

Scaling and Sustainability

It is important that the Nutrients Solution be scalable and sustainable. Using an iterative process for continuous improvement will help overcome obstacles and streamline scaling up. Since the Nutrients Solution uses globally adopted knowledge, it can efficiently be shared widely to improve performance.

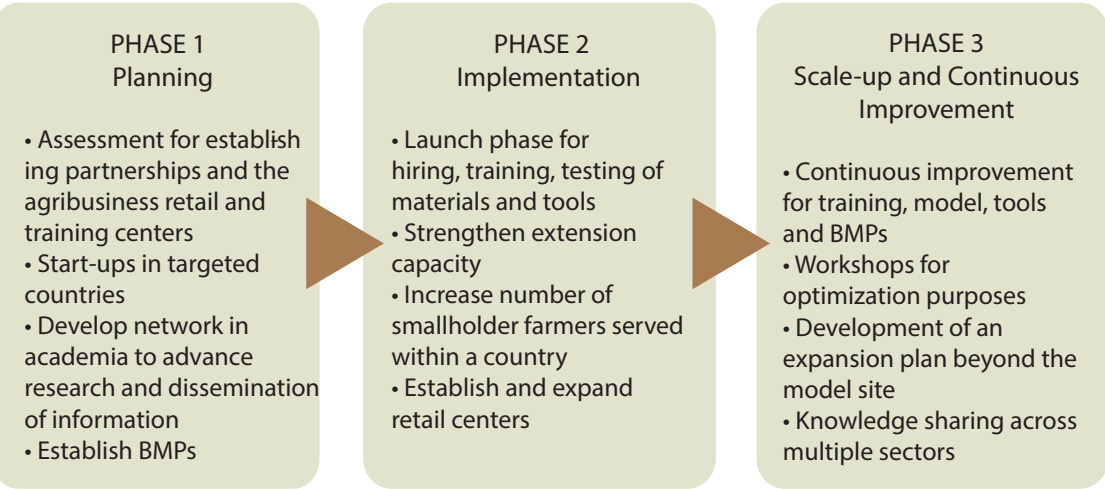
Integrating into or expanding existing extension systems will help to cultivate sustainability. Measures and goals will be customized to each country and will change with time and scaling.

Monitoring and evaluation is important to ensure that there is accountability and that decision making is informed and performance-based.

Governance

The SDSN as well as the local and international partners will implement the Solution. Partners on this project are being finalized. This group will support country level efforts, manage funding and allocations, support monitoring and evaluation activities and coordinate reporting among other duties. It will be guided by a board which will oversee the program and provide additional accountability.

The Nutients Solution will be approximately broken down into to 3 phases:



The Nutrients Solution

A Global Approach to Smallholder Sustainability

Summary

The Nutrients Solution, an initiative of the UN Sustainable Development Solutions Network (SDSN), aims to bring together different actors, including governments, not-for-profit organizations, the private sector and academia, under a shared commitment to sustainable food systems while promoting rural prosperity and mitigating environmental impact. It provides farmers with customized tools and best management practices on the 4 ‘Rights’ — Right Rate, Source, Time, and Place for nutrients — required to sustainably enhance crop production.



The Purpose and the Need

The Nutrients Solution addresses two common challenges for smallholder farmers in sub Saharan Africa (SSA): **Low agricultural productivity**; and **limited agricultural extension capacity**. Low productivity can lead to food insecurity and limit income opportunities in many farming families in SSA. This initiative addresses key challenges faced by smallholder farmers by providing access to region- and crop-specific information so that they can increase their yields. Through strategic partners, improved extension and expanded retail centers, farmers also increase their access networks and agricultural inputs.

Agriculture extension staff in SSA are few and overwhelmed by the volume of farmers to be assisted and ground to be covered. They can face shortages of key supplies and lack current information on nutrient

Best Management Practices (BMPs) or agricultural innovations. The Nutrients Solution helps to provide these by building or expanding existing agricultural extension. Adding a retail component to extension increases the sustainability of the model.

Smallholder farmers often cannot afford to purchase agricultural inputs, leaving them few options to improve soil health and improve yields. **Locally customized BMPs** can significantly increase yields, reduce nutrient losses and improve environmental stewardship, as many smallholders are not using optimal farming methods. Additionally, working with local governments, and/or strategic non-governmental organization (NGO) partners, farmers could **increase their access to agriculture inputs** via loans, retail or government subsidy. Ensuring that there are equal opportunities and access for women to be involved in agribusiness is considered key to the success of this initiative.

