

REPUBLIC OF KENYA



MINISTRY OF AGRICULTURE AND  
LIVESTOCK DEVELOPMENT



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# THE NATIONAL AGRI-FOOD SYSTEMS INVESTMENT PLAN (NASIP 2026-2030)

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*Building on Progress, Strengthening Resilience, and Transforming Kenya's Agriculture*

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*Building on Progress, Strengthening Resilience, and  
Transforming Kenya's Agriculture*

**Physical Address:**

Ministry of Agriculture and Livestock Development  
Kilimo House, Cathedral Road  
P.O. Box 30028-00100  
Nairobi, Kenya  
Tel: +254 20 718870  
E-mail: [psagric@kilimo.go.ke](mailto:psagric@kilimo.go.ke)  
Website: [www.kilimo.go.ke](http://www.kilimo.go.ke)

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# List of Acronyms

Acronym	Description
ADF	Agricultural Development Fund
AEZ	Agro-Ecological Zone
AFA	Agriculture and Food Authority
AFC	Agriculture Finance Corporation
AfCFTA	African Continental Free Trade Area
AIF	Agricultural Innovation Fund
ART	Assisted Reproductive Technologies
ASAL	Arid and Semi-Arid Lands
ASTGS	Agricultural Sector Transformation and Growth Strategy
ATO	Agricultural Transformation Office
AUDA-NEPAD	African Union Development Agency – New Partnership for Africa’s Development
BETA	Bottom-Up Economic Transformation Agenda
BMU	Beach Management Unit
CAADP	Comprehensive Africa Agriculture Development Program
CIH	County Innovation Hub
CIDP	County Integrated Development Plan
CNSC	County NASIP Steering Committee
CoG	Council of Governors
COVID-19	Coronavirus Disease 2019
CSA	Climate-Smart Agriculture
DFI	Development Finance Institution (in financing contexts); Direct Foreign Investment (in trade and investment flow contexts)
EAC	East African Community
EOCPP	Edible Oil Crops Promotion Project
FAO	Food and Agriculture Organization
GAIN	Global Alliance for Improved Nutrition
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HLPE	High Level Panel of Experts on Food Security and Nutrition
ICCA	Intergovernmental Coordination Committee on Agriculture
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
IRR	Internal Rate of Return
JICA	Japan International Cooperation Agency
JRF	Joint Results Framework
KALRO	Kenya Agricultural and Livestock Research Organization
KDB	Kenya Dairy Board
KEFRI	Kenya Forestry Research Institute
KEFS	Kenya Fisheries Service
KEPHIS	Kenya Plant Health Inspectorate Service
KES	Kenya Shilling
KII	Key Informant Interview

Acronym	Description
KIAMIS	Kenya Integrated Agriculture Management Information System
KMFRI	Kenya Marine and Fisheries Research Institute
KNBS	Kenya National Bureau of Statistics
KNCCI	Kenya National Chamber of Commerce and Industry
KODI	Kenya Open Data Initiative
KWS	Kenya Wildlife Service
MDA	Ministries, Departments, and Agencies
MEL	Monitoring, Evaluation, and Learning
MoALD	Ministry of Agriculture and Livestock Development
MTEF	Medium-Term Expenditure Framework
MTP	Medium-Term Plan
NARCF	National Agricultural Research Coordination Framework
NASIP	National Agri-Food Systems Investment Plan
NBFF	NASIP Blended Finance Facility
NCPD	National Council for Population and Development
NDMA	National Drought Management Authority
NEMA	National Environment Management Authority
NIA	National Irrigation Authority
NISIP	National Irrigation Sector Investment Plan
NRIC	National Research and Innovation Council
OECD-DAC	Organization for Economic Co-operation and Development, Development Assistance Committee
PBB	Program-Based Budgeting
PPP	Public-Private Partnership
PWDs	Persons with Disabilities
ROI	Return on Investment
SDGs	Sustainable Development Goals
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Standards
TFP	Total Factor Productivity
TLU	Tropical Livestock Unit
ToC	Theory of Change
TVET	Technical and Vocational Education and Training
UN	United Nations
USD	United States Dollar
WOAH	World Organization for Animal Health
WRC	Warehouse Receipts Council

# Glossary of Terms

Term	Definition
Agri-food Systems	The interconnected network of activities involving the production, processing, distribution, and consumption of food, including crops, livestock, and fisheries, as well as the economic, social, and environmental factors influencing these processes.
Blended Finance	A financing approach that combines public, concessional, and private capital to de-risk investments and mobilize resources for high-impact projects, particularly in agriculture and development.
Climate-Smart Agriculture (CSA)	Agricultural practices that sustainably increase productivity, enhance resilience to climate change, and reduce greenhouse gas emissions, such as drought-tolerant seeds and regenerative farming.
County Integrated Development Plan (CIDP)	A five-year strategic plan developed by county governments to guide local development, including agricultural priorities, aligned with national policies like Vision 2030.
De-Risking	Strategies to reduce financial, operational, or market risks for investors, such as credit guarantees, insurance, or performance-based incentives, to encourage investment in agriculture.
Farmer Financial Passport	A digital identity system linking farmers' profiles to financial institutions, enabling transaction-based credit scoring and access to loans without traditional collateral.
Flagship Initiative	A high-priority, transformative program within NASIP designed to address specific challenges or opportunities, with clear costs, targets, and investment pathways.
Intra-African Trade	Trade in goods and services between African countries, facilitated by frameworks like the African Continental Free Trade Area (AfCFTA) to enhance regional market access.
Joint Results Framework (JRF)	A structured system defining deliverables, milestones, and responsibilities across stakeholders to ensure coordinated implementation and accountability in NASIP.
Public-Private Partnership (PPP)	A collaborative arrangement between government and private entities to finance, develop, and manage agricultural projects, sharing risks and rewards to achieve sustainable outcomes.
Total Factor Productivity (TFP)	A measure of the efficiency with which inputs (labor, capital, land) are used to produce agricultural outputs, reflecting technological and managerial improvements.
Value Addition	The process of transforming raw agricultural products into higher-value goods through processing, packaging, or branding to increase economic returns and reduce post-harvest losses.
Warehouse Receipt System	A mechanism where certified warehouses issue tradable receipts for stored produce, enabling farmers and traders to access credit against stored commodities as collateral.

# Foreword

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Kenya's agricultural transformation is entering a decisive new phase, one defined by strategic investment, innovation, and partnership. The National Agri-food Systems Investment Plan (NASIP 2026–2030) provides a comprehensive framework to translate national vision into coordinated action, ensuring that the country's Agri-food sector remains a driver of inclusive growth, food security, and climate resilience.

Over the years, the Government of Kenya has consistently prioritized agriculture as a foundation of national transformation. This commitment has been articulated through Vision 2030, successive Medium-Term Plans, the Agricultural Policy, and the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019–2030). The Bottom-Up Economic Transformation Agenda (BETA) renews this commitment with a sharper focus on inclusivity, productivity, and enterprise, placing agriculture at the center of Kenya's socio-economic advancement.

BETA defines what the government seeks to achieve through stronger food systems, greater productivity, equitable participation, and sustainable livelihoods, while the ASTGS and NASIP together outline how these ambitions will be realized through coordinated investment, policy coherence, and result-driven implementation. NASIP therefore serves as the investment instrument that operationalizes both BETA's policy intent and ASTGS's strategic framework, ensuring that national priorities, county actions, and private-sector initiatives move in alignment. This synergy provides a unified and coherent roadmap for delivering measurable impact across Kenya's Agri-food system.

Developed through broad multi-stakeholder consultations, NASIP aligns Kenya's priorities with continental and global commitments under the Comprehensive Africa Agriculture Development Program (CAADP), the Kampala Declaration on Food Systems, and the Sustainable Development Goals (SDGs). The plan outlines nine flagship investment areas and a financing envelope of KES 1,080.54 trillion (approximately USD 8.34 trillion at KES 129.5 per USD) in five years, designed to mobilize public, private, and blended capital for transformative outcomes across crops, livestock, fisheries, agribusiness, and priority value chains. It links resources to performance, ensuring that each shilling invested delivers tangible benefits, higher productivity, better nutrition, stronger markets, and greener growth.

NASIP is therefore not simply a plan; it is a compact between national and county governments, as well as the private sector, and our citizens. Its success will depend on disciplined execution, transparent governance, and sustained collaboration within and across multiple levels. The Government of Kenya is fully committed to this agenda and to the partnerships that will bring it to life, within our borders, across Africa, and globally.

**Hon. Sen. Mutahi Kagwe, EGH**

Cabinet Secretary

Ministry of Agriculture and Livestock Development

# Preface

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The National Agri-food Systems Investment Plan (NASIP) 2026–2030 represents Kenya’s unified roadmap for accelerating transformation across the agriculture sector through coordinated, evidence-based, and inclusive investment. It has been developed through extensive technical analysis and wide-ranging consultations involving national and county governments, the private sector, farmer and pastoralist organizations, research institutions, and development partners.

NASIP builds on the achievements and lessons of the National Agriculture Investment Plan (NAIP I, 2019–2024) and the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019–2030) Mid-Term review. It reflects a strategic shift from fragmented projects to a whole-of-system approach that integrates crop and livestock production, fisheries, agribusiness, finance, and trade within a single result-oriented framework.

The plan introduces nine flagship investment programs, each costed, result-linked, and grounded in devolved implementation, to translate policy priorities into tangible action. Together, these programs strengthen productivity and competitiveness across Kenya’s Agri-food systems: enhancing irrigation and soil health; improving crop, animal, and fish production and productivity; supporting value addition and agro-industrialization; and deepening market access for agricultural, livestock, and aquatic commodities. NASIP also embeds cross-cutting commitments to gender equality, youth empowerment, digital transformation, and green growth, underpinned by innovative financing mechanisms such as blended funds and performance-based grants.

The Ministry acknowledges the leadership of the Agricultural Transformation Office (ATO) in coordinating the NASIP process, the Council of Governors for ensuring county alignment, and our development partners for their technical and financial support. We also recognize the invaluable contributions of farmers, pastoralists, and fisherfolk, researchers, and private-sector actors, whose experiences and insights have shaped NASIP into a pragmatic, forward-looking plan.

As we transition from planning to implementation, the Ministry reaffirms its commitment to transparency, accountability, and adaptive learning. NASIP is not an end. It is the investment vehicle through which Kenya will strengthen food and nutrition security, create sustainable jobs, and build a resilient, competitive, and inclusive Agri-food economy for generations to come.

*Signed jointly on behalf of the Ministry of Agriculture and Livestock Development*

**Dr. Paul Kipronoh Ronoh,**  
Principal Secretary,  
State Department for Agriculture

**Hon. Jonathan Mueke**  
Principal Secretary,  
State Department for Livestock Development

# Acknowledgement

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The Ministry of Agriculture and Livestock Development (MoALD) extends its sincere appreciation to all institutions, partners, and stakeholders whose dedication and expertise made possible the preparation of the National Agri-food Systems Investment Plan (NASIP) 2026–2030. The plan is the product of a truly national effort, reflecting Kenya’s commitment to inclusive, evidence-based, and results-oriented agricultural and livestock transformation.

The Ministry acknowledges the leadership of the national and county governments in guiding and validating this process. We recognize the Agricultural Transformation Office (ATO) for its coordination role and the Council of Governors (CoG) for ensuring alignment with county priorities. The active participation of Ministries, Departments, and Agencies, including the Kenya Agricultural and Livestock Research Organization (KALRO), Kenya Plant Health Inspectorate Service (KEPHIS), Agriculture and Food Authority (AFA), Warehouse Receipt Council (WRC), Kenya Fisheries Service (KeFS), Kenya Dairy Board (KDB), Directorate of Veterinary Services, Agriculture Finance Corporation (AFC), and the Kenya National Bureau of Statistics (KNBS), was instrumental in strengthening NASIP’s technical foundation and ensuring its consistency with national policies and data systems.

The Ministry also appreciates the valuable inputs from farmers, pastoralists, and fisherfolk, producer organizations, processors, private-sector actors, research institutions, and civil-society organizations, whose perspectives grounded NASIP in real-world needs and opportunities across Kenya’s diverse Agri-food systems.

We extend special thanks to our development partners, including the Global Alliance for Improved Nutrition (GAIN), the Japan International Cooperation Agency (JICA), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and the Alliance for Green Revolution in Africa (AGRA), and the International Fund for Agricultural Development (IFAD) through the Kenya Climate, Smart Agriculture Project, Climate Resilient Agricultural Livelihoods (KCEP, CRAL), for their financial and technical support throughout the process. We further acknowledge AKADEMIYA 2063 for its analytical support and scenario modeling, which provided an evidence base for investment prioritization and result monitoring.

The Ministry further appreciates the contribution of the NASIP Technical Development Team, composed of experts from the Ministry, county governments, national research institutions, academia, and independent consultants. Their analytical work, coordination, and technical reviews were critical in structuring the investment framework, costing, and performance-monitoring components of this Plan. Their professionalism ensured coherence between policy priorities and implementation design, making NASIP a credible and actionable investment instrument.

Finally, the Ministry acknowledges the continental guidance and frameworks provided by the African Union Development Agency – NEPAD (AUDA-NEPAD) through the Comprehensive Africa Agriculture Development Program (CAADP), and the direction offered by the Malabo Declaration (2014) and Kampala Declaration (2025) on food-systems transformation.

The Ministry reaffirms its commitment to sustaining these partnerships as we move from planning to implementation, ensuring that NASIP 2026–2030 delivers tangible outcomes for Kenya’s farmers, pastoralists, and agribusinesses while advancing national, regional, and global goals for sustainable and resilient Agri-food systems.

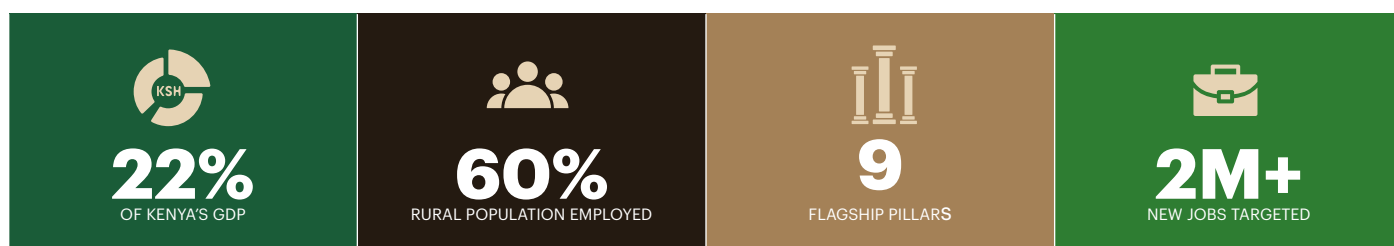
**Ministry of Agriculture and Livestock Development (MoALD)**  
**Nairobi, Kenya – November 2025.**

# Executive Summary

## NASIP: Kenya’s Agri-Food Investment Opportunity

Kenya’s agriculture sector remains one of the country’s greatest economic assets and one of its largest untapped investment opportunities. Agriculture contributes over 22 percent of Gross Domestic Product (GDP)<sup>1</sup>. It employs 60 percent.<sup>2</sup> of the rural workforce, and underpins livelihoods, food and nutrition security, and export earnings. Yet the sector continues to operate far below its productive potential due to low productivity, weak value-chain integration, limited private sector investment, and deepening exposure to climate and market shocks. Maize yields average approximately 1.4–1.8 t/ha, less than one-third of the global average of approximately 5.8 t/ha; while post-harvest losses consume up to 30–40 percent of food produced annually. Less than 5 percent of arable land is irrigated, and NASIP estimates the long-term agri-food financing requirement at approximately KES 9.7 trillion.

The country now faces a rare convergence of need, opportunity, and readiness for transformation. The National Agri-food Systems Investment Plan (NASIP) 2026–2030 is Kenya’s coordinated response. NASIP is a five-year, KES 1,080.54 trillion<sup>3</sup> investment framework that provides a reform-ready framework to unlock productivity, crowd in private investment, strengthen value chains, accelerate climate resilience, and modernize food systems at scale. Supported by enabling policy reforms, innovative financing instruments, institutional coordination, and growing political commitment, NASIP positions agriculture not only as a development priority but as a strategic engine for inclusive economic growth, industrialization, resilience, and national prosperity.



Developed under the Ministry of Agriculture and Livestock Development (MoALD) through the Agricultural Transformation Office (ATO), NASIP operationalizes Kenya’s most ambitious policy commitments, including the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019–2030), the Bottom-Up Economic Transformation Agenda (BETA), and Vision 2030, while maintaining full alignment with continental and global frameworks, including CAADP, the Malabo Declaration, and the 2025 Kampala Declaration on Food Systems.

## The Problem NASIP Solves

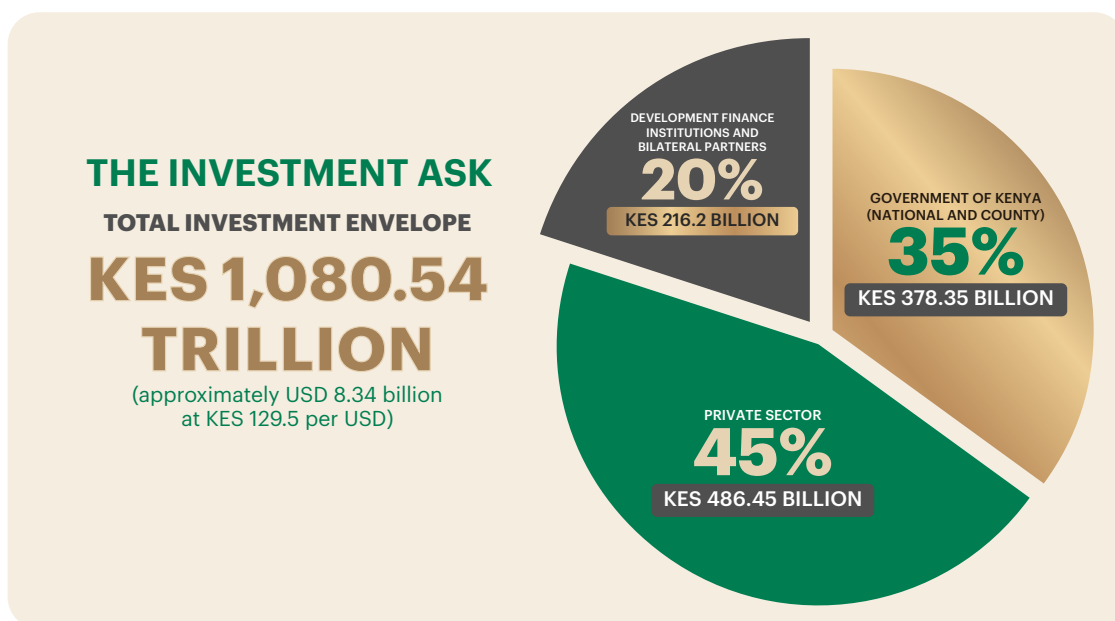
Kenya’s agricultural potential remains systematically underfinanced, not because of a lack of policies or strategies, but because of a persistent disconnect between policy ambition and investable delivery mechanisms. Over time, fragmented programs, weak coordination frameworks, and limited pipeline development have constrained the ability of public and private capital to flow into scalable agricultural transformation. Without a single, bankable framework that aligns government coordination, institutional accountability, and private sector participation, investors have lacked a credible platform through which to finance transformation at scale. NASIP is designed to provide that framework.



1 Kenya National Bureau of Statistics (KNBS). *Economic Survey 2025*. Nairobi: KNBS.

2 World Bank. *Kenya Agriculture and Food Systems Review*. Washington, D.C.: World Bank, 2024.

3 Ministry of Agriculture and Livestock Development (MoALD). *National Agri-food Systems Investment Plan (NASIP) 2026–2030*. Nairobi: MoALD/ATO, 2026.



**PROJECTED RETURNS**

<b>6-7%</b> Annual Agri-GDP growth	<b>40%</b> Increase in smallholder incomes	<b>2M+</b> New jobs created	<b>12-19%</b> Portfolio IRR range
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**The Nine Flagship Investment Pillars**

Each of NASIP’s nine flagship programs is structured around a distinct structural constraint in Kenya’s Agri-food system, costed to a credible investment envelope, and designed to generate measurable financial and development returns. The flagships function as a mutually reinforcing portfolio: gains in productivity (Flagships 1 to 3) create the supply base that justifies investment in processing and market infrastructure (Flagship 4), which in turn validates the food safety and resilience systems (Flagships 5 and 6) that underpin long-term investor confidence. Research and data infrastructure (Flagship 7), blended finance mechanisms (Flagship 8), and institutional capacity (Flagship 9) provide the enabling architecture across the portfolio. All investment costs and performance targets are drawn from the NASIP 2026–2030 investment costing framework<sup>[2]</sup>, validated through AKADEMIYA 2063 scenario modeling<sup>[3]</sup>.

<b>F1</b> KES 90 billion	<b>Increasing Agri-food Systems Production and Productivity (KES 90 billion)</b> The productivity engine of NASIP targets a 50 percent increase in crop production and more than 50 percent growth in animal and fish output by 2030 <sup>[2]</sup> . It invests in 500 Farmer Enterprise Clusters (FECs) <sup>[2]</sup> , digital farmer identity and profiling through KIAMIS, genetic improvement across crops, livestock, and fisheries, and county-based agri-preneurship hubs targeting 80 percent farmer coverage per county. This flagship creates the aggregated, bankable farmer base that makes downstream private investment in processing and logistics commercially viable.
<b>F2</b> KES 51 billion	<b>Targeted Input and Services Wallet for Vulnerable Farmers (KES 51 billion)</b> Replaces Kenya’s universal fertilizer subsidy with a digitally managed, targeted e-voucher system for 1.2 to 1.6 million of the most vulnerable smallholders, pastoralists, and fisherfolk <sup>[2]</sup> . The bundle covers certified seeds, animal health services, mechanization, insurance, and extension credits, delivered through a private-sector-led supply chain. Projected returns: a KES 20,500 to 30,750 annual income gain per household and a net contribution to agricultural GDP of KES 120 to 245 billion over the five years <sup>[2]</sup> .
<b>F3</b> KES 175 billion	<b>Enhancing Medium to Large-Scale Production, Irrigation, and Mechanization (KES 175 billion)</b> Targets 150,000 to 200,000 new hectares (370,000 to 494,000 acres) of irrigated land through PPP irrigation development, solar-powered pumping, and integrated irrigation-market ecosystems <sup>[2][12]</sup> . A 40 to 50 percent yield increase in targeted schemes and 500,000 acres unlocked for commercial production are the headline deliverables <sup>[2]</sup> . This flagship represents Kenya’s largest single infrastructure investment opportunity within NASIP, structured specifically for private co-financing and long-term off-take agreements.

<p><b>F4</b></p> <p><b>KES 120 billion</b></p>	<p><b>Improving Agro-Industrialization, Market Access, and Trade Competitiveness (KES 120 billion)</b></p> <p>Addresses the value destruction from Kenya processing only 16 percent of its agricultural output locally<sup>[9]</sup> by establishing agro-industrial zones across Kenya's six agricultural corridors, strengthening cold chain and logistics infrastructure, and facilitating market linkages under AfCFTA. Targets a 30 percent increase in export value, a rise in locally processed output to 30 percent of Agri-food GDP, and a 50 percent reduction in the KES 99–102 billion edible oil import bill by 2030<sup>[7][2]</sup>.</p>
<p><b>F5</b></p> <p><b>KES 55 billion</b></p>	<p><b>Strengthening Food and Feed Safety, and Reducing Food Loss and Waste (KES 55 billion)</b></p> <p>Builds the quality assurance, traceability, and certification architecture that unlocks premium export markets, reduces post-harvest losses by 30 percent, and ensures 100 percent of formal markets meet certified food safety standards by 2030<sup>[2]</sup>. Unsafe food costs Kenya's economy an estimated KES 12.3 trillion annually in lost productivity<sup>[4]</sup>. For private investors, this flagship de-risks supply chains, reduces export rejection rates, and creates viable commercial models in cold chains, packaging, and food testing infrastructure.</p>
<p><b>F6</b></p> <p><b>KES 85 billion</b></p>	<p><b>Reinforcing Agri-food Systems Resilience to Shocks (KES 85 billion)</b></p> <p>This flagship mainstreams climate-smart agriculture across all 47 counties, scales agricultural insurance to cover 30 percent of smallholder farmers<sup>[2]</sup>, and operationalizes county-level early warning systems. Mobilizes KES 1.9 to 3.9 billion in anticipatory climate finance linked to the Green Climate Fund, Adaptation Fund, and Kenya's Nationally Determined Contributions (NDCs) under the Paris Agreement. Recurrent droughts and floods cost Kenya's agriculture sector billions annually<sup>[1]</sup>; this flagship turns climate risk into a managed, investable variable.</p>
<p><b>F7</b></p> <p><b>KES 45 billion</b></p>	<p><b>Advancing Research, Data, Artificial Intelligence, and Innovation for Productivity and Global Competitiveness (KES 45 billion)</b></p> <p>Restructures Kenya's national research ecosystem around KALRO and the National Agriculture Data Hub, scaling 200 or more proven innovations through county-based incubators and raising research and development (R&amp;D) spending to two percent of agri-GDP. Currently, Kenya's public agricultural research expenditure falls below one percent of agri-GDP<sup>[3]</sup>. This flagship positions Kenya as a regional leader in AI-driven agricultural transformation by modernizing the national research, data, and innovation ecosystem. Through strategic investments in artificial intelligence, digital public infrastructure, climate and market intelligence systems, innovation financing, and county-based incubation platforms, the flagship will accelerate productivity growth, technology commercialization, precision agriculture, and climate resilience on a scale.</p>
<p><b>F8</b></p> <p><b>KES 148 billion</b></p>	<p><b>Boosting Agri-food Systems Financing (KES 148 billion)</b></p> <p>The NASIP Blended Finance Facility (NBFF), anchored within this flagship, pools loan guarantees covering up to 50 percent of credit risk, results-based financing instruments, climate finance windows, and agricultural insurance co-funding<sup>[2]</sup>. At full scale, the National Blended Finance Facility (NBFF) targets financing access for at least 2.5 million smallholder farmers through partnerships with the Agricultural Finance Corporation (AFC), the African Development Bank (AfDB), the International Fund for Agricultural Development (IFAD), and Kenya's financial technology ecosystem<sup>[2]</sup>. This flagship is the primary entry point for institutional investors, impact funds, and commercial banks seeking blended returns in Kenyan agriculture.</p>
<p><b>F9</b></p> <p><b>KES 30 billion</b></p>	<p><b>Strengthening Agri-food Systems Institutional and Human Capacity (KES 30 billion)</b></p> <p>The systems integration flagship, building organizational capacity, human skills, and technical competence at the national and county levels. Targets a 40 percent increase in technology adoption rates and a 50 percent increase in income for participating producers<sup>[2]</sup> through county compact operationalization, extension workforce reform, agripreneurship training for youth and women, and digital literacy infrastructure. Institutional strength is the single most reliable predictor of flagship delivery at scale, and this flagship is the mechanism through which that strength is systematically built.</p>

## Governance and Accountability

<p><b>TIER 1 — NATIONAL MoALD &amp; ATO</b></p> <p>Policy oversight, performance management, and national-to-county coordination through the Agri-food Systems Transformation Secretariat (ASTS)</p>	<p><b>TIER 2 — COUNTY CASSCOMs</b></p> <p>Frontline delivery across all 47 counties via County Agri-food Systems Steering Committees, with performance-linked disbursements</p>	<p><b>TIER 3 — CONTINENTAL CAADP Reviews</b></p> <p>Joint Annual Sector Reviews (JSRs) and CAADP Biennial Reviews: Kenya's performance benchmarked and publicly reported globally</p>
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### ▶ PERFORMANCE-LINKED DISBURSEMENTS

County allocations are **tied to verified output targets**. Corrective reallocation is triggered automatically when KPIs fall below **80% of milestone projections**. Every tier is linked to the **National Agriculture Data Hub** for real-time monitoring. NASIP's results framework is fully aligned with the Kampala Declaration's 22 targets and 35 intervention areas.

## Engagement Framework for Strategic Partners

### THE NATIONAL AND COUNTY GOVERNMENTS

NASIP 2026–2030 operationalizes Kenya's highest-level agricultural policy commitments into a fully costed, performance-linked investment framework. The Government of Kenya is called upon to ring-fence the KES 378.35 billion public commitment within successive Medium-Term Expenditure Frameworks, ensure that County Compacts are operationalized by the first quarter of 2026, and formally inscribe Kenya's CAADP Biennial Review targets as nationally binding performance obligations. The projected outcomes, namely a 35 percent increase in agricultural GDP, two million new jobs, and a 25 percent reduction in food import dependency, are contingent on the full and timely commitment of public resources at both national and devolved levels.

### PRIVATE SECTOR INVESTORS

NASIP presents a KES 9.7 trillion commercial opportunity, underpinned by a government-backed risk architecture calibrated to international investment standards. The NASIP Blended Finance Facility (NBFF) provides guarantee coverage of up to 50 percent of credit risk across participating financial institutions, materially improving the risk-return profile of Agri-food investment across all nine flagship programs. The KIAMIS digital farmer registry provides a verified, commercially

accessible base of registered producers. Private investors are invited to engage across the full investment portfolio: irrigation infrastructure (F3), agro-industrial zones (F4), cold chain logistics (F5), agricultural insurance (F6), digital platforms (F7), and blended credit instruments (F8). First-mover positions in this portfolio carry strategic value that will not be replicable at a later stage of NASIP's implementation.

### DEVELOPMENT PARTNERS AND DEVELOPMENT FINANCE INSTITUTIONS

NASIP 2026–2030 constitutes a fully domesticated, CAADP-aligned national investment framework with the institutional architecture, costing rigor, and accountability mechanisms that international development finance mandates require. NBFF is designed as an open co-financing platform accessible to all qualifying partners. Flagships 5 and 6 present particularly strong alignment with the Green Climate and Adaptation Funds mandate, while Flagship 7 offers a natural vehicle for technical cooperation and knowledge transfer. The CAADP Biennial Review architecture ensures that all partner contributions are tracked against publicly comparable, CAADP-validated performance indicators. Development Finance Institutions are invited to engage at the level of the NBFF structure, flagship co-financing windows, and technical assistance streams.

## CALL TO ACTION

### A STRATEGIC MOMENT FOR TRANSFORMATIONAL CO-INVESTMENT

Kenya's National Agri-food Systems Investment Plan 2026–2030 represents a generational opportunity to anchor transformational capital in one of Africa's most dynamic and reform-committed agricultural economies. The investment case is clear. The governance architecture is established. The policy commitment is in place. The window for transformation is now.

NASIP 2026–2030 invites governments, private investors, development finance institutions, and strategic partners to participate in a nationally led agricultural transformation agenda aligned with regional and global food systems priorities.

By linking investment to productivity growth, climate resilience, industrialization, food security, and inclusive rural prosperity, NASIP positions Kenya as a leading platform for sustainable agri-food systems transformation in Africa

The question is no longer whether Kenya's agri-food systems' transformation is possible, but whether the world is prepared to invest at the scale and speed required to realize it.

# I. Introduction & Context: NASIP as the Engine Driving Agricultural Transformation

**WHAT'S IN THIS CHAPTER**  
 Background on Kenya's agri-food sector, the strategic rationale for a new investment plan, lessons from NAIP I (2019–2024), the policy and institutional context, and NASIP's alignment with CAADP and the Kampala Declaration.

