Seed for the Transformation of Food Systems in Left-Behind Countries of Africa: 2020-2025 Business Plan Summary
Authors
William Ronnie Coffman
Vernon Gracen
K. Vijayaraghavan
Stefan Einarson
R. R. Hanchinal
C. Venu Gopal
Vijay Paranjape
Vithal Karoshi
Anand Singh
Rituparna Majumder
Poornima Gade
Richa Kapur
Aishwariya Varadan

National Seed Systems Consultant
Edgar Somacumbi - Angola
Glele Mellon - Benin
Sougnabe Pabame - Chad
Albert P. Bembe - Congo Republic
Assavo Nguetta – Cote d’ Ivoire
Christophe Asanzi - DR Congo
Tesfimichael Abraha - Eritrea
Ibrahim Diallo - Guinea
Paul M. Rabenasolo - Madagascar
Issoufou Salami - Niger
Festus Massaquoi - Sierra Leone
Gilbert Tchala – Togo

Editor - Matt Hayes
Designer - E. Sudhakar

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Riverside Studios
Riverside Lane, Nairobi, Kenya Tel: +254 734 699995
Email: info@seedsystemsgroup.org

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Background and Introduction

Subsistence-level farming in Africa is unsustainable. As rural populations grow and spread, agricultural lands and other resources are steadily depleted and rendered incapable of providing a stable, decent existence. Poverty, hunger, and malnutrition become the dominant themes in rural communities, and people lose faith in farming as a livelihood. Climate change, with its attendant droughts, floods, and other extreme weather events, is now exacerbating this trend across much of the continent. The result is high rates of rural-urban migration, leading to an overflow of non-productive people living in Africa’s cities. Many, especially the youth, make desperate attempts to migrate to Europe and other developed regions. Others turn to radical religious and social factions which threaten the stability of whole regions of the continent and other parts of the world.

Africa’s population has nearly tripled from 478 million in 1980 to a current estimate of 1.4 billion, and is expected to increase to 2.4 billion by 2050 (United Nations, 2016). Approximately 65% of Africa's population are farmers whose nutrition and income depend on the food they are able to harvest from small land holdings. Yet, in spite of the ubiquitous nature of agriculture, Sub-Saharan Africa has the highest rate of chronic malnutrition in the world and is home to 218 million undernourished people (OECD/FAO, 2018). Food imports, currently estimated at $35 billion annually, are projected to rise to $110 billion by 2025 (African Development Bank, 2018).

For decades, this has been the dominant trend across much of rural Africa. For lack of better options, smallholder farmers have continued to depend on the same, subsistence-level farming practices as generations of farmers before them. Grain crop yields in many countries remain stuck at around 1 MT/ha (1/3 the average level of productivity among all developing countries), preventing land from being cultivated with more nutritious vegetables and other protective foods. Rural economies, with some exceptions, have stagnated. Much of the fallout from failing agricultural systems is absorbed by women, who care for children and also supply a large portion of the labor on Africa’s farms (Palacios-Lopez et. al., 2015).

A Straightforward Solution

It does not have to be this way. There is a solution to low crop yields and the trap of subsistence agriculture. In recent years, farmers in a number of African countries have reversed decades of static or declining crop yields and over-reliance on starchy staple crops by planting seed of high-yielding, nutritious, climate-resilient crop varieties. In these countries, yields of a wider range of food crops are rising and economic indicators are improving. Improved seed has been key to unlocking rural economic growth and opportunity, especially for women and the youth. The biggest gains have been made in East Africa, where per capita cereal production has risen 50% since 2000. Not surprisingly, East Africa is also where the adoption of improved seed has flourished.

New seed has played a major role in offering some African farm families a better life. The past decade has seen a “quiet explosion” in the breeding of new varieties of Africa’s staple food crops and vegetables. Major public breeding initiatives operating with an estimated $500 million in support from the Bill and Melinda Gates Foundation, The Rockefeller Foundation, and several bi-lateral development agencies, have been implemented by CGIAR centers to create higher-yielding crop varieties adapted to African agro-ecologies and cope with climate change. National crop breeding teams in Ghana, Kenya, Mali, and Uganda, and several other countries were also funded to develop and released hundreds more new varieties.
This new generation of high-yielding, climate-resilient crop varieties now represents a major new asset in the struggle to help Africa feed its growing population with a more nutritious range of crops and adapt effectively to climate change.

Parallel investments in a new, private sector-driven model for seed production and sale to smallholder farmers has proven effective across a number of African countries.

