

Iron Beans in Rwanda

A Nutrition Success Story



A Natural Solution

The Rwanda Agriculture Board, HarvestPlus, and the International Center for Tropical Agriculture started working together in 2010 on a practical, cost-effective solution to iron deficiency:

enriching beans with iron through the process

of biofortification. These beans are biofortified through conventional crop breeding. They are not transgenic.

Uptake has been rapid since the beans were introduced in 2012. By the end of 2018:

20% of all beans produced in Rwanda were iron-biofortified

1.8+ million Rwandans (15 percent of the population) were eating iron beans

420,000+ farming households were growing iron beans

Improving Health with a Staple Crop

 **Iron deficiency** is a major cause of anemia, which afflicts 38 percent of children under five and 19 percent of women of reproductive age in Rwanda.

 **Iron beans improve nutrition and health.** Up to 80 percent of daily average iron requirement can be acquired by regularly consuming dishes made with iron beans.

 **Why beans?** Rwanda has one of the world's highest rates of bean consumption per capita, including among rural communities and resource-poor households most at risk of iron deficiency.

Generating Impact

Through the end of 2018:

5,000 Cumulative years of productive life* saved that would have otherwise been lost to disability or premature death

\$25 million USD Estimated value to Rwanda in health and productivity benefits from iron beans



*Measured in Disability-Adjusted Life Years (DALYs).

17-22% Higher yield by volume for farmers than other bean varieties

\$57-78 More profit per hectare for farmers than other bean varieties



Ensuring Sustainability

HarvestPlus and partners have trained:

5,000+ lead farmers

1,000+ agricultural extension workers supporting farmers in cultivating and marketing



and facilitated:

300+ public and private partnerships to support vibrant iron bean seed and food product markets



The Rwandan government is driving progress with supportive policies—such as new standards for biofortified beans—to help spur markets for iron bean-based products.