

Portfolio Strategy: Delivering Climate-smart Seeds

Date: December 2025



Portfolio Overview

Vision for the seeds market	<p>To catalyse a commercially driven, inclusive and climate-resilient seed market in which private seed companies profitably multiply and distribute high-quality climate-smart and biofortified varieties; smallholder farmers reliably access and adopt adapted seeds through sustainable last-mile channels and increase incomes. Quality assurance and governance systems are trusted and enforced; and financial institutions provide tailored products that enable continuous investment across the seed value chain.</p>
Number of interventions	<p>2.1 Increase certified CS seeds availability through scaling of community seed multiplication (CSM) model 2.2 Promote adoption and utilization of certified CS seeds by scaling rural seed promoter (RSP) model. 2.3 Strengthen the regulatory environment for seed certification by strengthening key industry bodies e.g., National Agricultural Seed Council (NASC)</p>
Potential partners	<ul style="list-style-type: none"> • Noman Zamani, Girmal, Tecni seeds, Value seed, Premier seeds, Seed Project Co, AgriSeed Co, Asma'u Memorial Farms • Regulatory agencies, State Governments
Projected impact (By Year 3)	<p>10 seed companies supported; 10,000MT of seed produced annually; 10,000 seed producers engaged annually, 500 RSPs activated; 200,000 farmers benefitted</p>

Outline

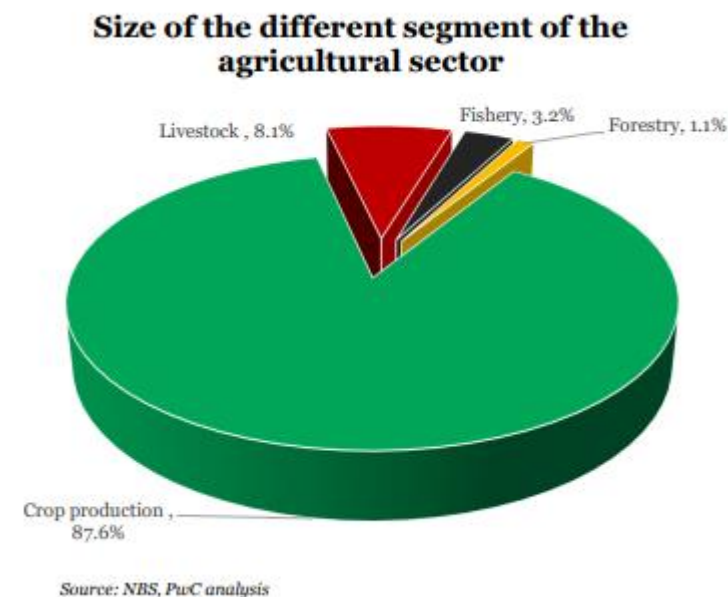
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Background

01

Background - Relevance of the Seed subsector 1/2

- Crop production makes the most contribution to agricultural GDP (19% of agricultural GDP) and accounts for 87% of the agricultural sector's total output (PwC).
- The availability of high quality locally adapted seed varieties considered the most important requirement for crop production – contributes 50% to crop yields (NAERLS):
- The Nigerian seed sector is valued at £767M, yet demand far outstrips supply (>70% supply gap)
- Access to and use of adapted seeds offers farmers an affordable means of increasing yields as well improve the efficiency and effectiveness of other inputs – e.g agrochemicals, fertilizers, and mechanization. Seeds sets the limits to which all other agricultural inputs can contribute to crop productions.



With high yielding varieties, and cultivars selected to better adapt to the changing local climates, seeds are therefore an important technology for transferring these adaptive capacities to farmers.

...Relevance to food security and changing climate

Climate change

- The cost of agricultural production greatly impacted by climate change due to reliance on rain-fed production.
- Accelerating climate change puts pressure on agricultural production and food systems:
 - Biotic stress (increased pest, pathogens and resistance to existing control measures),
 - Water and temperature stress; with varied sensitivity across different crops, leading to higher crop failure

Conflict: Unsustainable land management practices, compounded by poor use of inputs (seeds) impacts on livestock systems and soil management, resulting in increased migration, encroachment, and recurring conflict.

Gender and social inclusion: Access to quality climate adapted varieties with the right education, can significantly improve women's productivity and resilience. Where gender-related barriers are addressed, women prove to be good agents of behaviour change for climate messaging

Food security and Nutrition

- Nigeria has been a net food importer —and the agricultural trade deficit has widened with imports exceeding exports by N2.29 trillion in 2021 compared to N1.42trillion in 2020.
- In 2023, with rising food prices, about 28% of Nigerians are reportedly food insecure
- Measures to improve food security includes higher crop yields, and closely linked to that is the adoption of high yielding locally adapted seed varieties(>6.5T/ha), along with low food inflation rates (<5%) and a drop in the share of food imports (est. 10%) (IMF).

With the impending climate change threats to food systems, Effective seed systems, enabling access to improved locally adapted planting materials underpins crop adaptation.



Previous Interventions, Lessons, and Opportunities

02

Proven Models for Scaling Climate Smart Varieties

1

Community Seed Multiplication (CSM)

In the model, Seed companies empowers smallholder farmers as out-growers to produce high-yielding, locally preferred improved crop varieties; at harvest, seed companies do a buy-back, giving farmers a premium for participating, and out-growers sell surplus to other farmers within their community, thereby boosting local availability, opening avenues for SHFs to start seed-trading businesses, and offering farmers a 'basket' of crop varieties to utilize.

The Propcom Mai-Karfi (PM) program had previously demonstrated the effectiveness of the "community seed multiplication" model which significantly increased the supply of seeds suitable for the local climate. During PM's implementation, the program worked with Tecni Seeds & and Girmal Seeds to increase their out-growers from 155 to 305 resulting in the increase in production from 650 metric tons of seeds to over 1,220 metric tons of seeds in one farming season. This improved the availability of adapted seed varieties and incomes for seed companies, out-growers and SHFs.

2

Rural Seed Promoters Model (RSPs)

The rural seed promoter model tackles the issue of limited access to improved seeds for farmers residing in rural areas. This model enables micro-entrepreneurs within these communities to act as intermediaries by purchasing seeds from major seed distributors and selling them directly to farmers.

In the previous Propcom Mai-Karfi program, this model successfully addressed the issue of last mile distribution, extension services, and quality-assured inputs. This channel of distribution in the heart of rural communities created access for farmers and confidence that the products were not adulterated or fake and were available in time for the planting season. PM piloted with RSP model with Premier Seeds in 5 states, and on their own, Premier Seeds scaled up to 20 more states. TecniSeeds also leveraged existing RSP network to expand their seed sales in Kano, Bauchi, Yobe and Gombe.

Past efforts to address the constraints, lessons and opportunities...1/2

Market Failures	Past efforts	Lessons	Opportunity/value add for P+
Finance	<ul style="list-style-type: none"> PM provided a cost-share grant to two seed companies for community seed multiplication, significantly boosting seed availability. However, limited time hindered the generation of evidence to encourage MFIs to develop a loan product. A few other donor Programmes have invested in financing seed multiplication – USAID FTF, WFP, GAIN, but at small scale 	<ul style="list-style-type: none"> Seed companies produce based on their risk appetite and financial capacity. Financial institutions often have a limited understanding of opportunities in seed multiplication. 	<ul style="list-style-type: none"> Unlock financing for expanding community seed multiplication. This will be anchored on the approach to driving community seed multiplication
Supply	<ul style="list-style-type: none"> PM partnered with Tecniseed and GIRMAL Seeds for community seed multiplication, involving farmers as out-growers. This significantly increased the availability of locally adapted varieties across the NE and NW States of Nigeria 	<ul style="list-style-type: none"> Increasing the supply of adapted varieties requires investing in community seed multiplication and advocating for financial institution support. Seed companies have limited out-growers due to financing constraints. Effective demand will influence them to expand. 	<ul style="list-style-type: none"> Engage market actors to improve supply climate adapted seed varieties to farmers.
Distribution	<ul style="list-style-type: none"> PM successfully tested a rural seed promoters (RSPs) model with three seed companies, creating a network of trained promoters aligned with them. HarvestPlus is involved on a smaller scale, collaborating with Premier Seeds. 	<ul style="list-style-type: none"> The RSP model is efficient in reaching the last mile and can be scaled up with other seed companies and across regions. The model benefits all stakeholders - offering better yields for smallholders, access to new markets for seed companies, and margins for RSPs. 	<ul style="list-style-type: none"> Scale up the RSP model to strengthen last mile distribution and extension








Past efforts to address the constraints, lessons and opportunities ... 2/2

Governance Failures	Past efforts	Lessons	Opportunity/value add for P+
Capacity (institutional capacity)	<ul style="list-style-type: none"> PM has previously supported NASC in reviewing the seed policy and strengthening state structures for seed certification and post-market surveillance. 	<ul style="list-style-type: none"> A huge gap exists in the state's capacity to regulate and enforce seed quality. This affects farmers' confidence, reduces demand, and makes private sector actors perceive it as a risky investment. 	<ul style="list-style-type: none"> Strengthen institutional capacity for QC and enforcement to ensure seed quality for smallholders and market stability for investors
Policy, Business Environment	<ul style="list-style-type: none"> Ukaid, through PM and other programmes, supported the review of the Seed Act. The Netherlands government is now collaborating to develop the seed sector, starting with the National Seed Road Map (NSRM) as a policy guide. HarvestPlus, alongside research institutions, have been involved in the research and release of new varieties, especially biofortified crops, engaging with government and private seed companies. 	<ul style="list-style-type: none"> Reforms are necessary to scale seed production by agribusiness for farmers, but this aspect is covered by other programmes. The sector shows progress with policy updates; the amendments to the Seed Act boosted private sector involvement, doubling the number of registered seed companies to 177 in 2021 from 2019. Current seed breeding and varietal release policies, however, deter private sector investment, hampering seed availability. More reforms are needed. 	<ul style="list-style-type: none"> HarvestPlus is uniquely positioned to drive this effort given their involvement in varietal release. Also, the government of the Netherlands is quite invested in this area through the NSRM policy. <p>In view, the Programme will engage through other capacity building and advocacy entry points.</p>
Weak policy implementation/coo rdination	<ul style="list-style-type: none"> The federal government implemented the Growth Enhancement Scheme (GES), a PPP model aimed at catalyzing markets for seeds and other inputs through subsidies. Donors and implementing partners like GAIN, WFP and others continue to fund the free distribution of seeds PM previously advocated for a segmentation and targeted approach to subsidies, and played a role in shaping the GES to minimize distortions, creating room for catalyzing markets through subsidies. 	<ul style="list-style-type: none"> Policy implementation and coordination, especially at the state level is crucial to attract increased investments from seed companies. The newly established Seeds Codex verifies seed authenticity, but its practical utilization and impact on countering counterfeit seeds are unclear. Current subsidy policies and trade protection measures are ineffective, primarily due to poor segmentation, targeting, and inadequate planning. Subsidies at the state level are becoming increasingly crucial amid recent shocks and rising household poverty. However, they require better coordination with market actors for smarter utilization. P+ will need to drive such advocacy in targeted states. 	<p>Evidence-based advocacy to drive coordination, effective targeting, and policy implementation</p>

Problem and Market Systems Analysis

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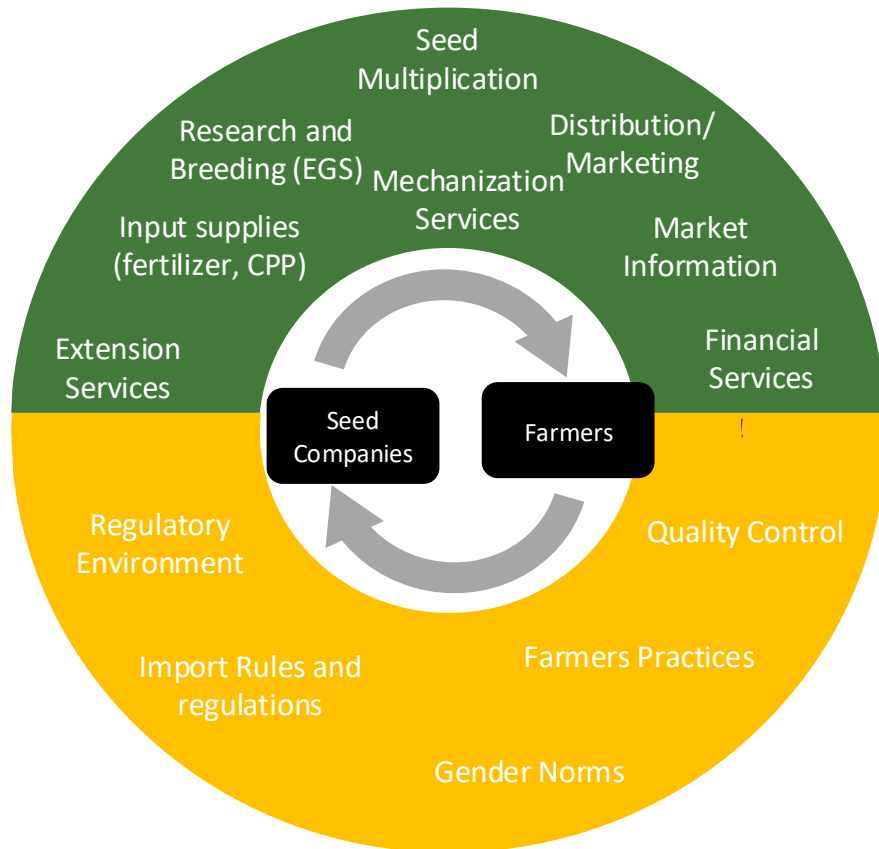
The Problem

-  Less than 15% of Nigerian farmers use climate-smart seeds, contributing to reduced productivity, yield levels, and limited access to nutrition.
-  Poor adoption rates of high-yielding seed varieties are evident in the productivity gap of most staple crops in Nigeria.
 -  This places additional strain on the environment as farmers may resort to unsustainable practices such as deforestation or clearing marginal lands to compensate for lower yields.
 -  Reduced agricultural productivity negatively impacts market growth, access to the premium/export market, employment, and overall economic growth.
-  Farmers are on the front line of climate change, and increasingly vulnerable to the changing and unpredictable climate.
 -  Most SHFs can only cultivate their crops during the rainy season because only 1% of cropland is irrigated(IFPRI). Farmers continue to lose the ability to depend on obsolete techniques as rainfall becomes increasingly erratic.
 -  Poor rural women and men depend on agriculture. Around 70% of rural people are smallholder farmers who rely on rainfall to cultivate unirrigated plots. These farmers produce nearly 90% of Nigeria's food.

