

# The Commercialisation of Biofortified Crops Programme

Expanding the reach of nutrient-enriched staples



**gain**  
Global Alliance for  
Improved Nutrition



## The challenge

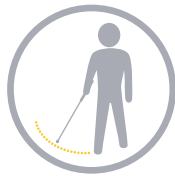
# 2 billion people

primarily in low- and middle-income countries, do not get enough essential vitamins and minerals (micronutrients) in their daily diets.

This "hidden hunger" increases their vulnerability to serious health problems, particularly in women and children, including:



stunting



blindness



poor brain development



weakened immunity



anaemia

The cost of hidden hunger to societies is staggering:



Chronic child underweight and poor growth have irreversible developmental effects



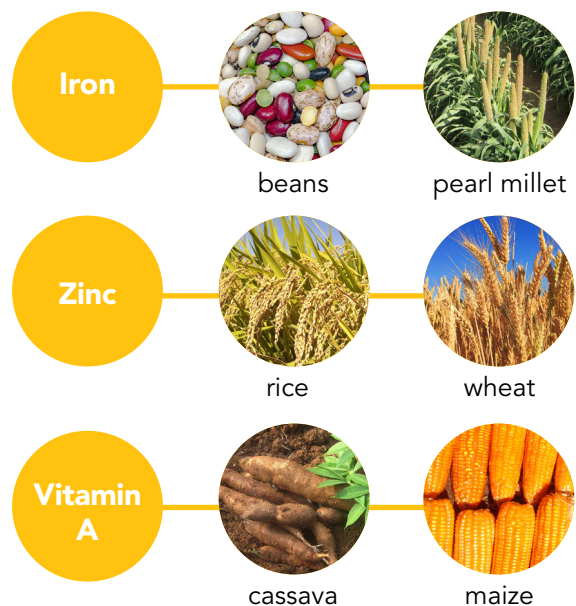
The lost human potential means average 11% annual GDP losses for Asian and African countries\*

## The response: biofortified staple crops

The **Commercialisation of Biofortified Crops (CBC) Programme** was launched in 2019 to address widespread hidden hunger in Africa and Asia by significantly expanding the reach of foods and food products made with biofortified staple crops (Figure 1).

These micronutrient-rich crops are developed through conventional breeding techniques (they are not genetically modified) to increase their density of iron, zinc, or vitamin A – all critical micronutrients for maintaining good health and human development. They are also bred with other traits demanded by farming families, including high yield, drought tolerance, and resistance to disease and pests.

Biofortified staple crops, foods, and food products can be practical, affordable, and natural sources of nutrition for billions of people.



**Figure 1:** The CBC Programme promotes foods made with these biofortified crops

\*Source: 2016 Global Nutrition Report

# The CBC Programme

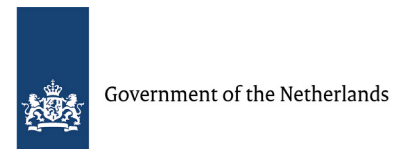
The CBC Programme works with commercial value chain actors – including seed producers, farmers, aggregators, and processors – to catalyse commercial markets for biofortified seeds, grains and food products in six countries with pervasive levels of malnutrition: **Bangladesh, India, Kenya, Nigeria, Pakistan, and Tanzania**. Our programme vision is to enhance food systems so that they are able to deliver nutrition cost-effectively and sustainably to all people.

The partnership brings together two leading actors in global nutrition. It combines the deep expertise of HarvestPlus in all aspects of biofortification with GAIN's proven track record of working with fortification and food companies to create sustainable market models for nutritious food systems.