The public-private model for seed delivery is based on the introduction and licensing of new crop varieties to local, private seed companies, together with technical and financial support to produce, package, and market seed of the new varieties via village-based agro-dealers. The growth of local seed markets attracts spill-in investments from regional and international seed companies, helping to further extend the supply frontier of improved seed.

Uptake by farmers of improved seed in countries which have received this type of assistance has driven increased crop yields for important food crops. Equally important, the new model for seed systems has proven sustainable, with new seed companies being formed, fertilizer use increasing, and grain markets growing to absorb the increased local production.

The twin assets of hundreds of new crop varieties and a reliable model for seed delivery essentially re-writes the narrative around prospects for attaining food security in Africa and achieving Sustainable Development Goal #2 to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” by 2030. Once viewed as one of the world’s most daunting humanitarian challenges, ending malnutrition and food shortages in Africa through sustainable increases in agricultural productivity can now be viewed as an achievable goal in our lifetime.

Many Countries and Millions of Farm Families Left Behind

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**Figure 1:** Cereal (Maize and Rice) yield trends in African countries receiving seed systems assistance vs. no assistance, 2000-2017.
Every African country where seed of the new crop varieties has reached farmers at a significant scale has seen progress. Increased farm yields have delivered improved nutrition to people in rural areas who need it most. Unfortunately, the number of countries where access to improved seed among smallholder farmers has been achieved is still limited. As a result, the benefits of the new varieties have remained out of the reach of many millions of Africa’s farming families. The Alliance for a Green Revolution in Africa (AGRA), operating with support from a coalition of donor agencies, has implemented its seed program in 15 countries. But there are 15 additional countries, home to an estimated 38 million farmers, which have effectively been left behind with regard to seed access.

Responding to the Challenge: A New Seed Systems Initiative in Africa

Extending the benefits of nutritious, higher-yielding, climate-resilient crops to farmers in African countries left behind in this transformation is the mission of Seed Systems Group (SSG), a non-profit, technical and financial assistance organization registered in the USA (501 c3) and headquartered in Nairobi, Kenya.

Seed Systems Group has identified 15 African countries with a total population of over 320 million people and an estimated 38 million farmers who have seen little or nothing of the new crop varieties or experienced any improvements to their seed delivery systems. These countries have few or no private seed companies operating within their borders, and imported seed remains prohibitively expensive to smallholder farmers, who continue to plant seed of land races or obsolete varieties developed 30 or more years ago.

Figure 2: 15 African Countries with Large Agricultural Potential Where Farmers Lack Access to Improved Seed.

Figure 3: Global Hunger Index (2019).
Average child malnutrition rates in these countries stands at 38%, with several reaching over 50% (Figure 4). Moreover, population growth rates in these countries average 2.8%, meaning populations are doubling every 25 years.

Since June of 2019, SSG technical staff, working with crop breeding and seed specialists from Cornell University have travelled to 12 of these 15 neglected countries, meeting with agricultural officials, researchers, private seed entrepreneurs, and farmers in order to develop individualized strategies for seed systems development.

In virtually every country visited, the buy-in from government to SSG’s proposals has been met with resounding approval. **Ministers and high-level government officials of the 12 target countries have expressed their desire to collaborate with SSG in writing.** Everywhere the teams have travelled, the message from government officials has been: “The time is right” for a concerted push for seed systems development. They, too, realize that they have been left behind.

The result of this work is the establishment of a five-year strategy to develop improved seed supply systems in 12 target countries. Implementation of the full strategy will require approximately $79.1 million dollars, of which $60 million will be to support concrete activities on the ground in the countries. The proposed activities are described briefly, below.

**Five Strategic Interventions**

In order to transform seed systems and achieve productivity gains on a par with other emerging economies in Africa, the team has identified five key investment themes for support over a period of five years. The key investment themes are:

1) Breeding and release of new varieties
2) Seed enterprise development
3) Private sector-led extension
4) Agro dealer development
5) Seed policy and advocacy

1) **Breeding and Release of New Varieties**

The adoption of high-yielding crop varieties among smallholder farmers begins with teams of crop scientists testing, selecting and releasing improved varieties of the countries’ principal food crops and more nutritious vegetable crops. New traits such as earlier maturity, increased nutrient composition, higher yield, disease resistance, and drought tolerance are one of the best ways international assistance can help local farmers to improve their incomes, diets and adapt to climate change. Direct farmer input is key...
to selecting the best-adapted and most acceptable varieties. The trove of new, Africa-adapted varieties developed by international and national breeding teams can now be introduced in neglected countries to “leapfrog” the otherwise time-consuming step of breeding new varieties from scratch. Once released by the national agricultural research system, these varieties are licensed to private, independent seed companies for commercialization.