Comparative average yields of Nigeria's most common seed crops (FAO)

2021 Yield values (tonnes/ha)		
Crop	Nigeria	World
Groundnut	1.20	2.40
Maize	2.50	4.50
Rice paddy	1.70	4.00
Seed cotton	0.23	1.50
Sorghum	1.23	1.45

Supporting Functions



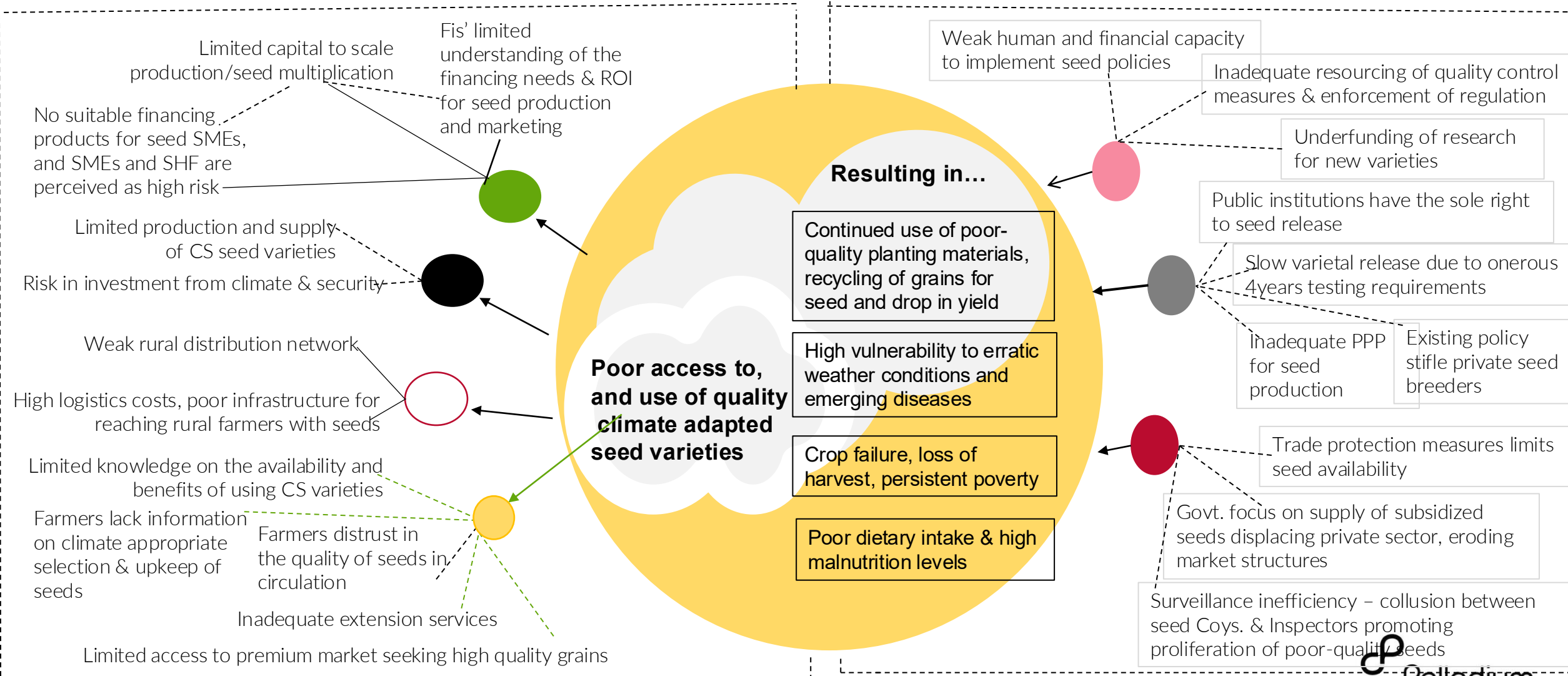
Rules and Norms

Support functions /rules	Definitions
Seed Multiplication	Process of producing genetically pure and high-quality seeds from breeder or foundation seed to generate sufficient certified seed for commercial distribution to farmers.
Financial services	Access to loans from commercial banks and micro finance institutions (MFIs) or equity/impact investment
Research and Breeding (EGS)	Access to breeders and foundation for multiplication by seed companies and seed producers. RI are mandated for development of specific crop varieties, breeding, research, sales of breeders and foundation seeds
Input supplies (Fertilizer and CPP)	Provide other inputs used in crop production, this includes organic and inorganic fertilizers and pesticides
Mechanization Services	Farm operation mechanizations, this could range from simplified planters to more sophisticated equipment like tractors, Irrigation systems etc
Distribution/ marketing	Logistics for aggregating from seed producers to processing factories and distribution of finished products to sales outlets. Demand creation through various marketing channels such as market storms, radio jingles, E-commerce
Market Information	This includes all facts, estimates, and opinions that influence the marketing of seed
Regulations	FMAFS, NASC, NVRC: Responsible for regulatory environment, seed companies' certification, quality control, governance of seed sector and release of new varieties
Research Institute	Mandated for development of specific crop varieties, breeding, research, sales of breeders and foundation seeds
Import Rules	Nigerian Agricultural Quarantine Service (NAQS), overseeing seed importation and biosafety
Gender Norms	Gender norms limit women's access to land, inputs, credit, extension services, and market opportunities, while domestic workloads further constrain participation in the seed system

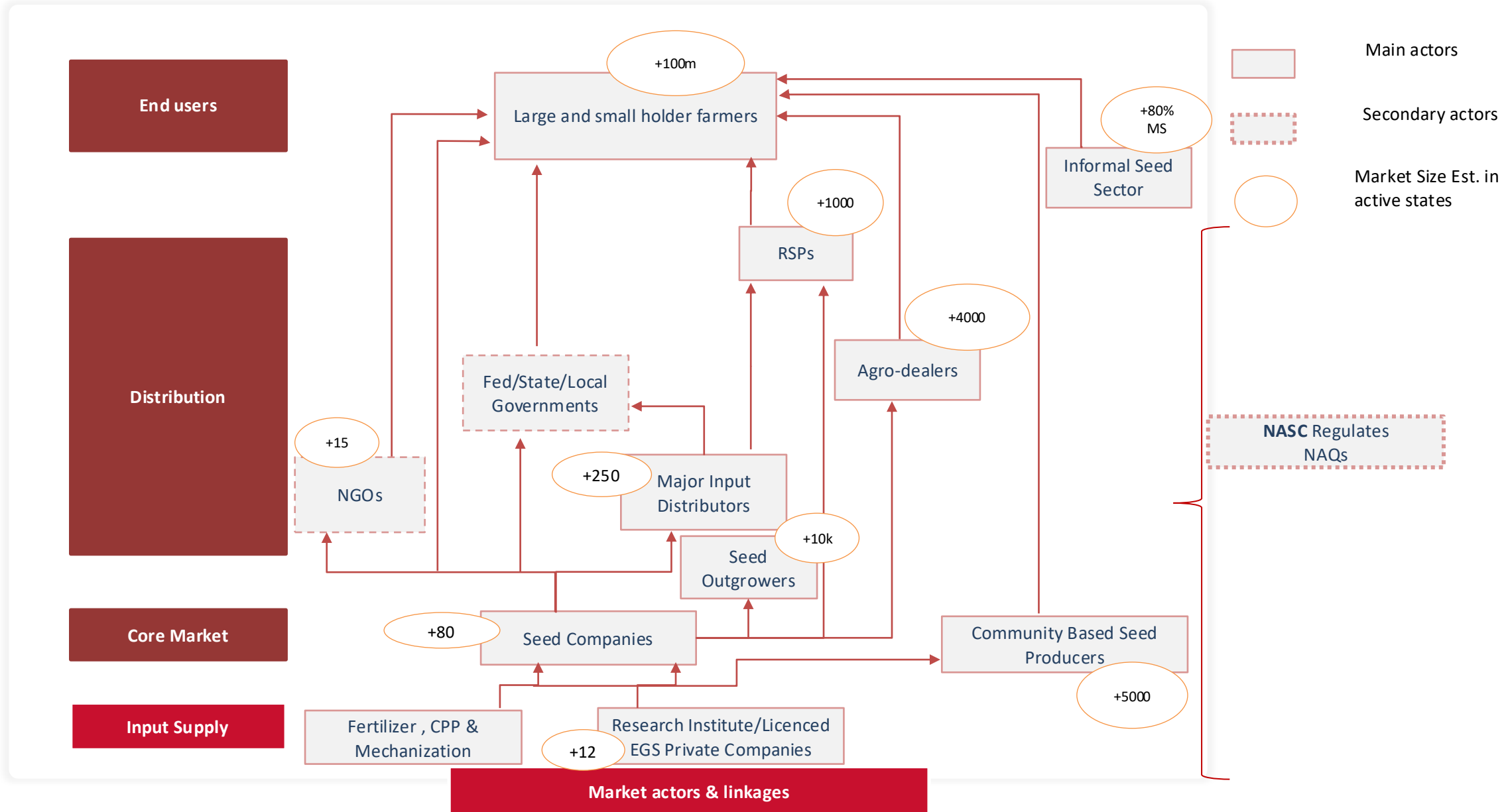
Market failure

Causes of sector underperformance

Governance failure



Actor Map of Climate Smart Seed Market



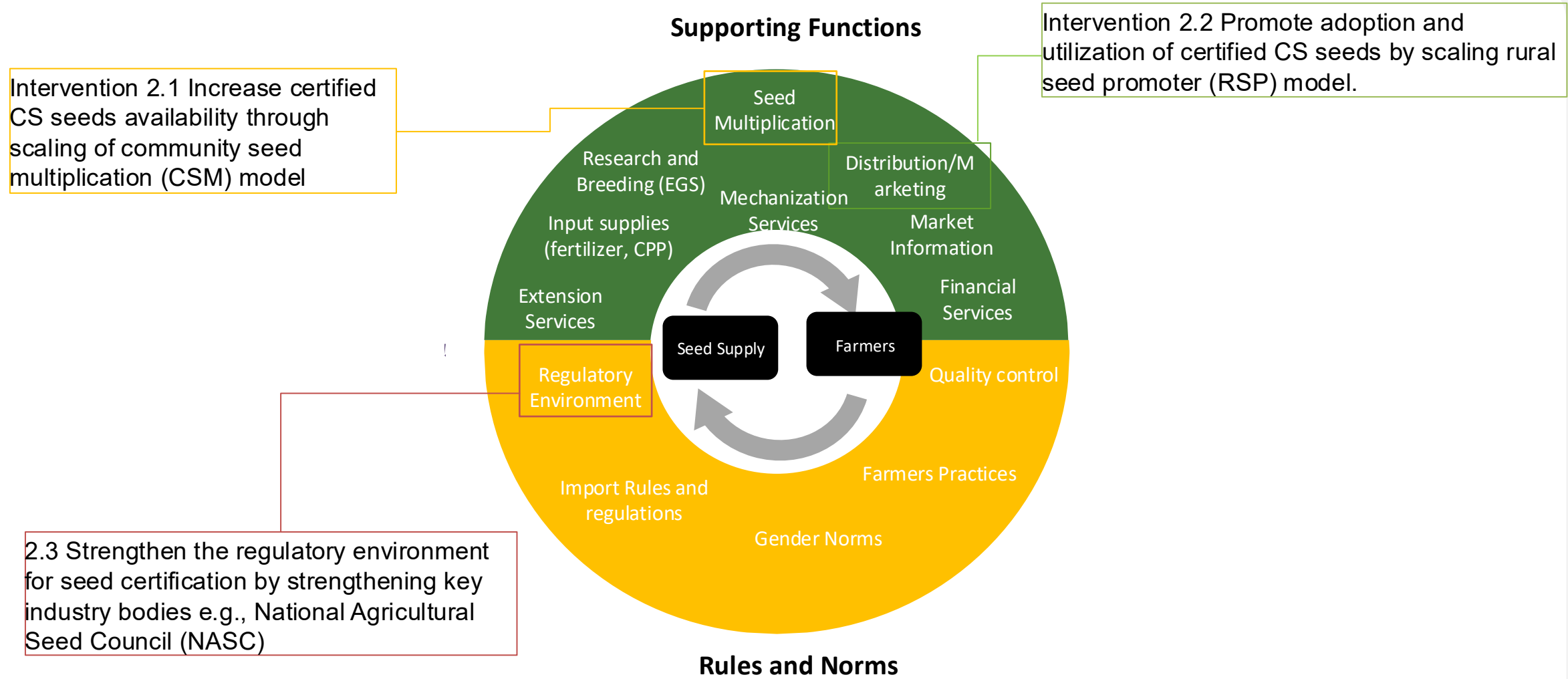
Core	Constraints	Opportunities	Actors
Seed Supply	<ul style="list-style-type: none"> • Weak rural distribution network • High logistics costs, poor infrastructure for reaching rural farmers with seeds • Weak rural distribution network • Low capacity to produce enough seeds • Lack sufficient infrastructure for seed production and processing • Low farmers demand 	<ul style="list-style-type: none"> • Development of rural distributor/agent networks, creating jobs and expanding last-mile reach. • Local seed production expansion through contract farming with outgrowers. • Establishment of seed processing facility closer to the farmers • Digital demand-generation platforms to educate farmers and stimulate adoption of improved seeds. • Public–private partnerships to improve rural infrastructure and strengthen supply chains. • Mechanization and automation in seed production to improve capacity and reduce costs. • Bundling seeds with inputs/credit/advisory to drive farmer demand and increase uptake. 	<p>Seed Companies (National and Regional), Community Based Seed Producers</p>
Seed Demand	<ul style="list-style-type: none"> • Unavailability of seeds at the last mile, farmers travel long distance to access seeds. • High cost of certified seeds when compared to the informal seeds • Limited knowledge on the availability and benefits of using CS varieties • Farmers distrust in the quality of seeds in circulation 	<ul style="list-style-type: none"> • Last-mile seed agent networks (Rural Seed Promoters) to bring seeds closer to farmers. • Affordable seed pricing models such as mini-packs • Targeted farmer education programs (demo plots, radio campaigns, mobile advisory) to raise awareness of certified seed benefits. • Partnerships with cooperatives to aggregate demand and reduce farmer travel distance. • Community-based seed multiplication to improve supply and reduce cost at rural level. 	<p>Large Scale Farmers, Smallholder farmers, farmers cooperative</p>