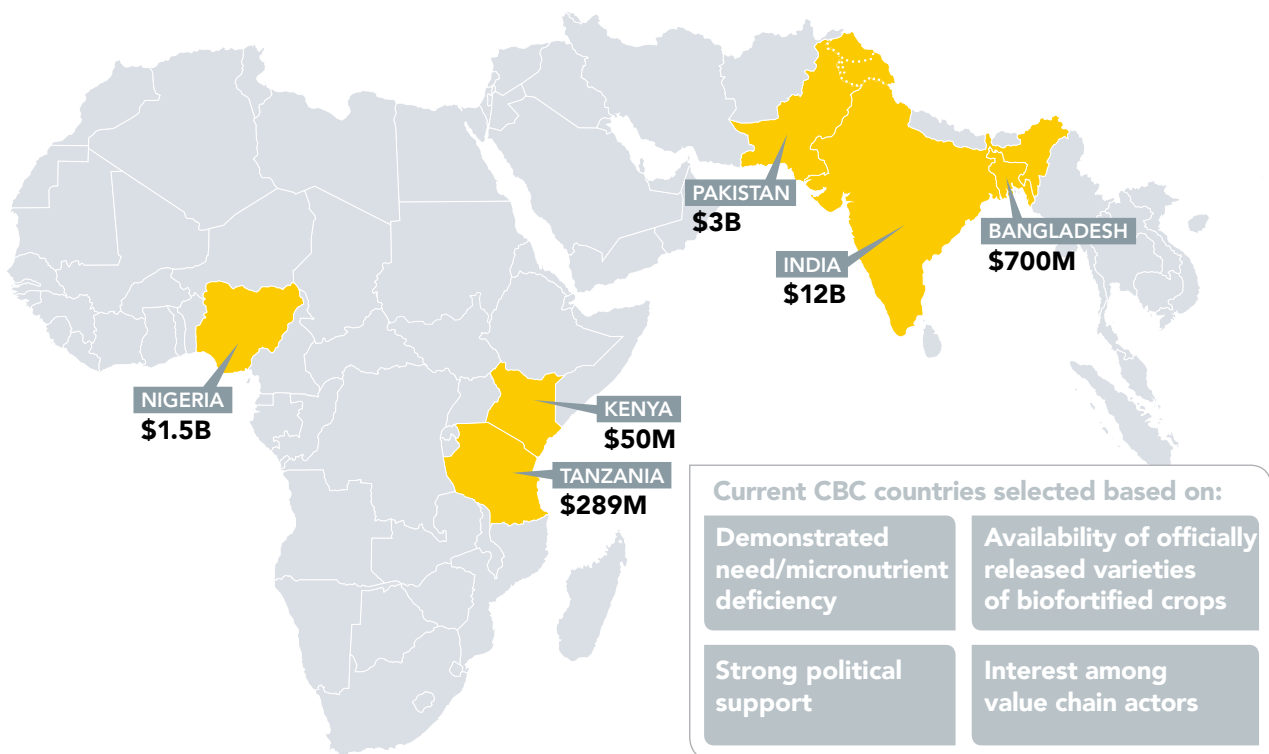
The CBC Programme is co-led by:



with funding from:



**Figure 2: Annual GDP losses from hidden hunger in current CBC Programme countries\***



\* Source: World Bank Nutrition at a Glance Country Briefs

## Our goals



# Our desired impact

**190.6 million** people consuming biofortified foods and food products by 2022

**571.8 million** people by 2028

This will be achieved by:

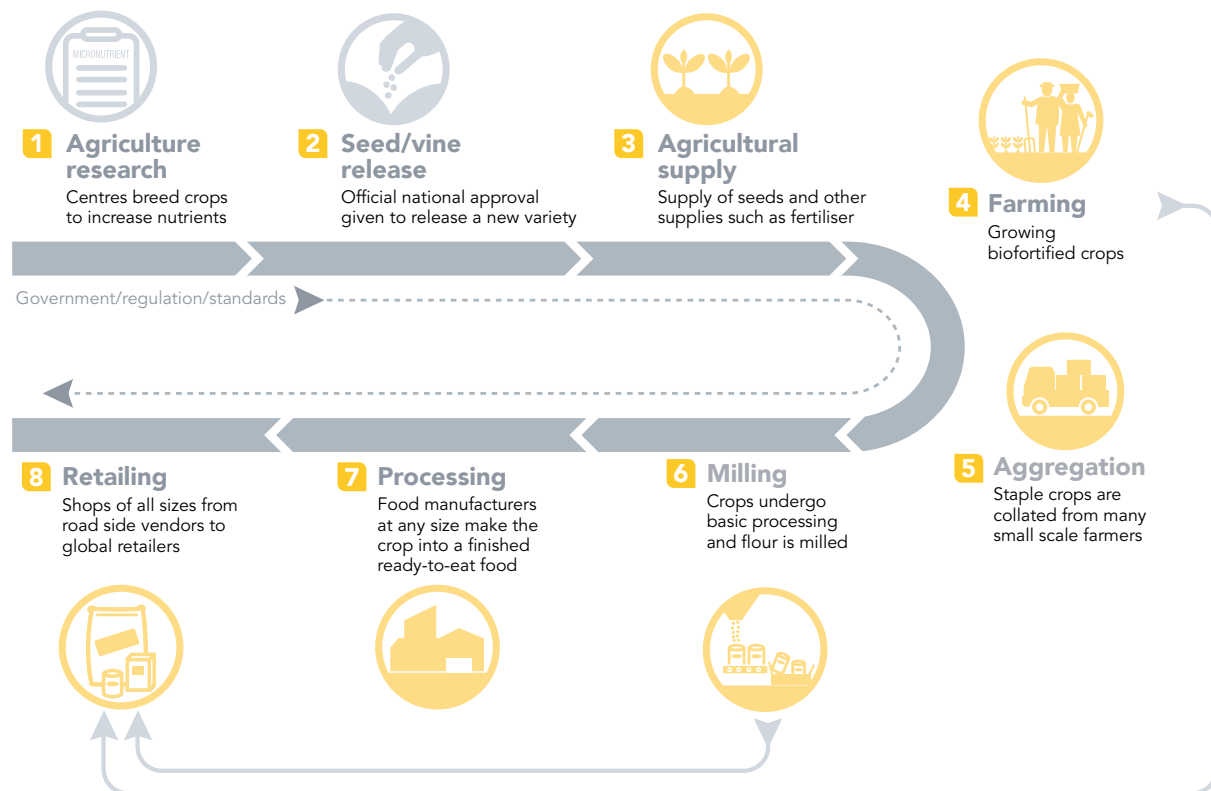
- Increasing participation and capacity of value chain actors in the production, processing, and marketing of biofortified seeds, grains and food products
- Ensuring market penetration of biofortified foods and food products through their integration in markets, including as replacements for non-biofortified goods.
- Over the longer term, expanding the Programme to more countries seeking to address hidden hunger.

## How the CBC Programme works

The CBC Programme works with country partners on a value chain approach to creating sustainable commercial pathways for biofortification. We do not start from scratch; existing value chains for comparable non-biofortified staple crops and foods are leveraged, and any gaps or barriers to producing or trading biofortified versions are identified and addressed.

The flow chart below lays out the process followed for each CBC country/crop combination:

**Figure 3: The full value chain for biofortification – CBC is active in 3 to 8**



### About GAIN

The Global Alliance for Improved Nutrition (GAIN) is a global, Swiss-based foundation launched at the United Nations in 2002 to tackle human suffering caused by malnutrition. GAIN mobilizes public private partnerships and provides financial and technical support to deliver nutritious foods to those most at risk of malnutrition. GAIN's work to improve the consumption of nutritious and safe foods is based on three strategic objectives: increase consumer demand for nutritious and safe foods; increase accessibility to nutritious and safe foods; strengthen the enabling environment for designing, implementing, and scaling up effective programs.

[www.gainhealth.org](http://www.gainhealth.org)

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### About HarvestPlus

HarvestPlus improves nutrition and public health worldwide by catalysing the development, production, and consumption of biofortified food crops that are rich in vitamins and minerals, and providing leadership on biofortification evidence and technology. Working with public and private partners across seed, crop, and food value chains, HarvestPlus helps advance healthy, inclusive, self-sustaining food systems that benefit the most vulnerable communities. HarvestPlus is part of the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH).

[www.harvestplus.org](http://www.harvestplus.org)

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