## 1.1 Background and Context of Kenya's Agri-Food Systems

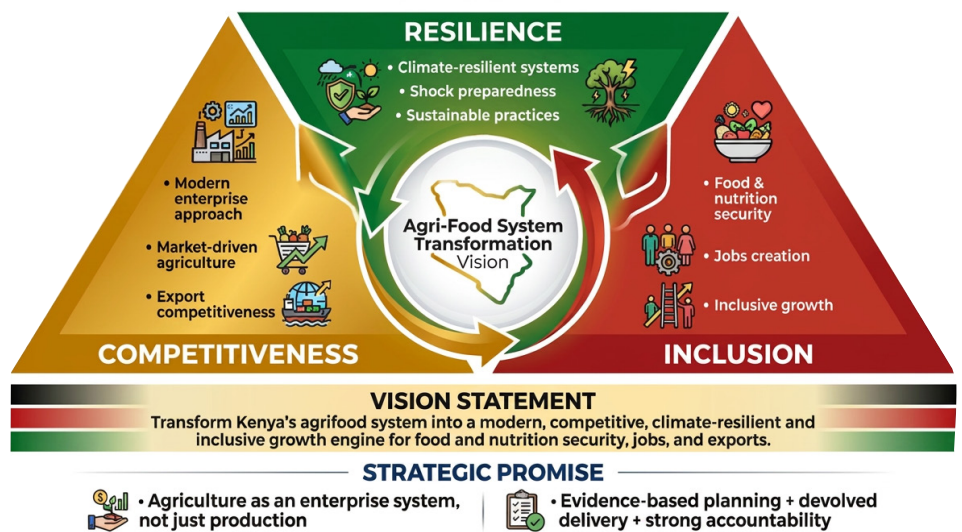
Kenya's Agri-food sector is the backbone of the national economy, contributing about 22% of the Gross Domestic Product (GDP) and employing over 60% of the population, especially in rural areas. It is the main factor affecting household food security and a key source of major export earnings (e.g., tea, horticulture, and coffee). However, the sector operates significantly below its potential. Over 80% of agricultural land is rain-fed, leaving production highly exposed to climate shocks such as droughts and floods. Smallholder productivity remains low due to limited access to quality inputs, soil degradation, and high post-harvest losses.

Value chains are fragmented by poor market linkages and inadequate storage infrastructure, while Kenya's food import bill continues to rise despite the country's considerable agricultural potential. Compounding these issues, weak policy coherence between national and county governments and delayed regulatory reforms continue to stifle private investment. NASIP 2026–2030 is conceived as the strategic response to these challenges, shifting the focus from simply increasing production to a holistic Agri-food systems transformation.

## 1.2 Strategic Rationale for a New Agri-Food Systems Investment Plan

Kenya's Agri-food sector stands at a decisive turning point despite numerous strategies and policies over the past decade. Growth has remained constrained by fragmented coordination, limited private-sector investment, and persistent vulnerability to climate and market shocks. The National Agri-food Systems Investment Plan (NASIP) 2026–2030 is therefore not a routine update to NAIP I but a comprehensive modernization effort designed to address structural gaps while responding to new global, national, and technological realities. This new investment plan is designed to achieve the following outcomes;

### NASIP Vision & Strategic Promise



**Transform the sector from fragmented interventions to systemic integration:** NASIP responds to the need for a new approach to agricultural transformation, one that adopts a whole food system's perspective, extending beyond production goals to include nutrition, resilience, trade, and environmental sustainability. Earlier agriculture sector policies were often reactive and segmented by subsectors. NASIP introduces systemic integration, strengthening coordination among ministries, counties, and value chains while linking food production to markets, consumption patterns, and health outcomes. This shift aligns Kenya with the direction of the UN Food Systems Summit, positioning agriculture as central to both human and environmental well-being.

**Build resilience from lessons learned:** The COVID-19 pandemic exposed deep vulnerabilities in food supply chains, logistics, and trade dependencies. NASIP incorporates these lessons by prioritizing resilience and adaptive capacity. It promotes digitalized market systems, localized value addition, and strategic food reserves to ensure supply continuity during future disruptions. At the county level, where agriculture is domiciled, the Plan strengthens data systems, forecasting, and contingency planning to enhance preparedness and response.

**Situate BETA within a unified investment framework:**

NASIP considers provisions from the Bottom-Up Economic Transformation Agenda (BETA) by positioning agriculture as a leading driver of employment, enterprise, and inclusion. It ensures that BETA's county-based development priorities are fully aligned with Vision 2030 and the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019–2030). Through national and county-level compacts, joint planning, and shared investment platforms, NASIP resolves long-standing coordination challenges that have arisen since devolution, ensuring coherence between national ambitions and local delivery.

**Address global disruptions and supply-chain vulnerability:**

The continuing impact of global conflicts and market volatility, including the Russia–Ukraine war, has underscored Kenya's exposure to external grain, fertilizer, and fuel markets. NASIP promotes domestic agro-industrialization, local input manufacturing, and diversification of import sources to reduce vulnerability and stabilize food prices. These measures will enhance national self-reliance and protect producers and consumers from future supply shocks.

**Accelerate the digital and ICT revolution:** Recognizing the transformative potential of digital technology, NASIP embeds digitization across the entire Agri-food system, from farmer registration and input distribution to market intelligence, extension, and finance. With rapid growth in e-extension, e-commerce, and digital finance, NASIP leverages platforms such as KIAMIS and upgrades it into the National Agriculture Data Hub to enable precision agriculture, traceability, and transparent results monitoring. These systems will expand access to credit, improve targeting, and enhance competitiveness through data-driven decision-making.

**Mainstream Climate Adaptation and Green Growth:**

Acknowledging agriculture's dual position as both impacted by climate change and a contributor to climate change, NASIP mainstreams adaptation and resilience through Climate-Smart Agriculture (CSA) and regenerative practices. It promotes green-finance instruments, expanded insurance coverage, sustainable irrigation, and soil-health restoration, anchored in the Climate Change Act (2016) and the Kenya

Climate-Smart Agriculture Strategy. These measures ensure that productivity gains are achieved in harmony with environmental stewardship and low-carbon growth.

**Learn from experience and align with continental commitments:**

NASIP draws directly on the experience of NAIP I (2019–2024), its successes, gaps, and implementation lessons. Key takeaways include the need for stronger inter-institutional coordination, more predictable financing, and deeper private-sector participation. The new Plan integrates these insights into a unified investment framework that combines public, private, and blended finance with performance-linked delivery mechanisms. At the continental level, NASIP incorporates commitments from the Kampala CAADP Declaration (2025) and the concluding Malabo Declaration (2014) goals into Kenya's domestic policy and investment landscape. It reinforces mutual accountability through CAADP Biennial Reviews and Joint Sector Reviews, while prioritizing investments that enhance intra-African trade under the African Continental Free Trade Area (AfCFTA).

**Provide timely response to emerging realities:**

NASIP represents Kenya's structured response to a rapidly changing environment, marked by pandemics, climate shocks, technological disruption, and shifting global trade geopolitics. Domestically, it tackles persistent constraints of low productivity, limited agro-industrialization, and uneven access to finance and markets. By integrating innovation, resilience, and inclusion within a single investment framework, NASIP provides a coherent pathway to transform Kenya's Agri-food systems.

For investors, NASIP offers de-risked opportunities in high-growth areas such as digital agriculture, green finance, and climate-resilient value chains. It links public and private investments through blended-finance instruments and transparent accountability mechanisms, ensuring that every shilling mobilized contributes to sustainable, inclusive development.



*By using innovative farming methods, Paul has become a respected farmer in his area and even trains other young people. Technology will encourage rural youth to stay and modernize the agricultural sector instead of migrating. ©FAO/Luis Tato*

### 1.3 Lessons Learned from NAIP I (2019–2024) and ASTGS Mid-Term Review

The Mid-Term Review of the Agricultural Sector Transformation and Growth Strategy (ASTGS) and the implementation of NAIP I revealed critical insights that inform the design of NASIP:

Table 1: Lessons from NAIP I 2019-2024

Focus Area	Key Findings from NAIP I / ASTS Review	Lesson Integrated into NASIP 2026–2030
1. Fragmented Coordination and Devolution	Overlaps between national and county programs led to inefficiencies and duplication of resources (e.g., parallel input subsidy schemes).	Establish inter-governmental compacts, joint planning templates, and performance-based financing mechanisms to harmonize national and county efforts.
2. Low Private-Sector e.g.gement	Private investment averaged only 1–3% of agricultural GDP, constrained by high risk perception and limited credit access.	Introduce de-risking instruments, guarantees, and blended-finance facilities to mobilize 60–80% private and DFI capital participation by 2030.
3. Climate Vulnerability and Resilience Gaps	Recurrent droughts (e.g., 2021–2022) reversed productivity gains, with estimated losses exceeding KES 50 billion.	Mainstream Climate-Smart Agriculture (CSA) and early-warning systems across all flagships, targeting at least 25% insurance coverage for smallholders.
4. Data and Monitoring Deficiencies	Fragmented “data islands” and weak M&E systems limited adaptive management and accountability.	Invest in integrated digital platforms such as the KIAMIS and propose its scaling up into a national agriculture data hub to enable precision agriculture, traceability, and transparent results monitoring.
5. Inclusivity Shortfalls	Women and youth participation remained below 30% in most programs.	Institutionalize 40% participation quotas and design tailored financing and capacity-building instruments for women, youth, and marginalized groups.
6. Value-Chain and Market Linkages	High post-harvest losses (20–30%) persisted due to limited storage, processing, and logistics infrastructure.	Prioritize agro-industrialization, value addition, and trade facilitation under the AfCFTA and NASIP’s Agro-Industrialization Flagship.
7. Financing Sustainability	Dependence on external donors (40% of NAIP I finance) led to delayed disbursements and misaligned cycles.	Strengthen domestic resource mobilization through MTEF integration, enhance public-private co-financing, and expand long-term blended instruments for sustainability.

These lessons, drawn from reviews and stakeholder feedback, ensure that NASIP is more resilient, inclusive, and result oriented.

### 1.4 NASIP’s Role in Advancing the CAADP and Kampala Declaration Commitments

In January 2025, Heads of State and Government of African Union Member States adopted the Kampala CAADP Declaration on “Building Resilient and Sustainable Agri-food Systems in Africa” and the associated CAADP Strategy and Action Plan (2026–2035) at an Extraordinary Summit held in Kampala, Uganda. The Declaration calls on member states to integrate the Kampala CAADP commitments into their National Agri-food Systems Investment Plans (NASIPs), with all countries expected to have done so by 2028. NASIP 2026–2030 is Kenya’s direct response to this obligation, serving as the national instrument for domesticating all six Kampala CAADP commitments.

The six commitments of the Kampala Declaration address: (1) intensifying sustainable food production, agro-industrialization, and trade; (2) boosting investment and financing for Agri-food systems transformation; (3) ensuring food and nutrition security; (4) advancing inclusivity and equitable livelihoods; (5) building resilient Agri-food systems; and (6) strengthening Agri-food systems governance. NASIP’s flagships and investment priorities are structured to advance all these commitments across Kenya’s agri-food system.

The Kampala CAADP Strategy and Action Plan aims to mobilize \$100 billion in investment, lift Agri-food output by 45 percent, triple intra-African trade in agricultural goods, and cut post-harvest losses in half by 2035. NASIP’s investment targets,

value chain Programs, and trade facilitation measures are calibrated to Kenya’s proportionate contribution to these continental goals.

On accountability, the CAADP Biennial Review (BR) mechanism provides the platform for mutual accountability and peer review, motivating AU member states to deliver on agreed targets through well-designed, transparent, and performance-based monitoring and evaluation, with biennial sector reporting to the AU Assembly. At the country level, Agriculture Joint Sector Reviews (JSRs) are the primary inclusive process through which national progress is tracked, and their outcomes feed directly into the Biennial Review Report. NASIP’s monitoring and evaluation framework is designed to align with the CAADP Biennial Review indicators, ensuring that Kenya’s reporting to the AU Assembly draws on consistent, nationally validated data.

Key recommendations from Kenya’s NASIP formulation process include the need to strengthen the Agriculture Joint Sector Review and integrate it with the CAADP Biennial Review, improve coordination among Agri-food stakeholders, increase public agriculture expenditures toward the 10 percent target, and attract domestic and foreign private investment. These recommendations are directly embedded in NASIP’s governance, financing, and mutual accountability provisions.

## 2. Situation Analysis of the Agri-Food System in Kenya

### WHAT'S IN THIS CHAPTER

*An evidence-based review of Kenya's crop, livestock, and fisheries performance (2019–2024); macroeconomic context; the policy environment from global to national; and key challenges and opportunities for transformation.*

This situation analysis establishes the foundation for the NASIP 2026–2030 by examining key sub-sectors, trends, system shifts, and the overall investment environment at both national and county levels. It underscores the Agri-food system's pivotal role in driving sustainable economic growth, enhancing food and nutrition security, and promoting inclusive development amid rapidly evolving global and domestic pressures, including climate change, geopolitical disruptions, and macroeconomic volatility.

Between 2019 and 2024, during the implementation of NAIP I, the sector demonstrated remarkable resilience against multiple shocks but also faced significant volatility. Annual agricultural GDP growth averaged 2.7–4.0 percent, below the 6 percent CAADP target, constrained by recurrent droughts, the COVID-19 pandemic, and international market shocks,

such as rising input prices linked to the Russia-Ukraine conflict. Despite these challenges, agriculture played a stabilizing role during crises, cushioning the wider economy and protecting livelihoods.

To achieve transformational change under NASIP 2026–2030, the sector must move beyond “business as usual.” It must pivot decisively toward climate-smart, digitally enabled, inclusive, and private-sector-led growth models. This transition entails shifting from predominantly subsistence farming to commercialized, value-chain-integrated Agri-food systems, leveraging public–private partnerships (PPPs), blended finance, and data-driven governance to attract investment, strengthen resilience, and close an estimated KES 9.7 trillion (USD 75 billion) financing gap.

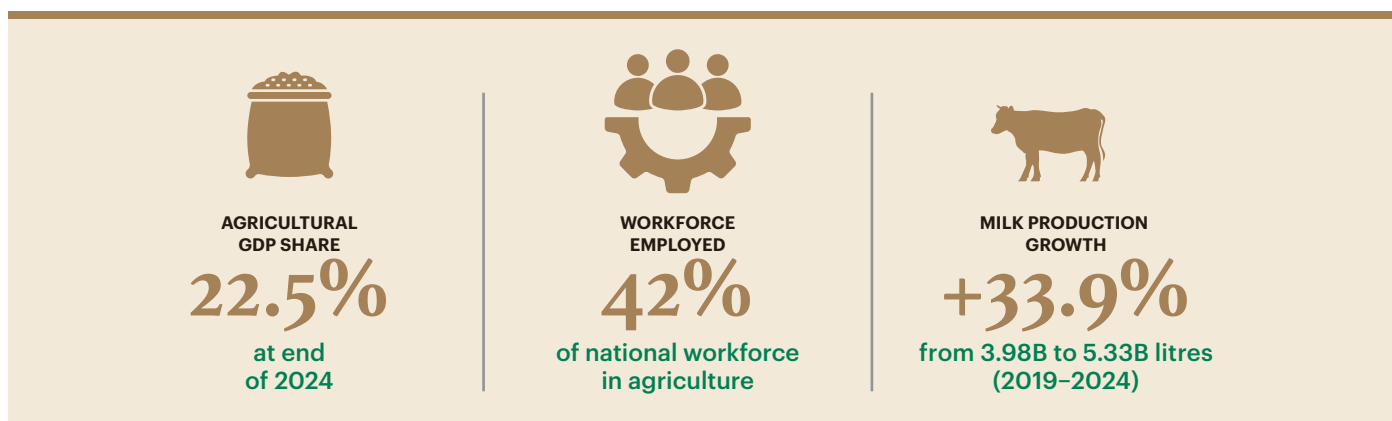
### 2.1 Evolution Toward an Agri-Food System Approach

Kenya's journey toward an integrated agri-food systems approach stems from national experiences and global momentum for sustainable, inclusive, and nutrition-sensitive development. For decades, policies emphasized production growth, boosting yields, expanding access to inputs, and expanding staple crop production, yielding output gains but failing to address food access, dietary diversity, rural incomes, and environmental resilience. The shift to a food systems lens accelerated around 2019 with the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019–2030) and the first National Agricultural Investment Plan (NAIP 2019–2024). Midterm reviews highlighted the limitations of productivity-focused interventions for food and nutrition outcomes. The COVID-19 pandemic (2020–2022) exposed supply chain vulnerabilities, causing shortages, price spikes, and income disruptions. This underscored the need for resilient, diversified, and equitable systems linking production, processing, trade, and consumption.

Kenya's participation in the UN Food Systems Summit (UNFSS, 2021) was pivotal, with national dialogs led by the Ministry of Agriculture and Livestock Development (MoALD), the Ministry of Health (MoH), and the Council of Governors (CoG) producing the Kenya Food Systems Transformation Pathway (2021). This formalized multi-sectoral coordination across food production, trade, nutrition, environment, and social protection.

Subsequent advancements, including food systems integration into Medium-Term Plan IV (MTP IV, 2023–2027) and the Kampala Declaration (2025), solidified this evolution. Additional progress includes the National Agroecology Strategy for Food Systems Transformation (2024–2033), which promotes sustainable practices, and the revised National Food and Nutrition Security Policy (NFNSP, 2025), which enhances alignment with global commitments such as the Sustainable Development Goals (SDGs).

## 2.2 Overview of the Agri-Food System



Kenya's agricultural sector encompasses crops, livestock, and fisheries, serving as a cornerstone for food security, export earnings, and rural livelihoods. Crops account for about 72 percent of agricultural GDP, while food crops such as maize, potatoes, wheat, rice, millets, beans, and sweet potatoes contribute roughly 32 percent of agricultural GDP and 0.5 percent of total exports. Horticulture and industrial crops, including tea, coffee, sugarcane, cotton, sunflower, pyrethrum, barley, tobacco, sisal, coconut, and bixa, represent nearly 70 percent of agricultural exports, reinforcing agriculture's central role in Kenya's economic structure and trade competitiveness.

From 2019 to 2024, the sector's performance fluctuated due to climatic variability and external shocks. Real agricultural GDP growth was positive in 2019 (4.5%), contracted in 2021 and 2022 (1.5 percent in 2022 amid drought) and rebounded to 6.5 percent in 2023 and 6.1 percent in the first quarter of 2024 following favorable rains and targeted fertilizer interventions.

Maize yields averaged 1.46–1.77 tonnes per hectare (t/ha) between 2019 and 2024, rising to 1.76 t/ha in 2023/2024 due to improved rainfall and input subsidies, translating to 4.29 million metric tonnes (tonnes) of production. Projections for 2024/2025 point to 1.81 t/ha and 3.8 million MT, rising to 1.91 t/ha and 4.4 million MT in 2025/2026. These levels remain below the global average of 5–6 t/ha, underscoring persistent constraints in soil health, irrigation coverage, and technology adoption.

In the edible oil sub-sector, structural import dependence persists. Kenya imports about 95 percent of its annual consumption (900,000 tonnes), primarily palm oil. In 2023, imports reached 720,000 MT, valued at KES 99–102 billion, with forecasts of 1.0–1.05 million MT by 2026. Domestic output currently meets less than 9 percent of demand. The Edible Oil Crops Promotion Project (EOCPP) targets 50 percent domestic production by 2028 through the expansion of sunflower and soybean cultivation.

Milk production rose by 33.9 percent, reaching 5.33 billion liters in 2024 from 3.98 billion liters in 2019. The cost of milk per liter rose from KES 30.0 in 2019 to KES 66.0 in 2024, representing an increase of 120 percent. Milk production has steadily grown over the years, mainly due to the intensification

of dairy cattle production, dairy cattle breed improvement, and better disease and pest control in dairy production systems. The number of cattle slaughtered was 2.6 million in 2019 and had not exceeded 3.0 million by 2024. The stagnation in these figures happened against a rising human population that was 48.7 million in 2019 and 55.65 million in 2024, an increase of 6.95 million people. The retail price of beef, however, rose from KES 422 per kg in 2019 to KES 616 per kg in 2024, an increase of 46 percent. The slaughter of sheep and goats increased by 32.9 percent from 8.05 million in 2019 to 10.7 million in 2024.

The number of camels slaughtered increased by 25.1 percent to reach 239,000 in 2024 from 191,000 in 2019, while 63.4 million chickens were consumed in 2019 compared to 69.2 million in 2024. e.g.consumption rose from 53.3 million trays in 2019 to 222 million trays in 2024. Production of hides decreased from 2.63 million in 2019 to 2.2 million in 2024, while sheep and goat skins increased from 8.1 million to 10.7 million pieces within the same period. Apiculture production increased from 15,251 MT in 2019 to 23,603 MT in 2024.

The total quantity of fish landed increased from 149,320.0 tonnes in 2019 to 177,196.0 tonnes in 2024, with a drop of 161,307.1 tonnes in 2023. Fish landed from fresh water sources decreased by 12.0 percent from 136,141.0 tonnes in 2022 to 119,816.0 tonnes in 2024. Fish production from marine sources registered an increase of 107 percent from 27,713.0 tonnes in 2020 to 57,380.0 tonnes in 2024. The total value of fish landed increased from KES 23.7 billion in 2019 to KES 39.7 billion in 2024. The value of fish production from freshwater sources contributed the highest share of the total value of fish landed from 2019 to 2024, despite a 6.0 percent drop in quantities between 2023 and 2024. The value of fish landed from artisanal marine sources increased by 129 percent to KES 10.25 billion over the same period.

Several factors, including climatic, environmental, economic, biological, and technological variables, affect the agriculture sector. Climate change remains the primary source of production volatility. Droughts in 2021–2022 and floods in 2024 damaged approximately 50,000 hectares of crops and led to the loss of 2.5 million livestock, triggering food price spikes of up to 40 percent and increased food insecurity.

Pests such as the Fall Armyworm (FAW) and desert locusts

continue to threaten cereal yields, highlighting the need for widespread adoption of climate-smart agriculture (CSA) and sustainable land-use practices.

In 2019 and 2020, Kenya experienced the worst desert locust invasion in 70 years. The invasion affected 28 counties and resulted in a loss of approximately 580,000 hectares of pastureland and 31,000 hectares of cropland, hence severely reducing animal feeds and the number of animals attaining slaughter weight. Many small-scale farmers depend on seasonal rains to cultivate crops, which predisposes them to the disadvantages of adverse weather and climate change. They often lack suitable storage facilities, leading to high post-harvest losses. Crop diseases and pests add to their stock of challenges.

The predominant smallholder dairy production and pastoralism in Kenya are characterized by poor record keeping, common grazing/feeding and housing, and minimal use of assisted reproductive technologies like Artificial Insemination (AI). Uptake of AI is estimated at 20 percent and less than one percent in dairy and beef cattle production, respectively; its use is negligible in other species of animals. These attributes predispose animals to many breeding diseases. Inadequate extension services regarding the benefits of AI, heat detection, and timing of insemination; high cost of AI equipment and inseminations; and long distances to AI centers contribute to low adoption of AI in many parts of the country.

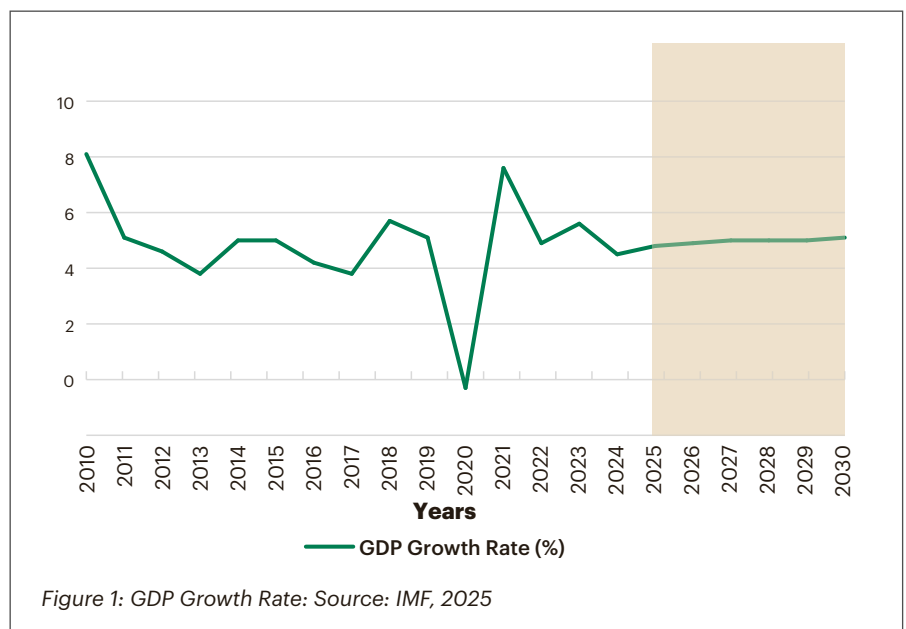
Feeds account for over 70 percent of the total cost of animal production. Available feed is estimated to be 25 million MT against a national feed requirement of 55 million tonnes of Dry Matter, representing a 55 percent shortage of Dry Matter or 30 million tonnes (State Department of Livestock Development, 2021).

In the ASALs, emerging land uses threaten pastoralism and the livelihoods of pastoralists. Climate change effects, particularly droughts, aggravate feed scarcities and adversely affect animal production. Non-ruminant and aquaculture production require manufactured feeds. However, good quality raw materials are not often guaranteed, and the capacity for their production is inadequate. Duty waivers on the import of feed ingredients are granted but not consistently implemented. Degradation of water bodies by pollution from upstream crop farming activities, disposal of garbage, and discharge of sewage and industrial

waste interferes with wild fish feeding in lakes and rivers.

Kenya experiences a wide range of animal diseases that have a great adverse impact on livelihoods, trade, and wealth. Transboundary Animal Diseases (TADs) such as Foot and Mouth Disease (FMD) and Peste des Petits Ruminants (PPR) have direct consequences for Kenya's export trade in livestock and livestock products, as disease prevalence triggers trade bans and restricts market access to high-value regional and international markets, undermining export earnings and competitiveness. The Government tends to put more emphasis on vaccination of animals rather than farm biosecurity, disease surveillance, and control of animal movement, which are more cost-effective and can be easily applied by farmers.

Advancing animal disease control embodies One-Health by reducing disease-causing organisms in humans, over 60 percent of which originate from animals. Moreover, about 75 percent of emerging human diseases like COVID-19, Ebola, and Avian Influenza directly come from animals. Fewer healthy animals produce more per unit animal and therefore lower emissions per unit output (Global Animal Health Association, 2025). At the county level, devolution has enhanced local responsiveness but also created coordination challenges. The 47 counties exhibit distinct agricultural archetypes, high-potential highlands (e.g., Uasin Gishu for maize and dairy), horticulture belts (e.g., Nakuru for perishables), arid and semi-arid lands (ASALs) (e.g., Turkana for livestock), and coastal niches (e.g., Kilifi for fisheries). However, inconsistent county by-laws, uneven capacity, and data fragmentation continue to impede alignment with national objectives and investment coordination.



### 2.3 Macroeconomic Context: Status of Agri-Food Systems

Kenya’s economy grew at an average of 4.5% annually during the period 2019–2024, with agriculture at 2.7%, below the 6% ASTGS target. The sector’s GDP contribution averaged

22%, stabilizing the economy amid shocks. Fiscal deficits averaged 7% of GDP, with rising debt (debt-to-GDP 70% in 2024) constraining public funding. Agriculture receives much less than 10% of the national budget, far from CAADP’s target. Private investments are low: domestic at 1% and foreign at 3.1% of agricultural GDP, versus Malabo targets of 5% and 9%. Kampala Commitments aim for KES 12.9 trillion (USD 100 billion) in public-private investments. Inflation stabilized at 5% in 2025 projections, but food inflation influences overall rates. The Kenyan shilling depreciated against the US dollar, boosting export competitiveness (e.g., tea/coffee) but raising import costs for inputs and food. The projected population growth to 58 million by 2030 will increase food demand, requiring productivity gains amid stagnant cereal yields.

Climate and market shocks pose risks: frequent droughts/floods and geopolitical tensions (e.g., US tariffs) unsettle futures markets. In 2024–2025, agriculture’s health shows resilience (Q2 2025 growth 4.4%) but vulnerability, exports rose in coffee/fruits but faced revenue pressures in flowers. Overall, the sector’s macroeconomic health is stable but constrained, with 2025 GDP projections at 4.5–5.6%.

Transformational investment requires shifting from aid-dependent models to de-risked private capital, targeting 50–60% private finance under NASIP.

The long-term target for overall GDP growth was set at 10% annually in the Kenya Vision 2030. The ASTGS set a growth target for the agricultural GDP at a 6% annual growth rate, aiming to increase its contribution to the manufacturing sector. Over the past five years, the economic performance remained volatile due to climate and market shocks experienced during the

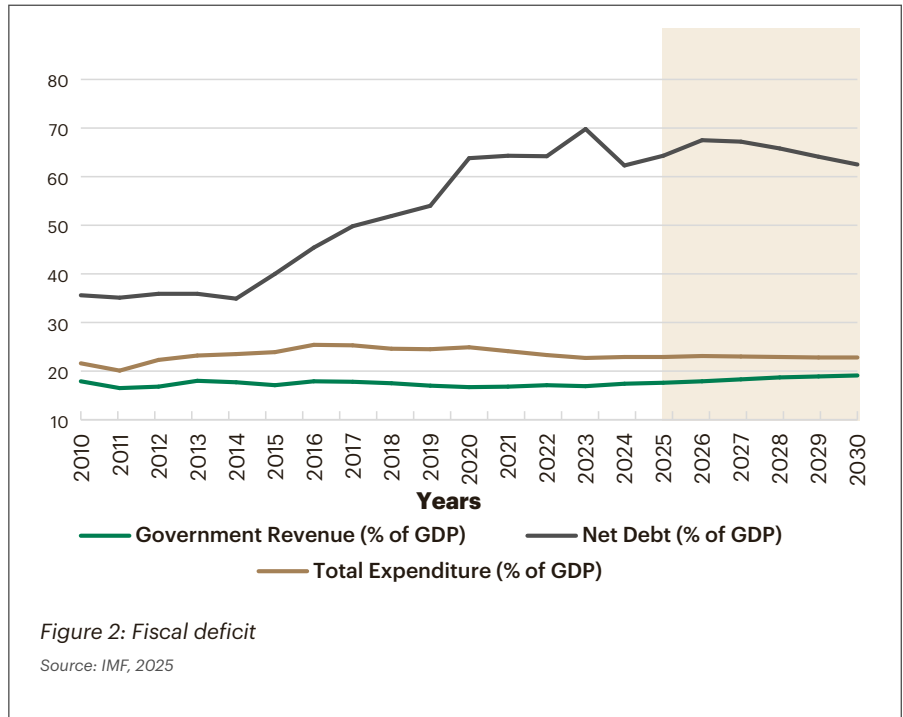


Figure 2: Fiscal deficit  
Source: IMF, 2025

period, as the overall economy grew at an average annual rate of 4.5%, and the Agricultural GDP grew at 2.7%. The Fourth Medium Term Plan 2023–2027, titled “Bottom-Up Economic Transformation Agenda for Inclusive Growth,” aims to achieve an overall growth rate of 7.2% by 2027. The outlook for the medium-term economic growth remains stable at 4.9%

The sector currently contributes one-fifth of the economy, and the significant reliance on the sector for economic performance is unlikely to shift over the medium-term. Direct contributions to household incomes and jobs, as well as indirect contributions through agro-processing and services, will essentially maintain the sector’s economic significance.

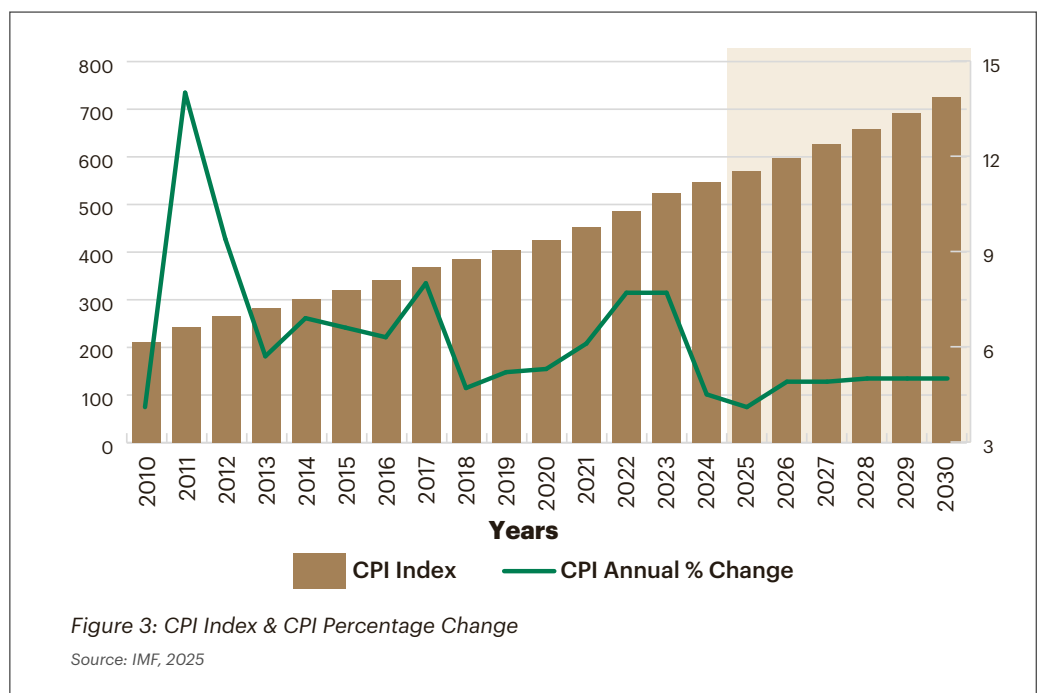


Figure 3: CPI Index & CPI Percentage Change  
Source: IMF, 2025

**The fiscal deficit remains a key challenge** for the government, with rising debt servicing costs significantly contributing to the deficit. The fiscal deficit has averaged 7% of GDP over the past five years, with the debt rising due to borrowing to bridge the budget deficit. The government embarked on fiscal consolidation to control government expenditure and reduce the deficit and restructure debt to ease debt repayment pressure. The implication for the sector is a constrained public sector funding environment, which suggests that much of the investments in the sector should be driven by private sector investments.