Support Functions / Rules	Constraints	Opportunities	Actors
Finance	<ul style="list-style-type: none"> No suitable financing products for seed SMEs, and SMEs and SHF are perceived as high risk. Fis' limited understanding of the financing needs & ROI for seed production and marketing High perceived risk of seed production cycles by FIs Limited performance data to assess risk No collateralizable asset base for seed SMEs Weather variability increasing repayment risk 	<ul style="list-style-type: none"> Creating access to blended finance to help seed companies scale production and multiplication. Design of tailored financial products (inventory financing, input credit lines, working-capital loans) suited to seed SMEs' production cycles. Risk-sharing facilities and credit guarantees to reduce perceived risk for financial institutions. Use of contract-farming structures to improve loan recovery and increase lender confidence. Build yield/ROI evidence base to de-risk FI entry Embed seed companies into seed financing 	Commercial banks, Micro-finance banks, DFIs
Extension	<ul style="list-style-type: none"> Limited knowledge on the availability and benefits of using CS varieties Inadequate public extension services Few extension service providers 	<ul style="list-style-type: none"> Digital extension platforms (SMS, WhatsApp, IVR, radio) to rapidly scale farmer awareness on CS varieties. Private-sector-led extension models using agro-dealers, youth agri-agents, RSPs and lead farmers to fill gaps. Training-of-trainers programs to expand the pool of local extension service providers. Demo plots and field days to showcase the benefits of certified seed varieties and drive adoption. 	Government extension agents, private extension providers, agents, media
Distribution and Marketing	<ul style="list-style-type: none"> Poor distribution network for seed Limited marketing activities by seed companies 	<ul style="list-style-type: none"> Develop last-mile Rural Seed Promoters (RSP) and agro-dealer to strengthen seed distribution and improve rural availability. Leverage digital marketplaces and mobile ordering systems to expand reach without heavy physical infrastructure. Investment in brand visibility through demos, radio campaigns, local fairs, and farmer-field days. Use of smaller-packaging and promotional bundles to stimulate farmer interest and trial 	Media, agro-dealers, agents, e-commerce, retailers

Support Functions Rules	Constraints	Opportunities	Actors
Input Supply	<ul style="list-style-type: none"> • Proliferation of poor quality and adulterated inputs • High cost of inputs • Weak distribution network 	<ul style="list-style-type: none"> • Promote organic inputs • Local production, input financing, bulk purchase models • Reduced reliance on imported products lowers cost and increases supply stability • Rural agro-dealer expansion, improved logistics, PPPs • Traceability, QR-coded input packages 	Input companies, Agro-dealers
Research and Development	<ul style="list-style-type: none"> • Inadequate supply of early generation seeds • Government policy misaligning with market-based solutions. Public institutions have the sole right to seed release • Underfunding of research for new varieties 	<ul style="list-style-type: none"> • Promote private-sector participation in early generation seed (EGS) production to reduce reliance on public institutions. • Public-private partnerships (PPPs) to co-fund and scale seed research and breeding programs. • Policy reform advocacy to allow competitive seed release systems and reduce regulatory bottlenecks. 	National Agricultural Research Institutes, IITA, ICRISAT, Licensed Private Sector
Regulatory framework & institutional coordination	<ul style="list-style-type: none"> • Govt. focus on supply of subsidized seeds displacing private sector, eroding market structures • Inadequate man-power to monitor seed production and sales. • Poor coordination among actors 	<ul style="list-style-type: none"> • Strengthen regulatory capacity through training, outsourcing inspections, or partnering with accredited private labs. • Establish multi-stakeholder platforms to improve coordination among breeders, seed companies, regulators, and farmer groups. 	NASC, NAQS, NVRC, SEEDAN, FMAFS
Farmers Practice	<ul style="list-style-type: none"> • Dependence on the informal seed sector for seed supply, this include farmers exchange, saved seeds, seeds from grain traders. • Low yield and poor quality • Limited or no information on variety 	<ul style="list-style-type: none"> • There is a opportunity for Community-based seed enterprises, Small and medium seed companies, Agro-dealers investing in certified seed distribution. • With farmers lacking reliable information about seed varieties, there is room for bringing in improved drought-tolerant, pest-resistant, demonstration fields and on-farm trials. 	Small holder farmers, grain traders, agro-dealers

GESI related barriers to adoption of Climate-Smart Varieties

S/N	Barrier	Causes	Mitigation
1	Environmental	<ul style="list-style-type: none"> • Poor access to climate-smart seeds due to the inefficient last-mile delivery of seed companies which hinders female access to improved varieties. • Linked to limited inclusion into seed multiplication chains 	<ul style="list-style-type: none"> • Seed companies will establish rural distribution channels to facilitate the last-mile delivery of inputs which inadvertently reaches female SHFs. • Incorporating of women into seed multiplication systems
2	Institutional	<ul style="list-style-type: none"> • Limited access to land use/land ownership. • Limited access to credit and financial resources due to lack of collateral and low ownership of digital devices by women SHFs. 	<ul style="list-style-type: none"> • Providing women with access to financial resources through micro-loans and women-centred cooperatives. • Advocating for gender-responsive policies and strengthening enforcement of existing laws that protect women's rights. • Strengthening women's land rights and promoting equitable access to land.
3	Attitudinal	<ul style="list-style-type: none"> • Due to existing socio-cultural, and religious norms, women are often restricted at the household level from access to land, extension services adopting new climate-smart technologies, and working in women groups/clusters. 	<ul style="list-style-type: none"> • Driving behavioural change through advocacy and incentivized learning • Targeting resources and information dissemination towards women farmers through gender-sensitive extension services and training programs.



Proposed Intervention

04

Vision of the market

Market Vision

To catalyse a commercially driven, inclusive and climate-resilient seed market in which private seed companies profitably multiply and distribute high-quality climate-smart and biofortified varieties; smallholder farmers reliably access and adopt adapted seeds through sustainable last-mile channels and increase incomes. Quality assurance and governance systems are trusted and enforced; and financial institutions provide tailored products that enable continuous investment across the seed value chain.

What does scaling mean?

Crowding in of seed market actors to drive growth through

-  Mainstream adoption of community seed multiplication and rural seed promoter models to drive the supply and last-mile distribution of climate-smart varieties.
-  Suitable financial products and services for key market actors.
-  Available innovative digital solutions and technologies to drive farmer education
-  Institutional capacity to implement policies and enforce quality control.

Intervention Priorities

Propcom+ is prioritizing two main interventions, based on their scope to address multiple failures and value add in achieving scale

Community Seed Multiplication

This model is aimed at improving access to climate-smart as well as biofortified seeds through the out-grower model which addresses the limited supply of adapted varieties

The CSM model will address 3 market failures

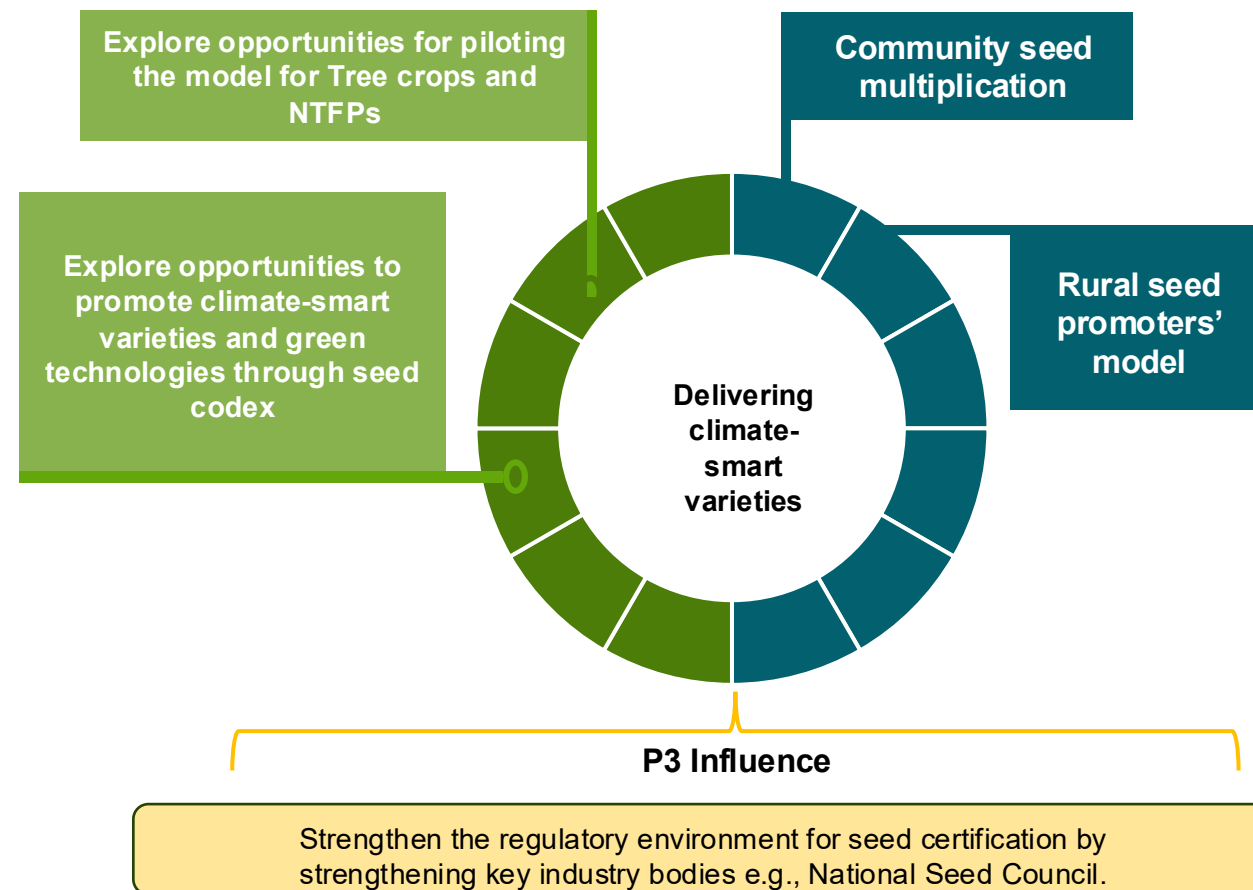
- Access to finance
- Inadequate extension services
- Limited supply

Rural Seed Promoters

This model will facilitate the efficient delivery of extension services and the distribution of climate-smart seeds to the last mile through rural distribution networks

The RSP model will address 2 market failures

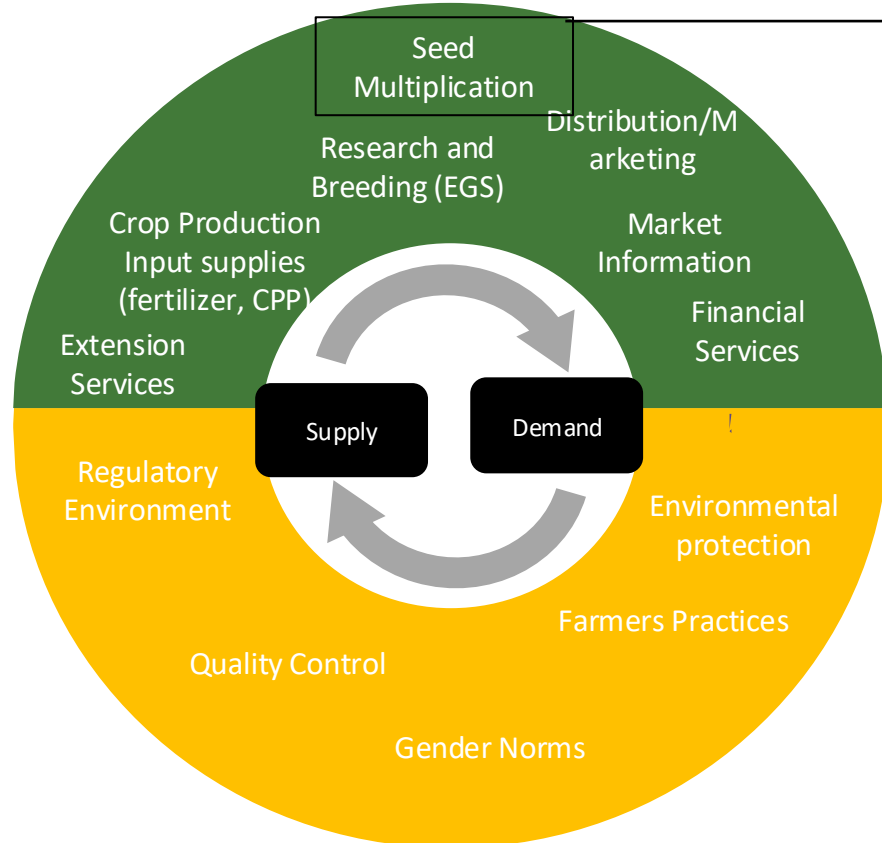
- Limited distribution
- Inadequate extension services