To achieve SSG’s mission of one-third of farmers adopting improved varieties and quality seeds being made available in each of SSG focus countries in next 10 years, testing 120 – 150 varieties in each country, release in each country of 2 - 5 hybrids of maize (yield potential - 8 tons/ha), 2 – 5 improved varieties of rice (3 tons/ha) and 2 – 4 varieties each of soybean, sorghum, cowpea, groundnut and horticultural crops such as tomatoes, pepper, and nutritious indigenous vegetables will be required (Figure 5).

The investment required to implement these activities is estimated at US$16.93 million over a period of 5 years across the 12 target countries.

2) Seed Enterprise Development

Driving supply of new seed at farmer level requires a critical number of private, independent seed companies capable of producing, processing, and marketing better seed to farmers through an open, competitive market system. Highly capable seed entrepreneurs, including many women and young “agri-preneurs” exist throughout Africa, but often lack the specialized knowledge or capital needed to establish companies capable of producing, packaging, and distributing quality seed. Women seed entrepreneurs have figured strongly in the emergence of seed business in Africa, a trend that was highlighted by the awarding of the Africa Food Prize for 2017 to Maimouna Coulibaly, CEO of Faso Kaba Seed Company of Mali.

SSG will provide one-time-only “start-up grants” to promising emerging seed companies to help them increase production, broaden their marketing via agro-dealers, develop new products through links to public breeders and undergo intensive training in the key areas of production, processing, marketing, business management and quality control and link growing seed companies to impact investors, start-up venture funding agencies, corporate investment partners and philanthropic organizations aiming to bring change in the target countries. The goal will be to bring the enterprises to the stage where they can qualify for commercial credit from local banks and other financial institutions.
Over the first five years SSG will help establish 51 enterprises in the target countries that are self-sustaining, progressing and growing. The average active engagement span for SSG with each of these enterprises is expected to be three years (Figure 6).

Our analysis estimates investments of US$18.49 million on this component.

3) Private Sector-Led Extension

Engaging the drive and energy of private sector to inform farmers of the value of improved seed and other modern practices has proven more effective than traditional, public sector extension. Simultaneous to the establishment of seed supply, SSG will conduct thousands of on-farm demos of new varieties. Self-employed “Village-Based Advisors” (VBAs) will be recruited, trained to teach farmers how to cultivate the new seed using fertilizer, row spacing, weeding, and other modern practices, and rapidly distribute hundreds of thousands of small (50 gram) packs of new seed plus 200 gram packs of fertilizer to fellow farmers. Recruitment of VBAs also offers a new form of rural and youth employment, as these are often young farmers who are more open to trying new technologies, and many go on to establish agro-dealerships.

The adoption and spread of mobile phones among farmers have dramatically increased the impact that can be achieved through private sector-led extension and VBAs, more specifically. VBAs will be facilitated to communicate messages regarding seed availability, farmer field day meetings, opportunities for accessing fertilizer and other inputs, and even grain, legume, and vegetable marketing opportunities. VBAs can also be facilitated to access relevant ICT applications, weather predictions, and instructive videos to accelerate the adoption of new technologies and management practices.

Leveraging relevant, continually evolving ICT platforms and facilitation of self-employed VBA’s will enable SSG efficiently achieve results at an estimated cost of US$13.95 million in the 12 target countries over a period of 5 years.

4) Agro-Dealer Development

The final link in the seed value chain is village-level supply of seed through private, local shop owners. Young, village-based entrepreneurs – especially women entrepreneurs – are often crucial to introducing new seed through these small businesses, and will be prioritized for this assistance. SSG will train these emerging business people in practical business management skills. It will also provide start-up, matching grants and technical assistance to local entrepreneurs to open seed and input supply shops. The establishment of private, locally-owned and operated input shops creates another source of rural employment and ensures the regular, dependable supply of seed, fertilizer, and other technologies at a local level.

The proposed interventions will be directed towards development of a sustainable network of agro-dealers with businesses located at strategic rural areas with strong links
to a wide range of seed and other input suppliers in order to reach smallholder farmers with technical knowhow and quality inputs at affordable prices. The agro-dealer development model will be supported by five key elements (Figure 7):

![Agro-dealer development model](image_url)

Grants will be provided to open new outlets, refurbish or relocate shops, procure inventory supplies and build cost-effective storage units. SSG aims to ensure existence of at least one agro-dealer for every 5,000 farmers in each of the focus countries. SSG envisages supporting 7,500 agro-dealers across the target countries as depicted in (Fig. 8).