**Private sector financing, both domestic and foreign, in the sector remains low** and far below target. Domestic private sector investments as a share of agricultural GDP averaged 1% over the past five years, while foreign private sector investments accounted for 3.1% of GDP. The target for the Malabo Commitments was 5% and 9% for domestic and foreign private sector investments as a share of agricultural GDP. The Kampala Commitment sets a target of KES 12.9 trillion (USD 100 billion) in public and private sector investments in agriculture.

**Prices are projected to be stable**, with the annual inflation growth rate projected to remain at 5%. Food inflation continues to have a significant influence on overall inflation. As such, any shocks, whether climate-related or market-related, will upset this assumption. The exchange rate is projected to deteriorate against the US dollar, which will have both

positive and adverse effects on the sector. For agricultural exports, the country's products will be competitive in global markets, sustaining incomes and driving growth. However, as a net importer of food, there will be inflationary pressure, especially if the share of imports to total demand increases.

**The population is expected to grow** to 58 million people by 2030, although the population growth rate is declining. The growing population implies increased food demand, and a strong sector performance is required to ensure livelihood support, which is estimated to account for 70% of the population. Cereal productivity has remained relatively stagnant, and although the population growth rate is expected to continue declining, the country must still increase agricultural productivity to ensure food security and support for households reliant on agriculture for livelihoods.

**Climate and market shocks** will pose a risk to the projected outlook. The frequency of climate shocks implies that the country can expect adverse climate-related shocks over the medium term. The global geopolitical realignments have increased uncertainties in international markets and will influence both input and output markets. For example, the retaliatory tariffs imposed by the United States have already shifted agricultural markets, leading to the formation of new alliances. The agricultural futures markets are already unstable and are likely to be followed by measures affecting trade. This will have direct ramifications for households in terms of incomes and food security.

## 2.4 Trends in Kenya's agriculture sector and the investment landscape

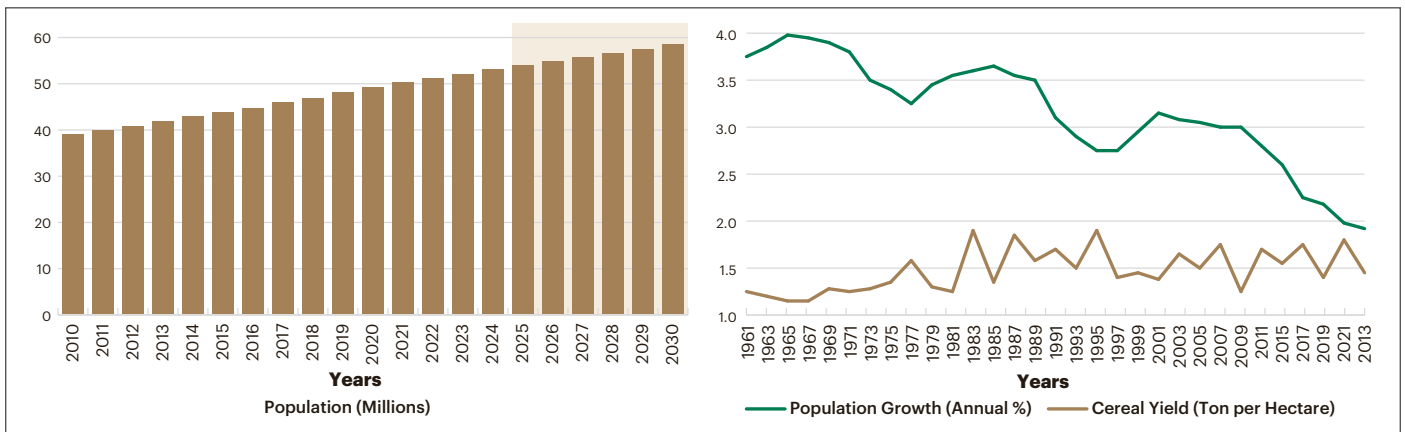


Figure 4: Population and Cereal yield trends

Source: IMF, 2025 and World Bank, 2025

### FOOD CROPS

The crops sub-sector comprises food and industrial crops. Important food crops include maize, potatoes, wheat, rice, millet, beans and cowpeas, green grams, pigeon peas and sweet potatoes. The industrial crops which are largely produced for export include coffee, tea, horticultural crops (flowers), sugarcane, sisal, cotton, and pyrethrum. These crops are important in the country's food and nutrition landscape, generation of household-level income and, especially for the industrial crops, generation of foreign exchange. Through the implementation of NAIP I (2019-2024), the crops subsector was targeted for productivity improvement to ensure sufficient production for domestic consumption and export needs.

**CEREAL CROPS**

Cereal production, particularly maize, has faced persistent challenges. While there were periods of recovery, especially due to timely rains and fertilizer subsidies, yields have been inconsistent. Between 2019 and 2022, maize productivity declined from 1.79 T/Ha to 1.46 T/Ha but has since recovered to 1.76 T/Ha in 2023 (Figure 5) and may have increased further in 2024, driven by rains and input support through the subsidy program by the government. In 2024, production was indicated to have increased to 44.7 million 90 kg bags (approximately 4.02 million metric tonnes), down from 47.6 million bags in 2023 (KNBS Economic Survey 2025). These levels remain below the global average of 5–6 t/ha, underscoring persistent constraints in soil health, irrigation coverage, and adoption of technology.

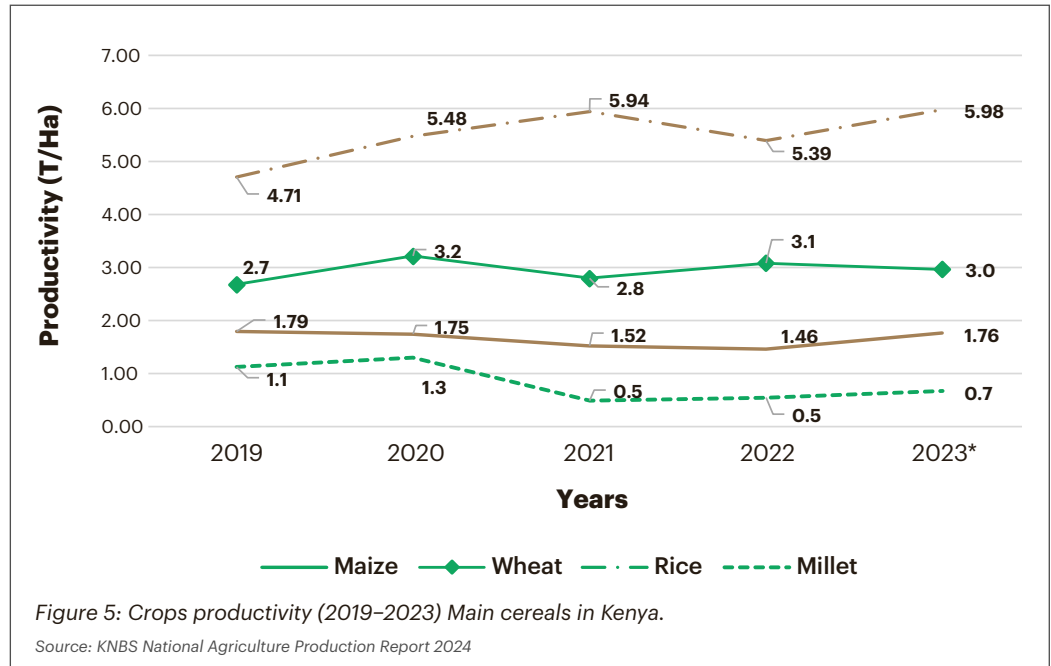


Figure 5: Crops productivity (2019–2023) Main cereals in Kenya.

Source: KNBS National Agriculture Production Report 2024

Wheat productivity grew from 2.7 t/ha in 2019 to 3.0 t/ha in 2023, while rice showed gradual growth from 4.71 t/ha to 5.98 t/ha over the same period of NAIP I implementation. However, the productivity of millet has been on a gradual decline from 1.1 t/ha in 2019 to 0.7 t/ha in 2023, which could be attributed to shifts into other food crops such as maize. However, despite marginal growth in production of these cereal commodities, the country remains a net importer of the national requirements, especially for wheat, rice, and smallholder grains like millet and sorghum.

**ROOT TUBERS**

Other than cereals, Irish and sweet potatoes are other crops of interest at the national level due to their increasing consumption level. The productivity of Irish potatoes grew from 9.53 t/ha in 2020 to 9.65 t/ha in 2023 (Figure 6) was largely driven by increased production (14%), which, over the period of NAIP, grew slightly faster than the area under production (13%). The decline in productivity in 2022 was occasioned by a decline in production that went down to 1.8 million tonnes from 2.3 million tonnes in 2021 due to below-average rainfall in the season. The productivity of sweet potatoes remained constant but with a marginal decline from 12.8 t/ha in 2019 to 12.3 t/ha in 2023 at an average productivity of 12.2 t/ha over the NAIP I implementation period.

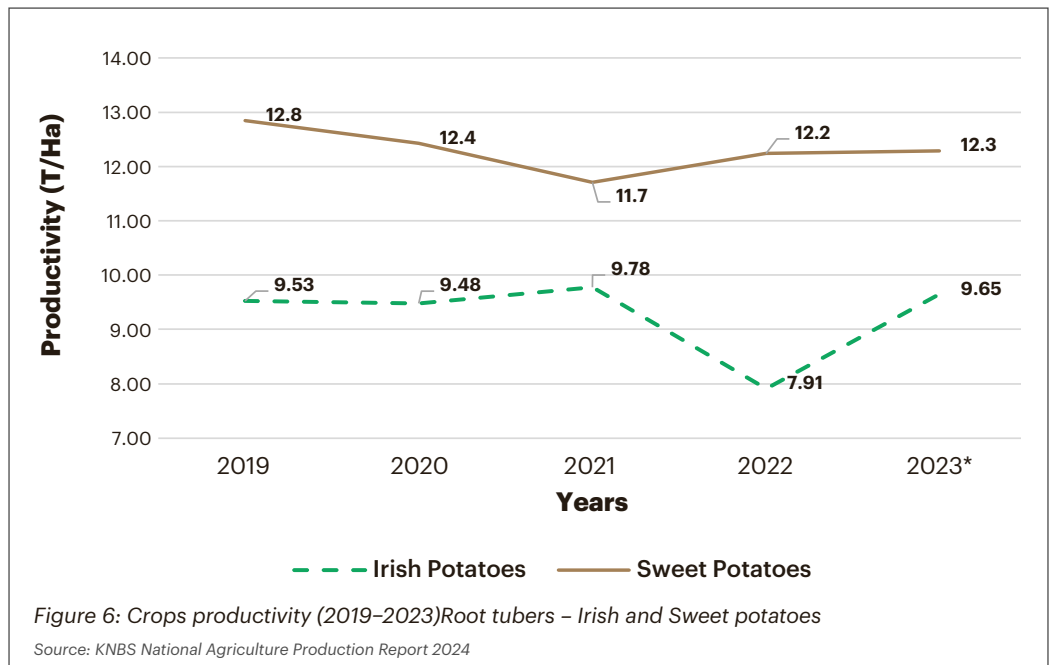


Figure 6: Crops productivity (2019–2023) Root tubers – Irish and Sweet potatoes

Source: KNBS National Agriculture Production Report 2024

**LEGUMES**

Important legumes in the country include beans, green grams, pigeon peas, and cowpeas. The productivity of beans, green grams, pigeon peas, and cowpeas has remained constant. The productivity for beans and cow peas, for instance, remained low at 0.7 t/ha, but with green grams and pigeon peas declining marginally from an average of 0.6t/ha and 0.7 t/ha, respectively (Figure 7).

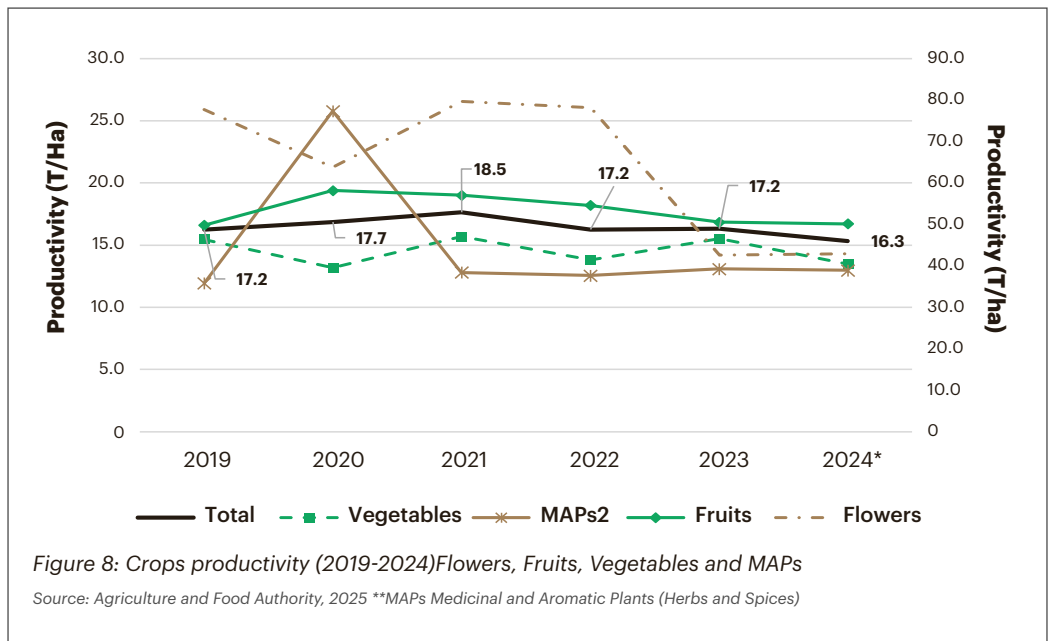
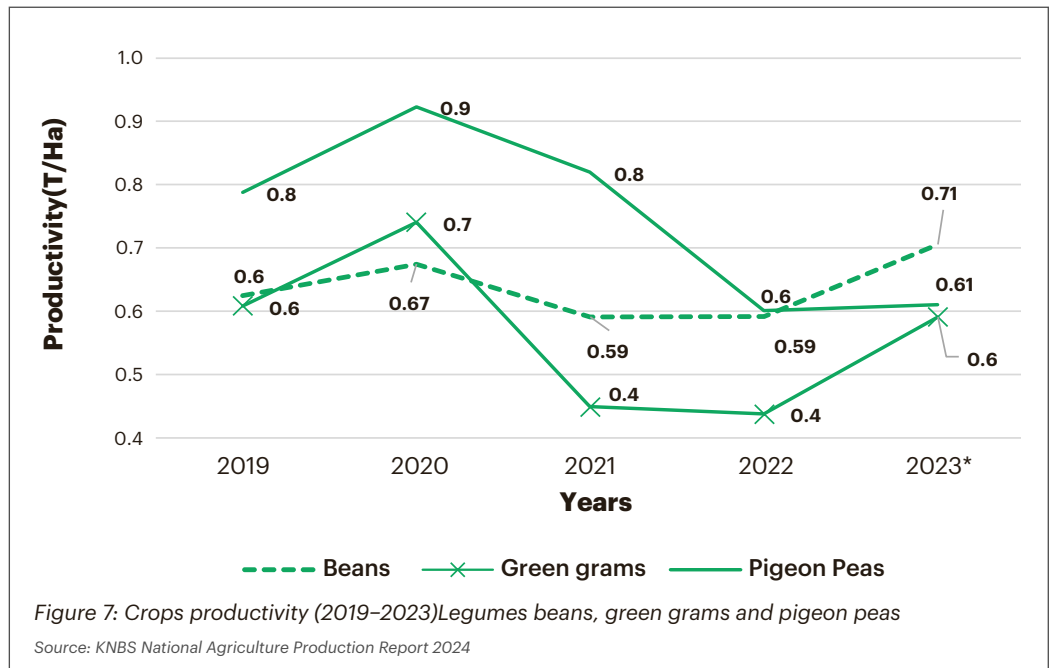
**HORTICULTURAL CROPS**

Figure 8 shows production performance for horticultural crops, i.e., flowers, fruits, vegetables, and medicinal and aromatic plants (herbs and spices). Horticultural crops recorded declining productivity, with cut flowers, herbs, and spices showing the largest declines during the NAIP 1 implementation period. The productivity of horticultural products (aggregated fruits, vegetables, and cut flowers) has been on the decline. While the trend increased between 2019 and 2021 from 17.2 t/ha to 18.5 t/ha, it declined to 16.3 in 2024.

The sub-sector has shown a fluctuating performance, with the quantity of exported cut flowers increasing from 173.7 thousand tonnes in 2019 and declining to 146.0 thousand tonnes in 2020. In 2021, the quantity exported rose to 210.1 thousand tonnes but has since declined to 102.5 thousand tonnes in 2024. Exports of fruits have been on a positive trend, increasing from 81.9 thousand tonnes in 2019 to 225.4 thousand tonnes in 2024, driven by the expansion of production of avocados in the central counties. A gradual increase in export of vegetables was realized from 72.7 thousand tonnes in 2019 to 75.4 thousand tonnes in 2022, and then an upward spike in 2023 to 164.1 thousand tonnes, but declined to 74.3 thousand tonnes in 2024.

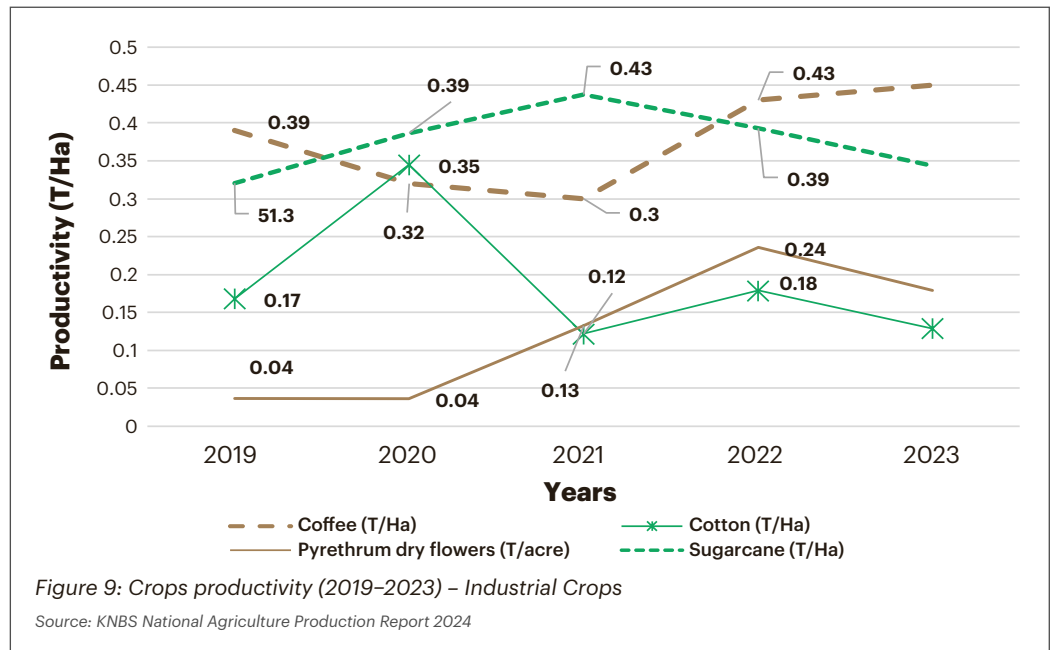
Cut flowers contribute about 40% of the value of horticultural crops. The decline in productivity has resulted in this contribution being reduced to 28%. The value of production for fruits, herbs, and spices rose due to an increase in prices, especially in global markets where these products are targeted. The value of exports follows a similar trend to the quantity of exports. The value of exported cut flowers has been on a declining trend since 2019, from KES 104.1 billion to KES 72.1 billion.

Whereas the value of exported fruits increased over the 2019-2024 period from KES 13.2 billion in 2019 to KES 41.0 billion in 2024, the value of exported vegetables declined gradually from KES 27.2 billion in 2019 to KES 23.4 billion in 2024.



### INDUSTRIAL CROPS

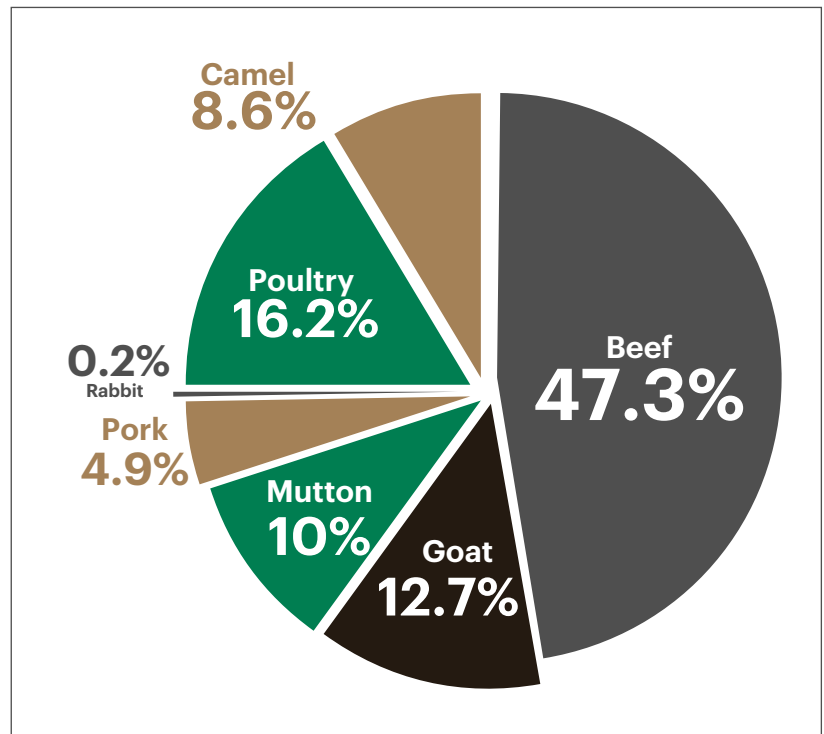
Industrial crops, including coffee, tea, sugarcane, sisal, and cotton, among other emerging crops such as macadamia, are important for foreign income generation. The productivity of coffee, pyrethrum, and sugarcane showed marginal increases from the pre-NAIP I level. Coffee productivity increased from 0.39 t/ha in 2019 to 0.45 t/ha, while pyrethrum (dry flowers) productivity increased from 0.04 t/acre to 0.18 T/acre between 2019 and 2023 (Figure 10). This is attributed to efforts to revive the two crops, which have entailed incentive-driven coffee production, reorganization of the management and governance of the coffee sector, and marketing. The pyrethrum sub-sector has witnessed reorganization of the management of the pyrethrum board and incentives toward production. Sugarcane productivity increased from 51 t/ha in 2019 to 70 t/ha in 2021 and went back to 55 t/ha in 2023. The fluctuation in sugarcane productivity tracks the patterns of rainfall and lagged import trends.



Over the NAIP I implementation period, the productivity of cotton increased drastically from 0.17 T/Ha in 2019 to more than double in 2020, to 0.35 T/Ha in 2020, and thereafter experienced a drastic decline to 0.13 T/Ha in 2023.

### LIVESTOCK AND FISHERIES

The livestock sub-sector employs an estimated 50% of the agricultural labor force and over 10 million Kenyans in the Arid and Semi-Arid Lands (ASALs). In 2019, Kenya had a wide range of livestock resources comprising 2,209,980 exotic dairy cattle; 559,174 exotic beef cattle; 13,005,664 indigenous cattle; 19,307,445 sheep; 28,011,800 goats; and 4,640,085 camels. In addition, there were 30,320,632 indigenous chickens; 5,580,766 exotic layer chickens and 2,914,840 exotic broiler chickens. Beehives were 1,157,162, while donkeys and rabbits were 1,176,374 and 561,351, respectively (KNBS, 2019). Kenya’s livestock resources contribute approximately 4.2 percent of the Gross Domestic Product (GDP) and account for nearly 20 percent of the Agricultural GDP. The livestock resource base in Kenya was valued at KES 795 billion, while the total annual livestock products value was estimated at KES 1,891 billion in 2016.



The number of cattle slaughtered declined between 2019 and 2024, while the population of sheep and goats consumed increased (Table 4). The number of pigs slaughtered has also been on a gradual increase over the 2019–2024 period, increasing from 222,000 in 2019 to 665,000 in 2024. The increase in the number of chickens and pigs slaughtered against declining cattle and sheep reveals a shift from beef and chevon/mutton (red meat) to chicken and pork (white meat) consumption. This shift may be informed by increasing health awareness, as well as due to price and income changes.

Table 2: Livestock Slaughtered 000

		2019	2020	2021	2022	2023*	2024*
Cattle and Calves	000 Head	2,633.50	1,953.70	2,004.90	1,783.10	1,903.30	2,243.60
Sheep and Goats	000 Head	8,048.00	12,040.20	9,478.00	7,281.00	9,906.20	10,700.40
Pigs	000 Head	222.00	397.00	355.50	432.00	616.00	664.90
Rabbits	000 Head	1,468.30	2,140.80	827.80	532.60	542.10	546.10
Chicken	000 Head	63,370.50	49,437.30	63,892.90	66,672.10	66,873.00	69,240.90
Camels	000 Head	191.90	204.70	130.40	81.10	184.00	239.00
Donkeys	000 Head	1,663.00	1,232.60	1,393.60	1,729.90	1,724.50	0.00

Source: KNBS Economic survey, 2025 (various)

An examination of meat consumption revealed that beef is still the mainly consumed meat in the country despite the declining number of cattle slaughtered. Between 2019 and 2023, on average, beef accounted for 47% of the meat consumed in the country. Poultry, chevon and mutton accounted for 16.2%, 12.7% and 10% of the total meat consumed in the country respectively (Figure 12). However, the share of beef in the overall meat composition has been on a decline from 55% in 2019 to 47% in 2024 while the shares of chicken and pork have been on an upward trend.

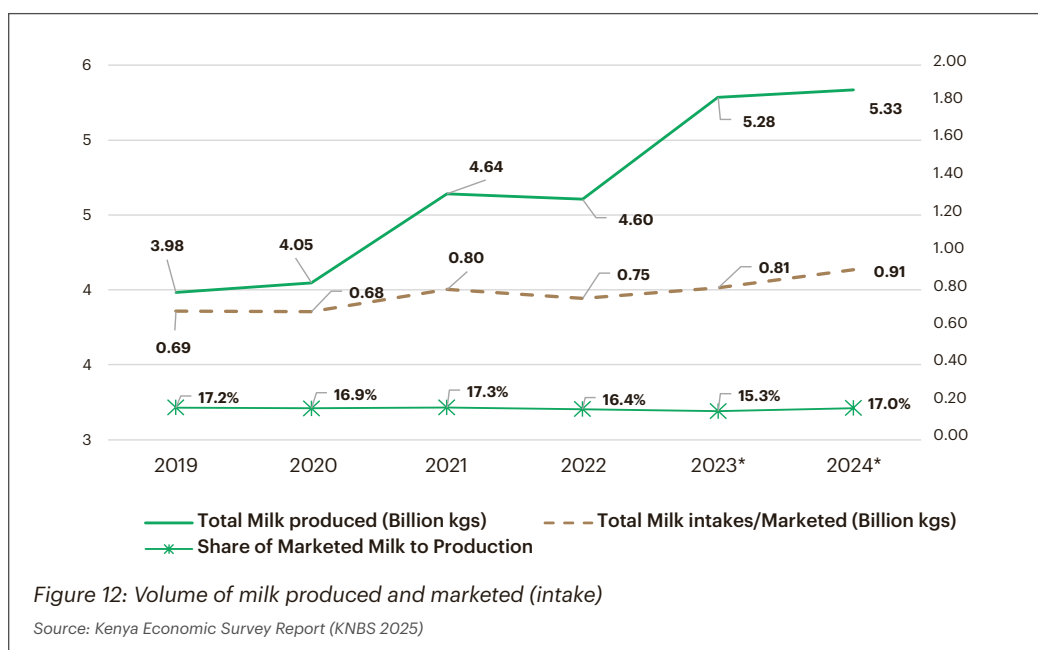
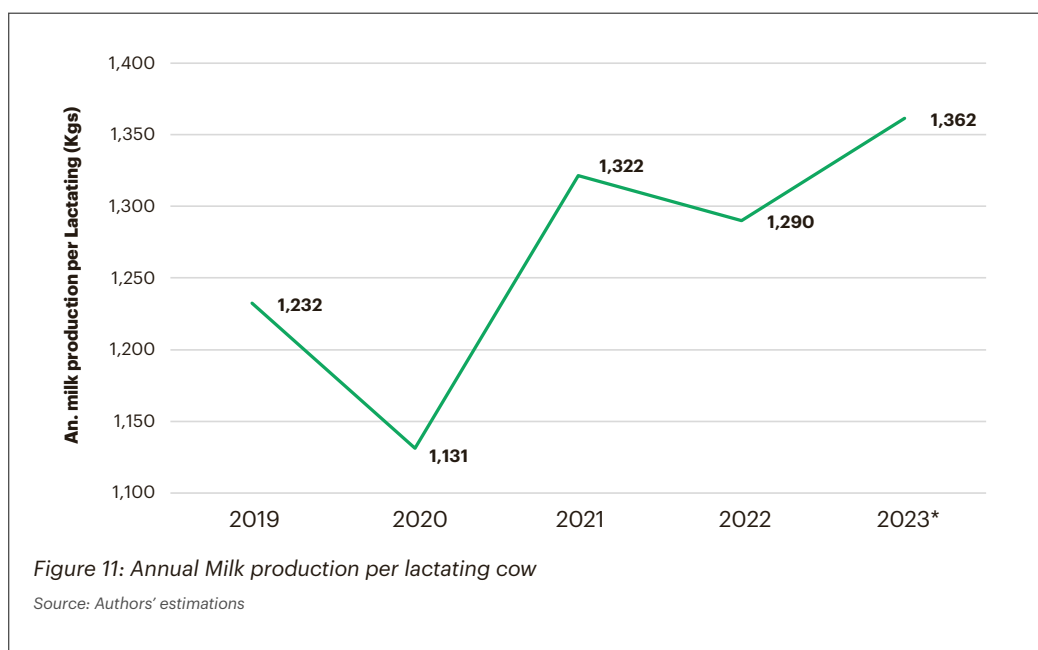
### MILK PRODUCTION

#### Milk production and marketed quantities:

Productivity of dairy cattle increased during the NAIP I implementation period, as expected in Flagship 2. Although productivity dipped between 2019 and 2020, it increased gradually from 1,131 liters in 2020 to reach 1,362 kgs in 2023 (Figure 11). However, the productivity fell short of reaching the NAIP I target productivity of 1,390 liters.

The quantities of milk produced increased by 33.9 percent from 3.98 billion liters in 2019 to 5.33 billion liters in 2024 over the NAIP I implementation period (Figure 12). This was driven by the steady growth of the dairy herd due to the intensification of dairy cattle breed production systems. Between 2022 and 2024, the drought situation eased off, and above normal rains were received in most parts of the country, the recorded increase in milk production.