Proposed Intervention: 2.1. Community Seed Multiplication

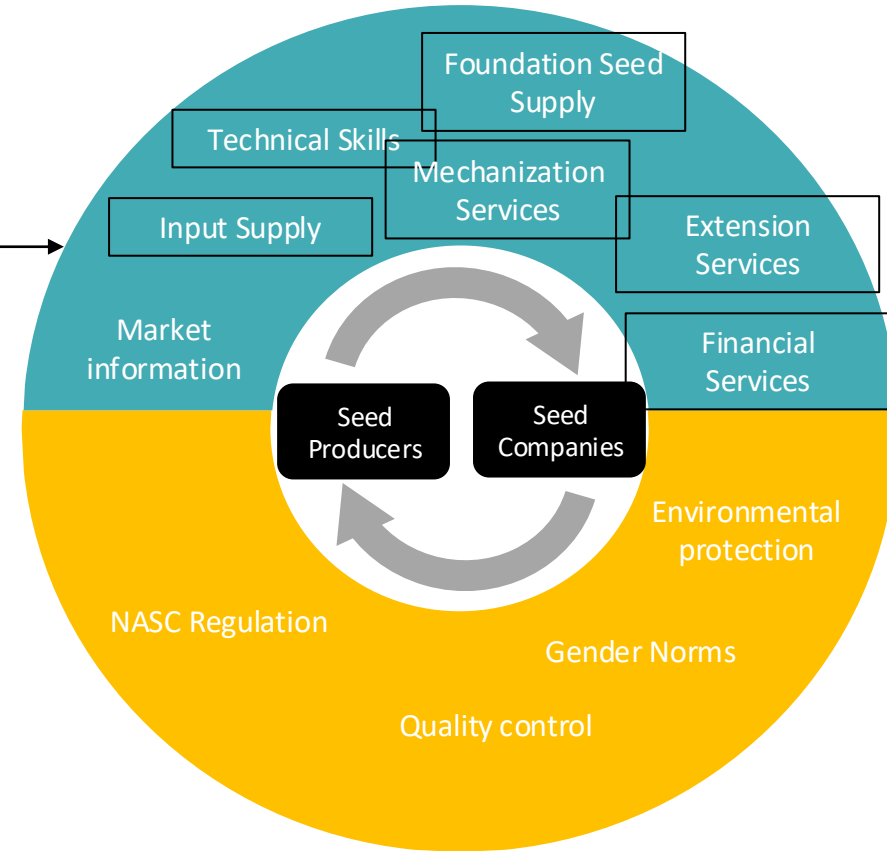
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Supporting Functions

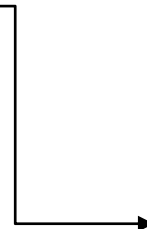


Rules and Norms
Core market system

Supporting Functions



Rules and Norms
Interconnected market system



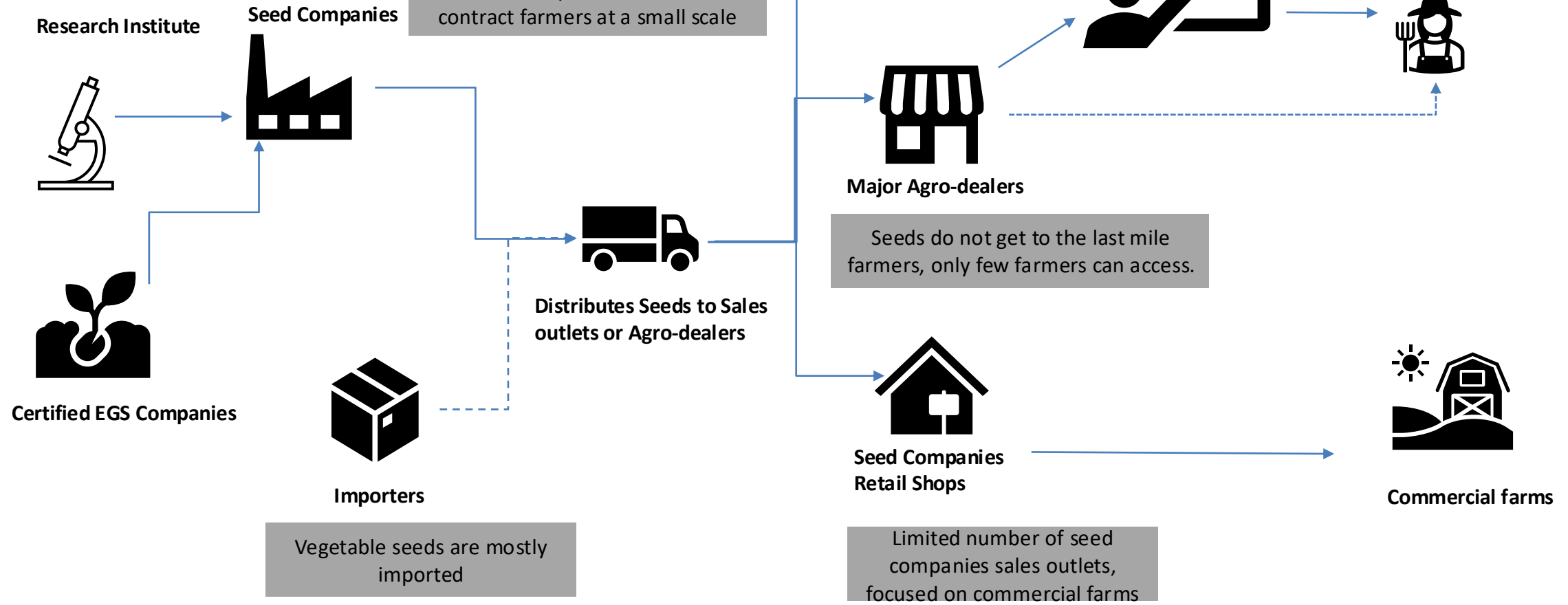
Market Vision	To catalyse a commercially driven, inclusive and climate-resilient seed market in which private seed companies profitably multiply and distribute high-quality climate-smart and biofortified varieties; smallholder farmers reliably access and adopt adapted seeds through sustainable last-mile channels and increase incomes.
Theory of Change	If seed companies provide smallholder farmers with foundation seeds, training, other input, and structured buy-back arrangements and if farmers are able to produce and sell high-quality, locally adapted seed while earning premiums and selling surplus within their communities; then a reliable, profitable, and locally embedded supply of improved seed will emerge, increasing seed producers incomes and expanding last-mile access to climate-adapted varieties.
Intervention Concept	In the model, Seed companies engage smallholder farmers as seed producers to produce high-yielding, locally adapted, improved crop varieties. The seed companies support the farmers with capacity building in partnership with National Agricultural Seed Council (NASC), provide input on credit, on some cases provide access to farmland. At harvest, seed companies do a buy-back at a competitive price, giving farmers a premium for participating, and out-growers sell the surplus to other farmers within their community, thereby boosting local availability.
Potential Partners	Premier Seed, Value Seed, AgriSeedCO, Seed Project Co, Tecni Seed, Asma’u Memorial Farms, Noman Zamani, HASI, NASC
Facilitation Activities	B2B linkage facilitation, TA to support adoption of CSM model, Capacity Building on identified capacity gap, grant to support increased production of seeds
Systemic Change	A seed system where seed companies continuously engage smallholder farmers as skilled seed out-growers, supported by strong NASC-led capacity building, monitoring and quality assurance, enabling a profitable locally embedded supply of high-quality, climate-adapted seeds that reaches last-mile communities and strengthens farmer incomes and market access.
Timeframe	3 Years (2024 to 2027)
Feasibility	High
Gender	Access to quality climate adapted varieties with the right education, can significantly improve women’s productivity and resilience. Where gender-related barriers are addressed, women prove to be good agents of behaviour change for climate messaging.
Climate	The cost of agricultural production is greatly impacted by climate change due to reliance on rain-fed production. Accelerating climate change puts pressure on agricultural production and food systems including biotic stress (increased pest, pathogens and resistance to existing control measures), and water and temperature stress with varied sensitivity across different crops, leading to higher crop failure

Original Market Model

RI's are unable to meet EGS seed demands

Seed companies multiply EGS seeds on their own farmlands, although few seed companies have nascent contract farmers at a small scale

NGOs and Government distribution free seed which undermines the market

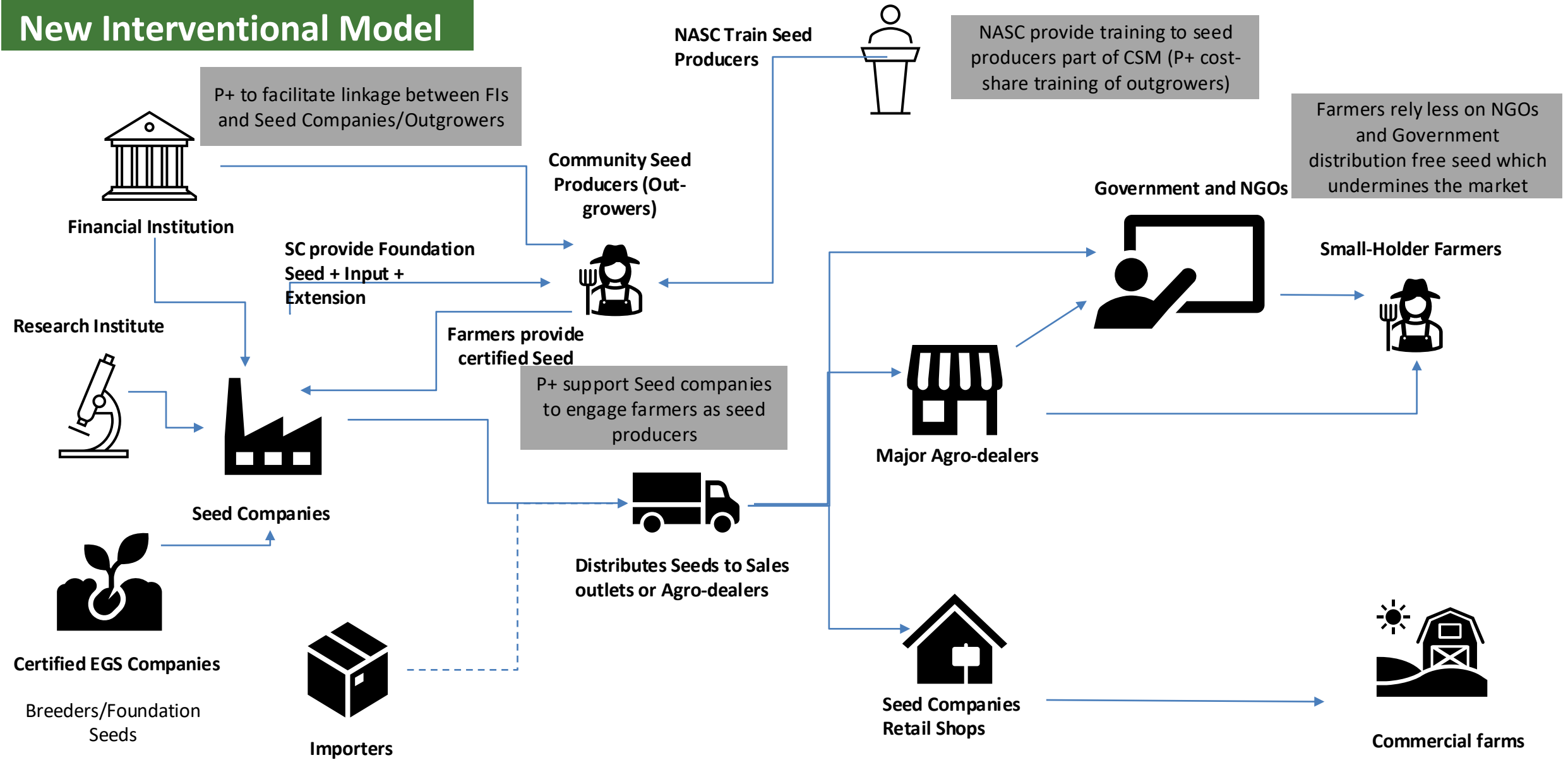


Vegetable seeds are mostly imported









Seeds do not get to the last mile farmers, only few farmers can access.