The cost of these activities over a period of five years is estimated at US$11.67 million.

5) Seed Policy and Advocacy
Seed systems development also requires direct, consistent engagement with high-level government officials to modernize seed policies and procedures and make them private sector-friendly. Engaged seed policy leaders can, and often do, become champions for seed supply at a national level.

![No. of agro-dealers to be supported](image_url)
SSG’s proposal is well-timed to take advantage of several recent developments in seed harmonization, which streamline the regulatory process for variety release and registration and national seed certification regimes. Harmonized seed conventions include the Economic Community of West Africa States (ECOWAS), the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), and the Southern African Development Community (SADC). The target countries are all part of single or multiple regional groups (Figure 9).

SSG will work closely with governments to develop a regulatory framework that increases seed supply and improves seed quality. SSG envisages a modest investment of US$2.22 for seed policy improvement over a period of 5 years across 12 target countries in Africa.

Program Investment, Execution and Impact
SSG has created a lean, accountable structure that provides for dynamism and stability while ensuring a people-centered culture, operating in a rapid learning and fast decision cycle. Technology enablement across the organization will drive efficiency and an informed decision-making process. The nimble organizational structure with experienced technical specialists empowered to take action is easy to mobilize at both headquarters and regional level.

Our analysis and planning has revealed that transforming seed supply in the 12 target countries will require $US 79.1 million over five years. Eighty percent of the investment will be directed to target countries to strengthen their seed systems. The investment will:

- Help produce 88,000 metric tons (MT) of quality seeds of staple and horticultural crops, sufficient to plant 4.4 million ha;
- Benefit approximately 11 million farmers through increased yields and income;
- Produce approximately 8.8 million MT of additional food worth approximately $US 2 billion;
- Establish 51 private seed enterprises and 7,500 agro-dealers;
- Strengthen the capacity of 12 national agriculture institutes;
- Create stable, productive employment for 75,000 individuals in rural areas; and,
- Train 127 MS and 20 Ph.D. breeders.

From a wider perspective, it is projected that these interventions will broadly increase the
availability of more nutritious food and catalyze improvements in the food systems of these countries, including the growth of grain, legume, and vegetable markets, opportunities for regional trade, and a revitalization of national research systems, contributing other innovations to the food system. By introducing improved seed into rural farming areas of these neglected countries we can inject new opportunity and hope into the lives of some of the most marginalized people in the world and offer them new powers for coping with a changing climate.

Figure 10: SSG five-year budget breakdown.

Country-Level Highlights
From June to December, 2019, Seed Systems Group and Cornell University traveled to 12 target countries at the invitation of the respective ministries of agriculture to study the status of seed supply among smallholder farmers, identify key public and private actors in seed systems, and agree national strategies for seed systems development. SSG also financed national experts in each of the 12 countries to conduct detailed feasibility studies for seed systems development. The findings, recommendations, and five-year investment plans are elaborated in the full SSG business plan. Below are shown the highlights from each of the countries in an at-a-glance format. Full details are available on request.
ANGOLA

By the numbers

SEED SUPPLY-DEMAND GAP

MAIZE

BEAN

Yield trends for major crops

OUR VISION

Strategic investment in the Angolan seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

1,000+ NEW AGRO-DEALERS CREATED

5 NEW PRIVATE SEED COMPANIES ESTABLISHED

204% INCREASE IN QUALITY SEEDS

Improved varieties INTRODUCED

TOTAL INVESTMENT: $7.63 MILLION

Quick wins

- Two private Angolan seed companies with big potential.
- Government support for accelerated growth of the national seed sector in Angola.

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By the numbers

**SEED SUPPLY-DEMAND GAP**

- 12M POPULATION
- 25.6% AGRICULTURAL SHARE TO GDP
- 40.1% SUFFER FROM FOOD INSECURITY
- 33% AGRICULTURAL EMPLOYMENT WOMEN
- 32.2% CHILDREN UNDER 5 MALNOURISHED
- 107.5 CLIMATE RISK INDEX

**Yield trends for major crops**

**OUR VISION**

Strategic investment in the Beninese seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

- **650** NEW AGRO-DEALERS CREATED
- **5+** NEW PRIVATE SEED COMPANIES ESTABLISHED
- **181%** INCREASE IN QUALITY SEEDS

**Quick wins**

- Active, pro-private sector agriculture ministry
- Close proximity to Nigerian food markets

