

BILL & MELINDA GATES AGRICULTURAL INNOVATIONS

Gates Ag One Fact Sheet

Bill & Melinda Gates Agricultural Innovations (Gates Ag One) is dedicated to ensuring high-quality, cutting-edge crop innovations are accessible to those who need them most: smallholder farmers in sub-Saharan Africa and South Asia.

OUR PURPOSE

Smallholder farmers are demographically amongst the most likely to be poor, hungry, and malnourished. They are also disproportionately impacted by climate change, despite being amongst the least responsible. Yet, agricultural innovations have continued to overlook smallholders' needs and realities.

We believe that smallholders must have the same opportunity to thrive as others, as all lives have equal value. Supporting smallholder agriculture also helps unlock numerous other development gains, ranging from better livelihoods, particularly for women and youth, stronger economies, and greater climate resilience.

HOW WE WORK

We embrace a start-up mentality, seeking major breakthroughs and acting decisively. We act like an agricultural innovation accelerator — connecting what is currently a fragmented research and development (R&D) crop science pipeline. We take a collaborative approach — crowdsourcing diverse expertise and building local capacity for the long term.

Our Open Innovation Network generates and shares knowledge freely, believing that collaboration, not competition, creates the best results. As such, we consult with a broad range of stakeholders, including:

- R&D organizations
- Academic institutions
- Governments
- Private-sector companies
- Farmers' cooperatives
- Nonprofits

WHAT WE DO

We aim to deliver smallholder-designed innovations, focusing on the most important crops used by smallholders. Improving plant biology offers the potential for breakthrough transformation that are renewable, affordable, and scalable. Our initial focus crops include:

- **Cassava**, a crucial food security crop with untapped potential as a commodity.
- **Cowpea**, which provides protein for more than 200 million people across Africa.
- **Maize**, the most important cereal crop in Africa.
- **Soybean**, a global commodity crop with significant economic potential for smallholders and national economies at large.

We are a nonprofit subsidiary of the Bill & Melinda Gates Foundation, guided by our shared belief that all lives have equal value. Gates Ag One was founded in 2020.

CONTACT US

If you have any queries or are interested in learning more about our work, contact us: Media@GatesAgOne.org

THE PROBLEM WE ARE TRYING TO SOLVE

Smallholder farmers play a crucial role in national, regional, and global food systems and economies, but conventional R&D often neglects their priorities and needs if the risk is too high or the road to commercialization too uncertain. The potential is great:

- ~500 million smallholder farms worldwide,
- Depended on by over two billion people,
- And producing 35% of food for sub-Saharan Africa and South Asia

EXAMPLES OF OUR WORK

Unlocking photosynthesis

The Realizing Increased Photosynthetic Efficiency (RIPE) is an international effort to harvest more from the untapped potential of photosynthesis, the natural process all plants use to convert sunlight into energy and yield.

Rethinking nitrogen

We partner with Engineering Nitrogen Symbiosis for Africa (ENSA), which aims to increase yield for smallholder farmers in the absence of chemical inputs by equipping cereal crops with the ability to fix nitrogen, a key nutrient for growth.

Boosting cassava

The Cassava Source-Sink Project (CASS) focuses on optimizing the metabolic processes in edible tuberous root crops like cassava, a smallholder staple that has yet to significantly benefit from major advances in plant science, to achieve greater productivity.

LEADERSHIP TEAM

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