Limited number of seed companies sales outlets, focused on commercial farms

New Interventional Model



Interventions, Activities and potential partners

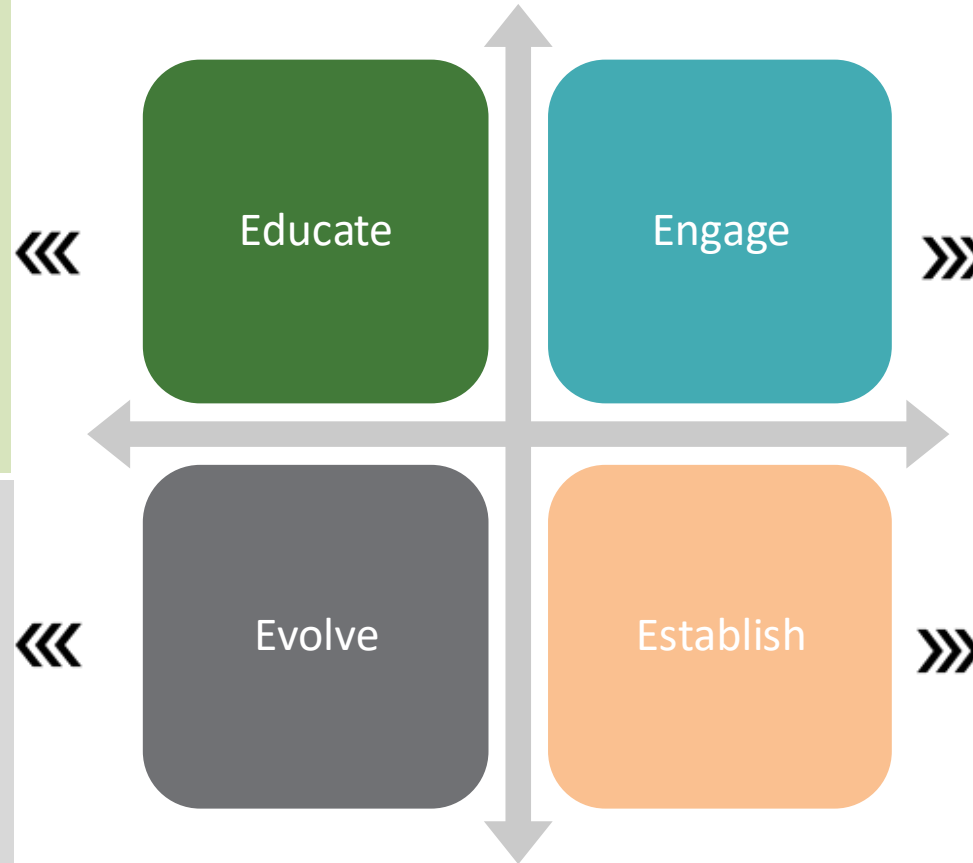
Intervention	Intervention Priorities - Near to immediate term
<p>Community seed multiplication model</p> <p><u>Market Failure addressed</u></p> <ol style="list-style-type: none"> Limited Supply Access to Finance <p><u>Potential Partners</u></p> <ol style="list-style-type: none"> GIRMAL Seeds Tecni-Seeds SeedCo Norman Zamani Seeds FIs 	<p>Support market actors to improve the supply of climate-adapted seed varieties to farmers by:</p> <ul style="list-style-type: none">  Expanding community seed multiplication to increase the supply of region-specific varieties (food and tree crops) (Operational) <ul style="list-style-type: none"> ▪ Develop a business case and pitch deck for seed multiplication and distribution. ▪ Commence engagement with seed companies. ▪ Organize business meetings to pitch the opportunities to seed companies. ▪ Work with interested seed companies to identify further nutrition-sensitive climate-smart seeds for multiplication ▪ Co-invest in agreed activities for the seed multiplication. ▪ Use evidence generated from scale-up activities to crowd-in more players/investors through evidence sharing of clear financial models and viability reports.
	<p>Support activity - build the case to M/FIs for developing and deploying loan products for community seed multiplication.</p> <ul style="list-style-type: none">  Use ongoing evidence from seed multiplication activities to develop financial models for engaging with Fis/MFIs.  Support interested M/FIs to develop and test financial products.  Share evidence with the wider financial communities through multi-communication channels  Develop/refine loan products suitable for seed companies and out-growers considering diverse gender perspectives.  Undertake value chain analysis of the seed sector to identify and avert possible risks.
	<p>Opportunities (Not started)</p> <ul style="list-style-type: none">  Explore opportunities for piloting the model for Tree crops and NTFPs,  Seed Codex: Explore opportunities for building on their open-source channel to promote climate-smart varieties and other inputs/green technologies.

Demonstrate success to relevant stakeholders

- Develop a learning brief on Community Seed Multiplication and share learnings to other seed companies and stakeholders at state level, national level.
- Develop and share private sector learnings with farmers and cooperatives.
- Develop Case Studies, Success stories from private sector partners

Improve the intervention model

- Support the promotion of climate smart practices adoption among seed producers. Evidence showed that yield increased when CSA are applied.
- Support diversification into low fertilizer requiring crops, export friendly, and agro-ecology specific variety promotion.



Actively support second movers

- Share market insights, early success evidence with non-partners through learning sessions and direct pitching to partners, and facilitate support to confidently enter, adapt, and scale model in new locations

Strengthen or reform rules and regulations, social norms

- Support the certification of at least one seed companies to become EGS producers, this might require the review of the NASC certification process.
- Support the establishment and operationalisation of state seed coordination committees

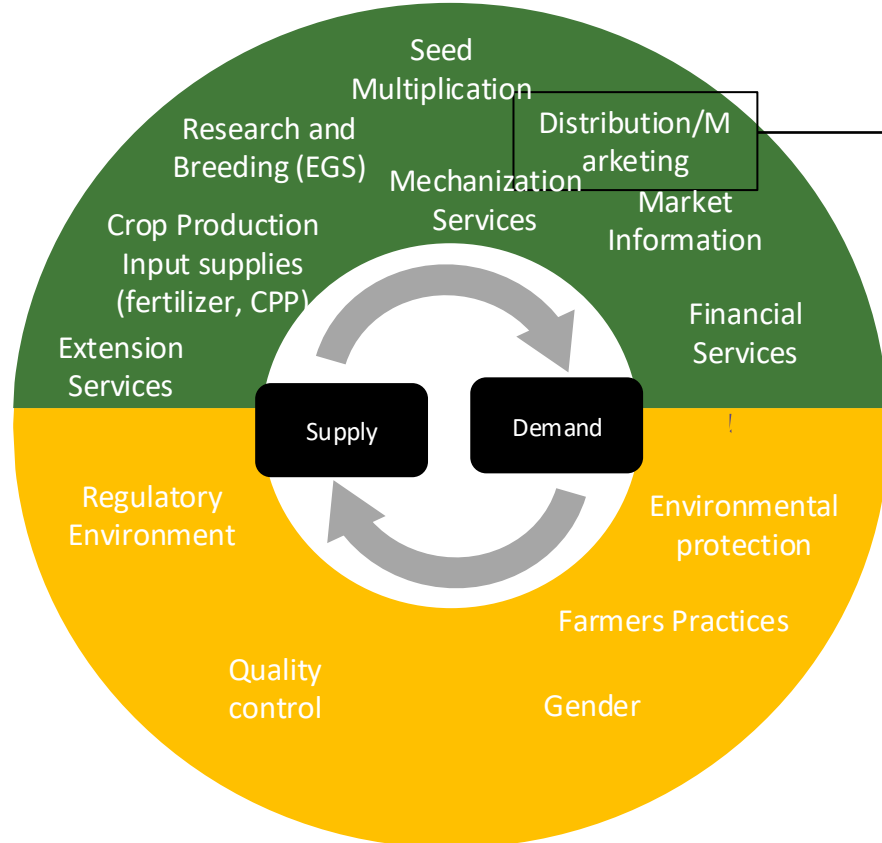
Scale up results:

- 15,000 Seed Producers at scale
- 500,000+ farmers
- 15,000 MT seed produced annually

Proposed Intervention: 2.2. Rural Seed Promotion

04

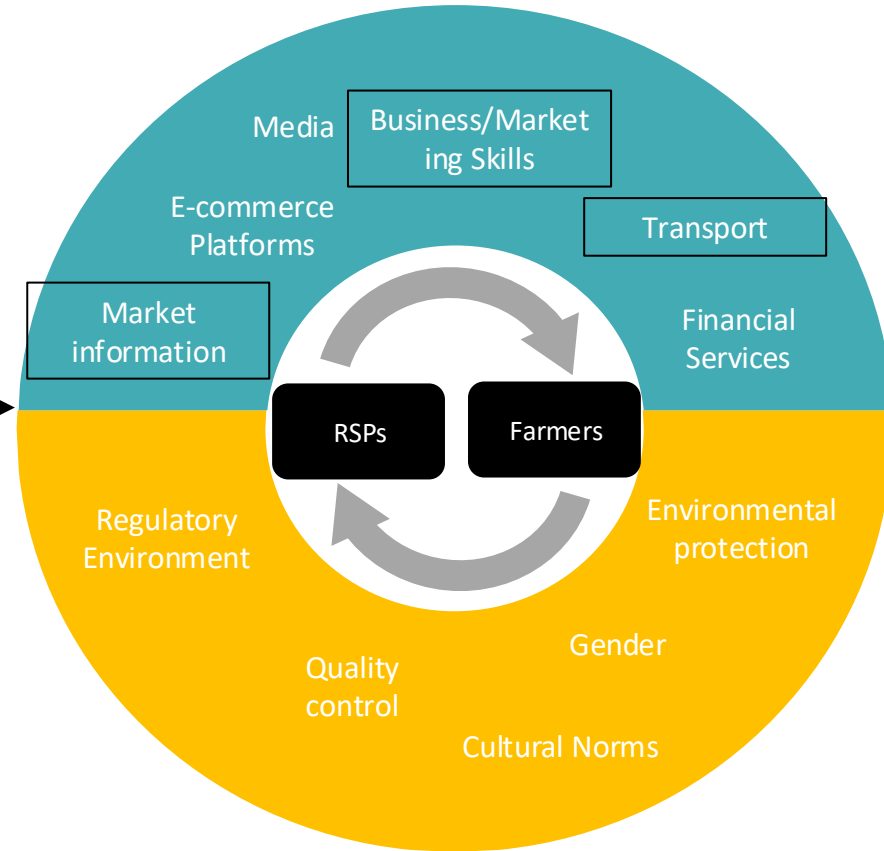
Supporting Functions



Rules and Norms

Core market system

Supporting Functions



Rules and Norms

Interconnected market system

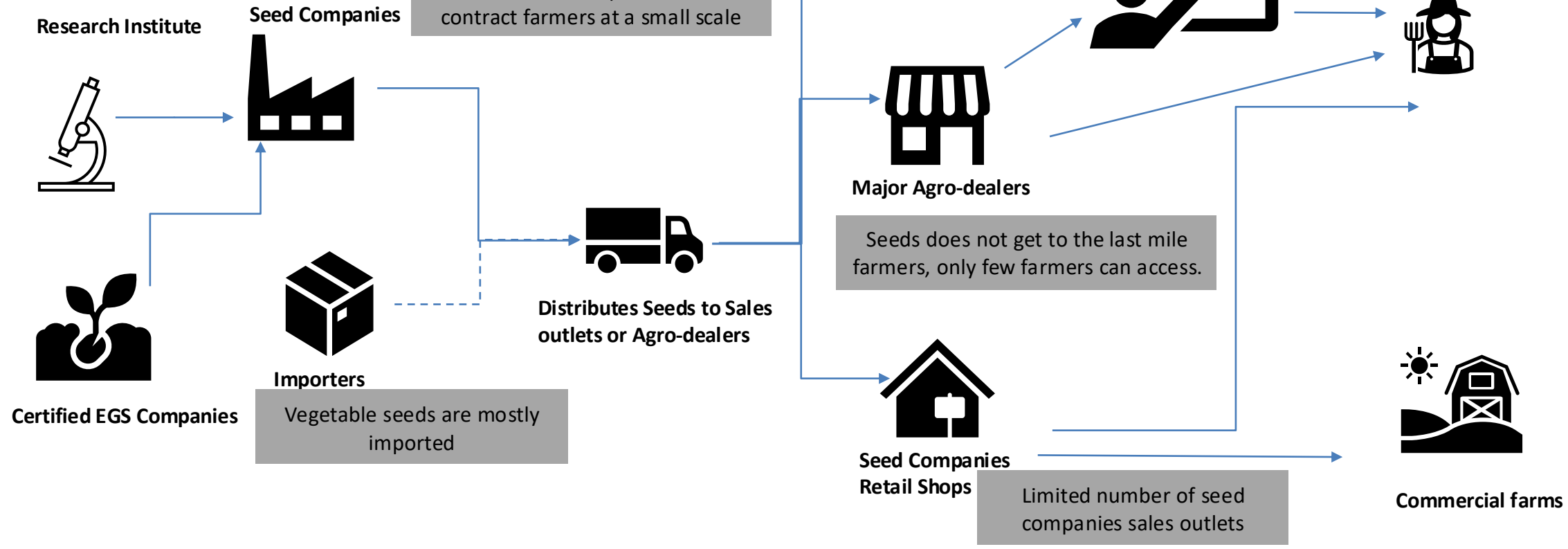
Market Vision	A competitive and inclusive seed market where seed companies sustainably reach last-mile farmers through RSPs, farmers reliably access climate-adapted seeds and advisory services within their communities.
Theory of Change	IF Propcom + provides supports that strengthen seed companies’ ability to work with RSPs as viable last-mile retailers and extension agents; and IF farmers can reliably access climate-adapted seeds in their communities; THEN a sustainable, market-driven seed system will emerge where seed companies profitably reach last-mile farmers and RSPs thrive as micro-entrepreneurs, and farmers will have increased yield and income.
Intervention Concept	The rural seed promoter (RSP) model seeks to address the limited access to improved seeds for farmers in rural areas. This model enables micro-entrepreneurs within these communities to act as intermediaries by purchasing seeds from major seed distributors and selling them directly to farmers, earning a margin. These micro-entrepreneurs also provide trainings and extension services for farmers to maximize the benefits of investing in improved seeds for crop production.
Potential Partners	Premier Seed, Value Seed, AgriSeedCO, Seed Project Co, Tecni Seed, Asma’u Memorial Farms, Noman Zamani, HASI
Facilitation Activities	B2B/market linkage facilitation, TA to support adoption of RSP model, capacity building on marketing and business skills, grant to support expanded market outreach.
Systemic Change	A commercially viable and inclusive seed market system where seed companies actively engages rural seed promoters (RSPs) to deliver climate-adapted seeds and bundled with extension services to farmers at the last mile; RSPs operate as profitable micro-entrepreneurs; farmers reliably access quality seeds within their own communities and reporting increased yield and income.
Timeframe	3 Years (2024 to 2027)
Feasibility	High
Gender	Access to quality climate adapted varieties with the right education, can significantly improve women’s productivity and resilience. Where gender-related barriers are addressed, women prove to be good agents of behaviour change for climate messaging.
Climate	The cost of agricultural production is greatly impacted by climate change due to reliance on rain-fed production. Accelerating climate change puts pressure on agricultural production and food systems including biotic stress (increased pest, pathogens and resistance to existing control measures), and water and temperature stress with varied sensitivity across different crops, leading to higher crop failure