The quantity of milk processed tracked the production quantities. The quantities of marketed milk decreased by 0.22 percent from 0.69 billion liters in 2019 to 0.68 billion liters in 2020 before rising by 17.2 percent to 0.80 billion liters in 2021, then dropping to 0.75 billion liters in 2022. The quantity of



milk marketed has been on a gradual increasing trend between 2022 and 2024, realizing an increase from 0.81 to 0.91 billion liters, a 20.3 percent increase.

**Marketed share of milk:** The marketed shares of processed and formally marketed milk hovered around 15% percent and 17% of the total milk production over the period. This points to the fact that the intended transformation of value addition to livestock products was not realized. More processing increases the productivity of a value chain and downstream jobs, for example, procedures for processing, manufacturing, and supplying ingredients for processing, manufacturing, and supplying packaging equipment, distribution, and retailing. The quantities of processed milk and cream decreased by 6.5 percent from 489.7 million liters in 2019 to 457.9 million liters in 2020, then increased to 510.6 million liters in 2021 before dropping to 473.6 million liters in 2022. However, between 2022 and 2024, there was an increase of 31.1 percent in quantities of processed milk and cream. Regarding the quantities of cheese processed, there was a continuous drop from 305.4 tonnes. From 93.2 tonnes in 2019 to 93.2 tonnes in 2022, followed by a 44.3 percent increase to 134.5 tonnes in 2024.

### OTHER LIVESTOCK PRODUCTS

Several other products are produced over the livestock value chain. These include eggs, honey, wax, hides and skins, and wool. Table 5 shows the trends of production of other livestock products from different livestock over the period 2019 to 2024. COVID-19 Pandemic and locust invasion adversely impacted hides and skins production. Hides and skins are the raw material for the leather value chain, and the level of production determines the volume of work, investments, and the success of the chain. The performance of other livestock products largely mirrored the sector’s shocks e.g., production was highly volatile, honey and wax showed mixed growth, and the production of hides and skins declined steeply. This decline in hides and skin represents a significant constraint to the competitiveness of the leather value chain.

Table 3: Production of other Livestock Products 2019 – 2024

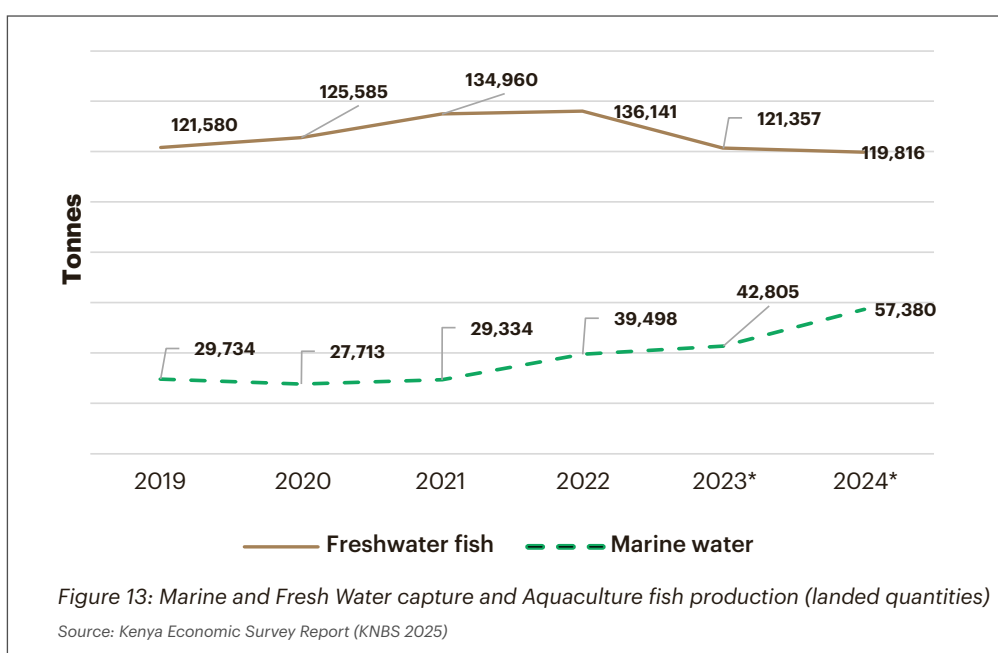
	2019	2020	2021	2022	2023
e.g. (No. of trays) 000	140,644.20	296,652.20	240,854.20	97,948.80	194,721.80
Honey (Kg)	13,876.80	17,800.90	17,265.10	19,777.20	17,151.10
Wax (Kg)	1,374.40	1,716.50	5,783.30	2,824.90	3,212.20
Hides (No.) 000	34,381.20	2,625.50	1,731.30	1,253.10	1,285.80
Skins (No.) 000	3,176.10	7,036.00	2,864.20	1,734.90	2,141.90
Wool (kg)		909.8	1,505.00	1,211.60	1,792.80

Source: Kenya Economic Survey Report (KNBS 2025)

### FISH PRODUCTION

Figure 13 shows the quantity of fish landed. The total fish landings increased from 149,320 tonnes in 2019 to 177,196 tonnes in 2024. However, this growth was not uniform.

- Freshwater:** Freshwater catch declined by 12% from 2022 to 2024. This was primarily driven by a drop in Lake Victoria’s yields, attributed to challenges like overfishing, habitat loss, water hyacinth, and eutrophication.
- Marine:** In contrast, the marine catch more than doubled between 2020 and 2024, from 27,713 tonnes to 57,380 tonnes. This success was a result of the use of larger vessels, access to deeper seas, and improved surveillance against illegal, unreported, and unregulated (IUU) fishing.
- Aquaculture:** Cage aquaculture, driven by private investment, showed expansion. However, stakeholders cite high feed costs and environmental management as key barriers to scaling the subsector.



## 2.5 The NASIP Policy and Institutional Context

NASIP is the operationalization tool for the Government's high-level policy agenda, ensuring investments are strategically aligned across global, continental, regional, and national frameworks. Together, these frameworks define the policy coherence and investment priorities guiding Kenya's agri-food systems transformation.

### GLOBAL POLICY CONTEXT

The United Nations Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), remain central to NASIP's objectives of ending hunger, achieving food security and nutrition, and promoting sustainable and climate-resilient agricultural systems. The plan also contributes to broader SDG targets on poverty reduction (SDG 1), inequality (SDG 10), sustainable consumption and production (SDG 12), and climate action (SDG 13). The emphasis of SDG 2.4 on sustainable food-production systems is directly reflected in NASIP's focus on increasing smallholder farmer incomes and building resilience in arid and semi-arid lands (ASALs). To advance SDG 13, NASIP integrates climate-resilience investments, including drought-tolerant seeds, small-scale irrigation, and climate information services, all reinforcing the goal of sustainable food systems.

### CONTINENTAL POLICY CONTEXT

NASIP aligns with Agenda 2063, the African Union's vision for a prosperous and food-secure continent, and with the Comprehensive Africa Agriculture Development Program (CAADP). While NAIP operationalized the Malabo Commitments (2014), NASIP incorporates the Kampala CAADP Commitments (2025), comprising six commitments, 22 targets, and 35 intervention areas. The Kampala Declaration emphasizes transforming Africa's agri-food systems through increased productivity, accelerated agro-industrialization, and enhanced intra-African trade, while reaffirming the original CAADP targets: allocating 10 percent of national budgets to agriculture, achieving 6 percent annual sector growth, and halving poverty and hunger.

### REGIONAL POLICY CONTEXT

At the regional level, NASIP is consistent with the East African Community (EAC) Vision 2050, which seeks to ensure regional food security, liberalize cross-border trade in agricultural goods, expand production across crops, livestock, fisheries, and forest products, and promote value addition through agro-processing. These aspirations, together with regional market integration under the AfCFTA, reinforce NASIP's emphasis on competitive, trade-driven agri-food value chains.

## 2.6 County-Level Dynamics: Agri-Food Systems Realities under Devolution

Under devolution, Kenya's 47 counties bear full responsibility for frontline agricultural functions, including extension, livestock health, irrigation, input delivery, and local market infrastructure. This has enabled more localized service delivery and allows counties to align interventions with their agro-ecological conditions. However, structural imbalances persist between high-rainfall and arid and semi-arid land

### NATIONAL POLICY CONTEXT

Nationally, NASIP is grounded in Kenya's Constitution (2010), Vision 2030, the National Agricultural Policy, Veterinary Policy, National Livestock Policy, National Oceans and Fisheries Policy, the National Aquaculture Policy, and the Medium-Term Plan IV (MTP IV, 2023–2027), which integrates the government's Bottom-Up Economic Transformation Agenda (BETA). The Constitution, under Article 43(1c), guarantees every person's right to be free from hunger and to have adequate food of acceptable quality, while the Fourth Schedule defines the distribution of agricultural functions between national and county governments, providing the legal foundation for Kenya's devolved system of agricultural service delivery.

NASIP's alignment with these national frameworks can be summarised as follows:

- **Kenya Vision 2030:** NASIP contributes directly to the Economic Pillar by enhancing productivity, commercialization, and value addition, with a target of 10 percent annual growth in the sector. Vision 2030 further informs NASIP through its focus on increasing investment, strengthening research and development, and improving extension services.
- **Bottom-Up Economic Transformation Agenda (BETA):** NASIP directly targets the BETA goal of achieving food and nutrition security through productivity enhancement in five priority value chains (Flagship 2), irrigation expansion (Flagship 3), and promoting exports (Flagship 4). The agriculture pillar of the BETA model, centred on food and nutrition security, import substitution, and export growth, guides NASIP's selection and prioritization of flagship investment Programs. BETA also provides direction through its emphasis on MSMEs (trade, markets, finance, and enterprise development) and the digital and creative economy (infrastructure, skills, and innovation).
- **Agriculture Sector Transformation and Growth Strategy (ASTS):** NASIP serves as the five-year Investment Plan for the second phase of the ASTGS' long-term vision (2019–2029).
- **Medium-Term Plan IV (MTP IV):** NASIP is fully aligned with MTP IV's agricultural priorities and resource allocation framework, ensuring a clear budgetary pathway for implementation.

(ASAL) counties, between subsistence and commercial farming, and between large-scale and smallholder operations.

Smallholders dominate production across all regions yet face common constraints: limited access to credit, mechanization, extension services, and markets. Land fragmentation, high input prices, and low participation by youth and women further suppress productivity and commercialization.

County-level performance is consistently weakened by a cluster of systemic pain points. Market and policy fragmentation, including inconsistent cess fees and by-laws across county boundaries, raises transaction costs and discourages private investment. Fiscal volatility, delayed disbursements, and neglected operation and maintenance of irrigation and market infrastructure erode the value of public spending. Weak data systems, high staff turnover, cartelized procurement, and overlapping national and county programs in areas such as input subsidies and extension further reduce efficiency. Food safety and sanitary and phytosanitary (SPS) standards remain unevenly enforced, producer organizations are underdeveloped, and coherent disaster risk and resilience strategies are largely absent at the county level.

County agriculture budgets currently range between 2 and 6 percent of total county expenditure, well below the level needed to leverage co-financing or catalyze private investment. County governments should target a minimum allocation of 10 percent of development budgets to agri-food systems, consistent with the CAADP commitment. Macroeconomic pressures, including high public debt, inflation, and elevated interest rates, compound the fiscal constraint.

Despite these challenges, investor interest is rising in agro-processing, feed and seed systems, aquaculture, and climate-smart irrigation, all areas suited to blended finance solutions. NASIP 2026–2030 must move beyond national-level planning to county-anchored transformation, guided by differentiated investment packages by agro-ecological archetype, harmonized policies on cess and market regulation, and performance-based national-county compacts. Devolution provides the structural foundation; the determinants of whether it delivers food security, employment, and inclusive growth are performance-based coordination, co-financing, and digital integration.

## 2.7. Challenges and Opportunities for Agri-Food System Transformation

Kenya’s agri-food system faces structural constraints that collectively limit smallholder participation, suppress producer incomes, and impede the sector’s transition into a modern, commercially viable system aligned with the ASTGS vision. At the same time, concrete opportunities exist across productivity, finance, markets, governance, and inclusion that, when pursued strategically, can unlock durable and inclusive growth.

### CHALLENGES

#### 01

##### Low Productivity and Climate Vulnerability

- Smallholders averaging less than two acres with limited access to improved seeds, irrigation, mechanization, and soil fertility inputs.
- Continued land subdivision and degradation erode yields across crop, livestock, and fisheries subsystems.
- Recurrent droughts, floods, and pest outbreaks destabilize production and discourage long-term investment.

#### 02

##### Weak Value Chains and Market Inefficiencies

- Inadequate rural infrastructure, aggregation capacity, and post-harvest systems drive high losses and reduce competitiveness.
- High energy and input costs, cheap imports, and inconsistent trade policies constrain agro-processing and export growth.
- Fisheries and livestock subsectors remain structurally underserved across the value chain.

#### 03

##### Financing Constraints

- Agriculture receives less than the CAADP target of 10 percent of public budgets, leaving a persistent investment gap.
- Financial products are poorly tailored to agricultural cycles, with high collateral requirements, elevated interest rates, and short repayment periods.
- Livestock, fisheries, and horticulture subsectors remain significantly underfinanced by both banks and microfinance institutions.

#### 04

##### Youth Exclusion from the Sector

- Agriculture is widely perceived by youth as low-status and high-risk, limiting generational entry into the sector.
- Structural barriers, including restricted land access, inadequate finance, and limited technical skills, block meaningful youth participation.
- The sector risks a demographic gap without deliberate policy intervention to attract and retain young Agri-preneurs.

#### 05

##### Policy and Institutional Gaps

- Weak coordination between national and county governments slows strategy implementation, including the ASTGS.
- Absent or underfunded county-level agriculture strategies create planning and resource allocation gaps.
- Burdensome regulations and limited monitoring and accountability mechanisms reduce investment confidence and policy effectiveness.

## OPPORTUNITIES

### Productivity and Climate-Smart Agriculture

- Scaling irrigation expansion, water harvesting, drought-tolerant seed adoption, and precision soil health management to secure yields and build climate resilience.
- Mainstreaming climate-smart livestock practices, including rotational grazing, silvo-pastoralism, and solar-powered water systems to restore degraded rangelands and stabilize production.

### Land Governance and Commercialization

- Digitizing land registries, improving title issuance, and resolving land disputes to unlock investor confidence and enable land as collateral.
- Promoting land consolidation, cooperative land-use arrangements, and contract farming to reduce fragmentation and support mechanization at scale.
- Linking land reforms to County Integrated Development Plans (CIDPs) to align agro-industrial zones, irrigation schemes, and export-oriented clusters with local investment priorities.

### Value Chain Strengthening and Agro-processing

- Investing in aggregation centers, cold storage, and transport infrastructure to reduce post-harvest losses and improve market consistency across all subsectors.
- Expanding agro-processing across staples, horticulture, and livestock to capture more value locally, substitute imports, and diversify exports.
- Strengthening aquaculture systems through incubation centers, hatcheries, and integration of Beach Management Units (BMUs) into county plans to improve governance and profitability.

### Farmer Organizations and Collective Action

- Strengthening producer groups and cooperatives across crops, livestock, and fisheries to reduce middlemen dependence, improve input access, and enable collective bargaining.
- Supporting community-based cooperative breeding programs, feed centers, and aquaculture producer groups to raise productivity and stabilize farmer incomes.

### Agri-finance and Investment Mobilization

- Deploying blended finance, results-based financing, pay-as-you-grow mechanisms, guarantee schemes, climate finance, and carbon markets to de-risk private investment and expand smallholder credit access.
- Delivering on CAADP commitments: at least 10 percent of annual public expenditure allocated to agri-food systems and 15 percent of agri-food GDP reinvested annually.
- Reducing input, energy, and equipment taxes to lower production costs, while using import substitution for products such as powdered milk and industrial sugar to protect domestic producers.

### Trade, Market Access, and Digital Transformation

- Scaling structured markets, warehouse receipt systems, and commodity exchanges, alongside harmonized quality standards, to expand competitiveness within EAC, COMESA, and AfCFTA markets.
- Deploying ICT solutions, including mobile veterinary services, traceability systems, and market information apps to improve efficiency, disease surveillance, and farmer decision-making.
- Reviving Agricultural Technology Development Centers (ATDCs) to support mechanization uptake and equipment maintenance at the county level.

### Policy Harmonization and Institutional Coordination

- Embedding value chain plans into CIDPs to align county, national, donor, and private sector investments under a shared framework.
- Harmonizing cess fees, licensing, and regulatory frameworks to reduce transaction costs and incentivize private sector participation.
- Integrating institutions such as BMUs into county governance structures to improve subsector oversight and sustainability.

### Youth and Women as Growth Catalysts

- Deploying youth-friendly credit facilities, agribusiness incubation hubs, digital platforms, and contract farming models to channel youth energy into agripreneurship.
- Expanding off-farm opportunities in logistics, processing, and agri-services to broaden the economic pathway for young people and women within the sector.

# 3. Approach & Methodology

## WHAT'S IN THIS CHAPTER

How NASIP was developed: the five-phase methodology (diagnostic, stakeholder consultation, strategic framing, investment design, and validation), analytical tools used, data sources, inclusivity measures, and alignment verification processes.

### 3.1 Overview

NASIP was developed through a structured, evidence-driven, and participatory process designed to ensure technical rigor, broad stakeholder ownership, and coherence with national and continental agendas. The approach is grounded in lessons from NAIP I (2019-2024) and guided by the Agricultural Sector Transformation and Growth Strategy (ASTGS 2019-2029) as the overarching strategic framework.

The process was led by the Agricultural Transformation Office (ATO) within the Ministry of Agriculture and Livestock Development (MoALD), in close partnership with county governments, development partners including the World Bank and AUDA-NEPAD, private sector actors, and technical

institutions such as KALRO. This collaborative architecture ensured that NASIP reflects a shared national vision rather than a centrally imposed directive.

The methodology unfolded across five interconnected phases: diagnostic analysis, stakeholder engagement, strategic framing, investment design, and validation. These phases were iterative rather than sequential, with feedback loops allowing for continuous refinement in response to emerging evidence, stakeholder input, and real-world factors including post-COVID-19 recovery dynamics and global food trade volatility.

### 3.2 Methodological Framework

The framework rests on five foundational principles that guided every stage of NASIP’s development, from initial diagnostics through to final validation.

<p><b>01</b> <b>Evidence-based</b></p> <p>Decisions rooted in verified quantitative and qualitative data from credible national and international sources.</p>	<p><b>02</b> <b>Participatory</b></p> <p>Extensive consultations across national, county, and community levels to foster ownership and integrate local knowledge.</p>	<p><b>03</b> <b>Aligned</b></p> <p>Consistent with BETA, Vision 2030, MTP IV, ASTGS, CAADP, and the Kampala Declaration, to prevent duplication.</p>	<p><b>04</b> <b>Result-oriented</b></p> <p>Interventions linked to measurable indicators: incomes, post-harvest losses, export volumes, and nutrition outcomes.</p>	<p><b>05</b> <b>Scalable and bankable</b></p> <p>Investments designed to attract public, private, and blended finance through sound financial modeling and viable returns.</p>
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These principles were applied from the review of NAIP I’s achievements and gaps through to the design and costing of the nine flagships. They transform NASIP from a static policy document into a dynamic, adaptive tool for agri-food systems transformation.

#### FIVE-PHASE METHODOLOGY AT A GLANCE

<p><b>01</b> <b>Diagnostic Analysis</b></p> <p>Established factual baseline from NAIP I performance and sector data.</p>	<p><b>02</b> <b>Stakeholder Engagement</b></p> <p>Incorporated perspectives from over 600 stakeholders at all levels.</p>	<p><b>03</b> <b>Strategic Framing</b></p> <p>Defined Theory of Change and causal pathways to transformation.</p>	<p><b>04</b> <b>Investment Design</b></p> <p>Costed nine flagships with financing strategies and implementation roadmaps.</p>	<p><b>05</b> <b>Validation</b></p> <p>Secured technical, county, and Cabinet-level endorsement for legitimacy.</p>
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### 3.3 Methodological Approach

NASIP's formulation followed a structured, five-phase iterative process. Each phase built on the last, with continuous cross-verification to ensure analytical integrity and stakeholder ownership at every stage.

<p><b>01</b> Phase</p>	<p><b>Diagnostic and Situational Analysis</b></p> <p><i>Empirical foundation for investment design</i></p> <ul style="list-style-type: none"> <li>• NAIP I performance review against OECD-DAC criteria: relevance, effectiveness, efficiency, impact, and sustainability.</li> <li>• Sector trend analysis drawing on KNBS, MoALD, FAOSTAT, and World Bank data covering productivity, trade, employment, and investment flows.</li> <li>• County-level mapping across agro-ecological zones, identifying regional disparities and untapped opportunities.</li> <li>• Identification of cross-cutting constraints, including fragmented financing, climate vulnerability, and limited private sector engagement in smallholder value chains.</li> </ul> <p><b>Output:</b> <i>Diagnostic reports and sector dashboards directly informing flagship prioritization.</i></p>
<p><b>02</b> Phase</p>	<p><b>Stakeholder Consultations and Participatory Design</b></p> <p><i>Over 600 stakeholders engaged across virtual and in-person formats</i></p> <ul style="list-style-type: none"> <li>• National forums with line ministries, state departments, parastatals, and development partners focusing on macro-level policy integration.</li> <li>• County workshops and key informant interviews with CEC members, farmer organizations, and cooperatives addressing localized constraints.</li> <li>• Private sector roundtables addressing financing barriers and value chain inefficiencies, such as cold chain logistics.</li> <li>• Dedicated forums for youth and women co-designing gender-sensitive investment pathways and digital agribusiness opportunities.</li> </ul> <p><b>Output:</b> <i>Stakeholder inputs embedded into the Theory of Change, flagship architecture, and priority investment areas.</i></p>
<p><b>03</b> Phase</p>	<p><b>Strategic Framing and Theory of Change Development</b></p> <p><i>Causal logic from constraints to transformational outcomes</i></p> <ul style="list-style-type: none"> <li>• Theory of Change (ToC) developed across four levels: inputs and activities, outputs, outcomes, and long-term impact.</li> <li>• Multiple revision cycles through technical workshops led by MoALD, ATO, and AKADEMIYA2063.</li> <li>• Scenario testing for risks, including economic downturns and climate shocks.</li> <li>• Strategic outcomes anchored in food and nutrition security, green growth, and global agri-export competitiveness.</li> </ul> <p><b>Output:</b> <i>Validated Theory of Change forming the strategic backbone of NASIP (detailed in Chapter 4).</i></p>

04

Phase

### Investment Design, Costing, and Prioritization

*Strategic intent translated into fundable actions*

- Nine flagships co-designed with national experts, county representatives, development partners, and private sector leaders.
- Scenario modeling comparing business-as-usual and transformational pathways, projecting GDP and productivity outcomes.
- Costing against standardized parameters: unit costs, target coverage, and expected returns, including financial gap analysis.
- Explicit alignment with CAADP Results Framework targets: 6% annual agri-GDP growth and 10% public expenditure on agriculture.

**Output:** *Indicative financing envelope of KES 1.25 trillion (approximately USD 9.6 billion), with 50 to 60 percent anticipated from private and blended sources.*

05

Phase

### Validation, Refinement, and Endorsement

*Multi-tiered review securing technical soundness and political legitimacy*

- Technical validation by the Technical Committee comprising MoALD, ATO, KALRO, KDB, KEPHIS, and the Agriculture and Food Authority (AFA).
- County-level validation through regional workshops organized under the Council of Governors.
- Steering Committee oversight, chaired by the Principal Secretary of MoALD, with Treasury, CoG, and private sector apex body representation.
- National validation forum followed by Cabinet approval and submission to AUDA-NEPAD for continental CAADP recognition.

**Output:** *Cabinet-approved, CAADP-compliant National Agri-food Systems Investment Plan, ready for implementation and financing mobilization.*

## 3.4 Analytical Tools and Techniques

NASIP’s methodology leveraged a suite of analytical instruments to underpin data-informed decision-making. These tools were selected for their applicability to complex agri-systems and applied across phases:

Table 4: Analytical tools used

Tool / Technique	Purpose / Application
Scenario Analysis	Employed to forecast alternative future pathways (e.g., climate-impacted vs. tech-enabled scenarios), aiding in flagship prioritization and risk mitigation.
OECD-DAC Evaluation Criteria	Utilized for a structured postmortem of NAIP I, quantifying aspects like efficiency (e.g., cost per beneficiary) and sustainability (e.g., post-project viability).
Results-Based Management (RBM)	Integrated to map investments into verifiable outputs (e.g., trained farmers) and outcomes (e.g., yield increases), facilitating performance tracking via key performance indicators (KPIs).
Cost-Benefit and Investment Gap Analysis	Applied through economic modeling to evaluate ROI for flagships, identifying gaps (e.g., KES 500 billion shortfall) and proposing closure strategies like PPPs.
Stakeholder Mapping and Power-Interest Grids	Used to chart actor dynamics, categorizing influencers (e.g., high-power donors) and defining engagement strategies for coordination.
Policy Coherence Diagnostic Framework (FAO/GAIN)	Deployed to assess synergies across policies, ensuring NASIP complements initiatives like nutrition-sensitive agriculture under the Global Alliance for Improved Nutrition (GAIN).
Gender and Youth Analysis Matrix	Incorporated to embed inclusivity, setting targets like 40% women/youth beneficiaries and analyzing barriers (e.g., land access for women).

These tools bridged quantitative rigor with qualitative nuance, anchoring NASIP in evidence rather than speculation.

### 3.5 Data Sources and Validation

NASIP drew on a balanced mix of primary and secondary data, each subjected to rigorous validation protocols to ensure comprehensiveness and credibility.

#### PRIMARY DATA

- County consultations using participatory rural appraisals.
- Key informant interviews with over 200 sector experts.
- Focus group discussions with farmer groups across agro-ecological zones.
- Targeted surveys on emerging themes, including digital adoption and climate adaptation.

#### SECONDARY DATA

- Government sources: MoALD annual reports, KNBS economic surveys, KEPHIS seed certification data, AFA commodity statistics, KALRO research outputs, and NIA irrigation metrics.
- International repositories: FAOSTAT, IFAD rural poverty indices, World Bank Development Indicators, IMF economic outlooks, and AKADEMIYA2063 modeling datasets.
- Evaluative studies: NAIP I end-term reviews, ASTGS mid-term assessments, and CAADP Biennial Reviews.
- Policy documents: BETA blueprints, MTP IV, Vision 2030 progress reports, ASTGS 2019-2029, Agricultural Policy 2021, NISIP 2025, and the National Agroecology Strategy 2024-2033.

#### DATA INTEGRITY AND VALIDATION

- Triangulation across sources to cross-verify findings, for example, comparing KNBS yield data against FAOSTAT.
- Peer reviews conducted to affirm accuracy, relevance, and timeliness.
- Systematic bias mitigation and gap-filling across all data categories.

### 3.6 Inclusivity

Inclusivity was integrated into the methodological core from diagnostics through to validation. Intentional measures ensured fair representation of and equitable benefits for underrepresented groups: women (comprising approximately 50 percent of smallholders), youth under the age of 35, indigenous communities, persons with disabilities (PWDs), and marginalized groups such as pastoralists in arid and semi-arid lands (ASALs). All flagships underwent gender and social inclusion screening, with mandatory minimum thresholds applied throughout the investment design process.

#### INCLUSION STANDARDS APPLIED ACROSS ALL FLAGSHIPS

- A minimum of 40 percent participation by women and youth in each flagship.
- Tailored interventions for PWDs, including accessible extension materials and adaptive service delivery.
- Targeted interventions for pastoralist and ASAL communities to address structural exclusion.
- Gender and social inclusion screening embedded as a mandatory step in flagship design and appraisal.

### 3.7 Alignment and Coherence Verification

NASIP's methodology incorporated a dedicated coherence check to ensure alignment with higher-level commitments at the global, continental, and national levels, preventing policy fragmentation and duplication.

#### CONTINENTAL AND GLOBAL ALIGNMENT

- Mapping against the Kampala CAADP Declaration commitments, including resilient agri-food systems and youth empowerment, and compliance with the CAADP Results Framework targeting doubled productivity and tripled intra-African trade.
- Integration with Agenda 2063 aspirations for a prosperous Africa and with SDGs 1 (no poverty), 2 (zero hunger), 8 (decent work), 12 (responsible consumption), and 13 (climate action).

#### NATIONAL POLICY COHERENCE

- Synchronization with national imperatives under BETA, with particular attention to value chain prioritization and bottom-up investment logic.
- Alignment with Vision 2030's socioeconomic transformation agenda.
- Integration with key national sectoral strategies: Agricultural Sector Transformation and Growth Strategy (ASTS) 2019-2029, Agricultural Policy 2021, National Irrigation Sector Investment Plan (NISIP) 2025, and the National Agroecology Strategy for Food Systems Transformation 2024-2033.



*By using innovative farming methods, Paul has become a respected farmer in his area and even trains other young people. Technology will encourage rural youth to stay and modernize the agricultural sector instead of migrating. ©FAO/Luis Tato*

### 3.8 Output of the Methodology

The methodological process yielded six tangible deliverables that collectively form the operational foundation of NASIP.

- 1** A detailed diagnostic review of NAIP I, complete with updated baselines and performance benchmarks across all major agri-food system dimensions.
- 2** A refined Theory of Change and accompanying Results Framework, delineating causal pathways, outcome indicators, and measurement milestones.
- 3** Nine flagships, each with a costed implementation roadmap, institutional lead assignments, and a defined financing strategy.
- 4** A multi-actor coordination framework outlining distinct roles and responsibilities for national government, county governments, the private sector, and communities.
- 5** An innovative financing and accountability platform designed to mobilize blended and private capital, including impact investment funds and risk-sharing instruments.
- 6** A fully validated, CAADP-aligned national investment blueprint equipped with adaptive monitoring tools to guide evidence-based execution throughout the plan period.

# 4. NASIP Strategic Framework: The Roadmap for Transformation

## WHAT'S IN THIS CHAPTER

*e.g.t guiding principles, the reconstructed Theory of Change, and the results chain linking NASIP inputs to long-term national development goals.*

The National Agri-food Systems Investment Plan (NASIP) 2026–2030 serves as the blueprint for Kenya’s agricultural transformation. It translates the high-level aspirations of national policies and strategies and the renewed commitments of the CAADP–Kampala Declaration into a coherent, actionable five-year plan while taking into account the transient Bottom-Up Economic Transformation Agenda (BETA). This strategic framework defines not only what Kenya aims to achieve but how its institutions, capital, and technology will be coordinated for systemic impact.

