

## Genebanks house 30 bean varieties that beat the heat of global warming

Amidst fears that global warming could zap a vital source of protein that has sustained humans for centuries, bean breeders with the CGIAR global agriculture research partnership announced today the discovery of 30 new types, or lines as plant breeders refer to them, of “heat-beater” beans that could keep production from crashing in large swaths of bean-dependent Latin America and Africa.

The new beans are a landmark result of urgent efforts by CGIAR to develop new crop varieties that can thrive in drastic weather extremes. The bedrock of this research is CGIAR’s “genebanks,” which preserve the world’s largest seed collections of humanity’s most important staple crops. Using new genomic tools, plant breeders are now better able to unlock the potential of the genebanks’ vast genetic diversity by probing nearly 750,000 samples of cereals, legumes, roots and tubers, trees, and other important food crops—along with their wild relatives—to identify genes with traits like heat, flood, and drought tolerance or resistance to pests and disease that can help farmers adapt to environmental stresses.

“The payoff we are seeing from these bean breeding efforts underscores the vital importance of investing in CGIAR’s genebanks—a front-line defense in the race to adapt crops to climate change to protect the staple food supplies of poor farmers and consumers and avert food crises around the world,” said Jonathan Wadsworth, a CGIAR Executive. “The development of these heat-defying beans also highlights what can be achieved when we invest in modern science to find solutions to urgent challenges, with expected economic benefits vastly exceeding the costs of investment in the research.”

**Read full, original article:** [Discovery of heat-tolerant beans could save ‘meat of the poor’ from global warming](#)