Original Market Model

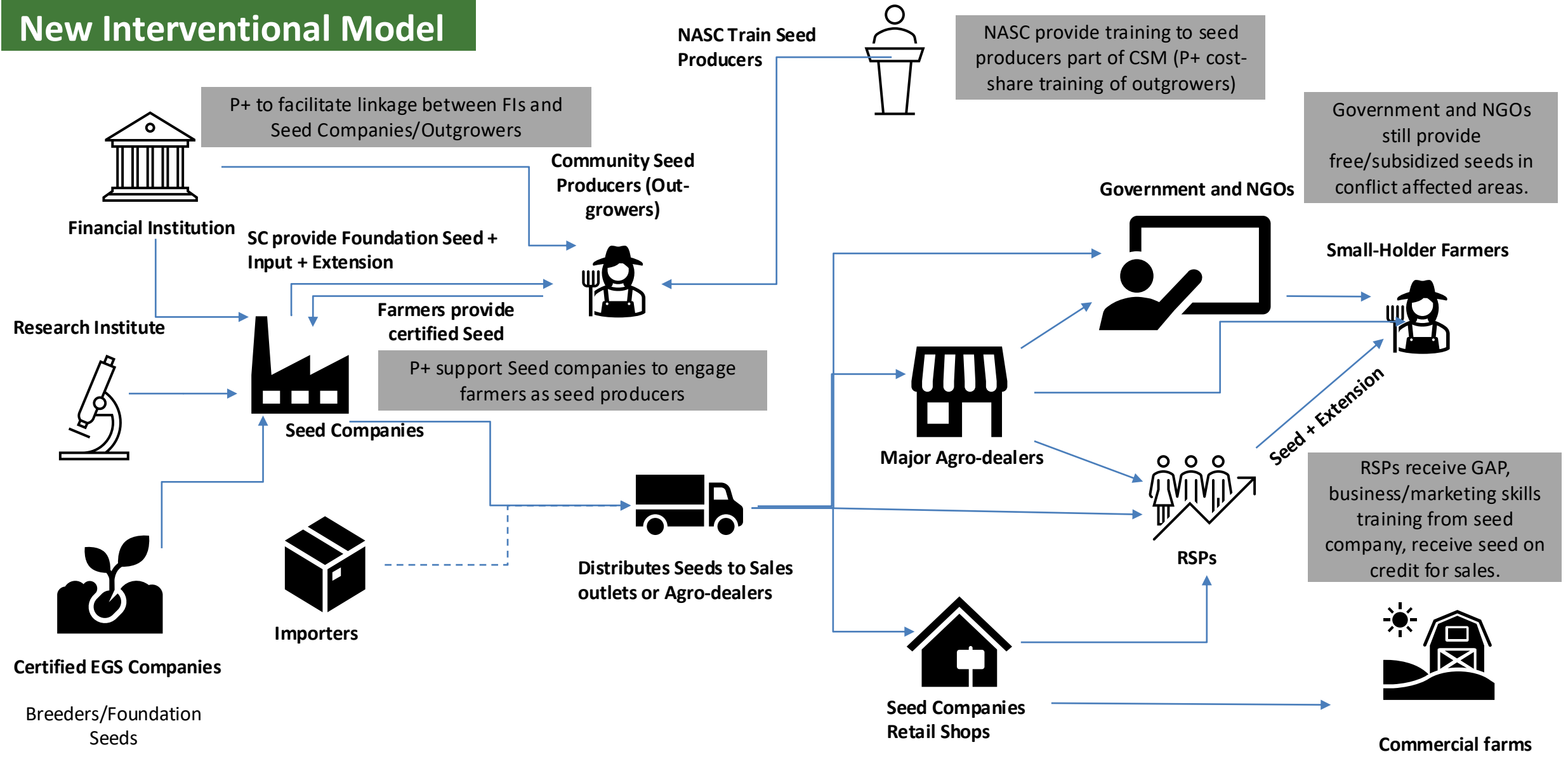
RI's are unable to meet EGS seed demands

Seed companies multiply EGS seeds on their own farmlands, although some seed companies have contract farmers at a small scale








NGOs and Government distribution free seed which undermines the market



New Interventional Model



Interventions, Activities and potential partners...2/3

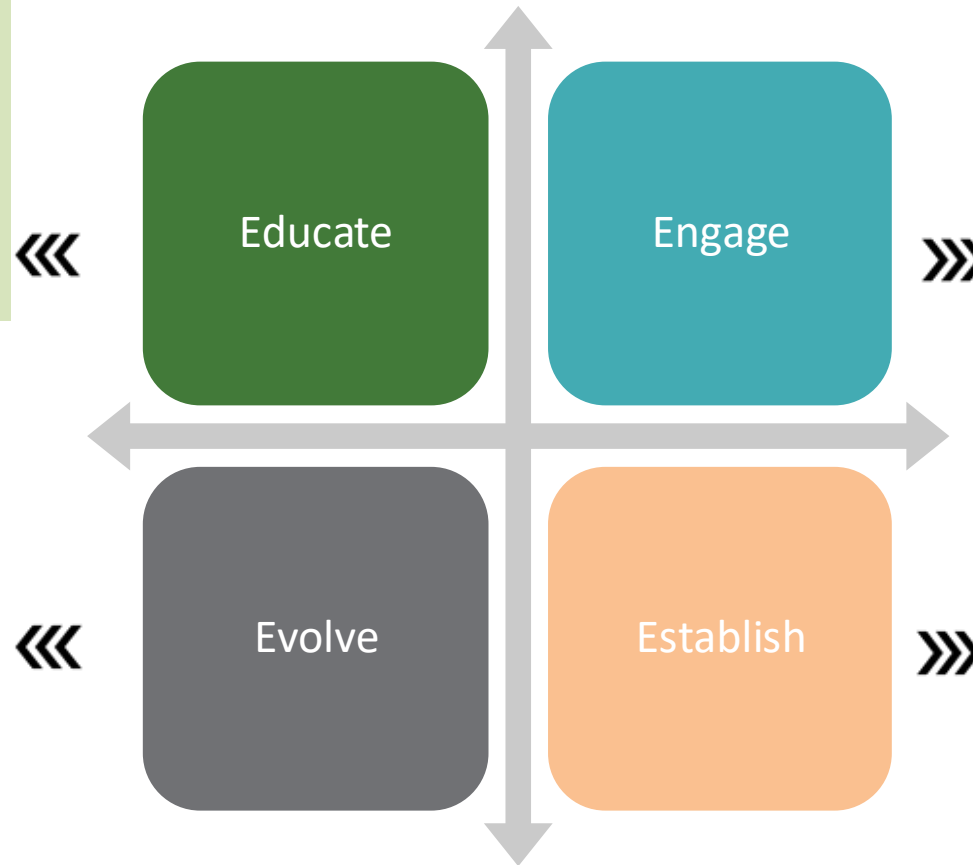
Intervention	Interventions Priorities - Operational
Rural Seed Promoters Model	<p>Strengthen rural distribution channels for seeds by scaling the RSP models to reach inclusive smallholders (50% women) and help seed companies enter new markets by:</p>
<p><u>Market Failures</u></p> <ol style="list-style-type: none"> Limited distribution Inadequate extension services 	<ul style="list-style-type: none">  Developing a business case and pitch deck to seed companies to develop and leverage the RSP channels, along with other grassroots networks; women groups negotiate and co-invest with partners targeting relevant crops and locations.  Support Partners to activate (identify and train) RSPs including women and establish product supply to RSPs who go on to promote and sell to farmers, earning a margin from it.  Use evidence generated from scale-up activities to crowd-in more actors <p>Support intervention – Improve farmer access to knowledge via:</p> <ul style="list-style-type: none">  Farmer engagement on demo days and routine check-ins to facilitate the delivery of good agricultural practices (GAP).
<p><u>Potential Partners</u></p> <ol style="list-style-type: none"> Premier Seeds GIRMAL Seeds Tecni-Seeds SeedCo Norman Zamani Seeds 	<ul style="list-style-type: none">  Leverage grassroots marketing and communication networks through radio programs to ensure inclusivity and gender sensitivity  Provide generic support for digital extension – Support agri-tech companies to update and share knowledge on climate-smart varieties in catchment areas, weather information and region-specific varieties.  Co-investing knowledge/awareness on the availability and benefits of using CS varieties through tailored content to bridge the knowledge gap on farmers’ lack of information on climate-appropriate selection and upkeep of seeds

Demonstrate success to relevant stakeholders

- Develop a learning brief on Rural Seed Promotion and share learnings to other seed companies and stakeholders at state level, national level
- Develop Case Studies, Success stories from private sector partners and share with other seed companies

Improve the intervention model

- Modify the RSP model to integrate agro-dealers as an active actor in the supply change.
- Support RSPs to include other inputs in their baskets of products



Actively support second movers

- Share market insights with non-partnered seed companies, early success evidence, and facilitation support to confidently enter, adapt, and scale model in new locations
- Share RSPs profitability analysis, sales data with financial institution to show market opportunity, triggering development of financial product for the RSP.

Strengthen or reform rules and regulations, social norms

- Support women participation in seed sales by creating an enabling environment.

Scale up results:

- 5,000 RSPs
- 500,000 Smallholder farmers




Partnership Offer

Community Seed Multiplication Model

Seed companies




-  Establishment of demo & seed multiplication plots
-  Extension services
-  Breeder seed procurement
-  Procurement of inputs
-  Technical support

Propcom+




-  De-risking & co-investment in farmer education
-  Advisory services
-  Market Linkages

Rural Seed Promoters Model

Seed companies

-  Establish rural distribution channels and set up demo plots
-  Deliver extension services to farmers
-  Facilitate the marketing and promotion of climate-smart seeds to rural farmers.

Propcom+

-  Advisory services
-  Capacity Building
-  De-risking & co-investments.

Proposed Intervention: 2.3. Seed Quality Assurance and Governance Systems

04

Challenges and Gaps: Seed Quality Assurance

01

Lack of adequate capacity within NASC

02

Lack of International Seed Testing Association (ISTA) Accredited Labs

03

Lack of effective Quality Assurance activities at agrodealers and other seed distribution points

04

Absence of a binding regulatory framework on certification

05

Unpredictability of the import permitting process

06

Inadequate farmer awareness of SEEDCODEX and SEED Tracker

07

Additional QA functions need to be in place for ICT solutions (Seed Tracker and Seed Codex) to be more effective.

08

Lack of funding for Quality Assurance activities.

09

Lack of regulations and enforcement for QA, including anti-counterfeiting measures

Challenges and Gaps: Seed Quality Assurance 1/3

■ National Seed Quality Assurance (QA).

- **Lack of adequate capacity within NASC:** Quality Assurance (QA) is the mandate of the National Agricultural Seed Council (NASC). However, the NASC is constrained by inadequate resources to fulfil its mandate. It is essential to assess the NASC's specific human resource capacity needs and subsequently provide the funds to address them.
- **Lack of International Seed Testing Association (ISTA) Accredited Labs:** There is no ISTA-accredited lab in the country. The existing labs have substantial inadequacies, including a lack of or poor equipment, inadequate infrastructure, insufficient storage, and limited technical capacity.
- **Lack of effective Quality Assurance activities at agrodealers and other seed distribution points:** Best practices related to protecting and ensuring seed quality at distribution points, and supporting seed distributors to understand and engage in these practices, are broadly related to: i) registering and tracking qualified distributors; ii) ensuring valid supply chains, including appropriate labelling; iii) identifying and penalizing distributors that adulterate seed; iv) ensuring that carryover stock is returned to seed companies for retesting versus being sold without retesting and relabeling, and v) verifying good distributor storage conditions that are free of weevils and have appropriate temperature and humidity conditions. However, effective planning and implementation are still outstanding.

Challenges and Gaps on Seed Quality Assurance 2/3

- **Inconsistent application of ECOWAS rules:** The NASC Act aligns Nigeria's seed regulation with ECOWAS seed regulations. Under the ECOWAS Seed Regulations, any variety entered in the national catalogue of a Member State should be included in the West African Catalogue of Plant Species and Varieties and can be traded freely throughout the ECOWAS region. But in practice, (i) varieties that are registered in other ECOWAS Member States' national catalogues and listed in the West African Catalogue of Plant Species and Varieties still require retesting to evaluate their compatibility with Nigerian agro-ecological conditions, contrary to the ECOWAS seed rules; (ii) Some DUS and VCU testing protocols are not aligned with the 2008 ECOWAS Procedure Manual for Variety Registration in the National Catalogue for Crop Species and Varieties in West African Countries, and (iii) stakeholders reported bureaucratic challenges when importing varieties registered in other ECOWAS Member States even when listed in the West African Seed Catalogue.
- **Weak implementation of anti-counterfeiting measures:** Under the NASC Act, anyone convicted of a counterfeiting offence is subject to imprisonment for up to one year or a fine of up to 1 million naira (or both) for a first-time offender, and imprisonment for up to two years or a fine of up to 2 million naira (or both) for a multiple offender. It has been reported that, although penalties have been strengthened under the NASC Act, there have been no reported cases of prosecution, and counterfeit seed remains a major challenge.