### 4.1 Guiding Principles

The NASIP 2026–2030 is anchored on nine guiding principles that direct its design, implementation, and monitoring. These principles ensure alignment with national priorities, devolved governance, private-sector engagement, and global and continental commitments. These shape how resources are allocated, partnerships managed, and results measured across Kenya’s Agri-food systems:

Table 5: NASIP Guiding Principles

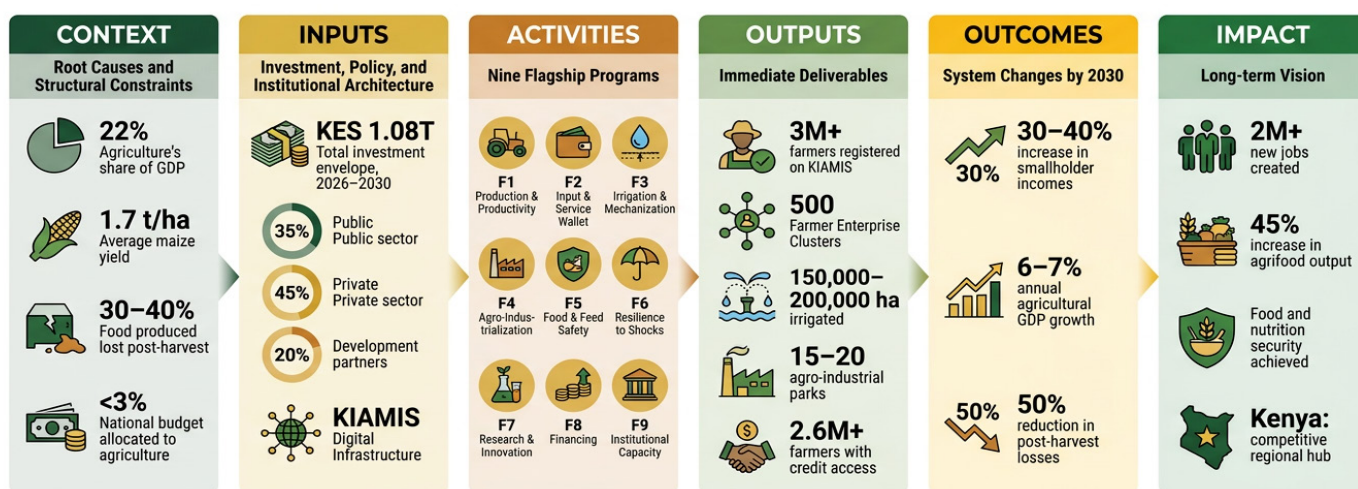
Principle	Description	Strategic Relevance to NASIP
1. Whole-of-System Approach	Investments encompass the entire Agri-food value chain, from research and innovation (upstream) to processing, trade, and consumer health (downstream), while integrating climate, nutrition, and environmental outcomes.	Prevents siloed programming, ensuring that productivity goals link directly to nutritional, environmental, and market results.
2. Devolution and Subsidiarity	Recognizes agriculture as a devolved function, placing counties at the center of implementation while national institutions (MoALD, ATO) provide coherence, financing, policy support, and technical backstopping.	Strengthens intergovernmental coordination through County Compacts and CASSCOM structures, promoting local ownership and accountability.
3. Inclusivity and Equity	Ensures equitable access to resources and opportunities for women, youth, smallholders, and persons with disabilities, with a 40% participation target across capacity building, finance, and employment initiatives.	Reduces poverty and unemployment while advancing inclusive growth in line with Kenya’s social and economic transformation agenda.
4. Private Sector-Led Growth	Positions government as an enabler and risk mitigator, using public investment to catalyze private capital, technology, and innovation through PPPs, blended finance, and guarantees.	Drives sustainability and efficiency, targeting 50–80% private-sector participation across flagship programs.
5. Climate Resilience and Green Growth	Mainstreams Climate-Smart Agriculture (CSA) and regenerative practices, ensuring all flagship investments are screened for adaptation, mitigation, and sustainable resource use.	Builds long-term sector resilience against climate shocks and supports low-carbon, green economic growth.
6. Digital Transformation and Data-Driven Decision-Making	Embeds digital solutions such as KIAMIS and the national agriculture data hub for traceability, transparency, and evidence-based monitoring.	Enhances efficiency and accountability by enabling real-time data tracking, precision targeting of subsidies, and performance management.
7. Results Orientation and Accountability	Links funding to measurable outcomes, reviewed through annual Joint Sector Reviews (JSR) and CAADP Biennial Reviews.	Focuses on outcomes and impact rather than activities, aligning NASIP performance indicators with ASTGS, CAADP, and SDG targets.
8. Regional Integration and Trade	Positions Kenya as a leader in regional Agri-food markets under AfCFTA and COMESA, promoting harmonized standards, logistics, and market access.	Expands regional trade and investment opportunities, strengthening Kenya’s competitiveness.

## 4.2 NASIP Theory of Change

### CHANGE HYPOTHESIS

If Kenya strategically invests KES 1.08 trillion across nine coordinated flagship programs, activating devolved county delivery systems, de-risked private capital, and a national digital agriculture backbone, and if political commitment, intergovernmental coordination, and enabling policies are sustained throughout the plan period, then Kenya's Agri-food systems will achieve inclusive, climate-resilient transformation: reducing food insecurity, growing agricultural GDP at 6-7% annually, and creating 2 million new jobs by 2030, in full alignment with the Kampala CAADP Declaration commitments.

National Agri-Food Systems Investment Plan  
**NASIP 2026-2030**  
**Theory of Change**  
*Building on Progress, Strengthening Resilience, and Transforming Kenya's Agriculture*



### CONTEXT

Kenya's Agri-food sector contributes 22% of GDP yet operates far below potential: over 80% of production is rain-fed, yields average 1.7 t/ha against a global 5-6 t/ha, 30-40% of food is lost post-harvest, and agriculture receives less than 3% of the national budget against a CAADP target of 10%. Only 16% of output is processed locally. Fragmented national-county coordination, chronic underfinancing, and data fragmentation together constrain transformational growth.

### INPUTS

KES 1.08 trillion is mobilized across public (35%), private (45%), and development partner/DFI (20%) sources. Key enablers include the BETA agenda, ASTGS 2019-2029, and the Kampala CAADP Declaration (2025). KIAMIS, hosting 6.5 million farmer profiles, scales into the National Agriculture Data Hub. National institutions (ASTS, JASSCOM, KALRO, KEPHIS) and 47-county structures (CASSCOM, CAICs) anchor devolved delivery. The nine flagships are the core investment instruments through which NASIP translates policy intent into measurable impact. Each is costed, result-linked, and grounded in a devolved implementation framework.

### OUTCOMES BY 2030

Outputs (2026-2027): 3M+ farmers digitally registered; 500 Farmer Enterprise Clusters operational; 1.2-1.6M vulnerable households receiving targeted input bundles; NADH MVP launched; 47 county resilience plans adopted; 47 CASSCOM committees constituted.

Intermediate (2027-2030): 150,000-200,000 ha under irrigation; 15-20 agro-industrial parks and 47 CAIPs operating; MANCP and national food safety platform established; KES 191B in finance mobilized; average lending rates down 5 percentage points; 2.6M+ farmers with formal credit.

### LONG-TERM IMPACT

2 million new jobs created; 45% growth in Agri-food output; 50% poverty reduction; food-insecure population reduced to 0-1.3 million; stunting in under-5s falls from 18% to below 13%; KES 1.25 trillion in private investment mobilized (1:3 public-to-private leverage); Kenya established as a competitive regional Agri-food hub with Agri-food trade tripling under AfCFTA; 10% of the national budget allocated to agriculture; Kenya reporting on all 22 Kampala CAADP targets.



Rosemary Odhiambo supervises tractor services booked through Hello Tractor on her farm. Mechanization, such as using a tractor instead of preparing land by hand, significantly reduces expenses, time and labor for rural farmers. Photo by Francis Mwangi/Heifer International. Photo by Francis Mwangi/Heifer International

**RESULTS CHAIN**

Inputs	Activities	Outputs	Outcomes	Impact
KES 1.08T; BETA, ASTGS, Kampala CAADP frameworks; KIAMIS scaled to NADH; county compacts (CAICs); ADF blended finance	Nine flagships (F1-F9); devolved delivery via 47 counties; PPPs for irrigation and agro-industrialization	3M+ farmers registered; 500 FECs; 150-200k ha irrigated; 15-20 agro-industrial parks; 47 CAIPs	30-40% income rise; 6-7% agri-GDP growth; 50% post-harvest loss reduction; 60% private capital share	2M+ new jobs; 45% output growth; 50% poverty reduction; food security achieved; Kenya as regional Agri-food hub

**KEY ASSUMPTIONS AND RISKS**

Assumptions	Risks and mitigations
<ul style="list-style-type: none"> <li>• Political commitment sustained beyond 2027 elections;</li> <li>• County co-financing at a minimum of 10% of development budgets;</li> <li>• Private sector engagement through de-risking instruments;</li> <li>• JASSCOM and CASSCOM are functioning effectively;</li> <li>• KIAMIS scaling into NADH;</li> <li>• Climate shocks do not catastrophically reverse gains; development partner financing remains predictable.</li> </ul>	<ul style="list-style-type: none"> <li>• Fiscal constraints (debt-to-GDP 70%): ring-fence NASIP in MTEF and expand blended finance.</li> <li>• Climate shocks: mainstream CSA across all flagships.</li> <li>• Coordination failures: enforce intergovernmental compacts.</li> <li>• Private sector hesitancy: deploy AIF guarantees.</li> <li>• Policy discontinuity: institutionalizing ASTGS across MTP cycles.</li> <li>• Trade disruptions: advanced domestic agro-industrialization via AfCFTA.</li> </ul>

# 5. From Foresight to Investment:

## NASIP Strategic Thinking Process

### WHAT'S IN THIS CHAPTER

How NASIP evolved from NAIP I through scenario analysis (Business-as-Usual vs. Transformational), and the rationale for the nine flagships as the engines of transformation.

## 5.1 Overview

The strategic thinking process for the National Agri-food Systems Investment Plan (NASIP) 2026–2030 represents an evidence-informed evolution from the National Agricultural Investment Plan (NAIP I) 2019–2024. The NASIP strategic thinking process bridges the Vision with actionable Flagships. It is designed to ensure that the required investments are aligned with national goals and future-proofed against critical uncertainties such as climate change, global price shocks, and coordination failures. The process is defined by its integration of lessons learned (from NAIP I) and strategic foresight (through scenario development).

### TRANSITIONING TO AGRI-FOOD SYSTEMS (PANDEMICS, CONFLICTS, CLIMATE CHANGE)

NASIP represents a shift from NAIP I's focus solely on production to a comprehensive Agri-food systems approach, driven by the need to address interconnected vulnerabilities. Agri-food systems encompass all activities, from farming and gathering to processing, distributing, consuming, and waste management, within broader economic, social, and environmental contexts. This change is prompted by recent shocks.

- **Pandemics:** The COVID-19 crisis exposed supply chain fragilities, disrupting logistics and markets while increasing food insecurity. NASIP responds with digitalized systems (e.g., e-commerce, market intelligence) and local value addition to ensure continuity, building on lessons from NAIP I, where growth dipped to -1.5% in 2022 due to such disruptions.
- **Conflicts:** Geopolitical events, such as the Russia-Ukraine war, inflated input costs (e.g., fertilizers, fuels) and highlighted import dependencies. NASIP promotes domestic agro-industrialization, import substitution (e.g., edible oils to 50% local production by 2028), and diversified trade under AfCFTA to stabilize prices and reduce external risks.
- **Climate Change:** Recurrent droughts (2021–2022), floods (2024), and pests (e.g., Fall Armyworm) caused volatility, with agricultural growth averaging 2.7–4% under NAIP I. NASIP integrates CSA, expanding irrigation, regenerative practices, and green finance to build resilience, aligning with the Climate Change Act (2016) and targeting insurance for 25% of smallholders.

This transition reframes agriculture as a resilient engine for nutrition security and planetary health, making NASIP adaptable to future uncertainties while offering investors opportunities in sustainable technologies and risk-mitigated ventures.

### TRANSITIONING TO BETA

NASIP is aligned with the Bottom-Up Economic Transformation Agenda (BETA), a flagship initiative that positions agriculture as a social and economic equalizer. BETA focuses on county-based development, job creation, poverty reduction, and affordable nutrition, with agriculture as a key pillar. NASIP takes this into account by:

- Prioritizing smallholder commercialization through value chains, aiming for 100% food security and reduced imports (e.g., edible oils, maize).
- Fostering inclusivity via youth agri-innovation hubs (47 established, 250,000 trained) and women-led enterprises, creating 500,000 jobs.
- Integrating digital and creative economies (e.g., e-extension, fintech) to enhance market access and efficiency.

This alignment ensures NASIP supports BETA's goal of 7.2% overall growth by 2027, with agriculture contributing through export expansion and rural entrepreneurship, appealing to investors focused on inclusive, bottom-up models

### TRANSITIONING FROM MALABO TO KAMPALA

NASIP bridges the transition from the Malabo Declaration (2014) to the Kampala Declaration on Accelerating CAADP Implementation (2025), evolving CAADP from agriculture-led growth to comprehensive Agri-food systems transformation. Key differences and commitments include:

- **Malabo Focus:** Emphasized 10% budget allocation to agriculture, 6% annual growth, halving poverty/hunger by 2025, and intra-African trade. While Kenya made progress (e.g., 22% GDP from agriculture), NAIP I fell short on targets due to underinvestment (3% budget) and shocks.
- **Kampala Shifts:** Builds on Malabo with six commitments, 22 targets, and 35 intervention areas, prioritizing food systems resilience, agro-industrialization, nutrition, private investment (KES 12.9 trillion / USD 100 billion target), and climate adaptation. It recommends 10% budgets and 6% growth but expands to sustainability, intra-Africa trade (AfCFTA), and mutual accountability via Biennial Reviews.

NASIP domesticates Kampala by embedding these in its flagships, enhances NASIP's continental legitimacy and positions Kenya as a leader in post-Malabo implementation.

## 5.2 Scenario Development: Informing Flagship Design

Scenario analysis was employed as a strategic foresight tool to test the robustness of planned investments. By contrasting two plausible futures, NASIP identified the “no-regret” interventions required for high-impact transformation.

**Business-as-Usual (BAU) Scenario:** This scenario represents a continuation of historical trends and the inability to implement systemic reforms.

Table 6: Business-as-Usual (BAU) Scenario

Dimension	BAU Scenario Outcome	Strategic Implication for NASIP
Investment & Finance	Fragmented public spending; Private capital participation remains below 30%; development partner funding decreases due to lack of co-financing.	Must establish a dedicated blended finance platform (F8) to unlock private capital.
Coordination	National and county institutions retain silos; political prioritization of agriculture in county budgets remains weak.	Must enforce the Inter-Governmental Compact and link performance (F2-F6) to sustain funding.
Performance	Productivity growth stagnates at 3.5–4%, failing to meet the 6% CAADP target. High post-harvest losses (PHL > 35%).	Must prioritize catalytic investments in irrigation (F3), input efficiency (F2), and market infrastructure (F4).
Resilience	Rain-fed agriculture dominates; reliance on emergency relief; climate shocks trigger frequent crises.	Must mainstream climate-smart practices and expand coverage of agricultural insurance (F6).

**Transformational (Optimal) Scenario:** This scenario, which underpins the NASIP strategy, assumes the successful, coordinated implementation of policy, digital, and financial reforms. It represents the desired state achieved through the Flagships.

Table 7: Transformational (Optimal) Scenario

Dimension	Transformational Scenario Outcome	Target/Metric
Economic Growth	Agri-GDP grows at 6–7%, driven by value addition and productivity gains.	Meets the CAADP Malabo/Kampala target.
Investment	Public investment acts as a catalyst, securing 50–60% of total investment from private and blended capital.	KES 1.25 Trillion mobilized, with KES 810 Billion private.
Incomes & Jobs	Increased farmer profitability and agro-industrialization create 2 million new jobs. Smallholder incomes rise significantly.	Smallholder incomes up by 40%; Food import dependency reduced by 25%.
Efficiency	Digital systems (KIAMIS/national agriculture data hub) enable targeted investments. PHL reduced.	Post-harvest losses reduced by 30–40%.

The transformational scenario is not a forecast but rather a strategic target. The flagships are the actionable path to realize this target, designed specifically to negate the risks inherent in the BAU scenario.

## 5.3 NASIP Flagships: The engines of Transformation

The nine Flagships are the essential investment priorities needed to reach the Transformational Scenario outcomes. They are large, coordinated programs aimed at driving systemic change, not just pilot projects.

Table 8: NASIP Flagships

Flagship	Thematic Focus	Transformational Outcome (Under Optimal Scenario)
F1	Increasing Agri-food System production and productivity	80% increase in crop production. 50% increase in livestock and fisheries’ production.
F2	Targeted input and service wallet for vulnerable and high need farmers	90% voucher redemption efficiency; 30% yield increase through optimized input use.
F3	Enhancing Medium-to-Large-Scale Production and Irrigation	+500,000 ha irrigated (leveraging solar/PPP models); reliable, climate smart production.
F4	Improving Agro-Industrialization and Value Addition	50% reduction in post-harvest losses; 30% export growth by expanding processing/cold-chain.

Flagship	Thematic Focus	Transformational Outcome (Under Optimal Scenario)
F5	Strengthening Food Safety and Feed Safety for health, enhanced trade and reducing food loss and waste	100% of formal markets with certified food systems; enhanced traceability.
F6	Reinforcing Agri-food System Resilience to shocks	30% farmer insurance coverage; 47 counties with operational resilience and climate funds.
F7	Advancing Research, data and Innovation for competitiveness	200+ innovations scaled through incubators; R&D spending reaches 2% of Agri-GDP.
F8	Boosting Agri-food System Financing	Finance at least 2.5M smallholder farmers, enhance climate resilience finance for ASALs,
F9	Strengthening the Agri-food system’s institutional and human capacity	40% improvement in adoption rates and 50% increase in income for participating producers.

### INTEGRATING SCENARIOS AND FLAGSHIPS: THE TRANSFORMATION PATHWAYS

The strategic integration ensures that each Flagship contributes to a distinct yet interconnected Transformation Pathway, solidifying the “Whole-of-System Approach” (Principle 1). This cross-linkage is the core mechanism that prevents fragmented investment and ensures systemic impact.

Table 9: Flagships transformation pathways

Transformation Pathway	Flagship Contribution	Systemic Linkage
Productivity & Resource Efficiency	F1, F2, F3 (Digital registration, Input access, Irrigation/Yield)	Addresses the production-level failures of the BAU Scenario.
Value Addition & Market Systems	F4, F5 (Processing, Cold Chain, Quality/Standards/Traceability)	Addresses the high PHL and informality constraints of the BAU Scenario.
Resilience & Climate Adaptation	F6 (Insurance, Early Warning, Climate Finance)	Mitigates the principal risk of the Transformational Scenario: climate shocks.
Finance & Innovation	F7, F8 (R&D/Technology, Blended Finance/Investment)	Provides the catalytic capital and technology required to reach the Optimal Scenario’s scale and sustainability targets.

The NASIP strategic thinking process culminates in an executable investment platform. By first acknowledging the potential pitfalls of the Business-as-Usual approach, then defining an ambitious but achievable Transformational Scenario, and finally designing nine mutually reinforcing Flagships to bridge the gap, NASIP transitions from a policy document to a coordinated engine for economic growth. It is a strategic commitment to managing risk, mobilizing finance, and driving measurable, inclusive, and climate-smart prosperity across all 47 counties.

The NASIP Flagships serve as core investment tools that turn Kenya’s Agri-food system transformation vision into practical programs. Each flagship combines lessons from NAIP I, insights from the Kampala CAADP Declaration, and modeling data from AKADEMIYA 2063 to focus on high-impact, scalable, and inclusive initiatives. Built around Kenya’s comparative strengths and emerging national priorities, the flagships foster multi-stakeholder partnerships that link smallholders, agribusinesses, counties, and financiers within coordinated value chains. Together, they implement NASIP’s strategic pillars, productivity, value addition, climate resilience, financing, and governance, aiming for measurable gains in food security, jobs, and income by 2030.

## 5.4 Rationale and Design Logic of the Nine NASIP Flagships

The development of NASIP’s nine flagship projects was an evidence-based process that stemmed from reviewing NAIP I (2019–2024) and the broader strategic framework. This process included multiple phases of analysis, consultation, and alignment to ensure the flagship initiatives address Kenya’s Agri-food system challenges while adapting to new realities, such as climate shocks, pandemics, geopolitical conflicts, and the move toward integrated food systems.

**Foundation in NAIP I Review and Lessons Learned:** The flagship programs stemmed from a thorough assessment of NAIP I, which identified ongoing challenges such as fragmented implementation, low private sector involvement, vulnerability to shocks (e.g., droughts, COVID-19), and underperformance against targets e.g., average 2.7–4% agri-GDP growth compared to the 6% CAADP goal. The review, carried out by a technical team within the Agricultural Transformation Office (ATO), highlighted the necessity for a more systemic approach that goes beyond production-centered reforms. This prompted the consolidation and reimagining of initiatives to emphasize resilience, innovation, and finance, areas where NAIP I did not meet expectations.

**Consultative and Iterative Stakeholder e.g. gement:** From September to November 2025, extensive consultations were held with over 1,000 stakeholders, including national and county governments (via the Council of Governors and 47 counties), farmers' organizations, pastoralists, fisherfolk, private sector actors (e.g., agribusinesses, financiers), civil society, women and youth groups, research institutions, and development partners. These forums, including county-level workshops and national validation events, gathered input on priorities like digital integration, inclusive finance, and value addition. The feedback was synthesized by the Technical Committee to refine the flagships, ensuring they reflect devolved needs and grassroots voices.

**Scenario Analysis and Evidence-Based Prioritization:** AKADEMIYA2063's modeling, informed by KNBS data, IMF projections, and ReSAKSS CAADP tracking, played a pivotal role. The Business-As-Usual (BAU) scenario (extrapolating NAIP I trends) projected continued volatility (e.g., 4.5–5.6% GDP growth, stagnant yields), while the optimal/transformational scenario demonstrated that targeted investments could achieve 6% agri-GDP growth and 4% annual total factor productivity (TFP) by doubling R&D and resilience efforts. This analysis identified high-impact areas, leading to the selection of nine flagships that balance productivity with emerging needs like food safety and data innovation.

## 5.5 Evolution from the ASTGS Flagships

The ASTGS 2019–2030, which NASIP builds upon, outlined nine flagships organized under four anchors: (1) Increase small-scale farmers, pastoralists, and fisher-folk incomes; (2) Increase agricultural output and value addition; (3) Increase household food resilience; and (4) Enablers. The ASTGS flagships were:

- Transform 1 million poor farmers into surplus producers (with a focus on smallholder crops).
- Shift the nationwide subsidy program to focus on allowing 3 million registered high needs farmers to access a wide range of inputs.
- Establish 6 large-scale agro- and food-processing hubs across the country through a rapid PPP process.
- Unlock 50 new large-scale private farms (>2,500 acres each).
- Restructure governance and operations of the Strategic Food Reserve (SFR) to better serve 4 million vulnerable Kenyans.
- Boost food resilience of 1.3 million farming and pastoralist households in ASALs.
- Launch three knowledge and skills programs.
- Strengthening research and innovation as a priority launch, digital and data use cases to better drive decision making and performance management.
- Actively monitor two key food systems risks.

NASIP's nine flagships evolved from ASTGS in structure, scope, and emphasis to reflect the evolution toward an Agri-food systems approach, post-NAIP I lessons, and

**Alignment with Evolving Frameworks:** The flagships were shaped by transitions from Malabo to Kampala Declaration (emphasizing agro-industrialization, resilience, and private investment), BETA (focus on food security and jobs), Vision 2030/MTP IV (7.2% growth by 2027), ASTGS 2019-2030, Agricultural Policy 2021, National Irrigation Sector Investment Plan (NISIP) 2025, and National Agroecology Strategy for Food System Transformation 2024–2033, and global initiatives. This ensured deviation toward a food systems lens, incorporating digital tools and green growth. The design of the flagships was also considered in cognizance of the existing and running programs in resilience building, food and nutrition security and input support

**Steering Committee and Validation:** The draft flagships were reviewed by the Steering Committee, incorporating political and fiscal viability checks (e.g., ring-fencing budgets). National validation and Cabinet endorsement finalized them, with submission to AUDA-NEPAD for continental alignment. In summary, the nine flagships were developed through a thorough, multi-stakeholder process that integrated NAIP I evaluations, data modeling, consultations, and policy alignments, leading to a more focused, resilient, and investor-friendly set of programs.

new priorities under Kampala CAADP Declaration and the government's BETA initiative. Key deviations include:

- **Consolidation and Integration:** Sector-specific programs under ASTGS (for crops, livestock, fisheries) were consolidated into broader, cross-cutting NASIP initiatives. For instance, Flagship 1 – Enhancing Productivity spans all sub-sectors under a unified Climate-Smart Agriculture (CSA) approach. This reduces the fragmentation noted in NAIP I and improves systemic efficiency.
- **Transition to Agri-Food Systems Transformation:** While ASTGS emphasized production and income growth, NASIP expands the focus to include nutrition, food safety, waste reduction (Flagship 5), resilience to shocks (Flagship 6), and data and innovation (Flagship 7). This shift aligns with the Kampala CAADP Commitments and addresses vulnerabilities such as droughts that previously reversed progress.
- **Stronger Focus on Finance and Private Investment:** NASIP elevates agricultural financing by integrating two dedicated flagships, Flagship 4 (Agri-Finance and Inputs) and Flagship 8 (Agri-Food Systems Finance), that embed de-risking tools, guarantees, and blended-finance facilities. This aims to raise private investment to 80% of total funding, addressing the gap under ASTGS and NAIP I, where private flows averaged only 1–3% of agri-GDP.
- **Incorporation of Resilience and Innovation:** New Flagship 6 (Resilience) responds to emerging risks such as pandemics and conflicts, while Flagship 7 (Research, Data, and Innovation) extends ASTGS's

monitoring framework by leveraging national agriculture data hub and the Agriculture Investment Facility (AIF). These additions reflect the digital transformation and science-led priorities of the Kampala agenda.

- **Stronger Devolution and Inclusion:** NASIP introduces a county-led delivery model through County Compacts and Implementation Hubs, integrating BETA's bottom-up philosophy. It includes explicit targets for youth and women (e.g., 250,000 trained) and ensures that every flagship has a devolved implementation framework, addressing NAIP I's limited county-level ownership.
- **Rationale for Evolution:** Scenario analyses showed that maintaining a "business as usual" (ASTS-like) approach would lead to stagnation, whereas transformational progress requires a stronger emphasis on resilience, financing, and agro-industrialization. The Kampala Declaration's post-Malabo focuses on agro-industry (Flagship 3) and trade (Flagship 2), informed by NASIP's forward-looking design, positioning it to address future challenges such as population growth and land constraints beyond 2029.
- **Land as a core element of the Agri-food system:** Land is one of the most essential prerequisites for agricultural production and, therefore, a factor of concern regarding NASIP flagships. Agricultural land

subdivision and rural land use changes, coupled with environmental degradation, including the destruction of water catchments, adversely impact agricultural production and productivity. Consequently, agricultural land merits urgent protection that can be achieved through county spatial planning in accordance with the County Governments Act, 2012 (sections 103 and 110; National Spatial Plan 2015 – 2045 and the National Land Commission Act, 2012.

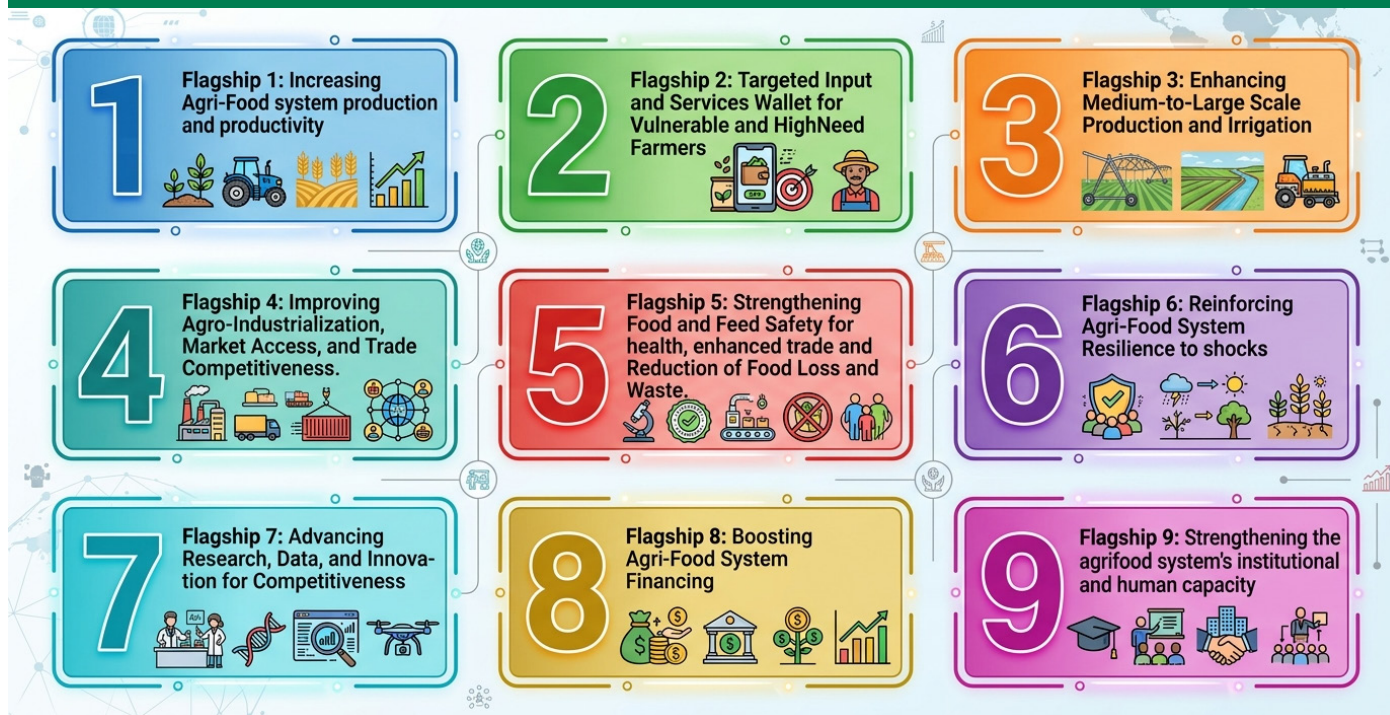
- **One Health Approach:** More than 60 percent of animal-based disease-causing organisms can potentially afflict humans. About 75 percent of new or emerging infectious diseases have an animal origin (zoonotic), e.g., COVID-19 and Ebola (WHO, 2023a). Over 36 percent of animal-derived diseases are associated with food animals, e.g., Avian Influenza and Swine Influenza (FAO, 2021). Effectively managing animal diseases and deploying Good Agricultural Practices as elements of One-health can prevent the bulk of human diseases and significantly reduce expenditure on curative health.

Overall, NASIP's flagships represent a refined, adaptive evolution, more integrated, resilient, and investor-focused, while retaining ASTGS's core vision of growth and inclusion.

# 6. The NASIP Flagships

## WHAT'S IN THIS CHAPTER

Detailed treatment of all nine flagship investment programs: context, goals, transformation pathways, costing, incentives, and expected outcomes for each flagship through 2030.



## 6.1 Flagship 1: Increasing Agri-Food Systems production and productivity

### FLAGSHIP 1 | Production & Productivity

**Goal:** To enhance the productivity, profitability, and resilience of Kenya's farmers through enterprise growth, financial inclusion, and market participation.

**Investment:** KES 90 Billion over 5 years

**Key Outcomes:** 50% increase in crop production; 50% increase in animal production; 30% increase in farmer incomes; triple access to inter-African and international markets of animals and animal products by 2030.

### OVERVIEW AND CONTEXT

Farmers in Kenya face challenges of rapidly receding agricultural land and soil fertility; high cost of inputs; poor marketing, market uncertainties, and low value addition; high post-harvest losses, and unfavorable taxation that increases production costs and lowers product competitiveness in the local and international markets.

Sustainable profitability of crops, animal production, and fisheries systems that primarily depend on constant genetic improvement, optimal inputs, and effective disease control is in doubt.

Kenya experiences chronic feed shortages that are exacerbated by drought and the reduction in land for grazing animals. Many Transboundary Animal Diseases, including

Foot and Mouth Disease (FMD) and Peste des Petits Ruminants (PPR), are prevalent in the country. However, effective vaccination of entire animal populations is not feasible. The World Organization for Animal Health (WOAH), in its report of the 2022 Performance of Veterinary Services Gap Analysis for Kenya, estimated that the Government would have to spend approximately KES 15 billion per year for 3 consecutive years, using the current water-based vaccine delivered twice per year, for Kenya to attain FMD-free status.

**Goal:** To enhance the productivity, profitability and resilience of Kenya's farmers through enterprise growth, financial inclusion, and market participation, thereby increasing farmer incomes and building a foundation for sustainable Agri-food sector transformation.

## TRANSFORMATION PATHWAYS

This flagship addresses key constraints in crop, livestock and fishery production and productivity with a view to improving food and nutrition security, market access to agricultural products and farmers' income.

### 1. Enhancing investment in crop production and productivity

- Protect agricultural land from increasing encroachment and unchecked subdivision to support uptake of improved crop production technologies.
- Increase access to agricultural inputs, including certified seeds, fertilizer, machinery, equipment, and energy, by adopting the last-mile approach and minimizing taxation.
- Enhance sustainable agriculture practices by supporting soil health improvement and associated technologies.
- Improve uptake of technologies that increase farmer-led irrigation, including water pans and water harvesting.
- Upgrade markets and marketing infrastructure, including rural access roads;
- Identify and enhance support for priority value chains, including business development services and extension.

### 2. Improvement of animal genetics

- Increase commercialization of improved seed and strengthen certification services.
- Support conservation of plant genetic resources in their natural habitats (*in situ*), on farms, and in gene banks (*ex situ*).

