

HarvestPlus is working with a wide variety of stakeholders in Pakistan to popularize nutrient-rich biofortified crop varieties. Partners include R&D institutions, food departments, public & private seed sectors, farmers, flour millers, academia, service providers, business partners, and members of civil society to popularize biofortified crop varieties. Our objective is to eliminate “hidden hunger” among the most malnourished populations in the country.



Why Choose Zinc-Biofortified Wheat in Pakistan?

More than 60 million people in Pakistan have inadequate daily zinc intake; about 20 percent of these people are children. Zinc deficiency is one of the key factors leading towards the existing severe malnutrition indicators in Pakistan and leads to an overall loss of 3 percent annually in the country’s GDP.

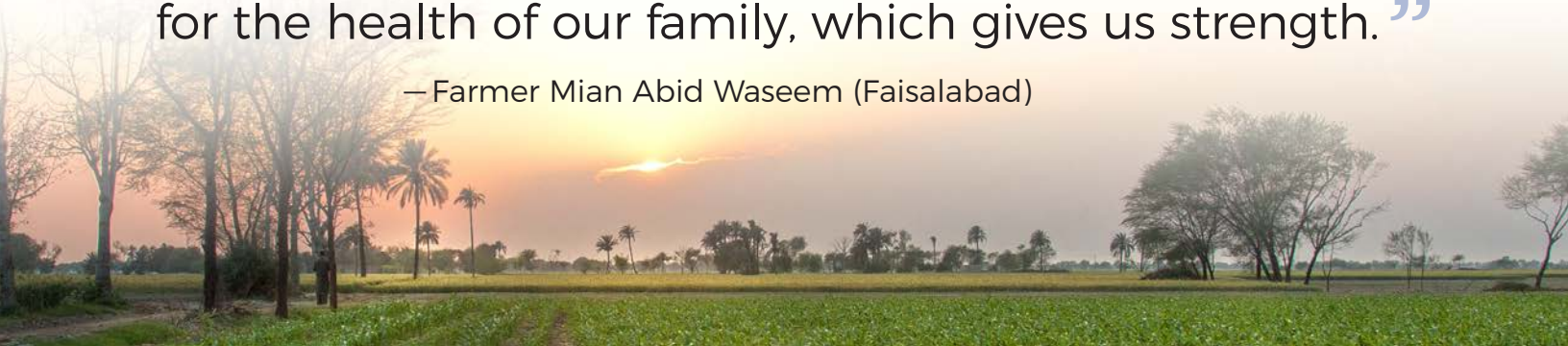
Wheat is the main staple crop in Pakistan, and the average (per capita) annual intake of wheat in Pakistan is one of the highest in the world at 87 kg. Thus, bio-fortification of wheat is one of the most suitable and sustainable interventions to address zinc deficiency, and the government has shown positive interest in adopting this approach in its policies.

Statistics for Zinc Deficiency in Pakistan:

- 21% of Pakistani children have inadequate Zinc intake.
- In Pakistan, zinc deficiency is the cause of stunting in almost 40% of the pre-school population.
- Malnutrition costs Pakistan USD 7.6 billion every year (due to lost labors, health care expenses, and lower productivity). (WFP, 2017)
- Every year more than 177000 Pakistani children die before their fifth birthday due to the lack of nutrition they receive from their mothers. (WFP, 2017)

“ We are now renowned biofortified zinc wheat-growers and seed multipliers of the area. We enjoy growing biofortified wheat because we know that it is good for the health of our family, which gives us strength. ”

— Farmer Mian Abid Waseem (Faisalabad)



Building Strong Seed and Crop Value Chains

In addition to reaching and empowering farmers, HarvestPlus provides technical, logistical, training, and marketing support to a wide array of partners in seed and food value chains to build strong biofortified food systems.



Crop Development: Harvest Plus helps the Research Department of Pakistan breed, test, and release varieties of high zinc wheat developed through a partnership with the CIMMYT. Through the HarvestPlus Pakistan program, CIMMYT has released two zinc wheat varieties so far, namely, Zincol-2016 and Akbar 2019.



Seed Multiplication: These biofortified wheat varieties have been approved by the Punjab Seed Council under the Ministry of Agriculture Punjab for multiplication of certified seed, and are licensed to several public and private seed companies to multiply seeds for local farmers.



Seed and Grain Distribution/Dissemination: HarvestPlus connects buyers, flour millers, and processors to farmers. Commercial seed is distributed through agro-dealers, government agricultural input support schemes, and non-governmental organizations.



Consumer Engagement: HarvestPlus increases awareness of zinc wheat through consumer education, gatherings, and advertisements using electronic & print media.



Policy Engagement: HarvestPlus advocacy seeks to strengthen national ownership of biofortification through effective integration into nutrition and agricultural policies of Pakistan's federal and provincial governments.

“ Biofortified staple food crops will change the nutritional landscape in humans. The biofortified food product is the best merchandise for alleviating hidden hunger in humans. ”

– Dr. M.Azeem Khan, Chairman, Pakistan Agricultural Research Council, Federal Ministry of National Food Security and Research, Islamabad.

PARTNERS – CGIAR Centers: CIMMYT; **NGO Partner:** GAIN; **Other:** Abad Seed Company, Jhang, Al Shamas Seed Corporation Rahim Yar Khan, AlHaider Seed Company, Rajanpur, Alzaraun Seed Corporation, Bahawalpur, Ayub Agricultural Research Institute, Faisalabad, Baba Fareed Seed Company, Vehari, Bihar Seed Company, Rahim Yar Khan, Chatha Seeds, Vehari, CKD Seeds, Gujranwala, Family's Farm Foods, Lahore, Fatima Fertilizer Company Limited, Fauji Fertilizer Company Limited, Federal Seed Certification & Registration Department (FSC&RD), Ghani Seeds, Bahawalnagar, Hudaibia Seed Company, DGKhan, Indus Seed Company, Rajanpur, Jullundur Seed Corporation, Rahim Yar Khan, Manpasand Seed Company, Rahim Yar Khan, Ministry of National Food Security & Research, Ministry of National Health Services, Regulation and Coordination, National Agricultural Research Center (NARC), National Agricultural Research System (NARS), Ministry of Planning, Development and Reform, MNS Agriculture University, Multan, Neelam Seed Corporation, Multan, Pakistan Agricultural Research Council, Islamabad, PMAS Arid Agriculture University, Rawalpindi, Punjab Seed Corporation, Lahore, Reach Seed Company, Sukkur, Resham Seed Corporation, Rahim Yar Khan, Scaling Up Nutrition (SUN), Senova Seeds Company, Bahawalpur, Shoaib Seed Corporation, Sukkur, Sun Crop, Multan, Tara Group of Companies/ Seed, Lahore, Trigon Int. Multan, Zamad Seed Company, Rahim Yar Khan, and 4-Brothers, Lahore.

Partner with us to make food systems more nutritious, inclusive, and sustainable.

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HarvestPlus improves nutrition and public health by developing and promoting biofortified food crops that are rich in vitamins and minerals, and providing global leadership on biofortification evidence and technology. HarvestPlus is part of the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) and is based at the International Food Policy Research Institute (IFPRI).

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