Challenges and Gaps : Seed Quality Assurance 3/3

- **Additional QA functions need to be in place for ICT solutions (Seed Tracker and Seed Codex) to be more effective.** The accuracy, efficiency, and transparency of QA are all strengthened by the appropriate and sustainable use of IT tools. NASC has already selected the Seed Tracker and Seed Codex tools to provide digitised support for field QA operations and certified seed authentication, respectively. However, additional technical vetting is required to assess the efficiency and functionality of the tracker since its implementation.
- In addition, technical IT capacity building, with respect to hardware, software, project management, data capture and analysis, and user interface, is needed.
- **Lack of funding for Quality Assurance activities.** The poor status of seed laboratories and equipment indicates severe underfunding, as does the lack of training, vehicles, and support for inspector facilitation. NASC and the Nigeria Agricultural Quarantine Service (NAQS) charge for services offered, but the fee and/or collection levels are reported to be inadequate. Due to the funding gap, certification officers are not adequately equipped (with vehicles and funds) and risk being compromised by seed companies.
- **Inadequate farmer awareness of SEEDCODEX and SEED Tracker:** These two initiatives are implemented by the NASC. However, their success is constrained by the lack of awareness among the farmers who are the main beneficiaries.
- **Lack of regulations and enforcement for QA, including anti-counterfeiting measures:** There is poor implementation of QA activities for seed storage, carryover and retesting, with a lack of verification of proper disposal of obsolete and/or low-quality seed. The roll-out of the SeedCodex feature on seed packets aims to combat counterfeit seeds, but is currently not fully utilised or functional.

Challenges and Gaps: Seed Sector Governance Systems

01

Weak coordination mechanisms reinforce disconnects around incentives and interests across institutions, companies, and donors:

02

Inadequate and inaccurate seed demand and supply information constrains planning, budgeting, and coordination

03

The national seed trade association, SEEDAN, while a strong advocate for private seed company policy initiatives, lacks regional and commodity working group representation.

04

Key gaps and challenges in National Planning and Coordination in Nigeria

05

Inconsistent application of ECOWAS rules

06

Weak implementation of anti-counterfeiting measures

07

Delayed annual budget releases to public institutions affects performance

Challenges and Gaps: Seed Governance 1/2

■ National Planning and Coordination (NPC)

- **Key gaps and challenges in National Planning and Coordination in Nigeria.** Annual budgets consistently fall short of high-level planning commitments to fund agricultural development. The national budget allocation to the agriculture sector has stagnated between 1.0% and 2.0% from 2017 to 2020. The commitments are not consistent with Nigeria's high-level commitments to the Comprehensive African Agricultural Development Programme (CAADP). It was posited that while the FMAFS's departments and agencies collectively rank as one of the largest recipients of recurrent budgetary allocations, the allocations to research and development, EGS production, regulatory agencies, and the promotion of new crop varieties have a history of underfunding.
- **Delayed annual budget releases to public institutions affect performance: It was reported that the budget releases against their allocated budgets are** relative to their performance in the agriculture sector. Over the past four years, the National Assembly's approval for budget releases often occurred in the mid-year of that current fiscal year. The late release of funds was responsible for trials, breeder seed plots, and national performance trials, which were often delayed or had to be deferred, resulting in a weak regulatory enforcement capacity.
- **Weak coordination mechanisms reinforce disconnects around incentives and interests across institutions, companies, and donors:** NASC has clear responsibility for seed sector coordination from research, through all classes of quality assured seed, varietal promotion, licensing of seed businesses, industry and market development, seed trade, and administration of elements of subsidy programs. The National Seed Road Map (NSRM) and the NASC 2020-2025 strategy recognise that funding falls short of requirements to staff, and support for NASC operations is required to reach the needed standard. In addition, linkages to public extension are perceived as weak by the research institutions and seed producers, given the high household-to-extension officer ratio, the breadth of extension worker responsibilities, and low funding. It was also reported that private seed companies have started their own combined extension/marketing agent services

Challenges and Gaps – Seed Governance 2/2

- **Inadequate and inaccurate seed demand and supply information constrains planning, budgeting, and coordination:** One of NASC's core roles in the National Seed Policy is to establish and maintain a system for collecting and disseminating data on seed use, planned needs and seed availability to support decision-making by seed suppliers and users. However, the NASC faces challenges in developing a strong information base on seed demand and supply across the major cereal and legume food crops, as well as vegetatively propagated crops. Improvements in data collection, management and forecast modelling are expedient for bridging the gap and reducing counterfeit seeds.
- **The National Seed Trade Association, SEEDAN, while a strong advocate for private seed company policy initiatives, lacks regional and commodity working group representation.** SEEDAN represents the private seed industry in Nigeria. Since its inception, it has maintained a strong focus on promoting and advocating for the Nigerian private seed companies that are active in crop seed breeding, production, marketing, and distribution. Its core membership comes from companies focused on cereals, legumes, and vegetables. TASAI research report indicates that there is weak communication and transparency in governance in SEEDAN.
- National government programmes and projects include input subsidy programmes and schemes to improve access to credit. National subsidy programme rationales are based on seed supply to increase productivity and income in targeted groups and zones. Subsidy implementation approaches are viewed by seed producers as too skewed by top-down initiatives that diverge from the more market-oriented approaches that could have defined an exit strategy.

Seed Sector Quality assurance and Governance Systems within the MSD “donut”

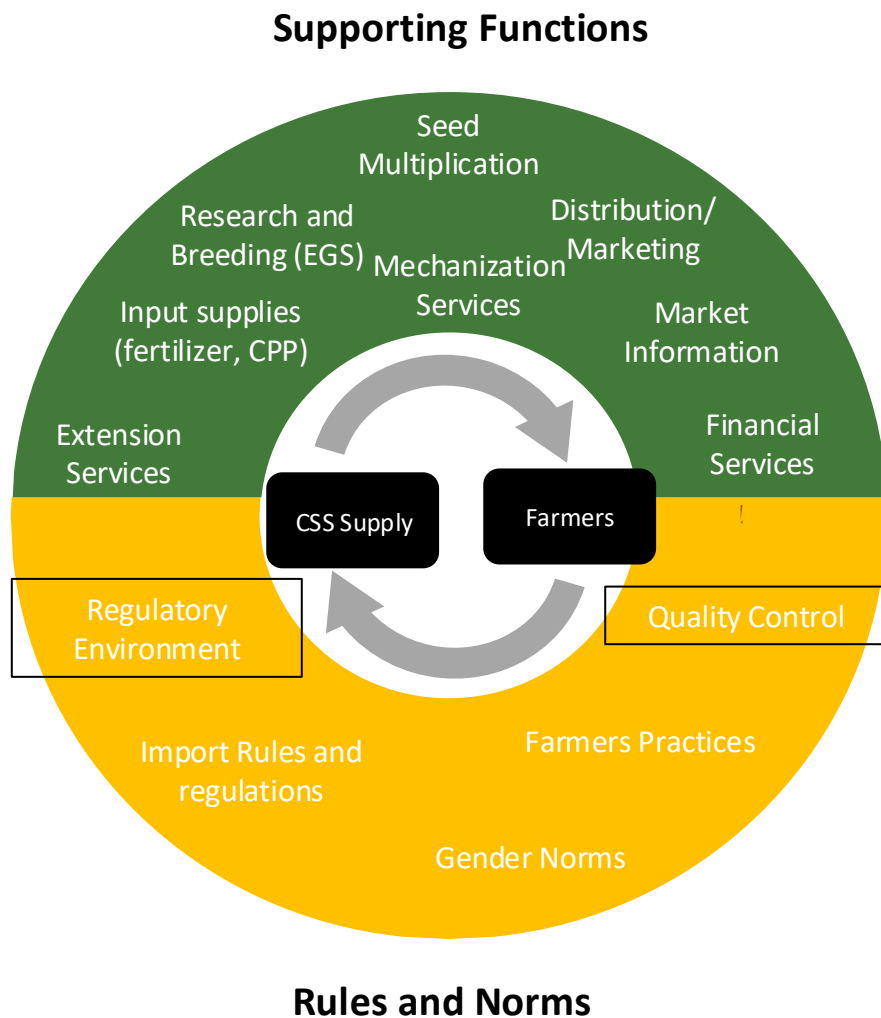
Reforms are necessary to scale seed production by agribusiness for farmers

Policy implementation and coordination, especially at the state level is crucial to attract increased investments from seed companies.

The seed tracker & seeds Codex verifies seed authenticity, but its practical utilization and impact on countering counterfeit seeds are unclear.

A huge gap exists in the state’s capacity to regulate and enforce seed quality. This affects farmers' confidence, reduces demand, and makes private sector actors perceive it as a risky investment.

Evidence-based advocacy is expedient to drive coordination, effective targeting, and policy implementation



3rd party seed quality assurance model



Inclusive seed sector platform



Sensitisation & adoption of the use of seed tracker & seed codex



Establishment & operationalisation of state seed coordination committees

Market Vision	A transparent, well-regulated, digitally traceable seed market in which high-quality, climate-smart seed moves efficiently across states and ECOWAS borders, counterfeit seed is significantly reduced, and private seed companies invest confidently in varietal development and distribution.
Theory of Change	IF seed quality assurance is decentralised and digitised, governance coordination is strengthened, and regulatory enforcement becomes credible and predictable, THEN farmer trust increases, private seed companies expand investment, counterfeit seed declines, and adoption of climate-smart varieties scales sustainably.
Intervention Concept	Facilitate systemic reform of Nigeria’s seed regulatory ecosystem through two core components: (1) Third-Party Seed Quality Assurance (SQA) and digital traceability (Seed Tracker & Codex), and (2) Strengthening seed governance and coordination (inclusive seed platforms, state coordination committees, regulatory alignment). Propcom+ provides time-bound technical assistance and convening power—not regulatory execution.
Potential Partners	NASC (National Agricultural Seed Council); FMAFS; State Seed Coordination Committees; SEEDAN; private seed companies; accredited third-party QA agencies; NAQS; research institutions; ECOWAS seed harmonisation bodies; digital solution providers (SeedTracker/Codex).
Facilitation Activities	<ul style="list-style-type: none"> • Technical assistance to scale third-party SQA models. • Support rollout and adoption of Seed Tracker & Codex. • Facilitate inclusive Seed Sector Platform for coordination. • Support implementation framework for Plant Variety Protection Act 2021. • Establish and operationalise State Seed Coordination Committees in Propcom+ focal states. • Evidence-based advocacy and performance audits.
Systemic Change	Shift from centralised, under-resourced QA to decentralised, accountable, digitally traceable system; embed private compliance incentives; reduce counterfeit seed; improve cross-border trade alignment; institutionalise coordination and accountability mechanisms across public and private actors.
Timeframe	Phase 1 (Issue discovery & design): Jun–Oct 2025. Phase 2 (TA implementation & pilots): Jan–Sep 2026. Phase 3 (Action learning & scaling documentation): Oct–Nov 2026.
Feasibility	Moderate. Strong policy alignment (NASC Act 2019, PVP Act 2021, National Seed Roadmap) but risks include bureaucratic inertia, budget delays, weak enforcement culture, and political economy resistance to stricter QA enforcement.
Gender	Indirect but meaningful. Improved QA and reduced counterfeit seed disproportionately benefit smallholder farmers, including women who often face higher exposure to seed fraud. Inclusion of women-led enterprises in seed distribution can be strengthened through coordination platforms.
Climate	High relevance. Strengthened QA and governance increases availability and trust in climate-smart seed varieties, enabling adoption of stress-tolerant and biofortified varieties central to resilience and productivity gains.

Component 1 –Third Party Seed Quality Assurance System

Context and Rationale

- Nigeria’s seed quality assurance system historically relied on centralised oversight. To strengthen the seed quality assurance subsector, the auditing of resources (25%) of field inspections by third-party seed certification entities will enforce compliance oversight. (NASC 2025)
- Recent pilot decentralisation via the SQA models, as endorsed at the 2024 Collaborative Seed Programme workshop, shows promise in scaling inspection coverage, reducing costs, and fostering ownership among seed businesses.
- The integration of Codex and Seed Tracker platforms ensures transparency, strengthens regulatory enforcement, and empowers both small and large companies with efficient QA tools.

Actionable Strategies

- **Decentralized Seed Quality Control:** TA for the roll out and scale up of the three-tier SQA models:
 - Internal quality control led by seed companies and supervised by NASC.
 - Advocacy on the promotion of seed certification through accredited third-party agencies.
 - PPD on the promotion of NASC-led licensed seed inspectors deployed regionally.
- **Integrated Traceability:** Support NASC in the sensitization and adoption of the use of digital traceability tools (SeedTracker, Seed Codex) for all commercial and institutional seed supply. All seed packages must carry unique batch numbers and e-verification codes.
- **Performance Audits:** Provide support to NASC for the assessment of the seed quality management systems of seed companies.

Measurable Outcomes

- Improved food security and market credibility as a result of 50% of marketed seed lots carrying validated digital Codex tags within three years.
- Increased agricultural productivity with at least 40% of seed certification processes handled at the sub-national (state or LG) level by 2027.
- **Regional laboratories accredited and operational in at least 5 geopolitical zones.**
- Enhanced food security and a more stable agricultural sector because Farmer complaints and counterfeiting reports reduced by 50% by 2028.
- Standards for seed certification are adhered to, and 85% of seed companies in the Propcom+ focal states demonstrate improved QA compliance in annual audits.

Component 2 – Strengthening Seed Sector Governance Systems

Context & Rationale

- The Nigerian Agricultural Seeds Council (NASC), a semi autonomous agency of FMAFS is responsible for regulating the seed industry in Nigeria.
- The seed sector in Nigeria is governed by the National Agricultural Seed Council (NASC) Act of 2019; the Plant variety Act of 2021 and the National Seed Policy of 2015. In addition, the 2019 National Seeds Roadmap for Nigeria (NASC 2020) provides the framework and strategy for the growth of the formal seed sector.
- Nigeria's seed sector governance has faced challenges in overlapping mandates, coordination, exclusion of key actors, and slow adaptation of regulatory frameworks.
- According to the National Seeds Road MAP, sector governance and coordination is critical to the transformation of the seed sector (NSRM 2020).
- Successful pilots in establishing coordination platforms, stakeholder planning (e.g., Seed Sector Platform), and third-party audits demonstrate the potential for transparent, accountable management and international best practice alignment.

