

Feed the Future Soil Fertility Technology Adoption, Policy Reform, and Knowledge Management Activity

The Feed the Future Soil Fertility Activity is a global support mechanism for USAID missions to access support on developing, piloting, and scaling up soil fertility and agricultural productivity practices and technologies. In addition, the activity engages in market analysis and policy conditions and promotes recommendations to develop a conducive policy environment for private sector-led input markets.

Soil Fertility, Soil Health, and Food Security

Recent USAID surveys of Feed the Future countries reveal the most frequently reported limiting factors regarding soil characteristics that contribute to poor crop yields are: nitrogen deficiencies, phosphorus deficiencies, acidity, and low soil organic carbon content. In several countries, micronutrient deficiencies and low available water-holding capacity were also reported in the top five limiting factors. Corresponding to these issues are the constraints in input market systems and an enabling environment that hinder access to and use of quality soil amendments, financial and agronomic resources, appropriate soil fertility recommendations, and extension support. These problems ultimately limit progress toward building soil fertility and soil health in Feed the Future countries. In support of prioritizing soil and landscape health, the Feed the Future Soil Fertility Activity focuses on these constraints with an approach, inclusive of biophysical and socioeconomic factors, that integrates:

1. Strengthening inorganic fertilizer systems
2. Increasing access to and use of quality organic materials
3. Building capacity along the entire knowledge transfer value chain
4. Strengthening farming systems across biophysical and socioeconomic factors

Resilience is about meeting the needs of a current situation. However, in typical smallholder production systems, only one-third of fertilizer reaches the roots of plants – the rest is unused and dispersed into the air, water, and soil. Under Feed the Future Soil Fertility, soil maps are developed to determine where and what kind of fertilizer should be used and to drive distribution and market systems development. Technologies such as fertilizer deep placement (FDP) are transforming farming communities in shock-prone environments like the Sahel. With FDP, fertilizer use and costs go down while yields, smallholder profits, and input sector development increase.

Support Available to Missions

Feed the Future Soil Fertility is a pre-competed award, so there is no need for additional competitive procurement. USAID missions, offices, and bureaus can procure services rapidly and conveniently utilizing the Feed the Future Soil Fertility buy-in mechanism. The activity has a ceiling of \$35 million and period of performance of up to five years beyond the ordering period. USAID missions may fully scope and manage assignments directly or receive management support from the Bureau for Food Security. Activities may use several approaches, including, but not limited to:

- Short-term technical assistance to missions, government institutions, and/or other partners
- Case studies, technical briefs, and/or strategic program design support for missions
- Trainings, seminars, and briefings for USAID and local partners on fertilizer sector development
- In-depth technical analysis and support for the implementation of fertilizer sector reforms at the country and regional levels

Mission Buy-In Mechanism

Through implementation by the International Fertilizer Development Center (IFDC), activities requested by missions could range from targeted assessments to surveys or evaluations of strategies, markets, or policies to even a fully developed project for working with smallholder farmers, their organizations, or fertilizer industry actors to scale up soil fertility programs and practices. This demand-driven mechanism enables rapid procurement of expertise to support the integration of soil fertility approaches into program planning and implementation through the following workstreams:

Workstream	Research/Technologies	Activities
1 Developing and Validating Technologies, Approaches, and Practices to improve nutrient management and sustainable intensification	• Soil SMaRT methodology • Balanced plant nutrition • Nutrient use efficiency • Stress-tolerant fertilizer management practices • Fertilizer deep placement (briquettes) • Decision support systems	• Soil fertility testing and mapping • Zone- and crop-specific fertilizer recommendations • Fertilizer quality assessment • Fertilizer value chain analysis • Adaptive field trials • Research on secondary and micronutrients • Plant tissue analysis
2 Supporting Policy Reforms, Advocacy, and Market Development related to fertilizers and complementary inputs	• Fertilizer market development • Agricultural input policies • Input subsidies • Agro-dealer development • Code of conduct for fertilizer management	• Fertilizer training programs • Fertilizer cost buildups • Input subsidy assessments • Review of agro-dealer development programs • Documentation of policy reform processes • Regulatory impact assessments on fertilizer policy reform
3 Multi-year Implementation Activities	• USAID/Myanmar Fertilizer Sector Improvement Project (FSI+) • East Africa Fertilizer Quality Assessments • Tanzania Support for Fertilizer Subsidy Reforms • Assessment of African Agro-Dealer Development Programs • Fertilizer Cost Build-Up Study in Ghana and Kenya • Northern Ghana Soil Mapping	• Promotion of application of balanced fertilizer with urea deep placement (UDP) • Use of good quality seed, seeding rates, and good agricultural practices (GAPs) • Targets smallholder rice and gram farmers

To learn more, please contact:

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