**TOTAL INVESTMENT: $5.26 MILLION**

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CHAD

16M
POPULATION

59%
AGRICULTURAL SHARE TO GDP

25.6%
SUFFER FROM FOOD INSECURITY

81%
AGRICULTURAL EMPLOYMENT WOMEN

39.8%
CHILDREN UNDER 5 MALNOURISHED

116
CLIMATE RISK INDEX

By the numbers

Quick wins

- Vast, underutilized agricultural lands
- National consensus on public-private seed supply model

OUR VISION

Strategic investment in the Chadian seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

- 500 NEW AGRO-DEALERS CREATED
- 5+ NEW PRIVATE SEED COMPANIES ESTABLISHED
- 157% INCREASE IN QUALITY SEEDS

Improved varieties INTRODUCED

TOTAL INVESTMENT: $5.71 MILLION

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**By the numbers**

- **5.3M** Population
- **48%** suffers from food insecurity
- **21%** children under 5 malnourished
- **59%** agricultural share to GDP
- **36%** agricultural employment women
- **5.3M** climate risk index

**Yield trends for major crops**

**Quick wins**

- Strong leadership in agricultural research
- High priority for agricultural development

**OUR VISION**

Strategic investment in the Congo Republic seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

- **300** new agro-dealers created
- **4+** new private seed companies established
- **35%** increase in quality seeds

**TOTAL INVESTMENT:** $4.16 million

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COTE D'IVOIRE

26M POPULATION
17.4% AGRICULTURAL SHARE TO GDP
26.8% SUFFER FROM FOOD INSECURITY
40% AGRICULTURAL EMPLOYMENT WOMEN
21.6% CHILDREN UNDER 5 MALNOURISHED
77.67 CLIMATE RISK INDEX

By the numbers

SEED SUPPLY-DEMAND GAP

Yield trends for major crops

Quick wins

- Strong history of public-private partnership in agriculture
- Large cadre of agricultural scientists

OUR VISION

Strategic investment in the Cote D'Ivoire seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

750 NEW AGRO-DEALERS CREATED

6+ NEW PRIVATE SEED COMPANIES ESTABLISHED

100% INCREASE IN QUALITY SEEDS

IMPROVED VARIETIES INTRODUCED

TOTAL INVESTMENT: $5.21 MILLION
By the numbers

- **89M** POPULATION
- **70%** SUFFER FROM FOOD INSECURITY
- **42.7%** CHILDREN UNDER 5 MALNOURISHED
- **21.1%** AGRICULTURAL SHARE TO GDP
- **68%** AGRICULTURAL EMPLOYMENT WOMEN
- **59** CLIMATE RISK INDEX

**SEED SUPPLY-DEMAND GAP**

**OUR VISION**

Strategic investment in the Democratic Republic of the Congo seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

**Quick wins**

- New government giving high priority to agriculture
- Dynamic emerging local seed companies

**TOTAL INVESTMENT**: $7.38 MILLION

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By the numbers

Quick wins

- Strong history of public-private partnership in agriculture
- Large cadre of agricultural scientists

OUR VISION

Strategic investment in the Eritrea seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

2+ NEW PRIVATE SEED COMPANIES ESTABLISHED
35% INCREASE IN QUALITY SEEDS
Improved varieties INTRODUCED

TOTAL INVESTMENT: $2.16 MILLION
13M POPULATION
46.5% SUFFER FROM FOOD INSECURITY
30.3% CHILDREN UNDER 5 MALNOURISHED
19.5% AGRICULTURAL SHARE TO GDP
70% AGRICULTURAL EMPLOYMENT WOMEN
116 CLIMATE RISK INDEX

GUINEA

By the numbers

SEED SUPPLY-DEMAND GAP

OUR VISION
Strategic investment in the Guinea seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

600 NEW AGRO-DEALERS CREATED
4+ NEW PRIVATE SEED COMPANIES ESTABLISHED
157% INCREASE IN QUALITY SEEDS

Quick wins

- Huge, untapped agricultural potential
- Large number of strong farmer cooperatives

TOTAL INVESTMENT: $6.12 MILLION

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MADAGASCAR

28M
POPULATION

23.7%
AGRICULTURAL SHARE TO GDP

70.7%
SUFFER FROM FOOD INSECURITY

65%
AGRICULTURAL EMPLOYMENT WOMEN

54.8%
CHILDREN UNDER 5 MALNOURISHED

15
CLIMATE RISK INDEX

By the numbers

SEED SUPPLY-DEMAND GAP

Quick wins

- Huge potential for closing yield gaps through improved seed
- Young, energetic public leadership

