FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

USAID
FROM THE AMERICAN PEOPLE

FEED THE FUTURE

SPACE TO PLACE

Helping farmers grow more nutritious foods by getting the most out of their fertilizer

THE **GOAL**

Transforming agriculture in Africa by increasing efficient use of fertilizer to sustainably help farmers increase their crop yields and profitability.

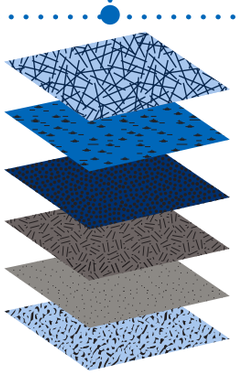
THE **CHALLENGE**

Fertilizer use in Sub-Saharan Africa is significantly less than in other parts of the globe. Imprecise fertilizer recommendations lead to less food produced, lower return on investment, and greater land use. Blanket recommendations or general guidance don't take into account local soil conditions that vary greatly or the needs of individual farmers.

THE **SOLUTION**

The Space to Place approach equips farmers with the critical information and tools they need to get the most out of their fertilizer.

Farmers know their soil conditions, what type of crop they want to plant, and how much they can invest in fertilizer. These components are critical in deciding the right kind, place, time, and amount for fertilizer application.



Digital soil maps are created with critical information like soil nutrient concentrations, fertilizer-crop response data, soil texture and type, and landscape slope.

The Space to Place approach also provides guidance for improving on-farm practices to bolster soil health: no till or low till approaches; crop diversification and rotations; and improving the ability of soil to absorb and hold onto rain water to increase water use efficiency.

Right Kind: There are many types of fertilizer, but nitrogen, phosphorus, and potassium are the most common.

Right Place: Fertilizer effectiveness depends on whether it's placed in the soil close to plants' roots or spread on top of the soil.

Right Time: Different crops require fertilizer before, during, or after planting or harvesting.

Right Amount: Too much fertilizer leads to run-off that can pollute groundwater and ecosystems and wastes farmer's money. Too little means less impact on size and quality of food.

IMPACT

Farmers can grow more food that is more nutritious.

Farmers earn more money that can be used for things like sending their children to school.

More food is grown with less land - which is good for the environment.

Critical information is put in the hands of female farmers who regularly have less access to extension and advisory services.

RESULTS

USAID supported this approach in Ethiopia and we are already seeing results:

4.2 MILLION FARMERS PROJECTED TO BENEFIT

2.7 MILLION HECTARES OF LAND COVERED

INCREASED YIELDS OF UP TO **200%**

REDUCED FERTILIZER WASTAGE BY UP TO **80%**