- Enhance seed improvement through universally accepted methods while leveraging innovations, including genomics, molecular methods, accelerated sequencing, and Artificial Intelligence, alongside indigenous knowledge.
- Enhance extension services among livestock producers to increase adoption of conventional and emerging animal genetic improvement practices, including Assisted Reproductive Technologies (ART).
- Increase availability, access, and uptake of ART equipment and genetic inputs, including semen, ova, and embryos.
- Strengthen fish population genetic improvement, including control of inbreeding depression and improvement of genetic diversity, adhering to Good Fisheries Practices and maintaining diverse breeding populations in aquaculture.

### 3. Building the foundation for feeds and aquaculture production

- Prioritize development of county spatial plans to specify areas for settlement and agriculture including animal feed production.
- Secure water for animals, rehabilitate and protect water catchments, sink boreholes, construct water pans, shallow or deep wells and sand dams.

#### Improvement:

- Commercial feed production, conservation and warehousing or storage
- Production of crops for feed manufacture including yellow maize, soybean, sunflower, cotton and other cereals
- Utilization of Machinery and equipment including

Fishermen at Hippo Point, Lake Victoria, Kenya pulling in fishing nets following a night's fishing.



- tractors, harvesters, balers, trailers, rackers, compressors or compactors for pasture and fodder production, harvesting and conservation; and
- Utilization of Aquaculture equipment including pond liners, water pumps, filters, feeders, water quality sensors, aerators, tanks and cages
- Sustainable marine resource management including seaweed and mangrove farming.

#### 4. Strengthening crops, livestock, and fish disease and pest control initiatives

##### There is a need to invest in

- Good Agricultural Practices including Integrated Pest Management that maximize the use of biological and naturally occurring plant disease and pest control methods
- Regulatory systems that prevent the entry of new and emerging plant diseases.
- Diverse plant disease and pest control mechanisms, including breeding for resistance, cultural practices and indigenous knowledge, biological procedures, and chemical controls.
- Strengthen surveillance, prevention, and control of destructive crop pests and diseases.
- Enhance private sector investment in animal vaccination with quality assurance from public veterinary services.
- Reinforce Animal Identification and Traceability (AIT), invest in a robust AIT program to provide real-time data on animal populations for animal health and animal-source food safety. AIT will also deter animal theft, including cattle rustling and conflicts.
- Bolster the use of Thermostable vaccines to reduce wastage due to exposure to sub-optimum temperatures. Intensify production and utilization of Oil-based FMD vaccine; these vaccine formulations show greater efficacy (i.e., stronger and longer-lasting immune responses as well as rapid onset of protection) than traditional alum/saponin or water-based vaccines.
- Increase adoption and use of drone-mediated vector control. Drone technology, or Unmanned Aerial Systems, can be used to spray large expanses of vegetation to control vectors as compared to conventional technologies.
- Upscale surveillance for fish and bee diseases to prepare disease control strategies and plans for transboundary fish and bee diseases that are likely to occur due to shared fish habitats in Lake Victoria and the Indian Ocean, common bee ecosystems with bordering countries.

#### 5. Digital Farmer Identity and Economic Profiling

- Build on the KIAMIS digital registry to create verified farmer identities linked to the National ID system, and mobile platforms.
- Integrate real-time data on production, value chain participation, and service uptake to enable precise targeting and performance tracking.

- Utilize Farmers' profiles as "digital economic passports," enabling them to qualify for credit, insurance, and contract farming.

#### 6. Farmer Enterprise Clustering and Aggregation

- Organize farmers into Farmer Enterprise Clusters (FECs) or Farmer Groups based on geography, enterprise, or value chain.
- Each FEC will manage collective input procurement, aggregation, storage, and market negotiation.
- Clustering will unlock access to finance by improving credit scores, reducing transaction costs, and fostering local agro-industrial linkages.
- Target: 500 functional FECs country-wide by 2030.

#### 7. Enterprise Capacity Building and Digital Advisory

- Provide integrated extension and business training to farmers within each cluster, focusing on:
  - Productivity improvement, enterprise management, and compliance with market requirements;
  - Pasture and fodder production and conservation, irrigation for pasture and fodder, and rangeland rehabilitation.
  - Animal disease control approaches including application of effective farm biosecurity measures, vaccination, timely disease reporting and animal movement control; and
  - Good fishing practices and aquaculture.
- Develop county-based Agri-preneurship and Digital Literacy Hubs to build local capacity.
- Target at least 80 percent of farmers in a county (50% youth, 40% women).

#### EXPECTED OUTCOMES/IMPACTS

- 50 percent increase in crop production by 2030.
- At least 30 percent increase in earnings from crop production by 2030.
- More than 50% increase in animal production including fisheries by 2030;
- At least 30% increase in earnings from animal production from 2030;
- At least 30% increase in earnings from fisheries from 2030.
- Triple access to inter-African and international markets of Kenyan animals and animal products by 2030.
- 35% increase in agro-industrialization by 2030;
- At least 30% increase in the contribution of crop production to GDP
- 50% increase in the contribution of animal production to GDP by 2030; and
- 1.0% increase in the contribution of fisheries to GDP by 2028.

Table 10: Investment Areas for Flagship 1

Investment Area	Description	Estimated Cost (KES Billion)	Key Performance Indicators	Target	Lead actors
Enhancing investment in crop production and productivity	Protect agricultural land, improve soil health, lower the cost of inputs, strengthen farmer-led irrigation technologies, improve access to markets and support priority value chains	30	% Increase in production of various crops. % Increase in income of crop farmers.	50% increase in the production of various crops	Agriculture Secretary & Respective county departments.
Improvement of crop, livestock and fish genetics	Enhance commercialization of improved seed and certification services, extension services among livestock producers, Increase access to ART equipment and genetic inputs, and fish population genetic improvement	2	% increase in animals inseminated by species.	30% increase in farmers' crop incomes At least 50% of livestock farmers adopt and use ART	*DVS & Respective county departments.
Building a foundation for commercial feed enterprises & aquaculture production.	Commercial feed production, conservation and warehousing or storage on own-land, hired or leased land. Improve aquaculture production.	15	% Increase in production of respective livestock/ aquaculture establishments.	50%	DLP;
			% Increase in income of livestock producers/ fisherfolk.	30%	DG-KFS & Respective county departments.
Strengthening crop, animal and fish disease control mechanisms	Good Agricultural Practices, Regulatory systems, plant disease and pest surveillance, prevention and control	20	% Decrease in incidents of disease outbreaks.	Eradicate FMD, PPR, CCPP ,and CBPP	DVS & Respective county departments.
	Private sector investment in animal vaccination, Animal Identification and traceability, Thermostable Vaccines, Oil-based FMD vaccine, drone mediated vector control & control of fish and bee diseases.		% Increase in inter-African and international trade regarding animals & animal products.	300%	
Digital Farmer Identity & Profiling	Integrating KIAMIS into a national agriculture data hub, IFMIS, and mobile platforms; onboarding 3M verified farmers.	5	# of farmer onboarded on an integrated KIAMIS and IFMIS platform	3 Million	Agriculture Secretary & Respective county departments.
Farmer Enterprise Clusters (FECs)	Establishing and operationalizing 500 clusters country-wide; infrastructure, training, digital systems.	10	# of clusters established and operationalized with infrastructure, training and digital systems	500	Commissioner Cooperatives in conjunction with **SDC, SDLD & KFS & Respective county departments.
Capacity Building & Digital Hubs	Agri-preneurship, digital literacy, and extension in 47 counties	8	# of farmers Trained on Digital services in agriculture in the following services (Sourcing inputs, Accessing Extension, Accessing Price Information, Linking to output Markets) by County (47 Counties).	50%	DLP for feeds;
			# Reporting use of the digital services in any of the services (Sourcing inputs, Accessing Extension, Accessing Price Information, Linking to output Markets)	40%	DVS for animal diseases and animal genetics;
<b>Total</b>		<b>90 Billion KES</b>			

\*DVS – Director Veterinary Services; DLP Director Livestock Production; DG – KFS: Director-General Kenya Fisheries Service. \*\*SDC – State Department of Crops; SDLD – State Department of Livestock Development; KFS – Kenya Fisheries Service

## EXPECTED OUTCOMES/IMPACTS

- i. A 50 percent increase in crop production by 2030.
- ii. At least a 30 percent increase in earnings from crop production by 2030.
- iii. More than 50% increase in animal production, including fisheries, by 2030;
- iv. At least 30% increase in earnings from animal production from 2030;
- v. At least 30% increase in earnings from fisheries from 2030.
- vi. Triple access to inter-African and international markets of Kenyan animals and animal products by 2030.
- vii. 35% increase in agro-industrialization by 2030;
- viii. At least 30% increase in the contribution of crop production to GDP
- ix. 50% increase in the contribution of animal production to GDP by 2030; and
- x. 1.0% increase in the contribution of fisheries to GDP by 2028.

## 6.2 Flagship 2: Targeted input and service wallet to the needy and vulnerable farmers

### FLAGSHIP 2 | Targeted Input & Service Wallet

**Goal:** To enhance productivity, income, and food security among vulnerable smallholders, fisherfolk, and pastoralists through an inclusive, digitally managed input and service delivery system.

**Investment:** KES 51 Billion over 5 years

**Key Outcomes:** 1.5 million farmers receiving bundled inputs; 15% yield increase among targeted farmers; KES 20,500–30,750 annual income increase per household; 70% of beneficiaries graduating to self-reliance.

### OVERVIEW AND CONTEXT

Flagship 2 reforms Kenya's subsidy program into a targeted, digitally managed input and service wallet designed for the most vulnerable and food-insecure farmers, fisherfolk, and pastoralists. It shifts from the previous universal fertilizer subsidy to a focused and efficient digital e-voucher system that provides a comprehensive bundle of inputs and services directly to beneficiaries through the Kenya Integrated Agriculture Management Information System (KIAMIS).

Under NAIP I, the universal subsidy boosted cereal productivity between 2023 and 2024 but proved fiscally unsustainable and limited in scope. Moreover, its top-down delivery model excluded private actors, constrained innovation, and failed to address broader productivity needs such as soil fertility, mechanization, or extension support.

Flagship 2 therefore builds a sustainable, inclusive, and performance-based subsidy model, where the public sector targets and regulates, while the private sector delivers and scales. This approach ensures that limited public resources achieve maximum impact, while stimulating markets, restoring soil health, and accelerating resilience among Kenya's most vulnerable producers.

#### Target and Cycle

The targeted subsidy will focus on vulnerable and needy smallholder farmers, fisherfolk, and pastoralists. In this instance, smallholder farmers will be defined as those with one or fewer acres and will be obtained from the farmer registry under KIAMIS, which has so far recorded over 7 million farmers. The number of targeted farmers, fisherfolk, and pastoralists will be in the range of 1.2 to 1.6 M. It will operate under the e-voucher system. An appropriate criterion for identifying vulnerable and high-need fisherfolk and pastoralists will be developed at the time of implementation.

A cohort of beneficiaries will be retained on the targeted subsidy program for a maximum period of three years, after which they will be deemed to have graduated into self-reliance and discharged to face the market. This cycle will be based on a cohort rather than a specific period, and recruitment and offloading will be a continuous process.

**Goal:** To enhance productivity, income, and food security among vulnerable smallholders, fisherfolk, and pastoralists through an inclusive, digitally managed input and service delivery system that promotes efficiency, accountability, and graduation from dependency to market participation.

This flagship will concentrate the subsidy program on the vulnerable and food-insecure. The current universal subsidy will be transitioned into a targeted subsidy offering a digital bundle of diverse inputs through an e-voucher service wallet. The targeted subsidy's objective remains increasing production and productivity of the target cohort. In the NAIP I period, the subsidy program was expanded to be universal, with all registered farmers being eligible. The program was confined to the supply of fertilizer only due to the focus on improving the dire food security at the time. While the universal subsidy program has registered positive results, especially on cereals productivity, which showed significant yield and productivity increases during the period 2023–2024 (NAIP I Review Report, 2025), it is unlikely to be sustainable in the long-term. The universal fertilizer subsidy program has been under the auspices of the government and its agencies, yet the industry is advocating for increased private sector presence. In this refined flagship, it is intended that the private sector will play a more prominent role in rolling out the expanded and targeted subsidy program.

### TRANSFORMATION PATHWAYS

The Flagship will be operationalized through the following five key transformative pathways.

- Expand the coverage of the digital e-voucher system:** The digital e-voucher system, currently operational under the KIAMIS database, will be expanded to include fisherfolk and pastoralists to be more inclusive. This will permit the targeted subsidy program to cover a wider spectrum of the country and entrants. It will entail the development and establishment of modules within KIAMIS that will accommodate the expanded database. The required investment is computed from a proportion of the establishment and operational costs of KIAMIS and the e-voucher system, which stands at KES 500M annually.
- Offer a bundle of inputs:** It is envisaged that the vulnerable and high need farmer, fisherfolk, or pastoralist eligible for the targeted subsidy program will be offered a digital bundle of diverse inputs, including (seed, fertilizer, lime, pesticides, feed, fodder, artificial insemination, animal health products, mechanization hours, fingerlings, extension credits, insurance, and other related inputs). As in NAIP I, the digital bundle of goods will be based on meeting a proportion (10%) of smallholders' production costs, which amounts to KES 6,000 over a period of one year. This translates to KES 6.7 billion.
- Release the targeted subsidy operation to the private sector:** The targeted subsidy program will be operationalized by the private sector through the MoALD's e-voucher system, which will ensure participating agro-dealers are speedily compensated. The cost of participating agro-dealers is based on the products supplied to farmers, fisherfolk, and pastoralists, and will be covered by a KES overhead. This will be a proportion of the total cost of the targeted subsidy program and will amount to KES 2–3 billion.
- Provide integrated extension and soil health services:** To ensure uptake of appropriate technology and guarantee continuous soil health, the targeted subsidy program beneficiaries will be required to partake of extension and specific soil health services, including soil testing. To facilitate this process, investments will be made in soil nutrient and crop suitability mapping-related services. The expected beneficiaries of the program per year are the targeted registered farmers, fisherfolk, and pastoralists, who range from 1.2–1.6 million, and the cost of the integrated extension and soil health services will amount to KES 1.2–1.6 billion annually, given an outlay of KES 1,000 per beneficiary.
- Introduce a beneficiary Graduation Cycle:** Beneficiaries will participate in the targeted program for a maximum of three years, after which they are expected to graduate into self-reliant, market-based production. New entrants will be continually identified through KIAMIS vulnerability profiles, ensuring equitable rotation.

Mango Farmers from the YieldWise Initiative by Rockefeller Foundation and TechnoServe





Table 11: Indicative Investments and Costing (KES Billion, 2026–2030)

Investment Area	Description	Cost (KES Billion)	Key Performance Indicator	Baseline	Target	Responsible Institutions
e-Voucher Platform Expansion	KIAMIS upgrade, inclusion of fisheries & pastoral data	2.5	# of registered farmers with active e-wallets	2M	5M	MoALD/MoFBE/CoG
Input & Service Bundles	Annual targeted subsidies (1.2 – 1.6 M beneficiaries)	30	# of farmers receiving bundled inputs	0.8M	1.5M	MoALD/MoFBE/CoG
Private-Sector Operations	Compensation for accredited input suppliers	10	# of private agro-dealers integrated into the system	0	2000	MoALD/MoFBE
Extension & Soil Health Services	Integrated advisory & testing	7	Yield increase among targeted farmers (%)	0%	15%	MoALD/MoFBE/CoG
			Annual increase in smallholder incomes (KES)	20,500	+20500 – 30,750 (KES)	KNBS
Monitoring & Graduation System	KIAMIS analytics, targeting & reporting tools	1.5	Graduated farmers attaining self-reliance (%)	0%	70%	MoALD/MoFBE/CoG
			Contribution to agri-GDP (KES Billion per year)		24 – 49 B (KES)	KNBS/MoALD
<b>Total Estimated Investment (2025 – 2030)</b>		<b>51.0 Billion KES</b>				

### INCENTIVES AND ENABLERS

- Digital transaction guarantees and timely reimbursement for agro-dealers and input suppliers.
- Performance-based contracts linking subsidy access to compliance with extension and soil-health protocols.
- Smart-subsidy co-financing through blended funds (MoALD, counties, development partners).
- Data integration incentives for counties contributing to KIAMIS updates.
- Credit and insurance bundling through microfinance and fintech partners to support graduation and risk reduction.

### EXPECTED OUTPUTS/OUTCOMES/IMPACTS

- Enhanced production and productivity:** The targeted subsidy is expected to result in increased production and productivity for participating households resulting in a 10 – 15% bridging of actual and potential yields.
- Increased household incomes:** The current annual smallholder income is about KES 205,000. A 10 – 15% change in production and productivity due to the targeted input subsidy is likely to result in a KES 20,500 to 30,750 change in income.
- Improved food security for the most vulnerable:** Increased production and productivity will contribute to improved security by providing more food and disposable income to the smallholder household.
- Increase in Agricultural GDP:** The increased production and productivity will be realized in terms of an annual increase in contribution to agricultural GDP of 24B– 49B, i.e., 120B, 245B over the five years.

## 6.3 Flagship 3: Enhancing Medium-to-Large-Scale Production, Irrigation and Mechanization

### FLAGSHIP 3 | Irrigation & Large-Scale Production

**Goal:** To accelerate Kenya's transition to climate-smart, commercially viable, and energy-efficient irrigated agriculture by expanding and modernising irrigation infrastructure and linking producers to sustainable markets.

**Investment:** KES 190 Billion over 5 years

**Key Outcomes:** 200,000 additional hectares under irrigation; 60% powered by solar/renewables; 40% increase in productivity in irrigated schemes; KES 300–400 billion annual contribution to agricultural GDP.

### OVERVIEW AND CONTEXT

There are many instances where vast acreages under government or parastatal ownership are hardly utilized productively. This underutilization is, however, not confined to public land only. There are also vast acres of land in private hands that are equally grossly underutilized and need to be brought to efficient, productive use to improve not just food security but also to bridge the gap in commercially oriented agricultural production to boost Kenya's performance in international agricultural trade.

Some of the privately owned land suffers from constrained management capacity that limits production on a large scale. The same farms face constraints that extend to reduced capacity to meet stringent quality and standards.

Agri-food system transformation requires a dual focus: enhancing the productivity of smallholders while unlocking the full potential of medium and large-scale producers through sustainable irrigation and mechanization investments. Less than 4% of Kenya's arable land is irrigated, despite the country having significant potential, estimated at 1.3 million hectares (3.35 million acres), out of which only 750,000 acres have been developed, leaving a total of approximately 1.01 million hectares (2.5 million acres) undeveloped. The national irrigation sector investment plan (NISIP) targets up to 1 million acres for development within the next 10 years. Most existing irrigation schemes are underutilized, inefficient, or reliant on outdated systems. Meanwhile, productive areas remain rain-dependent and vulnerable to climate variability, leading to cyclical food shortages and unstable rural incomes.

During NAIP I (2019–2024), notable progress was made in rehabilitating national irrigation schemes, expanding smallholder drip systems, and establishing the National Irrigation Authority (NIA) as a specialized agency. However, the approach remained fragmented and public-sector-driven, with limited private investment and weak integration between irrigation development, energy use, and market linkages. The focus on small-scale schemes without commercial models limited scalability and sustainability.

NASIP 2026–2030 introduces a transformative approach that positions irrigation as a commercial, climate-smart, and inclusive enabler of large-scale production. The new model links medium and large-scale irrigation schemes to structured markets, Agri-industrial zones, and digital water management systems, anchored in public–private partnerships (PPPs) and county-level co-financing frameworks. Flagship 3 positions irrigation as the cornerstone of Kenya's climate-smart agricultural transformation. It transforms irrigation from an isolated public service into an investment ecosystem that

connects water, energy, and market systems. Through PPP-driven infrastructure, solarization, and digital governance, Kenya will unlock 200,000 hectares (494,211 acres) of productive land, raise yields by 50%, and build resilience for millions of rural households. This flagship thus operationalizes NASIP's vision of "productive, profitable, and sustainable Agri-food systems", ensuring that water becomes not a vulnerability but a strategic driver of national prosperity.

The focus will be on:

- i. Increasing the contribution of medium and large-scale farms to the national economy
- ii. Emphasizing public land commercialization and improving management of large private farms
- iii. Expanding irrigated land area through PPP models and solar-powered infrastructure;
- iv. Strengthening water-use efficiency and governance through digital monitoring and inclusive scheme management;
- v. Developing integrated irrigation–energy–market ecosystems that enhance productivity, reduce losses, and attract investors.

This flagship will mobilize the private sector as a co-investor, operator, and service provider, while counties contribute land, local infrastructure, and climate adaptation resources. The National Government will play an enabling role, providing policy incentives, concessional finance, and technical oversight through NIA and ATO.

By 2030, the flagship will have expanded irrigated acreage by at least 150,000–200,000 hectares (up to 500,000 acres), improved water efficiency, and increased average yields by 40–50% in targeted schemes. It will also enhance climate resilience, create rural jobs, and improve the reliability of domestic and export-oriented food production. In essence, this flagship transforms irrigation from a publicly subsidized service into a strategic national investment frontier, one that harnesses water, energy, and digital innovation to achieve sustainable, large-scale agricultural growth.

**Goal:** To accelerate Kenya's transition to climate-smart, commercially viable, and energy-efficient irrigated agriculture, by expanding and modernising irrigation infrastructure, improving water-use efficiency, and linking medium and large-scale producers to sustainable markets and value chains.

### TRANSFORMATION PATHWAYS

Flagship 3 moves Kenya from government-led, subsidy-dependent irrigation projects to integrated, investor-friendly, and climate-resilient irrigation ecosystems.

### 1. Enhancing the production and productivity of medium and large-scale farms

- Accelerated land commercialization to bring underutilized or dormant public land into productive use by enhancing the ongoing land commercialization initiative through leasing of government-owned farms, PPP arrangements, and other workable models.
- Develop and invest in an agency model that supports land management consultancy to take up the management of underutilized or underperforming private medium and large-scale farms.
- Develop and invest in an out-grower model that utilizes efficient medium to large-scale farms as a nucleus.

### 2. PPP-Driven Irrigation Development

- Introduce PPP models where private firms finance, build, and operate irrigation infrastructure, recovering investments through user fees or crop off-take agreements.
- Launch the Irrigation Infrastructure Investment Facility (IIIF) within NASIP's blended finance platform.

### 3. Solarization and Renewable Energy Integration

- Transition of all new and existing schemes to solar-powered pumping and drip systems, reducing reliance on diesel and grid electricity.
- Introduce concessional solar finance programs via DFI partnerships.

### 4. Climate-Smart Water Governance

- Deploy digital water metering and monitoring systems to track abstraction, optimize scheduling, and enforce efficiency.
- Strengthen WRAs for catchment management and drought early warning integration.

### 5. Integrated Irrigation–Market Ecosystems

- Co-locate irrigation zones near aggregation hubs, cold storage, and agro-industrial parks to reduce post-harvest losses and enhance value addition.
- Facilitate contract farming and nucleus–outgrower partnerships linking smallholders to medium/large farms.

### 6. County-Led Climate Adaptation Irrigation

- Counties to allocate climate funds for micro-dams, solar pumps, and localized irrigation targeting 5,000–10,000 ha per county.
- Promote community-managed schemes linked to County Climate Action Plans.

### 7. Expansion of public and private sector agricultural mechanization services

- Revamping the AMS under the national government and county governments
- Incentivization of agricultural mechanization services to attract private sector involvement.

### 8. Commercial production of feed and fodder under irrigation and creation of reserves

- Expand medium and large-scale mechanized and irrigated feed and fodder production
- Upscale national and county level feed and fodder reserves

*Enhancing Medium to Large-Scale Production and Irrigation*



Table 12: Investments and Costing (2026–2030)

Investment Area	Description	Cost (KES Billion)	Key Performance Indicators (KPIs)	Target	Lead / Partners
Enhance the production and productivity of medium and large-scale farms	Commercialization of public land through PPPs, improving management of private large-scale farms, and development of an outgrower model	30	% increase in productivity in mechanized irrigated medium & large-scale farms	40%	MoALD, CoG, Private sector
PPP Irrigation Expansion	Large-scale infrastructure (200,000 ha)	60	Increase in area (Ha) under irrigated agriculture by County	150,000 – 200,000	MoALD, NIA, Private Sector
Solar and Renewable Energy Integration	Solar pumps, off-grid systems	20	% Increase in solar powered irrigation systems	60%	MoE, DFIs, Counties
Digital Water Governance	Smart metering, monitoring systems	10	% Increase in Water use efficiency	60%	NIA, WRAs, MolCTDE
Integrated Market Ecosystems	County Aggregation Hubs, storage, transport	40	# of aggregation hubs actively engaged in the aggregation, processing and/or marketing of agricultural produce from selected value chains	47	Private Sector, CoG
County Irrigation Programs	Small–medium-scale adaptation schemes	15	# of counties with funded and implemented irrigation programs	47	Counties, CCFs, NDMA
Agricultural mechanization services	Public and private agricultural mechanization services	15	# of counties with Operational AMS	47	MoALD, the private sector and County governments
			# of farmers accessing and using AMS	30%	Counties, CCFs, NDMA
Irrigated and mechanized feed and fodder production	Feed and Fodder Production and reserves	10	Acreage of Irrigated feed and fodder	20,000 – 30,000 ha in ASAL counties	MoALD, the private sector and County governments
<b>Total Estimated Investment</b>		<b>190 Billion</b>			

## INCENTIVES

- i. PPP Concessions & Viability Gap Funding (VGF): Government co-financing for private irrigation investments through VGF grants and tax incentives.
- ii. Green Energy Rebates: Duty-free importation and tax waivers for solar pumps and renewable energy components.
- iii. Performance-Based Grants to Counties: Allocations tied to hectares irrigated, efficiency gains, and adoption of solar systems.
- iv. Credit and Guarantee Schemes: De-risking facilities for commercial banks financing mechanization and irrigation projects, under Flagship 8's blended finance facility.
- v. Water-Use Rights Reform: Simplified licensing and digital compliance systems to reduce bureaucracy and transaction costs.

## EXPECTED OUTCOMES (2026–2030)

- Expanded and Efficient Irrigation: 200,000 additional hectares under irrigation, contributing an estimated KES 300–400 billion annually to agricultural GDP.
- Decarbonized Irrigation Systems: At least 60% powered by solar and renewable energy, reducing

energy costs and emissions.

- Private-Sector-Led Growth: New PPP projects in irrigation infrastructure and mechanization, with blended financing reducing fiscal burden.
- Improved Water Governance: Real-time water accounting and efficiency monitoring across national and county schemes.
- Inclusive Growth: Equitable access for women and youth through joint ownership, outgrower participation, and leadership roles.

Flagship 3 positions irrigation and agricultural mechanization as the cornerstone of Kenya's climate-smart agricultural transformation. It transforms irrigation and agricultural mechanization from an isolated public service into an investment ecosystem that connects water, machinery, energy, and market systems. Through PPP-driven infrastructure, solarization, and digital governance, Kenya will unlock 200,000 hectares (494,211 acres) of productive land, raise yields by 50%, and build resilience for millions of rural households. This flagship thus operationalizes NASIP's vision of "productive, profitable, and sustainable Agri-food systems", ensuring that water becomes not a vulnerability but a strategic driver of national prosperity.



Workers at a potato packaging warehouse in Mau-Narok, Nakuru County in Kenya, weigh a sack of potatoes and remove the overhead weight.

## 6.4 Flagship 4: Agro-Industrialization and Value Addition

### FLAGSHIP 4 | Agro-Industrialisation & Value Addition

**Goal:** To build a competitive, inclusive, and sustainable agri-industrial economy by expanding processing capacity, reducing post-harvest losses, and creating high-value market linkages through integrated agro-industrial parks.

**Investment:** KES 265 Billion over 5 years

**Key Outcomes:** 15–20 large agro-industrial parks and 47 County Aggregation & Industrial Parks (CAIPs); value addition rising from 16% to 30%; post-harvest losses reduced by half; 300,000+ new jobs.

### OVERVIEW AND CONTEXT

Kenya's Agri-Food sector continues to lose value due to limited processing, weak post-harvest handling, and fragmented market systems. Nearly 30–40% of all food produced is lost post-harvest, and only 16% of agricultural output is processed locally, while a majority is sold in their raw form, despite agriculture being a leading export earner. Consequently, primary producers, mainly smallholders, capture a small fraction of the final market value, while the country continues to import processed foods worth billions of shillings annually. In addition, urbanization, increasing population of young people, and changing consumer populations have created an increased demand for high-quality, nutritious, healthy processed and ready foods both nationally and internationally.

Under NAIP I (2019–2024), the Government and counties piloted agro-processing initiatives and industrial parks, including the Special Economic Zones (SEZs) in Naivasha and Dongo Kundu, county-level aggregation hubs, and industrial park models in Meru, Nyeri, and Kisii. Yet these remained fragmented, under-financed, and poorly linked to raw material supply chains. The absence of a unified

national agro-industrialization framework, weak financing, and inadequate cold-chain and logistics infrastructure constrained competitiveness.

NASIP 2026–2030 introduces a coordinated national framework for agro-industrialization and value addition, aligning production, processing, and trade under one integrated system. The flagship prioritizes strategic commodity corridors, including dairy, horticulture, grains, fish, and oilseeds, and links them to Agro-Industrial.

Parks (AIPs), Aggregation and Processing Hubs (APHs), and County Industrial Clusters. These will be powered by renewable energy, supported by digital traceability systems, and connected to regional and global markets under the African Continental Free Trade Area (AfCFTA).

The flagship envisions counties as implementation anchors, the private sector as the investment driver, and the national government as the policy and regulatory enabler. By 2030, Kenya will have developed 15–20 fully operational agro-industrial parks and 47 county aggregation hubs, reducing post-harvest losses by half, doubling agro-exports, and creating more than 300,000 jobs along value chains.

**Goal:** To build a competitive, inclusive, and sustainable agri-industrial economy by expanding processing capacity, reducing post-harvest losses, and creating high-value market linkages through integrated agro-industrial parks and county-level value addition systems.

## TRANSFORMATION PATHWAYS

Flagship 4 shifts Kenya's agri-industrialization model from scattered, publicly funded projects to a network of commercially run, climate-smart, and regionally competitive industrial ecosystems.

### 1. Support Commercial aggregation, farmer-to-factory linkages, and digital traceability to meet SPS and buyer requirements on scale

- Allocate/procure land for CAIPs.
- Build and support aggregation centers along farmer producer organizations or value chain belts.
- Invest in digital traceability platforms for raw materials/ food items.
- Promote commercial outgrower contracts with processors and off takers.

*Investment requirement (CAPEX): KES 60 billion.*

### 2. Upgrade FPOs and Cooperatives

- Support 2,000 agribusiness SMEs and cooperatives to upgrade processing equipment, packaging, and digital market presence through matching grants, or FPO loans.
- Train 2,000 farmers, producers and marketing groups in value addition, trading, negotiations, contract farming, outgrower models etc.
- Invest in digital traceability platforms for raw materials/ food items for 2,000 farmers, producers and marketing organizations.

*Investment requirement: KES 25 billion.*

### 3. Develop and strengthen County aggregation and industrial parks (CAIPs)

- Establish & equip 47 CAIPs (one for each County targeting aggregation and primary value addition of selected agricultural value chains.
- Provide/ include sections for MSMEs including PWDs, youths and women, with appropriate shared facilities and managed either individually or as common user facilities (CUFs)-Designate sections focusing on women or youth-led processing (juices, fish, dairy, horticulture etc).

*Investment requirement: KES 10 billion.*

### 4. Development of medium-to-large-scale clustered Agro-Industrial Parks and Processing Hubs

- Establish clustered medium to large Agro-Industrial Parks (AIPs) connected to raw-material catchments. Including allocating land for agro-industrial parks. Funded through public-led supportive infrastructure

and private equity or loan investments.

- Establish & equip commercial agro-processing / Industrial zones/clusters structured as PPPs for processing plants (milling, dairy, oilseed, fish, fruits) within SEZs or county clusters.
- Build and operate cold-chain networks, warehouses, and aggregation centers through PPPs and concessional credit.
- Introduce a National agro-processing Fund under the blended finance platform (Flagship 8).

