious diets, while improving nutrient availability and reducing micronutrient deficiencies.

With WFP support, the Government of Bangladesh launched its rice fortification programme in 2013, initially reaching 30,000 people. Today more than 15 million ultra-poor Bangladeshis receive fortified rice through two government social safety nets – the Food Friendly programme and Vulnerable Group Development (VGD)

programme. WFP technical expertise is provided to support the Ministries of Food and of Women and Children's Affairs to implement the respective programmes which cover urban as well as rural Bangladesh.

WFP has supported the Government to establish domestic production of fortified rice kernels from 2015 onwards. Seven private companies in Bangladesh now make the kernels which are composed of rice powder mixed with vitamins A, B1 and B12, iron, zinc and folic acid. The kernels are blended with ordinary rice at a ratio of 1:100 by 180 millers across the country.

To ensure that fortified rice is not only limited to the two safety net programmes, WFP is now also supporting the commercial production of fortified rice in the country. In 2021, producers began piloting the sale of fortified rice in commercial markets on a small scale, and raising awareness on the importance of good nutrition and the reduction of micronutrient deficiencies through the use of fortified rice. WFP has been facilitating this process through a cost analysis and market research to (a.) enhance understanding of consumer and producer preferences and behaviour, and (b.) to promote the local sale and continued use of fortified rice among social safety net beneficiaries around the country.

November 2022

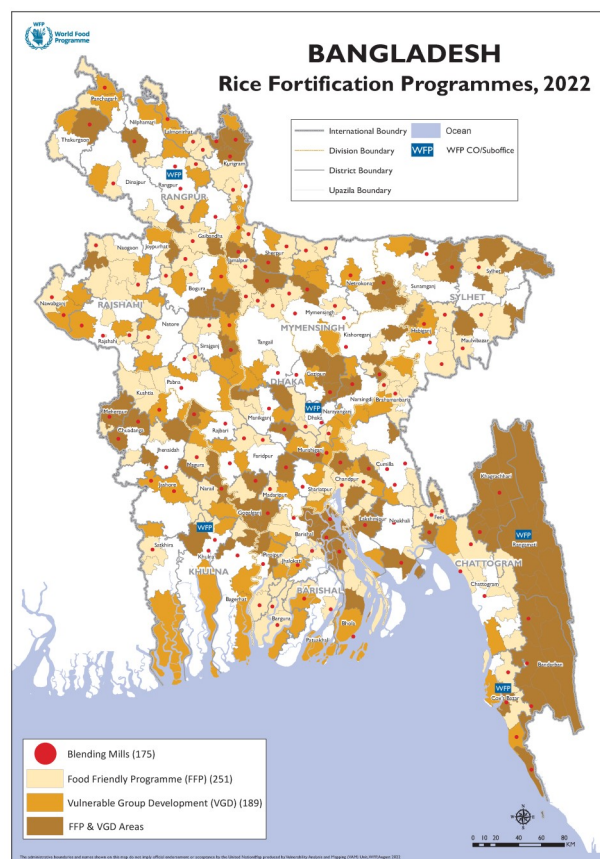
WFP technical support also includes assisting Government to create guidelines, strategies and standard operating procedures; to develop and implement policy; to conduct trainings and technical committee meetings; to validate mills and fortified rice kernel factories; and provide guidance on fortified rice kernel testing methodologies, and SBCC tools and materials. The WFP rice fortification programme is conducted together with more than 200 partners across the country, including five Government of Bangladesh agencies; 191 private sector partners; two NGOs; and two laboratories. Bangladesh is now the world's third-largest producer of fortified rice kernels.

ACHIEVEMENTS

- With WFP technical support, the Government is also establishing a kernel production facility with laboratory testing capacity. This will add an additional 1,800 mt to the existing 7,000 mt domestic production capacity for fortified rice kernel each year.
- With WFP technical assistance, two government and two privately-operated laboratories were established from 2019 to 2022 for the testing of fortified rice kernels.
- From March to April 2022, WFP worked with the Ministry of Food to launch the first phase of a cost optimization project which integrates the blending of kernels with the de-husking, milling and polishing process to avoid double handling and transportation. The pilot was introduced in six sub-districts as part of the Food Friendly Programme during the amon rice harvest, and the second phase will occur during the boro rice harvest from September to November 2022. From December, data from the pilot will be analysed and findings will be shared and used to inform whether the approach can be scaled across more areas of Bangladesh.
- In 2021, WFP and the Ministry of Food developed guidance on the production, distribution and management of fortified rice.
- The Government allocated US\$ 13 million for fortified rice distribution in 2022 and has distributed fortified rice since 2015 supported with WFP's technical expertise.

In Bangladesh, rice is fortified post-harvest to ensure high retention of nutrients. To create fortified rice, producers grind white rice into flour; mix it with vitamins and minerals; and reshape the blend into the size of regular rice kernels. The reconstituted kernels are combined with regular rice at a ratio of 1:100.

This blend is cooked in the exact same way as ordinary rice without any changes to the appearance or taste.



WFP PLANS

- To continue providing technical support for supply chain management and assist the Government in its plans to distribute fortified rice in all sub-districts by 2025. Under its expansion plan, the Ministry of Food intends to add 100 sub-districts each year to the Food Friendly and Vulnerable Group Development programmes, to reach far beyond the 15 million people already served.
- To develop monitoring and quality assurance tools to ensure the quality of fortified rice under government safety net programmes and in commercial markets.
- To develop a Social Behaviour Change Communications plan to create awareness of the health benefits of fortified rice for the commercial market.
- To support the Government in enlisting 10 more private companies to produce fortified rice kernels in 2023 with scope for export to other countries.

Annual requirement: US\$ 2 million

METRO

