Fundamental improvements in soil and plant nutrition will be required to meet the challenge of sustainably feeding 10 billion by 2050. Global population growth will drive a substantial increase in food demand, while climate change is already accelerating the risks affecting food production, especially in poorer regions. Major changes in agricultural systems – especially improvements in nutrient use efficiency – will be required to meet our shared challenge of creating a more food-secure, environmentally sustainable world.

Achieving impact at scale requires research and technology adapted to smallholder needs but must go beyond technology development. IFDC experts and their partners work across the discovery-to-consumer system. This includes testing of advanced fertilizers and related nutrient management technologies; design of fertilizer manufacturing and quality control processes; market systems development; gender and youth empowerment; and applied policy and regulatory analysis. With an emphasis on working with strategic partners and strengthening local capacity, IFDC bridges the traditional gaps between research, technology dissemination, and market systems that often undermine efforts to innovate, achieve results, and sustain impact at scale.
STRATEGIC OBJECTIVES

DEVELOP BETTER TECHNOLOGIES
Working with national, regional, and international partners, IFDC will develop, test, and adapt technologies that improve soil health and plant nutrition for smallholder systems:

✓ More efficient and improved fertilizers.
✓ Integrated soil management strategies.
✓ Mitigation of environmental impact.
✓ Technologies to improve degraded soils.

CATALYZE FARM PRODUCTIVITY
IFDC will assess the performance of emerging technologies under smallholder conditions to increase farm productivity, profitability, and sustainability:

✓ On-farm research to test viability of new technologies.
✓ Extend fertilizer recommendations to farmers.
✓ Incorporate 4R nutrient stewardship.
✓ Evaluate environmental impact of improved practices.
✓ Demonstrate best available technologies.
✓ Scale and sustain adoption of improved technologies.
✓ Women and youth engagement.

STRENGTHEN MARKETS
IFDC functions as an intermediary to connect farmers to input/output markets, and vice versa, ensuring scalability of improved technologies, increased production of commodities in demand, and trust among partners:

✓ Scaling assessment to develop inclusive markets.
✓ Develop agribusiness clusters.
✓ Strengthen capacity of agribusiness clusters.

ENABLE IMPACT
IFDC is committed to providing technical support and training to help countries invest in soil fertility and plant health and equipping partners to identify, develop, and implement key agricultural system changes:

✓ Achieve increased investment in soil fertility and plant health.
✓ Strengthen capacity to implement policies and regulations.
✓ Improve technical capacity of public and private sector partners.
✓ Share new knowledge and data.