Critical Components

Shared Value Partnerships

Customized and science-based BMPs

Tailored implementation

Iterative approach

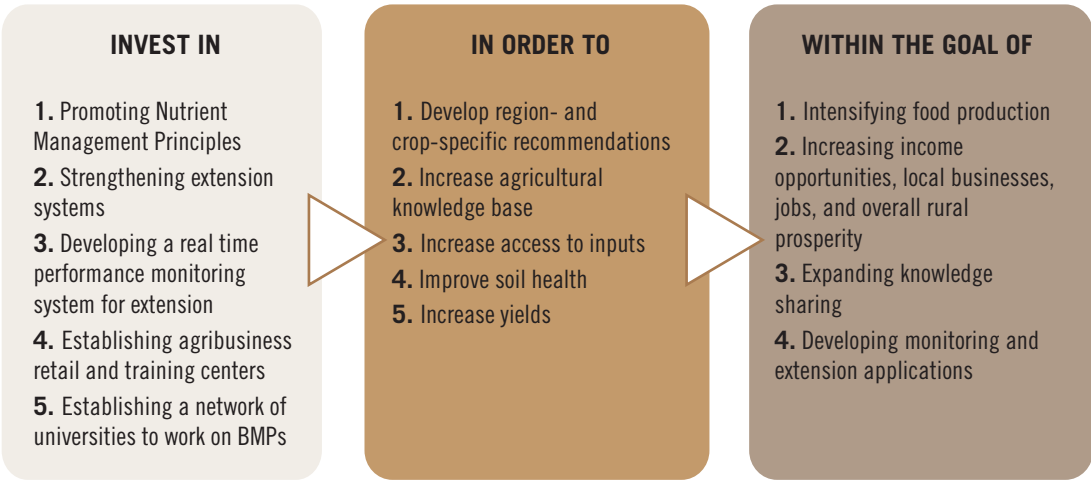
Continuous Improvement

Open Source

Strength-based management

Activities and Outcomes

The Nutrients Solution aims to achieve the following activities and outcomes:



Approach

One of the key features that differentiates this initiative from others is strength-based management and the **shared value approach**. Each partner will do what they do best and work together on an iterative basis to ensure the program is constantly evolving and improving. Each partner has the flexibility and freedom to work within their own structures and networks as well as leverage existing assets, but draws strictly from the following time-tested and proven principles:

- The 4R model, BMPs, and extension materials will be open source;
- Only science-based interventions and BMPs will be promoted;
- Multi stakeholder implementation will be fostered and;
- The Solution will strengthen the capacities of local stakeholders

BMPs must also be customized to the location, crop and culture of implementation. It will use a science-based approach while ensuring that the deliverables are user-friendly and appropriate. Delivering these BMPs within the program will identify areas where farm performance needs to be improved for smallholders and will help to achieve the economic, social and environmental goals that have been established. A scalable model, women’s active participation and using the Lead Farmer approach will all create a more sustainable system.

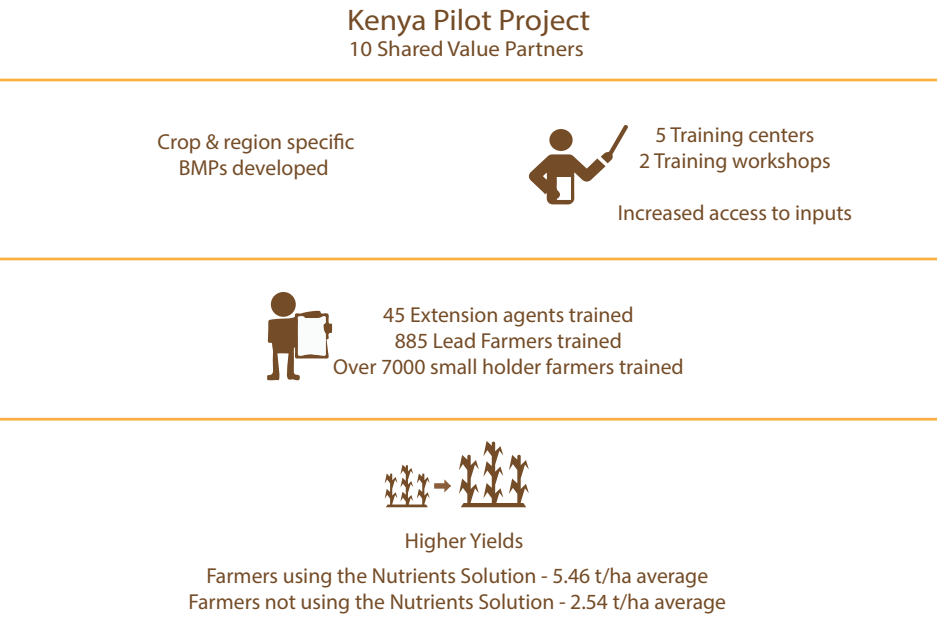
Extension and Agribusiness Retail and Training Centers

Strengthening local extension and advisory services will ensure that nutrient management recommendations reach smallholder farmers and are tailored to local conditions. Government relationships provide the potential to inform local policy regarding BMPs, and expanded extension will link smallholders to broader networks than they may otherwise have access to. Farmers and extension workers will both contribute to, and learn from the BMPs.



The **retail training centers** will create a hub for extension workers and smallholder farmers to access information and resources. Through partners like One Acre Fund, the retail component of extension provides increased access to inputs. The training centers will strengthen public-private partnerships, provide networking opportunities for smallholders and be the meeting point for learning and training on BMPs; modern farming techniques, such as plant spacing, fertilizer application, crop rotation, etc.; and fine-tuning their existing production systems to allow for a higher yields and eventually higher incomes.

Implementation has already begun on a pilot project in Kenya with 45 extension staff, 885 Lead Farmers, customized nutrients recommendations and over 7000 smallholder farmers trained. Early results have been promising – farmers using the Nutrients Solution had an average of 5.46t/ha, while farmers not using the Solution yielded an average of 2.54t/ha.



Critical Components

These activities and outcomes will be achieved through a set of critical components that cannot be compromised. The system is built on a foundation of shared value partnerships with NGOs, governments, the private sector and academia. Customized BMPs will be delivered by trained extension agents and Lead Farmers through strengthened local networks or retail centers which builds local capacity and creates social, economic and environmental benefits and sustainability. The chart below demonstrates the Nutrients Solution model.

