



FOOD FORTIFICATION PROGRAMME POLICY BRIEF



Addressing micronutrients malnutrition in Pakistan with mandatory food fortification

Pakistan is losing 2 - 3 percent of its GDP annually due to a high burden of malnutrition which unfortunately has not changed over the last four decades¹. The recent National Nutrition Survey (NNS) 2018 revealed very high rates of micronutrient deficiencies - 41.7% women of reproductive age (WRA) in Pakistan are anaemic, 18.2% iron deficient, 27.3% deficient in Vitamin A, and 79.7% in Vitamin D. The problem repeats itself in children with 53.7% of under 5s suffering from anaemia, 51.5% from vitamin A deficiency, and 62.7% from vitamin D deficiency.

The lack of iron, vitamins A and D and other minerals limits ability to fight disease, making it a major contributor to high maternal newborn and child death rates. Malnourishment also affects cognitive and physical development, ultimately leading to reduced learning abilities and lower productivity in adulthood. Pakistan's rates of malnutrition are stagnating compared to reductions seen in neighboring countries.

Why food fortification?

Food fortification - adding essential vitamins and minerals to staple foods - is a cost-effective and safe way to address the "hidden hunger" caused by micronutrient deficiencies. Wheat flour and edible oil/ghee are consumed daily by most people and by fortifying these foods, nutritional status can change quickly - after one year of sustained consumption - without changing eating habits. Fortification is also cost effective, with the Copenhagen Consensus panel of economists finding a return on investment of \$8 for every \$1 invested in the case of iron fortification². When costs are passed to the consumers, the price increase is roughly 1-2 %, less than normal price variation.

Figure 2: Fortification Benefits







What is being done?

A number of initiatives are already in place to reduce malnutrition in Pakistan. Vision 2025 envisages a hunger free Pakistan, providing safe food and adequate nutrition for the whole population. A multi-sector nutrition strategy for Pakistan is underway and provincial multisector nutrition strategies have been developed but have vet to be developed into plans. A revitalised National Fortification Alliance is in operation, and all provinces have constituted Provincial Fortification Alliances. However, more policy measures are urgently required in order to meet UN Sustainable Development Goal No.2 to "end hunger". Government commitment is required to ensure that significant progress is made in addressing Pakistan's micronutrients malnutrition crisis through mandatory food fortification initiatives. The Pakistan Government's commitment to tackling malnutrition provides a platform to build on. Other important fortification efforts on which FEP will build include the Nutrition International's work on Universal Salt Iodisation (USI) and the work of World Food Program and GAIN, which have been supported by donors including USAID and Australian DFAT.

¹ The Economic Consequences Of Undernutrition in Pakistan: An Assessment of Losses". World Food Programme (WFP) Pakistan. 2017. https://sunpc.org.pk/wp-content/

uploads/2019/06/Economic-Consequences-of-Undernutrition-An-Assessment-of-Losses-Final-AK_170414_electronic-copy.pdf>

² Micronutrient Fortification (Iron and Salt Iodization). Sue Horton, Venkatesh Mannar & Annie Wesley. Copenhagen Consensus Centre, 2008.





Existing food fortification regulatory environment in Pakistan

1) Mandatory legislation relating to food fortification in Pakistan

There is no mandatory legislation on wheat flour fortification in any of the four provinces; however, Punjab, Sindh and Balochistan have started making progress. With the technical support of FFP, Punjab and Sindh have drafted their legislative policy and bills for mandatory fortification of wheat flour standards, and the support has also been extended through National Food Alliance (NFA) to Balochistan and Gilgit Baltistan (GB) provinces. The bills for mandatory legislations for fortifying edible oil/ ghee already existed before the start of the programme but Vitamin D was added to the standards for edible oil/ ghee by FFP. Furthermore, there was a lack of adequate enforcement and regulatory mechanism with the result that the vast majority of edible oil was either unfortified or inadequately fortified. Moreover, only Punjab has so far banned the sale of substandard/loose oil in the open market, while its sale and consumption is common in other provinces including Sindh. FFP has been supporting the government departments to review and revise rules and regulations for oil fortification and their harmonization amongst provincial and the federal government departments.

2) National Standards

The Pakistan Standards and Quality Control Authority (PSQCA) has issued Pakistan Standard Specifications for fortified wheat flour and edible oil/ghee. With the technical support of FFP, provincial arms of National Fortification Alliance, and other partners, achievements have been made in the formulation of provincial fortification standards with Food Authorities in all four provinces both approving and notifying standards in line with national levels and the PSQCA.

3) Government commitment to enforcement

Multi-sector nutrition strategies are in place in every province of Pakistan, and all four provinces have established their food authorities. FFP is working with the regulatory bodies to help build their capacity and skills in testing for adequate fortification. FFP has trained staff from PSQCA and Food Authorities from Punjab, Sindh and KP provinces on food fortification and quality control and has provided them with Rapid Test Kits (RTKs) leading to availability of trained public sector staff monitoring mills regularly in the field. However, the government enforcement inspections of wheat flour mills are not as effective so far due to insufficient capacity and resources at food authorities.

Industry barriers to food fortification

At the start of the programme, there were multiple barriers for industry including non-availability of premix, lack of quality equipment (micro-feeders) and insufficient demand from consumers due to lack of information and knowledge about the benefits of fortified foods. These barriers are being addressed through supply of micro-feeders and subsidized premix to mills, and ongoing advocacy campaigns to raise awareness of food fortification.

What needs to be done?

- 1. Develop regulations and mechanisms for enforcement of the legislation for wheat flour fortification. Mechanisms should be in place to ensure that standards are followed.
- 2. Ensure that all required human and financial resources are in place and food inspectors and laboratories are resourced to undertake systematic, quality assured testing to sustain food fortification.
- 3. Ensure that government departments such as PSQCA regulate the quality of imported premix.
- 4. Work with government bodies and food authorities to ensure a ban on loose oil.
- 5. Involve private, public and civil society sectors more in the development and implementation of public awareness raising and demand generation activities.

Food Fortification Programme supporting role to government and industry

The Food Fortification Programme is a five-year investment by the UK Government and aims to support government at federal, provincial and district level and to support the wheat flour and edible oil/ghee industries through technical assistance. FFP has launched communications campaigns in districts to build consumer demand and is generating evidence based data through research studies to improve the implementation of food fortification in Pakistan.

Food Fortification Programme