OUR VISION

Strategic investment in the Madagascar seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

750
NEW AGRO-DEALERS CREATED

8+
NEW PRIVATE SEED COMPANIES ESTABLISHED

180%
INCREASE IN QUALITY SEEDS

Improved varieties INTRODUCED

TOTAL INVESTMENT: $6.13 MILLION

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**SEED SUPPLY-DEMAND GAP**

- **24M** POPULATION
- **41.5%** AGRICULTURAL SHARE TO GDP
- **25.6%** SUFFER FROM FOOD INSECURITY
- **71%** AGRICULTURAL EMPLOYMENT WOMEN
- **40.6%** CHILDREN UNDER 5 MALNOURISHED
- **26.5** CLIMATE RISK INDEX

**Yield trends for major crops**

- **Pearl Millet:** Area 69.9k ha, Production 1.05 mt ha
- **Cowpea:** Area 61.78k ha, Production 0.4 mt ha
- **Sorghum:** Area 41.5k ha, Production 0.5 mt ha
- **Groundnut:** Area 39.45k ha, Production 0.5 mt ha

**SEED SUPPLY-DEMAND GAP**

- **69.9k** Area (1,000 ha)
- **61.78k** Area (1,000 ha)
- **41.5k** Area (1,000 ha)
- **39.45k** Area (1,000 ha)

- **1.05** MT ha
- **0.4** MT ha
- **0.5** MT ha
- **0.5** MT ha

**Quick wins**

- Several well-managed, private seed companies
- Strong national capacity in crop breeding

**OUR VISION**

Strategic investment in the Niger seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

- **800** NEW AGRO-DEALERS CREATED
- **5+** NEW PRIVATE SEED COMPANIES ESTABLISHED
- **195%** INCREASE IN QUALITY SEEDS
- Improved varieties INTRODUCED

**TOTAL INVESTMENT:** $6.24 MILLION

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Our vision

Strategic investment in the Sierra Leone seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

500 NEW AGRO-DEALERS CREATED

4+ NEW PRIVATE SEED COMPANIES ESTABLISHED

100% INCREASE IN QUALITY SEEDS

Improved varieties INTRODUCED

Total investment: $4.02 million

Quick wins

- Huge potential for closing yield gaps through improved seed
- Committed cadre of public plant breeders

By the numbers

Population: 8M

60.7% Agricultural share to GDP

31% Suffer from food insecurity

24% Agricultural employment women

54.8% Children under 5 malnourished

15.67 Climate risk index

Yield trends for major crops

Cassava, Rice, Vegetables, Pulses, Groundnut

80 70 60 50 40 30 20 10 0


Committed cadre of public plant breeders

8M POPULATION

60.7% AGRICULTURAL SHARE TO GDP

31% SUFFER FROM FOOD INSECURITY

24% AGRICULTURAL EMPLOYMENT WOMEN

54.8% CHILDREN UNDER 5 MALNOURISHED

15.67 CLIMATE RISK INDEX

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By the numbers

**SEED SUPPLY-DEMAND GAP**

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<th>Crop</th>
<th>Area (000 ha)</th>
<th>Production (000 tons)</th>
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<tr>
<td>Groundnuts</td>
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</tr>
</tbody>
</table>

**Yield trends for major crops**

- Maize
- Cassava
- Yams
- Sorghum
- Lentils
- Vegetables
- Rice
- Groundnuts

**Quick wins**

- High priority for seed systems development at national level
- Three local seed companies eager to scale up supply

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**OUR VISION**

Strategic investment in the Togo seed system will spur farmers to reverse decades of declining productivity through the cultivation of higher-yielding, more resilient seed.

**TOTAL INVESTMENT:** $4.45 MILLION

**SEED SUPPLY-DEMAND GAP**

- **7.8M** POPULATION
- **30%** SUFFER FROM FOOD INSECURITY
- **32%** CHILDREN UNDER 5 MALNOURISHED

**AGRICULTURAL SHARE TO GDP:** 28%

**AGRICULTURAL EMPLOYMENT:** 34%

**CLIMATE RISK INDEX:** 106

**POPULATION SUFFER FROM FOOD INSECURITY:** 30%

**FOOD INSECURITY:** 30%

**CHILDREN UNDER 5:** 32%

**MALNOURISHED:** 106