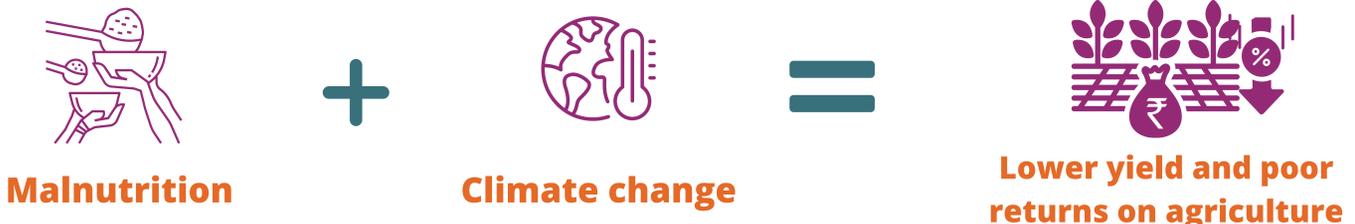


Towards Sustainable Agriculture through Biofortified Zinc Wheat



ABOUT THE INTERVENTION

Grameen Foundation India with the support of HarvestPlus launched its campaign in nine districts of Uttar Pradesh against this backdrop to emphasize the significant nutritional value of zinc and the efficiency of biofortified zinc wheat (BFZW) producers in addressing micronutrient shortages.

RESEARCH OBJECTIVES

Grameen Foundation India evaluated the commercialization of the biofortified crops (CBC) program using a mixed-method research design.

The research objective for the study was to assess:

- The change in awareness level amongst farmers about the nutritional benefits of BFZW;
- The adaptability of BFZW to climate change; and
- The economic returns to the smallholder farmers.

OUTREACH



27
Farmer Producer Organization



1004
small and marginal farmers



120
Female Farmers

RESULTS

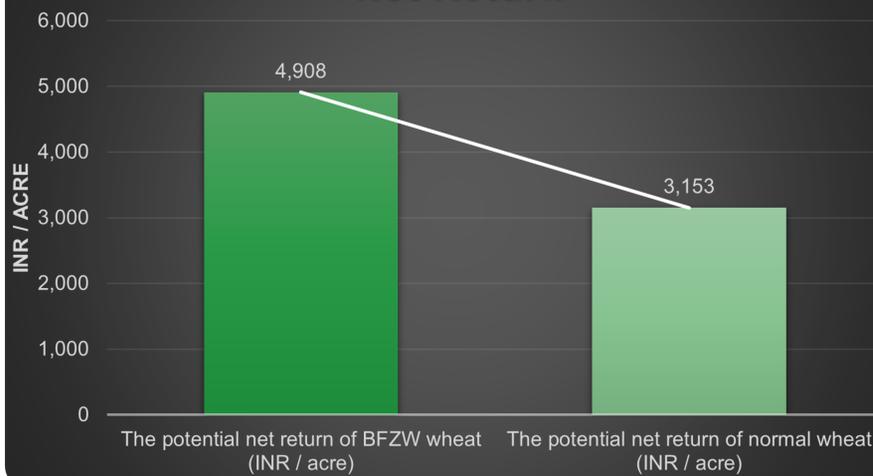
Economic Returns

- **Higher economic** (by **56%**) returns for BFZW than the traditional wheat variety;
- **Higher returns** were mainly due to **increased yield** (by **10%**) and premium pricing received by farmers

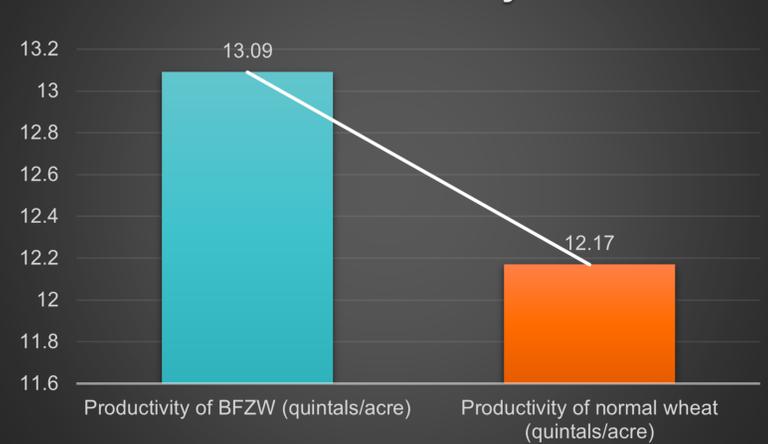
METHODOLOGY

- The quantitative research method included structured interviews with **420 farmers**. The sample size was calculated at a statistical significance of 95% and margin error of 5%.
- The qualitative research methods included Focus group discussions (8 FGDs) and Key Informant Interviews with the key stakeholders such as farmers, FPO leaders and traders

Net Return



Productivity



Climate Resilience

- BFZW variety was **climate resilient** as it could **sustain heatwave** better, without compromising on yield and grain quality (**shinier and bigger grains than traditional wheat**)
- It required **lesser fertilizer** (**3/4th** than traditional wheat) and **lesser rounds of irrigation** (two against four for traditional wheat variety).

Awareness about BFZW

- **73%** of the farmers were aware about the training on BFZW and its nutritional benefits; and
- **82%** of the farmers found the training useful, **64%** of the farmers started consuming BFZW and **63%** farmers reported improvement in agricultural practices.

CONCLUSION

Farmers were highly receptive to BFZW due to **greater economic returns, perceived nutritional benefits and climate-resilient features**. They found the BFZW tastier, softer and looked forward to grow it at scale. However, they wanted a **better marketing support** through value-chain sensitization approach.



Sonu Patel, 65, has always worked in the fields. He said "Biofortified crops are new to me, I have not heard of them. Vinay (FPO Board member) assured us that this is a good kind of wheat, and the FPO would provide free seeds and organic manure for trial. We were suggested to grow these crops for consumption and provide comments." So, I've grown and stored this variety," said Sonu." When asked if he's happy with the harvest and BFZW flour, he says, "Yes, because it produces a good yield and tastes better than normal wheat."