

# Genetic Innovation by the Numbers

CGIAR's Genetic Innovation (GI) Action Area enables rapid improvement of crops and stewardship of genetic resources, with the aim of boosting food security, rural livelihoods, gender equity and environmental sustainability. GI builds on and sharpens CGIAR's unparalleled 50-year impact legacy.



Numbers are vital to help us set goals and make decisions. They also demonstrate how we're delivering impact.

## How we work: by the numbers

**64** countries

supported across sub-Saharan Africa, South Asia and other areas facing urgent food security, nutritional and climate challenges



**~100** funders supporting GI through:



**22** Aligned major investments (>\$1M in 2023)



**187+** Additional projects (>\$1M in 2023)

**6** interconnected initiatives



INITIATIVE ON

**Market Intelligence**

Working together to understand markets



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**Accelerated Breeding**

Optimizing trait and variety delivery



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**Breeding Resources**

Modernizing breeding methods



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**Genebanks**

Conserving crop genetic diversity



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**Seed Equal**

Ensuring adoption by farmers



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**Genome Editing**

Using cutting-edge technologies

**2000+** staff



Scientists, operations staff, administrators and more work together to deliver varieties needed by smallholder farmers

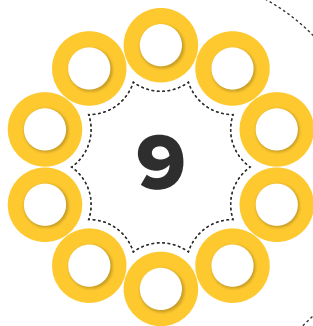
**25+** core crops

GI invests in breeding the most needed crops, in the most vulnerable regions: banana, barley, beans, cassava, chickpea, cowpea, durum wheat, faba bean, finger millet, forages, grass pea, groundnut, lentil, maize, musa, pearl millet, pigeon pea, plantain, potato, rice, sorghum, soybean, spring wheat, sweetpotato, winter wheat, yam



**CGIAR Centers**

1. AfricaRice
2. CIMMYT
3. CIP
4. ICARDA
5. IITA
6. IRRI
7. Alliance of Bioversity & CIAT
8. ILRI
9. IFPRI



**911** partners

**158** private sector

Plus international institutions, global companies and more

**200** NARES

National Agricultural Research and Extension Services - our primary peers in delivering varieties to farmers

**553** other partners

Including funders, international institutions, global companies and more



**580,000** genebank accessions

In 2022, covering 30 crops and 2,900 species - made freely available for research and breeding



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## Our vision: by the numbers

### Benefiting 5 CGIAR Impact Areas



**Poverty reduction, livelihoods & jobs:** product profiles raise productivity and returns to farmers, seed systems include inclusive livelihood opportunities, Genebank accessions are equitably distributed



**Environmental health & biodiversity:** productivity increases are coupled with incentives for sustainable agriculture and landscape management, Genebanks enhance agrobiodiversity, varieties require less water and chemicals



**Gender equality, youth & social inclusion:** product profiles, seed delivery and program management decisions target needs of women and other vulnerable groups



**Climate adaptation & mitigation:** new varieties counter drought, heat, flood, disease and pests, and require less fertilizers and chemicals

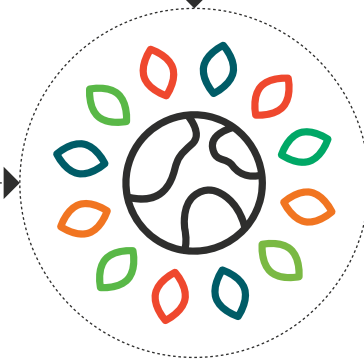


**Nutrition, health & food security:** new varieties improve food accessibility, affordability and biofortification



**≥1.5%**

GI modernizes breeding approaches to deliver ≥1.5% genetic gain rate per year



**31,000,000+**



Low-income smallholder farmers, both women and men, adopting improved varieties of cassava, rice, maize, sweet potato, beans and other crops with higher yields/cost saving, increased nutritional value, and/or climate-resilience

**<10 years goal**



Replacing outdated varieties that struggle against climate and other challenges, GI aims to reduce the area weighted average age of varieties in farmers' fields to <10 years

**135,000,000+**

Consumers and producers expected to benefit via targeted cassava, rice, bean, maize, sweetpotato and other crop varieties



**3,500,000+**

Women engaged directly through the research as we target their needs with the best market intelligence and investment decisions