*Investment requirement: KES 120 billion.*

### 5. Integrate Green and Renewable Energy systems

- Increase the compliance with environmental and social safeguards, including energy audits and effluent management.
- Equip all agro-industrialization parks with solar, biogas, or hybrid mini-grids to lower energy costs by 30% and cut GHG emissions.

*Investment requirement: KES 20 billion.*

### 6. Facilitate Standards, Certification, Digital Traceability and trade

- 7. Improved standards, quality assurance, blending, fortification, and SPS compliance. Modernize food safety laboratories, enforce SPS standards, and integrate blockchain-based traceability for export commodities (Also part of Flagship 6).
- 8. Promote trade facilitation, regional integration and competitiveness, harmonize regional tariffs, and address non-tariff barriers (irregular cess, levies, multiple licenses, etc.). Support exporters to meet AfCFTA/Regional Trade Agreements (RTA) rules of origin, reduce border delays, and use trade finance instruments to increase uptake.
- 9. Collaborate with industry practitioners, associations (e.g., Kenya Association of Manufacturers, KAM, Kenya National Chamber of Commerce and Industry, KNCCI), private B2B promoters, and government agencies (Kenya Export Promotion and Branding Agency).

*Investment requirement: KES 15 billion*

### 7. Promote Capacity building, Skill development, R&D and technology adoption.

- Support applied R&D in post-harvest tech, packaging, and shelf-life extension. Work with MITI, KIRDI, and KAM for Research and development on energy use efficiency, packaging materials, and shelf-life improvements.
- Technical skills and training for technicians, machine operators, innovators, etc., for agro-processing industries.
- Link technical institutions & colleges (TVETs, KIRDI, KITI, etc.) and universities to cluster needs.

*Investment requirement: KES 15 billion.*

Table 13: Flagship 4 Investments and Costing (2026–2030)

Component	Key Activities	Indicative Cost (KES Billion)	KPIs	Targets	Lead / Partners
Support commercial aggregation, farmer-to-factory linkages	Support to aggregation centers, digital traceability	60	Value (KES) of agricultural produce aggregated and sold through aggregation hubs	50%	MoALD, MoFBE, Private Sector
Upgrade FPOs and Cooperatives	Support to SMEs and Co-ops in upgrading processing equipment	25	# of FPOs upgraded to Cooperatives	Up to 2000 FPOs, SMEs and Coops	MoALD, KNCCI, DFIs
Develop and strengthen County aggregation and industrial parks (CAIPs)	Establishment of women and Youth-focused CAIPs	10	# of CAIPs established	47	Counties
			# of farmers using CAIPs disaggregated by Sex and Age		Counties
		# of Jobs (direct) created through CAIPs	250	Counties	
Development of medium-to-large-scale clustered Agro-Industrial Parks and Processing Hubs	Construction, PPP concessions, National Agro-processing Fund	120	# of medium and large-scale Agro-Industrial parks and processing hubs established	15 -20 AIPs	MoALD, CoG, Private Sector
			# of Jobs created through AIPs and PHs	300,000 new jobs	MoALD, CoG, Private Sector
Integrate Green and Renewable Energy systems in Agro-Industrial Parks (AIPs) and Processing Hubs (PHs)	Solar, biogas, and hybrid systems installation	20	% of AIPs and PHs using renewable energy	>60%	Ministry of Energy, Private Sector
Facilitate Standards, Certification, Digital Traceability, and trade	Labs, certification, digital systems	15	# of AIPs certified under GAPs		KEBS, MoH, KEPHIS, KRA, KNBS
			# of AIPs and PHs using treceability technology		
			Value (KES) of produce from AIPs and PHs sold, disaggregated by Domestic and international markets		
Promote Capacity building, Skill development, R&D, and technology adoption in Post Harvest Loss Management	R&D in post-harvest and packaging Technical skills training	15	% of AIPs and PHs who use PHLM technologies		MoALD, Ministry of Education (TVETs),
<b>Total Estimated Cost (5 Years)</b>		<b>265 Billion KES</b>			

**INCENTIVES**

- i. **PPP Concessions & Tax Reliefs:** 10 to 15-year PPP concessions for park developers; corporate tax holidays (5 yrs) for new agri-processing investments.
- ii. **Export Rebates & Quality Certification Support:** Duty and VAT exemptions on certified export-quality inputs and packaging materials.
- iii. **County Matching Grants:** Counties contribute land and infrastructure, unlocking national and Development Partners to co-finance.
- iv. **SME Matching Grants:** 50% cost-share for equipment upgrades and branding for certified FPOs, cooperatives and SMEs.
- v. **Green Finance Incentives:** Interest-rate buy-downs for renewable-energy-powered processing and cold-chain facilities.
- vi. **Results-Based Financing:** Disbursements tied to verified outcomes such as reduced post-harvest loss, export volume, and job creation.

**EXPECTED OUTCOMES (2026–2030)**

- Expanded Agro-Industrial Base: 15 20 large agro-industrial parks and 47 aggregation hubs (CAIPs) functional across counties.
- Higher Value Capture: Value addition in key commodities increases from 16% to 30%.
- Reduced Post-Harvest Losses: Annual food loss cut by half, saving KES 150 billion in economic value.
- Private-Sector Leadership: Private investors become principal operators of agro-industrial infrastructure.
- Inclusive and Green Industrialization: Women, youth, and SMEs integrated in renewable, low-carbon manufacturing ecosystems.

## 6.5 Flagship 5: Strengthening food and feed safety

### FLAGSHIP 5 | Food and Feed Safety

**Goal:** To protect human and animal health, promote safe trade, and enhance competitiveness by building an integrated national system for the management of food and feed safety and food loss and waste.

**Investment:** KES 49 Billion over 5 years

**Key Outcomes:** 70% reduction in foodborne illnesses; 50% reduction in food loss and food waste; 100% of food and feed operators HACCP/ISO/GMP certified; 80% reduction in chemical residue levels.

### OVERVIEW AND CONTEXT

#### a. Food and Feed Safety

Environmental hazards and operations along the food chain make food unsafe. According to the World Health Organization (2015), approximately 600 million people fall sick and 429,000 die from unsafe food worldwide annually, resulting in the loss of 33 million healthy life years (DALYs). Unsafe food is a major driver of Antimicrobial Resistance (AMR) in humans, which is directly responsible for about 1.2 million deaths annually worldwide and a higher number (thrice) of associated deaths (WHO, 2023b). The World Bank estimates that unsafe food leads to a loss of over KES 12.3 trillion (USD 95.2 billion) in productivity and an estimated KES 1.94 trillion (USD 15 billion) in medical expenses annually in the low- and middle-income countries. Other losses include foregone income from farmers and food traders and the climatic and environmental consequences of food waste (World Bank, 2018).

The integrity of Kenya's Agri-Food Systems depends on both food and feed safety. Unsafe feed leads directly to unsafe food, undermining public health, crop and livestock productivity, and export competitiveness. Currently, over 60% of food and animal feed products in Kenya pass through informal value chains where contamination, adulteration, and poor handling are common. The country faces persistent problems of aflatoxin, pesticide residues, antibiotic misuse, and heavy-metal contamination that erode consumer trust and restrict access to premium regional and international markets.

The most effective approach to food safety management is a holistic one, from "farm to fork," as it guarantees consumer safety and public health regarding possible food safety hazards at varying stages of food production, processing, and distribution. At the production or farm level, Good Agricultural Practices are indispensable. Good Hygiene Practices are necessary in production, storage, and transport. At the processing level, Good Manufacturing Practices and HACCP apply; and in the markets, hotels, and other places of food distribution or consumption, Good Hygiene Practices or HACCP are essential.

Food safety is a multidisciplinary function involving various Ministries, Departments, and Agencies that perform different roles at the stages of food production, processing, and distribution (Ministry of Health, 2013). Whereas these roles are supposed to be complementary, in practice, they are often duplicative, contradictory, and sometimes inadequate along the food safety continuum from farm to fork. Effective food safety control is undermined by the existence of fragmented legislation, multiple jurisdictions, and weaknesses in surveillance, monitoring, and enforcement.

Effective feed safety is essential for producing safe animal products, preventing economic losses, protecting animal welfare, and reducing the risk of antimicrobial resistance. Hazards associated with feeds include mycotoxins, infectious agents, veterinary medicines, and agricultural chemicals. Mycotoxins are regularly found in feed ingredients such as maize, sorghum grain, barley, wheat, rice meal, cottonseed meal, groundnuts, and other legumes. Infectious agents in feeds include Mad Cow Disease and Salmonellae. Veterinary medicines administered through animal feeds can also get to humans if concentrations used result in foods of animal origin with residues exceeding the established Maximum Residue Limits (MRLs). Small doses of these medicines ingested in animal-derived foods potentially cause antimicrobial resistance in humans.

Cereals such as maize, barley, and wheat, and legumes like soybean, used as ingredients in animal feeds, can be contaminated with herbicides, pesticides, and fungicides, as well as heavy metals like mercury, lead, or cadmium.

#### b. Food Loss and Waste

Food losses happen along with the food production and supply or distribution chains, while food waste occurs at the retail and consumer levels. Food loss estimates vary by food commodity and can exceed 50% for fruits and vegetables. Production and post-harvest losses of fishery products exceed 35%, while about 20% of potatoes are lost at production, harvesting, and marketing. Maize losses range from 12 – 20% post-harvest, equivalent to millions of 90 kg bags each year (FAO, 2014, World Resource Institute, 2025); significant losses are also recorded during maize production due to diseases, pests, and rainfall fluctuations.

Diseases, pests, invasive weed species, alongside climate change effects like drought and floods, are the main causes of food losses at the production levels of crops, animals, or fisheries. Post-harvest losses occur due to poor storage facilities, inadequate cold-chain, and practices that cause spoilage, decay, rotting, and mold growth. Poor and unhygienic handling of produce at harvesting, sorting, and packaging causes damage and predisposes harvests to infection and spoilage. Environmental factors, particularly wetness for cereals and pulses and high temperatures for fish, meat, milk, fruits, and vegetables, accelerate deterioration in safety and quality.

Distribution or supply chain delays between harvesting and processing or consumption increase nutrient losses and decay or spoilage, especially for fresh produce like fish, vegetables, and fruits. In Kenya, food losses and food waste are estimated at 9 million tons annually, worth about KES. 72 billion (KES 74.6 billion (USD 576 million)) when a quarter of

the population struggles to eat enough food in a day (World Resources Institute, 2025).

During NAIP I (2019–2024), Kenya invested in upgrading select national laboratories (KEBS, KEPHIS, MoH, DVS) and harmonizing standards under the EAC and COMESA SPS frameworks. Yet, enforcement focusing mainly on food remained uncoordinated while feed manufacturing and storage were loosely regulated, especially in the poultry, dairy, and aquaculture sectors.

**Goal:** To protect human and animal health, promote safe trade, and enhance competitiveness by building an integrated national system for the management of food and feed safety; and food loss and food waste.

## TRANSFORMATION PATHWAYS

Flagship 5 re-oriens food and feed safety from a compliance burden to a competitive advantage and public-health safeguard.

### 1. Integrated Governance and Coordination

- Establish a national food and feed safety management platform to coordinate food and feed safety control institutions from Farm to Fork.
- Formalize inter-agency compacts and joint inspection protocol.
- Establish a Multi-Annual-National-Control-Plan (MANCP) that bestows the responsibility for food and feed safety to relevant stakeholders for coordination and enforcement.

### 2. Risk-Based Inspection, Early-Warning Systems and certification support

- Develop a Risk-Based Inspection Framework that verifies FBO adherence to Good Agricultural Practices (GAP); Good Veterinary Practices (GVP); Good Practices in Fisheries and Aquaculture; Good Manufacturing Practices (GMP); and Hazard Analysis and Critical Control Points (HACCP).

### 3. Safe use of chemicals, pesticides, herbicides and medicines

- National excess chemical and medicine alerts in food or feed.
- Sensitization campaigns target the public and schools on allowable Maximum Residue Levels in food or feed.
- Regular sampling of food and feed in the market for chemical and medicine residues.

### 4. Laboratory Modernization and Accreditation

- Upgrade county laboratories to collect and process samples for food safety tests for transmission to national food and feed safety reference laboratories.
- Equip national food and feed safety laboratories for food hazard tests.

### 6. Food and Feed Chain Regulation and Quality Assurance

- Digitally register and license all food and feed manufacturers and importers; establish a national feed database linked to KIAMIS.
- Implement feed certification and random testing programs.



Simon, a public health officer in Kiambu, Kenya, visits Mary Wanjiku at her stall. Food safety should be given first priority when dealing with food and products to avoid foodborne diseases through contamination. With technical support from GAIN under the CAtalyzing Strengthened Policy Action for heALTHY Diets and resiliencE (CASCADE) project, the Nairobi County passed the Food Safety and Fortification Act. Photo Courtesy: Global Alliance for Improved Nutrition (GAIN)

### 6. Digital Traceability and Surveillance

- Integrate QR-traceability systems across food and feed chains.
- Link the QR traceability systems to inspection, logistics, and consumer-feedback dashboards.

### 7. FBO Compliance and Certification

- Provide 50 percent cost-share grants for feed and food processors to attain HACCP/ISO/GMP certification.

### 8. Food Loss and Food Waste Management

- Integrate food loss and food waste reduction into food safety and quality systems.
- Promote food processing technologies to increase shelf life.
- Establish user-led county-level aggregation and cold storage points for perishable foods (fish, milk, horticulture) and dry storage facilities for feed and

grains.

- Develop standards and grading systems for “near-expiry” products and promote redistribution mechanisms to reduce edible food waste.
- Introduce food fortification and preservation training for food manufacturers and cooperatives.

### 10. Capacity building of FBOs and consumers

- Train FBOs on Good Agricultural Practices, Good Hygiene Practices, and technologies to reduce food losses.
- Sensitize food retailers to sell or donate foodstuffs nearing expiry to large-group institutions like schools, prisons, or charity homes, or present the same for reprocessing and blending in the animal feed chains.
- Sensitize consumers on the benefits of nutritious diets and dietary diversity; the need to reduce food waste, and the appropriate disposal of food packaging waste.

Table 14: Investment and Costing

Investment Area	Description	Estimated Cost (KES Billion)	Key Performance Indicators	Target	Lead actor (s)
Integrated governance & coordination.	Establish a national food & feed safety management platform. Formalize inter-agency compacts and joint inspection protocols.	5	Establish a national food and feed safety control agency.	100% interagency coordination	Cabinet Secretary Agriculture & Cabinet Secretary Health, in consultation with all food and feed safety regulatory agencies, including the Division of Food Safety, Kenya Bureau of Standards (KEBs), and the National Public Health Laboratories (NPHL).
			Develop Food safety inspection plans.	1	Respective departments & agencies in food safety control.
			Annual food and feed safety business rating reports.	5	Food business ratings: Director of Public Health.
Develop & implement a Multi Annual National Control Plan (MANCP).	Strengthen inspection and Capacity build FBOs.	5	Develop a Multi Annual National Control Plan (MANCP).	1	National Food Safety Coordination Committee or its successor & county governments.
Risk-Based Inspection, Early-Warning Systems and certification support.	Risk-based inspection; consumer sensitization; rating of food businesses & use of private inspectors.	4	% reduction in prevalence of foodborne illnesses.	70%	Foodborne illnesses: DG – Health & county governments.
FBO Compliance and Certification.	Grants for feed and food processors to attain HACCP/ISO/GMP certification.	3	% of food and feed operators certified for HACCP/ISO/ GMP certification	100%	Principal Secretary Industrialization.
Laboratory modernization & accreditation.	Upgrade county food safety labs to collect samples for food safety tests; equip national food and feed safety labs for food hazard tests.	12	Upgraded county food safety labs;	47	Respective county food safety departments;
			Equipped national food & feed safety labs (by County Economic Blocks).	6	Respective national food safety departments & agencies & county governments.
			Develop a digital register for food manufacturers and suppliers.	1	DLP for the national register of feed manufacturers.

Investment Area	Description	Estimated Cost (KES Billion)	Key Performance Indicators	Target	Lead actor (s)
Safe use of agro-chemicals, pesticides, herbicides and medicines.	National alerts on institutionalized procurement, storage, and supply of agro-chemicals/ veterinary medicines through government procurement systems (KEMSA/PMCB/ Veterinary Medicines Directorate). Establish warning systems to monitor the effects of agro-chemicals, pesticides, herbicides, and veterinary medicines on farmers.	2	% reduction in chemical/ medicine residue levels in food in the market.	80%	Pest Control Products Board for chemical/pesticide residues.
	National alerts on excess chemicals in foods; public sensitization on allowable MRLs in food & regular sampling for residues.				Veterinary Medicine Directorate for medicine residues & county governments.
Food and Feed Regulation & Certification.	Digital registry, sampling, inspection. Feed certification and random testing.	1	Develop digital register for food manufacturers	1	DLP for the national register of feed manufacturers.
			% of feed manufacturers registered in the national register	100%	DLP for the national register of feed manufacturers.
			Feed certification reports.	80%	DVS for the national register of feed importers and feed certification.
Digital Traceability and Surveillance.	QR-traceability systems across food and feed chains; link to inspection, logistics, and consumer-feedback dashboards.	1 (for inspection)	% of food business operators using QR stamps on food & Feed packaging materials	100%	DG – KeBS.
Food Loss and Waste Management.	Food loss and food waste reduction.	10	% reduction in food loss	50%	Agriculture Secretary & DLP at the farm level (food loss).
			% reduction in food waste	50%	Director of Trade at the market/retail level (food waste).
					DG, NEMA at the consumer level (food waste) & county governments.
Capacity building of FBOs and consumers.	Train FBOs on GAP and Good Hygiene Practices. Sensitize food retailers & consumers.	6	# of FBOs or consumer-based organizations with enhanced capacity per county.	80%	Agriculture Secretary, DVS and DG – KFS in conjunction with respective county governments for FBO training.
					Director of Public Health, in conjunction with respective county public health departments, for sensitization of food retailers & consumers.
					County governments.
<b>Total</b>		<b>49 Billion KES</b>			

## INCENTIVES

- i. Certification Grants: 50 percent cost-share for HACCP/ISO/Feed-Quality certification.
- ii. Tax and Duty Waivers: on accredited testing equipment and certified feed inputs.
- iii. County Performance Grants: to counties achieving full laboratory accreditation and digital inspection rollout.
- iv. Insurance and Finance Incentives: lower credit and insurance premiums for certified firms via Flagship 8.
- v. Export Rebate Program: reduced levies for firms with traceable and compliant supply chains.

## Expected Outcomes (2026–2030)

- Food and feed safety governance: A national food and feed safety management platform is established, with full inter-agency coordination and a Multi-Annual National Control Plan (MANCP) operational across all 47 counties by 2030.
- Reduced foodborne illness: A 70 percent reduction in the prevalence of foodborne illnesses through risk-based inspection systems, upgraded laboratory capacity, and public consumer awareness campaigns by 2030.
- Reduced chemical residues: An 80 percent reduction in chemical and veterinary medicine residue levels in food marketed in Kenya, protecting public health and supporting export market access.
- Upgraded laboratory network: All 47 county food safety laboratories upgraded and equipped; six national food and feed safety reference laboratories fully operational by county economic block by 2030.
- Certified operators and reduced food loss: 100 percent of formal food and feed business operators registered in digital registries; QR-based traceability deployed across formal markets; a 50 percent reduction in food loss and food waste achieved by 2030.



## 6.6 Flagship 6: Reinforcing Agri-Food Systems Resilience to Shocks

### FLAGSHIP 6 | Agri-Food System Resilience

**Goal:** To develop a shock-resistant and financially secure Agri-Food system that can predict, withstand, and quickly recover from climate, production, market, and macroeconomic shocks.

**Investment:** KES 128.2 Billion over 5 years

**Key Outcomes:** All 47 counties with County Resilience Plans; 20% of input subsidy budget directed to Climate-Smart Agriculture; COMEX system fully operational; NSFR holding 3 months of national consumption.

### OVERVIEW

Kenya's Agri-food systems remain vulnerable to multiple shocks, including macroeconomic, market, climate and production shocks. The country experienced climate and market shocks during the NAIP I implementation period, with adverse effects on food security. Market shocks included the rise in global food prices in 2021 and the increase in the cost of inputs, such as fertilizer and animal feeds. Furthermore, in 2022, a domestic macroeconomic shock resulted in rapid exchange rate depreciation, which affected the costs of imports, including agricultural inputs and food items. These shocks were further exacerbated by global conflicts, primarily the Russia-Ukraine war, as well as non-tariff barriers among regional partners that supply the country with inputs and food items. Weather-related shocks, such as the severe drought experienced in 2021/22, had severe adverse effects on production systems in the arid and semi-arid areas. Subsequently, environmental shocks such as the degradation of land and declining soil fertility adversely affect agricultural production.

Flagship 6 aims to enhance the resilience of Kenya's Agri-food systems to the multiple shocks that are likely to occur during the NASIP implementation period. Implementing strategic, coordinated efforts across climate-smart production, market infrastructure, particularly cold chains, risk finance such as index insurance, inclusive value-chain development, and enhanced county-national collaboration can significantly boost resilience.

**Goal:** To develop a shock-resistant and financially secure Agri-food system that can predict, withstand, and quickly recover from climate, production, market, and macroeconomic shocks, thus protecting national food security and the livelihoods of vulnerable populations.

### TRANSFORMATION PATHWAYS

Flagship 6 achieves systemic resilience through six interlinked pathways:

- i. **Develop County-Level Resilience Plans:** The Ministry of Agriculture and Livestock Development (MoALD) will issue guidelines for conditional grants to incentivize County Governments to develop detailed resilience implementation plans. These plans must map CSA adoption, agricultural insurance uptake, post-harvest loss tracking, and establish clear social protection triggers for local interventions. This bridges the funding gap for locally appropriate measures and embeds resilience as a mandatory component of County Annual Development Plans (ADPs) and County Integrated Development Plans (CIDPs).
- ii. **Enhance Climate-Oriented Extension and Digital Bundles:** Extension services will pivot to promote specific Climate-Smart and environmentally sustainable packages, including water harvesting, conservation agriculture, and drought-tolerant seeds and breeds. The digital input e-voucher system (Flagship 2) will be upgraded to ensure that CSA technologies and inputs for improving soil health are included in digital bundle offerings to strengthen the resilience of agricultural production systems to weather and environmental shocks and stressors. Moreover, input bundles will automatically be covered by agricultural insurance (index-based or otherwise) to protect the farmer's investment and accelerate resilience to production shocks. 20% of the agricultural input subsidy budget will be devoted to certified climate-smart agricultural inputs and technologies.
- iii. **Strengthening Early Warning and Data Systems:** The Kenya Food Security Steering Group (KFSSG) will be strengthened to not only provide seasonal forecasts on food insecurity but also develop and regularly publish the Food Balance Sheet and integrate real-time commodity price data from KNBS and MoALD. This creates a credible, timely national risk dashboard, ensuring that data generated by KFSSG is critical in forecasting both climate and market shocks to inform anticipatory policy and intervention (Flagship 7).
- iv. **Operationalize Commodities Exchange (COMEX) and WRS:** Fully roll out the COMEX system and integrate it with the Warehouse Receipts System (WRS) to inject transparency and efficiency into commodity trade. This will utilize blended finance (grants and concessional loans) to implement demonstration projects for green-energy storage infrastructure (solar cold chains and dry storage) operated by youth/women cooperatives. This incentivizes investments. Modern storage reduces post-harvest losses and creates a transparent trading platform, improving price stability.
- v. **Scale Anticipatory Financing and Early-Action Protocols:** Develop a national anticipatory financing mechanism that utilizes seasonal forecasts to release contingency funds and pre-approved procurement before a shock peaks. This mechanism is linked to targeted social protection (e.g., cash transfers) and livestock support (financing off-take programs and fodder banks in ASALs) to address climate-induced conflicts and food crises. Mobilize USD 15–30 million for climate financing and an additional KES 645 million (USD 5 million) per annum to support regional programs targeting climate-induced conflicts and national off-take programs.

vi. **Restructure the National Strategic Food Reserve (NSFR):** Establish the NSFR as an independent body, fully delinked from the National Cereals and Produce Board (NCPB). The NSFR will develop and publish explicit buying and selling guidelines that are integrated into the COMEX/WRS for competitive pricing and procurement. The NSFR will hold diversified stocks (crops, livestock, fisheries products) equivalent to three months of national consumption,

acting as a genuine price stabilization mechanism, purchasing during gluts to cushion producers and releasing stock during shortages to protect consumers.

The estimated total investment for Flagship 6 is approximately KES 128.2 Billion , financed through a blended mix of Public, Private, and Development Partner/Climate Funds.

Table 15: Key Investments and Costing (Indicative, 2026–2030)

Investment Area	Description	Estimated Cost (KES Billion)	KPIs	Targets	Responsible/Major Actor
County Resilience Plans	Development and embedding of 47 County resilience plans into local governance.	0.967	# of counties which have developed and adopted County Resilience Plans (linked to KFSSG triggers).	47	Government-National & Counties
			# of counties with annual emergency funding to procure commodities for the restructured NSFR.	47	
Climate-Oriented Extension	Subsidized input packages (CSA), e-voucher system upgrades, hiring/training extension agents.	25.8	# increase in farming household resilience capacity index to climate induced shocks	Index demonstrably improved	Government-National (KNBS) & Counties, Private Sector
			% of input subsidy budget devoted to Climate-Smart Agricultural practices.	20%	
Early Warning Systems	Data collection, model development/upgrades, and dissemination of predictive reports (KFSSG/national agriculture data hub).	9.68	# of counties with early warning systems	47	Government-National & Counties, Development Partners
			# of counties with contingency plans	47	
			# of counties with developed seasonal forecasts incorporating contingency plans	47	
Operationalize COMEX/WRS	Infrastructure costs (clearing systems), cold/dry chain storage (green energy), and digital platforms.	42.6	COMEX system fully rolled out	COMEX fully rolled out.	MoALD, Private Sector, DFIs
			% Increase in Quantity/Volumes of warehoused commodities	30%	
Climate Financing	Mobilization of national anticipatory financing mechanisms (contingency funds and pre-approved procurement).	7.1	Value (KES) National anticipatory financing mechanism developed and climate funds mobilized for regional conflicts.	KES 3,2 Billion	Treasury, NDMA, Development Partners
NSFR Reforms	Establishing the independent NSFR, governance, and annual procurement mobilization	51.6	Annual funding mobilized to procure commodities for the restructured NSFR.	KES 52 Billion	Treasury, NSFR
<b>Total</b>		<b>128.2 Billion KES</b>			

## EXPECTED OUTCOMES (2026-2030)

### 1. Risk Governance and Institutional Planning Outcomes

- County Resilience Planning Achieved: All local governance structures will formally embed risk management and climate adaptation.
- Institutionalized Risk Management: Permanent structures for multi-hazard risk coordination are established and functional.

### 2. Production Resilience and Livelihood Protection Outcomes

- Climate-Smart Adoption Scaled: The adoption of verified climate-resilient farming techniques is significantly expanded across the smallholder base.
- Subsidy Budget Aligned to Resilience: Public investment in inputs is strategically shifted to prioritize climate action.
- Inputs and technologies to accelerate climate-resilient investment.
- Household Resilience Capacity Improved: Vulnerable households are measurably better equipped to withstand shocks.

### 3. Market and Trade Stability Outcomes

- Commodities Exchange Operational: The formal trading infrastructure necessary for price discovery and risk management is fully functional.
- Storage and Warehousing Modernized: Investments are incentivized in efficient, modern storage infrastructure.
- Strategic Reserve Secured and Governed Transparently: The national reserve system is reformed fisheries equivalent to three months of national consumption.

### 4. Data and Early Warning System Outcomes

- Predictive Data Systems Functioning: Data from climate, market, and food security sources are harmonized to enable predictive analysis.

### 5. Financial Preparedness and Anticipatory Action Outcomes

- Anticipatory Financing Mechanism Established: Financial resources are pre-arranged and released before a disaster peaks, shifting from ex-post aid to ex-ante protection.
- Climate Finance Mobilized: Dedicated capital is secured for resilience investments and conflict prevention.

*Drought and famine - dead hungry cattle on dry Masai land in Kenya*



## 6.7 Flagship 7: Advancing Research, Data, and Innovation for Productivity and Global Competitiveness

### FLAGSHIP 7 | Research, Data & Innovation

**Goal:** To harness research, data, and innovation as foundational assets for Kenya's agricultural competitiveness, equipping national and county systems with evidence, digital tools, and financing mechanisms.

**Investment:** KES 111.34 Billion over 5 years

**Key Outcomes:** 8 million farmers digitally active; 47 County Innovation Hubs established; 10–15 AI-powered decision-support models deployed; agricultural TFP increased by 4% annually; R&D spending at 2% of AgGDP.

### OVERVIEW AND CONTEXT

Flagship 7 anchors Kenya's transition toward a science, data, and innovation-driven Agri-Food economy under NASIP 2026–2030. Serving as the enabler for all NASIP flagships, it converts research outputs, digital intelligence, and innovation financing into measurable productivity and market gains across the Agri-food systems. The flagship implementation will be led by the MoALD, in partnership with KALRO, KMFRI, universities, counties, and private innovators.

County participation will be institutionalized through co-financing arrangements under the County Integrated Development Plans (CIDPs), ensuring sustainability at the devolved level.

As the knowledge and innovation engine of NASIP, Flagship 7 operationalizes national commitments under Vision 2030, the Science, Technology, and Innovation Policy (2019), and the Bottom-Up Economic Transformation Agenda (BETA). It addresses persistent bottlenecks, including fragmented coordination, outdated research infrastructure, limited digital integration, and under-investment in agricultural R&D (currently 0.5% of agri-GDP vs. the Malabo target of 1%), by building a coordinated, demand-driven research and innovation ecosystem. Investments in modern research infrastructure and digital data systems will generate scientific evidence and improve efficiency across the value chains through technology enhancement that can be shared more efficiently across priority value chains. Farmers, entrepreneurs, and counties will access timely, evidence-based solutions, adopt improved practices, and expand participation in high-value markets.

**Strategic Goal:** To harness research, data, and innovation as foundational assets for Kenya's agricultural competitiveness by equipping national and county systems with evidence, digital tools, and financing mechanisms that accelerate technology adoption, expand employment, and stimulate resilient, market-oriented Agri-food systems.

**Rationale:** Sustained agricultural growth in the face of land, water, and climate stress depends on the generation and use of new knowledge. Kenya already ranks among Africa's top three agricultural research systems (along with South Africa and Egypt) in terms of institutional diversity and scientific workforce (Beintema & Stads, 2021; World Bank, 2020). Doubling current R&D spending and expanding the number of MSc/PhD-level researchers by 25 percent could lift total factor productivity (TFP) by 4 percent annually by 2030. This flagship supports the implementation of the Kampala

Declaration (2025) call to "strengthen the generation, access, and use of data, science, and innovation" for agri-food systems transformation.

### TRANSFORMATION PATHWAYS

#### 1. Strengthening Research, Innovation, and Human-Capital Systems

Kenya's Agri-food system transformation requires a coordinated, demand-driven research and innovation system aligned with national value-chain priorities. Flagship 7 will modernize and digitalize the research and innovation architecture, revitalize infrastructure, scale climate-smart technologies, and build a future-ready workforce. Key approaches will include;

- Modernize and coordinate national research under a strengthened National Agricultural Research Coordination Framework (NARCF) led by KALRO.
- Implement demand-driven research programs in priority areas (drought-tolerant cereals, dairy genetics, SPS standards, aquaculture systems, rangeland restoration).
- Establish an Agricultural Research Infrastructure Modernization Fund to upgrade laboratories and biorepositories within the national agricultural research system (KALRO, KEFRI, KMFRI, universities, and Agriculture Training Centers).
- Scale climate-smart innovations through public-private technology platforms.
- Roll out competency-based education in digital agriculture, agribusiness, and climate-smart production via TVETs and universities.
- Create County Youth Agri-Innovation Hubs to mentor and incubate start-ups.

## 2. Digital and Data Transformation: Expanding (KIAMIS) into a full-fledged national agriculture data hub

Building on the Kenya Integrated Agriculture Management Information System, which currently hosts 6.5 million farmer profiles, NASIP provides for its expansion into a comprehensive National Agriculture Data Hub that integrates datasets from the Kenya National Bureau of Statistics (KNBS), the National Drought Management Authority (NDMA), the Agriculture and Food Authority (AFA), and county-level management information systems. The National Agriculture Data Hub will serve as the authoritative agricultural data backbone, enabling real-time analytics, predictive modeling, and evidence-based resource allocation.