Actionable Strategies

• **Seed Sector Governance and Coordination:**

- Support the establishment of an inclusive National Seed Sector Platform for joint planning and data sharing among public, private, and civil actors to oversee quality, procurement, compliance, and audit functions; ensure all major procurement includes external stakeholder participation, with administrative function by NASC
- Provide support for the development of the implementation framework for the Plant Variety Protection Act 2021 in alignment with the ECOWAS seed protocols
- Support the development of a framework which will clarify the roles and responsibilities of institutions responsible for the function of variety release and registration.
- Support the development of clear procedures for the certification process in NASC regulations.
- Provide support for the development of a checklist for quality assurance activities in the market.
- Support the establishment and operationalisation of state seed coordination committees using Propcom+ states as a pilot

Measurable Outcomes

- Enhanced **availability** to quality seeds with stronger seed governance with public documentation of targets and progress.
- Improved resource allocation, effectiveness and accountability in the seeds sector.
- Agricultural innovation and rights of farmers enforced because of the Implementation framework of the Plant Variety Act of 2021 in alignment with ECOWAS harmonized seed protocols by 2026.

Phased approach and timeline

Key Activities



Phase 1

- Issue discovery through the convening of a seed industry practitioners forum brought together key players in the different points of the seed value chain (regulators, research institutions, seed associations, private sector companies, etc.) to harvest issues hindering the implementation of the seed policy and emerging issues since the policy's launch.
- On the issue analysis process, a joint improvement action plan/ accountability framework was developed
- Further consultation sessions with NASC to prioritise issues and define areas/ entry points for technical assistance to strengthen the seed regulatory ecosystem

Timeline: June – October 2025



Phase 2

- Design of the policy intervention addressing regulatory issues of the climate-smart seeds and seedlings portfolio
- TA support to NASC is defined for implementation in two priority areas, which include:
 - Third Party Seed Quality Assurance
 - Strengthening Seed Sector Governance
- With a bucket of activities under each component area, including:
 - Facilitation of a dialogue to build consensus among key actors on regulatory compliance around the cross-border movement of seeds
 - Socialisation of seed standards
 - Enforcement of standards and certification
 - Establishment and operationalisation of State Seed Coordination Committees to be piloted in Propcom+ focal states

Timeline: January – September 2026



Phase 3

- Action learning and adaption based on lessons from TA support and pilots in Propcom+ focal state for documentation, scaling and lesson sharing

Timeline: October – November 2026

Intervention Alignment with National Food Security Objectives

Proposed intervention is closely mapped to Nigeria's overarching agricultural development goals of food and nutritional security, inclusive growth, sustainable rural economies, climate resilience, and job creation, as outlined in the following:

The National Development Plan

The NASC Revised Strategic Plan 2025–2029

Plant Variety Protection (PVP) Act 2021

The National Seed Roadmap, 2020

Mainstreaming of third-party and private seed certification, and data-centric approaches outlined in the Nigeria Digital Agriculture Strategy (NDAS) 2020–2030.

The Renewed Hope Agenda.

Theory of Change, Results & Measurement

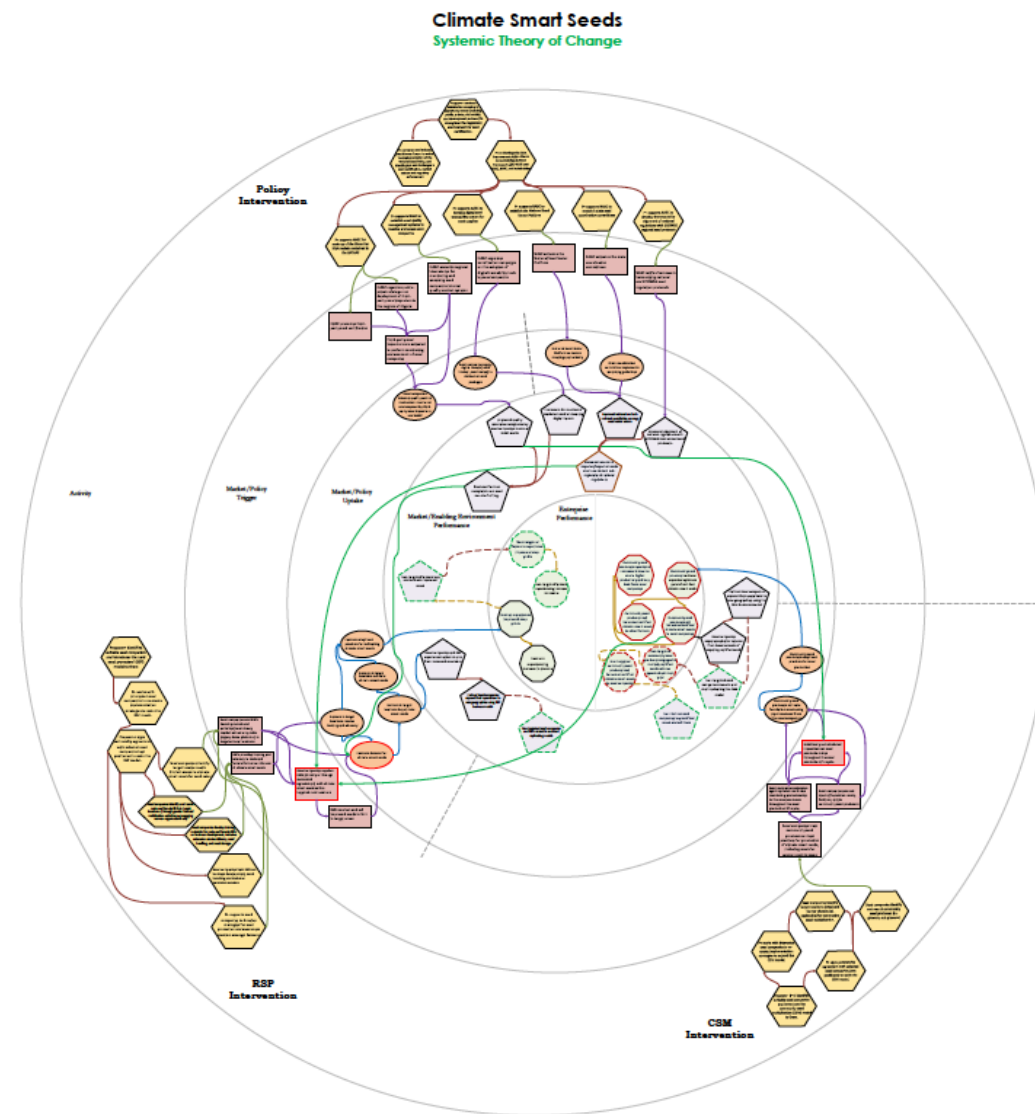
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Systemic Theory of Change– Climate Smart Seeds

The Systemic Theory of Change articulates how Propcom+ moves beyond facilitative activities—such as brokering partnerships with seed companies, strengthening quality assurance systems, and supporting state coordination platforms—to catalyse lasting changes in private-sector behaviour within the seed market system. These interventions trigger commercial expansion of community seed multiplication (CSM) and rural seed promoter (RSP) models, improve quality assurance compliance, and strengthen last-mile distribution of climate-smart and biofortified seed varieties.

The SToC demonstrates how increased adoption of adapted seeds, improved crop productivity, and stronger farmer incomes are achieved through shifts in incentives, regulatory credibility, and market relationships—rather than through direct input distribution. Over time, strengthened governance systems, reduced counterfeit risks, and improved access to finance crowd in additional seed companies and service providers, embedding a commercially viable system beyond programme support.

Systemic Theory of Change



Intervention Guides and Results Chains

- 3.1 Increase certified CS seeds availability through scaling of community seed multiplication (CSM) model
- 3.2 Promote adoption and utilization of certified CS seeds by scaling rural seed promoter (RSP) model.
- 3.3 Strengthen the regulatory environment for seed certification by strengthening key industry bodies e.g., National Agricultural Seed Council (NASC)

Insert link

[Community Seed Multiplication IG version 3 Current.xlsx](#)

[Rural Seed Promotion IG version5 Current.xlsx](#)

[Regulatory Environment for Seed Certification IG - Y3Q2 update.xlsx](#)

Contribution to Propcom+ Impact Areas

Climate adaptation

Climate adapted variety helps farmers cope with climatic changes and maintain quality yields

Mod. impact

Poverty reduction

Reduces the poverty level of SHFs by improving productivity and yield while reducing the time and effort required for farmers to produce, thereby helping farmers increase efficiency and profitability

High impact

Nutrition

The adoption of climate-smart varieties leads to improved productivity and yields, with direct impact on nutrition

High impact

Women empowerment

Provides economic, and market linkage opportunities for women SHFs within the seeds market, with direct impact on their nutrition

High impact

Climate mitigation

The adoption of CSA practices, combined with the use of adapted seed varieties improves the efficiency of production and reduced emissions associated with waste averted.

Med. impact

Impact estimates - by end of year 3



10

5 seed companies supported to scale up seed multiplication and RSP model: additional 5 unsupported companies adopting the model.



10,000 MT

Of climate adapted seeds multiplied annually through the community seed multiplication model



10

Private nurseries for relevant climate smart adapted seedlings established.



500

RSPs routinely marketing climate adapted varieties to rural farmers



200,000

Farmers across 5 states know and use climate-adapted varieties (**50% women**)

Result estimates - by end of year 3

Year 1

Year 2

Year 3

Seed companies

- 5 seed companies re-investing into commercialized climate-smart seed production leveraging P+ support.

- 10 seed companies investing (5 unsupported) into commercialized climate smart seeds production leveraging financial support from FIs.
- 5 private nurseries established

- 10 seed companies investing (5 unsupported) into commercialized climate smart seeds production leveraging financial support from FIs.
- 10 private nurseries established

Output

- > 500ha of land cultivated for dry & wet season production.
- 240 community seed multipliers (50% women)
- 1,000 MT of seeds produced.
- 25,000 farmers reached potentially.
- 100 RSPs engaged.

- > 1250 ha of land cultivated for dry & wet season production.
- >500 community seed multipliers (50% women)
- >2,500 MT of seeds produced.
- 75,000 farmers reached potentially
- 250 RSPs engaged.

- > 2500ha of land cultivated for dry and wet season production.
- >1500 community seed multipliers (50% women)
- >5,000MT of seeds produced
- 200,000 farmers reached potentially
- 500 RSPs engaged.


Access to Finance


- Support FI's learning cost to analyse the yield and the financials of seed companies to develop a case for product development

- Available financial products for seed companies.
- Pilot investments from FIs into seed production.

- Innovative financial products for seed value chain actors.
- Increased investment from FIs into seed production.

Budget & VFM

 Built on assumptions of the Propcom Mai-Karfi program, the table presents the data for value for money metrics from Y1 – Y3.

 Propcom+ will scale down its investments annually, with the expectation that financial institutions will fill the financial gaps with suitable products for seed companies.

Indicator	Year 1	Year 2	Year 3
Total operational costs /total costs	£105,000	£60,000	£25,000
Cost per farmer reached	£5.8	£3.2	£1.6
% of farmers reached who are female	50	50	50
Private sector investment leveraged	£40,000	£180,000	£300,000

Adopt-Adapt-Expand-Respond (AAER) Framework

- Seed companies adopt structured out-grower multiplication (CSM model) to scale climate-smart and biofortified varieties.
- Farmers adopt improved seed and GAP practices through strengthened extension and RSP channels.
- NASC operationalizes strengthened certification, inspection, and digital compliance systems.
- Regulatory agencies (NAQS, NCS, NAFDAC) adopt coordinated seed import/export and quality control procedures.
- State Seed Coordination Committees adopt harmonized regulatory oversight aligned with NASC standards.

Adopt

Respond

- Financial and digital service providers enter the seed market with tailored products.
- Insurance providers develop risk products for seed production.
- Government allocates resources to institutionalize climate-smart seeds.
- Private investors increase funding in multiplication, QA systems, and commercialization.
- The seed system responds with greater transparency, efficiency, and resilience.

- Seed companies adapt internal QA systems to meet strengthened certification and traceability requirements.
- States adapt national seed frameworks to local realities and improve enforcement coordination.
- Financial institutions adapt products to support licensed seed companies and multiplication financing.
- Extension systems adapt delivery models to promote climate-smart/biofortified varieties.
- NASC strengthens institutional capacity and sustainable service delivery financing..

Adapt

Expand

- CSM model expands geographically across agro-ecological zones.
- Last-mile distribution channels for adapted varieties expand through RSP and private networks.
- New seed companies crowd in to leverage structured multiplication and improved governance.
- Digital seed certification and traceability tools gain wider adoption nationally.
- State Seed Coordination Committees expand in membership and functionality.
- Regional alignment strengthens via ECOWAS harmonized seed regulation compliance.

Risks and Mitigation

S/N	Risk	Mitigation Strategies
1	Poor record keeping results in incorrect assessments of adherence to protocol by farmers	Regular monitoring through the Dynamic and Adaptive Monitoring system
2	SHFs to continue their old habit of using recycled seeds.	RSPs would be trained on GAP and marketing skills to reach farmers with knowledge and certified seeds
3	The inability of seed companies and RSPs to meet up with supply & and lack of affordable packs.	Work with seed companies to produce and sell smaller packs like 1kg and 2 kg to address the challenge of affordability.
4	Identifying suitable outgrowers, RSPs in the target locations.	Seed companies to identify community seed multipliers, seed distributors, and rural seed promoters within their network
5	Weather risks: Flooding, drought, fire etc	Encourage seed companies to procure insurance premium.
6	Policy Inertia and Fragmentation	Addressed through an autonomous sector governance unit and regular multi-stakeholder platform activities.
7	Digital Divide	Parallel in-person extension, device-sharing platforms, and language localization.