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Assessment of Wheat Flour Industry in Kazakhstan and Wheat Flour and Edible Oil Industries in Pakistan

KEY FACTS AND RECOMMENDATIONS

If all wheat flour and edible oil from Pakistan and Kazakhstan were fortified, **at least one third of Afghan people** would have improved intakes of micronutrients in the diets

Background and methodology

In the Central Asia region and Afghanistan, edible oil and wheat flour are important dietary staples, which if fortified, could improve the nutritional quality of the diets. The majority of these two staples are imported from Kazakhstan and Pakistan. In 2015, with USAID support through the **regional Central Asia and Afghanistan Food Fortification Program**, the Global Alliance for Improved Nutrition (GAIN) commissioned Altai Consulting to assess the wheat flour and edible oil industries in the exporting countries. The study included field visits to the production facilities, stakeholder interviews, and a desk review of available publications.

Kazakhstan wheat flour industry

Industry is well-equipped to fortify, fortification is mandatory but not strongly enforced

- 250-300 mills in operation, one third of them are large and medium enterprises. Trends indicate that 40-50 mills are projected to remain over the next decade due to consolidation
- annual flour production is ~ 4 million metric tons (MT)
- **1.8 million MT flour is exported**, of which 0.4 million MT is exported into Afghanistan
- main production/exporting regions are Kostanai, Karaganda and South Kazakhstan
- despite a mandatory law and full industry capacity to fortify, **only 25-30% of wheat flour sold on the domestic market is fortified** due to lack of enforcement and a perceived impact on price competitiveness by industry
- practically **0% of exported flour is fortified** due to lack of demand in importing countries
- the premix used in Kazakhstan to fortify wheat flour is called KAP Komplex. It was developed in 2002 and calls for vitamins B1, B2, B3 and B9 as well as iron and zinc
- the government imposes **23.2% tax on premix**, including 10% import duties and 12% VAT
- wheat flour premix costs on average 9.2 USD/kg, which **represents only 0.3% of the total wheat flour price**



In Kazakhstan, fortification increases the cost of flour by only about 0.3% (USD)

There are several opportunities to advance wheat flour fortification in Kazakhstan

Key priorities are:

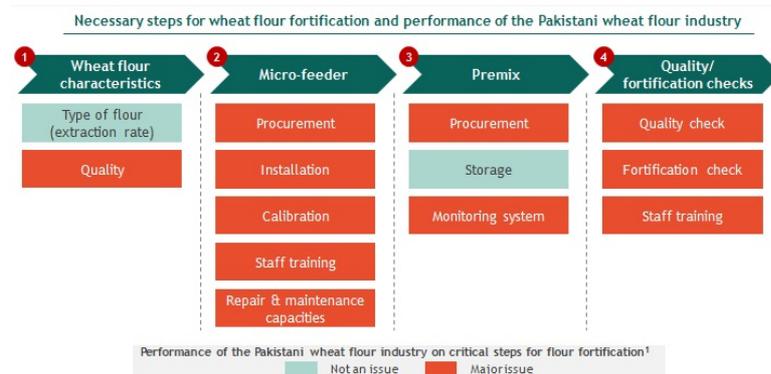
- development of additional communications on the benefits of fortification compared to its cost
- strengthening fortification law enforcement by government
- building capacity to improve and reduce cost of internal and external quality control
- development of financial incentives, such as tax reduction or subsidies, for the industry to facilitate production and trade of fortified flour

Pakistan wheat flour and edible oil industries

Industry capacity strengthening is urgently needed

Wheat flour

- 1,200 mills in total, excluding small mills (chakkis)
- annual flour production is 18.2 million MT, most of which is consumed domestically
- 0.6 million MT produced at 30-40 mills is exported to Afghanistan, which constitutes 15% of the Afghan market
- wheat flour fortification is mandatory only in one province (Punjab), one of the main production areas, but not yet enforced
- most mills do not have capacity to fortify; more than 75% lack equipment, and other issues are limited access to premix, and lack technical capacity of production personnel
- none of the assessed mills exporting to Afghanistan have on-site quality control laboratories
- wheat flour fortification premix costs 21 USD/kg
- import taxes and duties account for nearly a third of the price**
- fortification increases the cost of wheat flour by only 1.5% (USD 5.9/MT)



With average production volumes of 30,000 MT/year, and an average fixed investment in equipment and personnel capacity of \$6,500/year, most flour millers in Pakistan should break even as soon as they produce 1,300 MT of fortified flour per year, and fortification should not have a major impact on their bottom line

Edible oil

- Pakistan produces 1.8m MT of ghee and 0.8m MT of liquid edible oil annually
- in 2014, it exported 153,000 MT of edible oil to Afghanistan in 2014, **90%** in the form of **vegetable ghee**
- Edible oil fortification is mandatory by law, however the fortification protocols and product handling procedures are poorly followed resulting in inadequate quality (deterioration of Vitamin A content) in most cases
- fortification **increases the cost of vegetable ghee by around 5 USD/MT (only 0.3 % of the total cost)**
- there is a perceived lack of incentives to fortify edible oil for export due to feared reduction of price competitiveness and lack of fortification control by Afghan authorities



Only 14% of edible oil available on the open market is compliant with the Pakistani regulation on edible oil

Strengthening the industries to advance fortification will require:

- building capacity: fortification equipment, premix supply, protocols, personnel training, quality assurance
- promoting country-wide mandatory wheat flour fortification and harmonization of regional standards
- fortification law enforcement and quality control by government agencies
- advocacy for reduced taxation of fortification related materials and equipment
- building cost reduction systems (e.g., bulk procurement)
- development of financial incentives for industry
- educating market stakeholders on best practices for handling fortified products

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