To ensure a secure and trusted operating environment, NASIP embeds strong data governance principles aligned with the Kenya Data Protection Act (2019). The Act classifies personal information, including farmer profiles, biometrics, geolocation data, and production records, as protected data requiring lawful, transparent, secure, and purpose-specific processing.

This flagship will operationalize a sector-wide data governance framework that defines data stewardship roles and required management skills; establishes protocols for consent, access control, privacy-by-design, cybersecurity, and secure data sharing; and guides collaboration across national and county institutions.

The framework will also ensure that the hub integrates with national registries and digital systems without compromising confidentiality, and that private-sector and financial technology partners comply with data-minimization rules, retention limits, and accountability obligations set by the Office of the Data Protection Commissioner (ODPC). Grounding the data hub within Kenya's data-protection ecosystem will safeguard farmer trust, enhance data quality, and enable responsible innovation across digital agriculture services. The system will:

- Expand KIAMIS into a full-service national agricultural data hub, integrating datasets from KNBS, NDMA, AFA, county MIS, and any other deemed relevant for agri-food systems transformation.
- Ensure interoperability with Open Data Cube, KODI, and GODAN standards for backward compatibility.
- Embed advanced analytics and predictive modeling for real-time policy support.
- Partner with private tech firms and FinTechs to deliver AI, IoT, and digital-finance solutions.

## 3. Agricultural Education-Research-Extension and Farmer Linkages

A modern, integrated agricultural knowledge system is essential for translating research breakthroughs and digital innovations into tangible farm-level results. This pathway strengthens the full continuum of education, research, extension, and farmer engagement, ensuring that farmers acquire the skills, technologies, and support systems needed to improve productivity, incomes, and resilience. Formal agricultural education in schools, colleges, and universities is aligned with non-formal and digital extension approaches, such as field demonstrations, farmer groups, mobile platforms, and KIAMIS-based advisory services, to build a skilled, adaptive farming population by closing the "last mile" knowledge gap. At the same time, participatory and farmer-led mechanisms ensure that farmers' experiences and challenges are fed back to researchers, thereby improving the relevance and uptake of innovations.

Key actions include enhancing pre-service and in-service training for extension officers, integrating digital advisory and feedback loops, establishing County Innovation Hubs for adaptive trials and demonstrations, and expanding pluralistic extension models that leverage both public and certified private providers. Together, these measures position education and extension as drivers of technology adoption, behavior change, and community-level resilience.

### Priority Investment Areas

- Upgrading agricultural training institutions (curricula, digital labs, instructor capacity).
- Digital extension platforms integrated with KIAMIS.
- County Innovation Hubs for demonstrations, trials, and farmer learning.
- Extension workforce development, including digital skills and continuous professional training.
- Pluralistic extension contracts to scale delivery through public-private partnerships.
- Farmer-centered learning programs (field schools, youth and women academies, climate-smart training).



#### 4. Innovation Financing and Partnerships: Operationalizing the Agricultural Research Fund (ARF)<sup>1</sup>

Accelerating agricultural transformation requires a strong financing ecosystem that nurtures innovation, empowers locally led research and development, and reduces dependence on external funding. The Agricultural Research Fund (ARF), established under the Science Technology and Innovation Act of 2012 and the Kenya Agriculture and Livestock Act, 2013, is envisioned as the sector’s primary blended-finance instrument, providing matching grants, concessional loans, and equity co-investments to spur public–private research collaboration, pilot-to-scale commercialization, and youth and women-led innovation. By mobilizing significant public and private capital and aligning with continental platforms such as CAADP-XP4, the Forum for Agricultural Research in Africa (FARA), and the Africa R&D Platform, the ARF will enhance research efficiency, reduce duplication, and grow Kenya’s innovation pipeline.

To reinforce national leadership of the agricultural research agenda and reduce over-dependence on external donor funding, this pathway establishes system-wide mechanisms to improve coordination, ensure alignment with national priorities, and strengthen accountability. To catalyze locally defined research, especially where donor funding is limited, an agricultural research catalytic fund will be supported through MoALD budget allocations, small county contributions, and consumer-focused micro-levies. Kenya’s own experience with producer levies in tea and coffee research, and KEPHIS’s use of user fees to sustain Phytosanitary research demonstrates the viability of this blended model.

The investment priorities include;

- Invest in an agricultural research catalytic fund for early-stage research financing in underserved counties, supported by MoALD, counties, and consumer micro-levies.
- Create an agriculture research window within the National Research Fund (NRF) to support predictable, competitive funding for universities, young scientists, and cross-disciplinary research teams.
- Ensures 100% of research investments align with national and county priorities through a unified platform for national priority-setting, proposal screening, and donor-funded research alignment.
- Support at least 50 technologies to reach market adoption through Pilot-to-scale testing centers, innovation hubs, incubation spaces, and matching-grant programs.
- Mobilize KES 2.6–3.0 billion additional R&D co-financing schemes for Counties & Producer Organizations. These will support matching grants and performance incentives that crowd-in county and private-sector investment.

Target 300 early-stage innovators, through dedicated financing, incubation, mentorship, and commercialization support for women and youth to strengthen national innovation talent.

<sup>1</sup> The National Research Fund (NRF) and the Agricultural Research Fund are Funds established under the Science, Technology, and Innovation Act of 2012 and the Kenya Agriculture and Livestock Act, 2013, to finance national research and agricultural research activities, respectively. The NRF is fund operational. However, ARF was not operationalized.

Table 16: Indicative Investments and Costing (KES Billion 2026–2030)

Investment Priority Area	Description	Key Performance Indicators (KPIs) – by 2030	Estimated Cost (KES Billion)	Target (by 2030)	Lead Institution(s)
Strengthening Research, Innovation, and Human-Capital Systems	Modernization and digitalization of the national agricultural research and innovation system through coordinated, demand-driven research, upgraded infrastructure, climate-smart technology scaling, and competency-based human-capital development via TVETs, universities, and County Youth Agri-Innovation Hubs	<ul style="list-style-type: none"> <li>• % of agriculture expenditure on training and capacity building in agricultural research</li> <li>• # of patents from experimental research on crops, livestock, and fisheries</li> </ul>	99.25	10%	MoALD Principal Secretary / KALRO Director-General / ARF Board CEO
Digital and Data Transformation: Expanding KIAMIS into a national agriculture data hub	Expansion of KIAMIS into a secure, interoperable national agriculture data hub integrating KNBS, NDMA, AFA, and the county MIS; embedding advanced analytics, predictive modelling, and AI-enabled services under a sector-wide data governance framework aligned with the Data Protection Act (2019)	<ul style="list-style-type: none"> <li>• Agricultural datasets aggregated to the Digital National Agriculture Data Hub.</li> <li>• # of account logs to access data from the Digital National Agriculture Data Hub</li> <li>• # of agriculture -relevant institutions reporting use of the Digital National Agriculture Data Hub in policy and program related decision making</li> </ul>	0.53	Account Digital Hits	MoALD (Digital Agriculture Unit) / ICT Authority / ODPC
Agricultural Education–Research–Extension and Farmer Linkages	Strengthening the education-research-extension continuum through upgraded training institutions, digitally enabled extension services linked to KIAMIS, County Innovation Hubs for demonstrations and trials, and pluralistic public–private extension delivery models.	<ul style="list-style-type: none"> <li>• % of farmers with access to extension services</li> <li>• Ratio of Extension workers to farmers</li> </ul>	8.95		MoALD Extension Directorate / County Governments
Innovation Financing and Partnerships: Operationalizing the Agricultural Research Fund (ARF)	Capitalization and operationalization of the ARF as a blended-finance instrument providing catalytic funding, matching grants, and commercialization support; alignment of all research financing with national priorities; mobilization of county and private-sector co-financing	<ul style="list-style-type: none"> <li>• Value (KES) of finance mobilized for ARF.</li> </ul>	19.50	70% of farmers are accessing advisory services	MoALD / ARF Board/ National Research Fund

### INCENTIVES AND ENABLERS

- R&D tax credits and accelerated depreciation for private-sector investments in agricultural innovation, including AI, data infrastructure, precision agriculture technologies, and digital platforms.
- Innovation Challenge Grants targeting youth and women entrepreneurs, with dedicated windows for AI-enabled agri-tech solutions, digital advisory platforms, and data-driven business models.
- Performance-based county grants to incentivize adoption of AI-enabled decision-support systems, digital extension platforms, and data-driven planning tools for evidence-based agricultural transformation.
- Streamlined IP and patent frameworks to accelerate commercialization of public-sector innovations, including AI models, algorithms, digital platforms, and data products developed through national research systems.
- Blended finance guarantees under ARF to crowd in venture capital and DFIs, with targeted risk-sharing mechanisms for AI-driven startups, digital agriculture enterprises, and technology scale-ups.

### EXPECTED OUTCOMES BY 2030

- **Increased productivity and jobs:** Sustained Agri-food productivity growth, reduced post-harvest losses, and large-scale employment driven by modernized research, innovation, and agri-technology systems.
- **Data-driven agriculture:** A fully operational national agriculture data backbone enabling real-time planning, market intelligence, and digital service delivery to millions of farmers across all counties.
- **Stronger last-mile delivery:** Integrated education, research, and extension systems accelerating technology adoption, farmer learning, and resilience through county-level innovation platforms.
- **Sustainable innovation financing:** A robust, nationally led financing ecosystem mobilizing public and private investment to scale research, commercialization, and youth- and women-led agribusinesses.

## 6.8 Flagship 8: Boosting Agri-Food Systems Finance

### FLAGSHIP 8 | Agri-Food System Financing

**Goal:** To transform Kenya's agri-food system into a profitable, resilient, and job-creating industry by 2030 through the mobilisation of KES 191 billion in affordable, inclusive, and climate-aligned financing.

**Investment:** KES 191 Billion over 5 years

**Key Outcomes:** 2.6 million farmers with formal credit access; average lending rates reduced from 18% to 13–15%; 30% reduction in default rates; at least 30% of financing directly benefiting women and youth.

### OVERVIEW AND RATIONALE

Chronic underfunding is the single most binding constraint preventing agriculture from becoming a modern, productive, and job-creating industry despite the central role played by the sector in economic growth and development. This paradox is not the result of capital scarcity. Kenya's financial system is liquid, sophisticated, and increasingly innovative. The challenge lies in how risk is perceived, priced, and distributed across agri-food systems. Financial institutions continue to view agriculture as inherently "unbankable", while farmers find financing expensive, inaccessible, and poorly aligned with production realities.

The financing gap emanates from systemic failures largely driven by a reinforcing cycle of risks that locks both lenders and borrowers into a low-trust, low-investment equilibrium -

- **Climate Volatility** - Recurrent droughts, floods, and erratic rainfall raise production uncertainty, pushing lenders to classify agricultural loans as high-probability defaults. Without effective de-risking mechanisms, climate shocks are absorbed almost entirely by farmers and banks, discouraging long-term investment.
- **Post-Harvest Inefficiencies** - Between 25 and 30 percent of agricultural produce is lost after harvesting due to inadequate storage, cold chains, aggregation, and logistics. These losses force farmers into distress sales immediately after harvest, collapsing prices and undermining income predictability. For lenders, unstable cash flows translate directly into repayment risk.
- **The Collateral Trap** - Traditional banking models rely on land titles and fixed assets as collateral. However, most smallholder farmers, particularly women and youth, lack formal deeds. As a result, millions of productive farmers remain invisible to the formal financial system, despite producing tradable, insurable, and increasingly traceable outputs.

These constraints have produced a narrow, short-term, and risk-averse agricultural finance market, dominated by seasonal overdrafts, expensive input loans, and emergency credit, rather than the patient capital required for transformation.

The foundation for boosting Agri-financing is propped by the convergence of policy intent, digital infrastructure, and institutional reform that enables a genuine reset of agricultural finance. Specifically, two scenarios present an opportunity for expanding Agri-financing -

- First, government policy is shifting decisively away

from fragmented subsidies and politically driven credit schemes toward catalytic financial instruments designed to crowd in private capital. This marks a transition from the state as a direct lender to the state as a risk architect and market maker.

- Second, the operationalization of the Kenya Integrated Agricultural Management Information System (KIAMIS) has fundamentally changed the investment landscape. With verified data on more than 6.4 million farmers, including crops, locations, production cycles, and transactions, agriculture is becoming measurable, traceable, and auditable. This data revolution enables a shift from asset-based lending to cash-flow- and performance-based finance.

Together, these foundations create a once-in-a-generation opportunity to re-engineer how capital flows through Kenya's agri-food system.

Flagship 8 directly addresses the systemic underfinancing of Kenya's agri-food system. It treats financing not as a standalone problem but as an ecosystem challenge, requiring coordinated reforms across risk management, data systems, institutions, and value chains. Its transformative premise is that agriculture is not inherently high risk but is poorly structured for finance.

**Goal:** The overall goal of boosting financing for agri-food system in is to transform Kenya's agri-food system into a profitable, resilient, and job-creating industry by 2030 through the mobilization of KES 191 billion in affordable, inclusive, and climate-aligned financing. The specific objectives are -

- **Financial Inclusion:** Provide formal credit access to at least 2.6 million farmers, agribusinesses, and agri-MSMEs.
- **Cost Reduction:** Reduce average agricultural lending rates from 18 percent to 13–15 percent through risk-sharing and digital efficiencies.
- **Equity and Inclusion:** Ensure that at least 30 percent of financing directly benefits women and youth.
- **System Resilience:** Align financial products with climate adaptation, value addition, and market integration.

### TRANSFORMATION PATHWAYS

Flagship 8 is anchored on four interdependent transformation pathways, operationalized through seven mutually reinforcing investments.

**i. Risk-Sharing and Credit Enhancement Framework**

- The government transitions from a direct lender to a first-loss provider, absorbing initial risk to unlock commercial capital through:

- Agricultural Development Fund (ADF) -A sovereign catalytic fund that pools public, concessional, and climate finance to support large-scale, high-impact investments. The ADF targets a 3–5× leverage ratio, ensuring every public shilling mobilizes multiple private shillings.
- National Agri-Credit Guarantee Framework - A KES 5–10 billion guarantee facility that partially underwrites agricultural loans, integrated with index-based weather insurance. This mechanism lowers risk premiums, stabilizes portfolios, and enables longer tenures.

**ii. Digital Collateral and the “Data-as-Security” Model -**

This transformational pathway dismantles the collateral trap by replacing land titles with digital harvest and transaction histories.

- Digital Agri-Finance Infrastructure - Integration of KIAMIS with fintech platforms to generate transaction-based credit scores. Loan processing times fall from weeks to hours, while monitoring becomes continuous and automated.

- Warehouse Receipt Systems (WRS) - Expansion of the electronic WRS, allowing certified receipts to function as tradable collateral, improving liquidity and price stability for farmers and aggregators.

**iii. Value Chain Financing Loops and Blended Capital**

- Rather than financing isolated actors, this transformation pathway finances entire value chains, ensuring repayment is embedded within market transactions. This will be achieved through:

- Blended Finance Vehicles - Three dedicated funds: Climate-Smart Agriculture Fund (KES 13 Billion), Youth & Women Enterprise Fund (KES 6Billion), Agro-Processing and Value Addition Fund (KES 13 Billion), and Private Capital Instruments.
- Mobilization of KES 13B-14B through Agri-Bonds, Green Sukuk (Sharia compliant), and Diaspora Bonds aligned with ESG and impact-investment standards.

**iv. Institutional Realignment and Product Innovation -**

Finance is redesigned to follow the soil’s rhythm, not the bank’s calendar.

- Apex Agri-Finance Institution - Recapitalization and restructuring of the Agricultural Finance Corporation (AFC) into a modern development finance institution, providing wholesale lines of credit to banks, SACCOs, and MFIs

Table 17: Costed Investment and Impact Framework (2026–2030)

Transformation Pathway / Investment Area	Purpose & Strategy	Cost (KES Billion)	Key KPI (2030)	Target (2030)	Responsible Institution / Entity
Risk-Sharing & Credit Enhancement	Agricultural Development Fund (ADF): Sovereign catalytic fund to crowd in private capital through first-loss and concessional layers	80	% increase in private- to-public capital mobilized	3:5	National Treasury, MoALD, PPP Directorate
	Agri-Credit Guarantee Framework: Partial guarantees and index-based insurance to de-risk lending	20	% Reduction in lending rates	5%	National Treasury, CBK, Participating Banks
Digital Collateral & “Data-as-Security” Model	Digital Agri-Finance Infrastructure: KIAMIS–fintech integration for transaction-based credit scoring	5	Integrated module for KIAMIS and FINTECH platforms	100%	
			# of farmers linked to financial services	6.4M	MoALD, ICT Authority, Fintechs
			% reduction in credit/loan processing time	24 hrs	
Value Chain Financing Loops & Blended Capital	Warehouse Receipt Systems (WRS): Electronic receipts as tradable collateral	15	# of farmers accessing credit using electronic warehouse receipts	2.6 M	WRSC, KEPHIS, County Governments
	Blended Finance Vehicles: Climate-smart, youth & women, and agri-processing funds	32	% reduction in default rates	30%	DFIs, Impact Investors, Fund Managers
	Value Chain Fund Mobilization	14	% of value chain products processed from primary produce	30%	MoTIHUD, Export Councils, Private Sector
Institutional Realignment & Product Innovation	Apex Agri-Finance Institution (Reformed AFC): Wholesale refinancing to banks & SACCOs	25	% increase in farmers accessing financial services from Banks and SACCOS	20%	National Treasury, AFC, CBK
<b>Total</b>		<b>191 Billion KES</b>			

## 6.9 Flagship 9: Strengthening the Agri-food System's Institutional and Human Capacity

### FLAGSHIP 9 | Institutional & Human Capacity

**Goal:** To achieve efficient and effective delivery of capacity development and technical assistance for better organisation and strengthening of the country's agri-food system.

**Investment:** KES 5 Billion over 5 years

**Key Outcomes:** 47 county compacts with 85% achieving targets; 22,000 professionals certified; 500,000 farmers with market linkages; 40% increase in farmer adoption rates.

### OVERVIEW

This Flagship represents a fundamental paradigm shift in how the country approaches capacity development in the Agri-Food system. The Flagship introduces a transformative, system-based approach grounded in what has been proven in the agricultural sector nationally, continentally and globally.

Traditional capacity development in Kenya's agricultural sector has relied heavily on one-off training workshops, classroom-based instruction, and external expertise. Despite decades of investment, adoption rates remain low (15–25%), farmer incomes have stagnated, and institutional capacity has not fundamentally improved. The reasons are clear: training without follow-up support,

knowledge without application, and external solutions that do not fit local contexts.

**Goal:** to achieve efficient and effective delivery of capacity development and technical assistance for better organization and strengthening of the country's agri-food system.

This Flagship will build core system capabilities across four domains: (i) technical production and post-harvest skills, (ii) agribusiness and financial management capabilities, (iii) market intelligence and value chain coordination, and (iv) institutional planning, performance management, and data-driven decision-making.



## TRANSFORMATION PATHWAYS

### i. National Capacity Development Coordination and Oversight

- Establish a national-level institutional anchor within the Ministry of Agriculture and Livestock Development to lead, standardize, and coordinate capacity development across the Agri-Food system.
- Establish a dedicated National Agri-food Capacity Development Unit (NACDU) within the Ministry with a clear mandate, staffing structure, and budget allocation to oversee implementation.
- Establish a National Agri-food Capacity Development Coordination Function to: Set national standards, curricula, and certification frameworks; Coordinate technical assistance across counties and partners; Align capacity development with national priorities and investment plans and monitor performance, outcomes, and impact of capacity development interventions
- Provide guidance, tools, and technical backstopping to County Agri-food System Coordination Committees to ensure consistency, quality, and scalability.
- Ensure alignment with relevant regulatory and data governance frameworks, including the Office of the Data Protection Commissioner where digital systems and data-related capacity are involved.
- Define clear vertical accountability mechanisms linking national, county, and value chain actors, including performance contracts and annual review processes.

### ii. Institutional Coordination and County Compacts

#### Operationalization of County Agri-food System Coordination Committee

- Strengthen County Agri-food System Coordination Committees in each county with representation from: County Government (Agriculture, Water, Lands), Farmers (smallholder and commercial), Private Sector (input suppliers, processors, traders), Development Partners, Extension Officers, Farmer Organizations, Research Institutions, Civil Society.
- Provide capacity development for committee members on coordination, strategic planning, and performance management.
- Establish clear roles, responsibilities, and decision-making processes.
- Establish regular meeting schedule (monthly) with public reporting of decisions.
- Clarify functional differentiation between coordination committees (strategic oversight), value chain platforms (operational coordination), and technical delivery partners (implementation).

### County Agri-food System Compact Development

Each County Agri-food System Steering committee develops a County Agri-food System Compact specifying:

- Shared vision for agricultural transformation (e.g., “Double farmer incomes by 2029”)
- Specific objectives for each flagship (e.g., “Reach 50,000 farmers with improved production practices”)
- Each actor’s specific roles and responsibilities.
- Performance targets and accountability mechanisms.
- Financing commitments from government, private sector, and development partners.
- Monitoring and reporting mechanisms

Compacts will be legally or administratively endorsed to ensure enforceability and alignment with county planning and budgeting processes (CIDPs and annual plans).

#### Value Chain Coordination

- For each county priority value chain, establish a value chain committee with representation from key value chain actors i.e. farmers, input suppliers, processors, traders, and retailers.
- Develop value chain development plans specifying production targets, quality standards, market linkages, financing requirements, capacity building needs.
- Facilitate direct relationships between farmers and buyers.
- Support aggregation groups to supply consistent volumes of quality products.
- Position value chain platforms as primary vehicles for aligning production, market demand, financing, and capacity development interventions.

### iii. Professional Capacity Development

- Peer Learning Groups: Extension officers, farmer leaders, digital agriculture systems (including farmer registries and data platforms) to enable personalized advisory, performance monitoring, and feedback loops.

### iv. Market-Linked Skills and Value Chain Development

- Value Chain Analysis and Buyer Engagement: For each priority value chain, conduct analysis to identify current production, quality standards, market opportunities, buyer requirements, financing needs, capacity building needs.
- Farmer Training Linked to Market Opportunities: Farmers are trained on production and post-harvest practices that meet buyer requirements and enable them to profitably produce and market products. Training delivery will be embedded within extension systems, private sector service providers, and value chain actors to ensure continuous, demand-driven support rather than one-off interventions.

- **Farmer Aggregation and Collective Marketing:** Strengthen farmer aggregation groups that can supply consistent volumes of quality products to buyers.
- **Market-Linked Financing:** Establish financing mechanisms that enable farmers to invest in inputs and equipment needed to meet buyer requirements.

#### Establish:

- **Input credit schemes:** farmers borrow to purchase inputs, repay from harvest proceeds
- **Equipment financing:** farmers borrow to purchase equipment (tools, irrigation equipment), repay over time.
- **Output financing:** buyers provide advance payment to farmers for agreed volume.
- **Farmer savings groups:** farmers save collectively and lend to each other for investment.
- **Credit guarantee funds:** government or development partners guarantee 50% of farmer loans to reduce lender risk. Financing mechanisms will be linked to verified production, aggregation, and market contracts to reduce risk and improve repayment performance.

#### Cross-Cutting Enablers

- **Digital Measurement and Learning Systems:** Establish an integrated digital system for real-time tracking of farmer performance, service delivery, adoption rates,

and outcomes, enabling adaptive management and continuous improvement.

- **Incentive and Performance Systems:** Introduce performance-based incentives for extension officers, counties, and value chain actors linked to adoption rates, productivity improvements, and market participation.

#### Implementation Sequence

- **Year 1:** Establish County Agri-food System Coordination committees and compacts, establish digital platforms, and begin identifying market opportunities.
- **Year 2:** Launch peer learning groups for extension officers and farmer leaders, begin linking farmers to markets.
- **Year 3:** Scale peer learning and expand market linkages, launch professional certification.
- **Year 4-5:** Continue scaling, transition to sustainable financing (government budget, private sector, farmer contributions).

Implementation will follow a results-based management approach with annual performance reviews, adaptive planning, and continuous learning loops across all levels.



Farmer Rose Lekairab, right, used her Samburu savings group profits to help launch her daughter's now-successful restaurant business. Photo: WFP/Martin Karimi

Table 18: Flagship 9 Summary

Investment Area	Description	Estimated Cost (KES Billion)	Key Performance Indicators	Target	Lead actors
National Capacity Development Coordination and Oversight	Establishing a national institutional anchor/ National Agri-food Capacity Development Unit to standardize curricula, certification, technical assistance coordination, performance monitoring, and national-county alignment	Included within institutional coordination budget	National coordination unit established National capacity development standards and certification framework approved Annual national-county performance reviews conducted	National unit operational by Year 1 Standards and certification framework approved by Year 2 Annual reviews conducted across all 47 counties	Ministry of Agriculture and Livestock Development; Relevant national agencies; County Governments
Institutional Coordination and County Compacts	Operationalizing county Agri-Food system committees, development and implementation of CASICs, value chain selection and coordination	0.703	% of counties with functional compacts % of counties with performance-based coordination systems operational	47 county compacts with 85% achieving targets by Year 5 100% of counties implementing coordinated Agri-Food plans by Year 3	Ministry of Agriculture and Livestock Development; County Governments
Professional Capacity Development	Establishment of peer learning groups, professional certification processes and digitally enabled continuous learning	1.242	# of professionals trained and certified % of certified professionals meeting performance benchmarks Adoption rate of improved practices among farmers supported	10,000 professionals trained; 70% achieving adoption targets; 22,000 professionals certified 70% of certified professionals meeting performance benchmarks 40% increase in farmer adoption rates	Ministry of Agriculture and Livestock Development; Training Institutions; Private Sector
Digital measurement and learning systems	Effecting digital tracking including real-time performance monitoring, digital farmer to farmer learning and data quality assurance measures	0.70	# of farmers using platform % of extension officers and counties using digital performance systems	1 integrated national platform deployed across all 47 counties 95% data quality; 60% of farmers using digital services; 30% faster adoption of improved practices	Ministry of Agriculture and Livestock Development; ICT Authority; Private Tech Providers
Market linked skills and value chain development	Training on value chain analysis and buyer engagement, market opportunities, aggregation and collective marketing and market-linked financing	1.5	# of farmers with market linkages % of farmers adopting practices Amount of market-linked finance mobilized	500,000 farmers with market linkages 60% of farmers participating in value chains; 40% income improvement KES 500 million in market-linked finance mobilized	Ministry of Agriculture and Livestock Development; Private Sector; Financial Institutions
<b>Total</b>		<b>4.25 Billion KES</b>			

# 7. NASIP 2026-2030 Investment Costing Framework

## WHAT'S IN THIS CHAPTER

Overview of the costing methodology, the three-tier investment framework, the annual phased investment summary across all nine flagships, and the total KES 1,080.54 billion envelope.

## 7.1 Overview of Investment Costing

The Investment Costing Framework serves as the analytical and financial backbone for effectively mobilizing, allocating, and tracking resources. It integrates contributions from national and county governments, private investors, and development partners to ensure a holistic approach. By shifting from traditional activity-based budgeting to outcome-focused investment programming, the framework guarantees that every Kenyan Shilling (KES) invested yields tangible results in areas like enhanced productivity,

increased resilience to shocks, greater inclusion of women and youth, and improved competitiveness in regional and global markets.

This strategic pivot emphasizes value-for-money, with built-in mechanisms for transparency and adaptability. For instance, investments will prioritize high-impact interventions, such as digital tools for real-time monitoring, to allow for mid-course corrections based on performance data.

## 7.2 Costing Methodology

The costing methodology adheres to a rigorous, four-step process inspired by the CAADP Results Framework and OECD-DAC standards for development effectiveness. This approach ensures transparency, realism, and scalability, with costs grounded in empirical data to enhance achievability.

- i. **Activity Identification and Structuring:** Each of the nine flagship programs was deconstructed into discrete investment packages or components, aligned with their respective Transformative Pathways. This, however, doesn't include a granular breakdown of the activities under each investment, to leave options for implementation.
- ii. **Unit Cost and Coverage Estimation:** Costs were calculated using standardized national parameters, sourced from reliable references such as the Economic Review of Agriculture (2024), sector budget estimates, and baselines from projects by the National Irrigation Authority (NIA), Kenya Dairy Board (KDB), Kenya Agricultural and Livestock Research Organization (KALRO), FAO, World Bank, and GIZ. Examples include KES 900,000 per hectare for irrigation development, KES 10 million per km for feeder roads, and KES 5,000 per farmer for digital registration. Coverage targets were set realistically, e.g., aiming to irrigate 500,000 additional hectares by 2030, based on historical project success rates.
- iii. **Phasing and Sequencing:** Investments are phased over the five years (2026–2030) to reflect practical implementation logic. Frontloading occurs in Years 1–2 for capital-intensive elements like infrastructure (e.g., 60% of irrigation budgets allocated yearly), while scaling up service delivery and private investments happens in Years 3–5. This sequencing includes contingency buffers (5–10% of budgets) for inflation or delays, making the plan more achievable. The costing framework is designed to be inclusive, recognizing financing contributions from development partners, other line Ministries and Departments within MoALD, as well as County Governments. While specific project-level contributions from development partners and MoALD departments are not individually itemized, the framework provides a level summary that acknowledges these streams and is designed to be updated as partner commitments are confirmed.
- iv. **Financing Attribution:** Investments are categorized by funding source—Public (Government of Kenya, GoK including national and counties), Development Partners (DPs), and Private Sector, with an indicative blended ratio of 30:10:20:40 (GoK: County: Private). This ratio was adjusted slightly based on feasibility assessments, resulting in actual shares of 24%:10%:22%:44% to account for higher private sector potential in value addition. Attribution ensures balanced risk-sharing and leverages comparative advantages, such as DPs focusing on technical assistance.

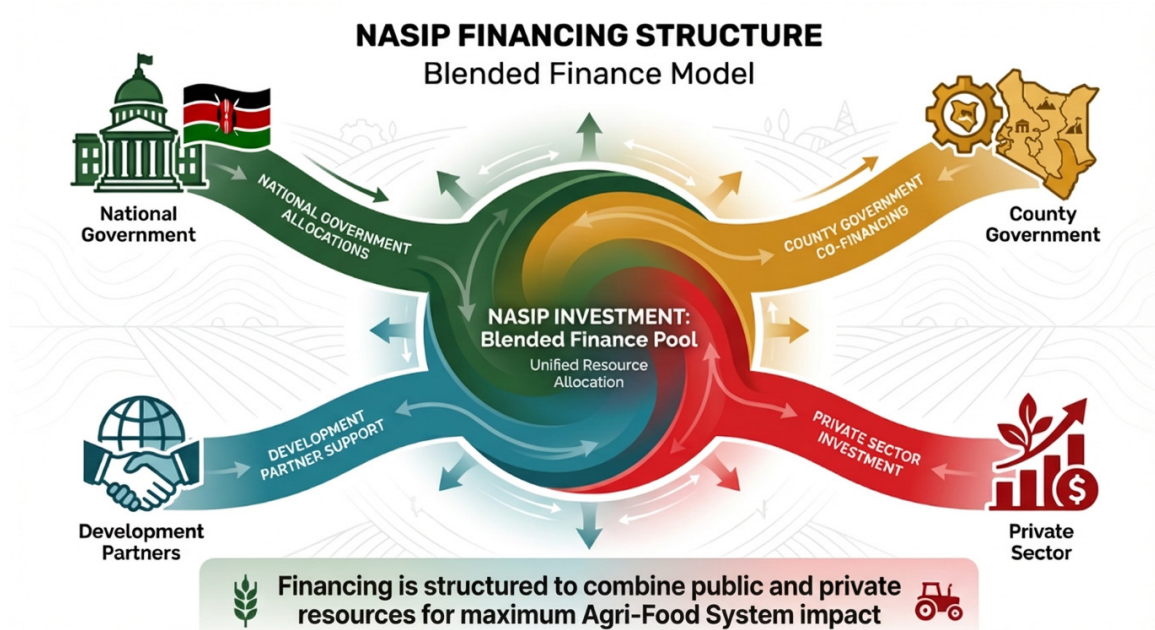
### 7.3 Structure of the Investment Framework

NASIP’s Investment Framework is organized into three interconnected tiers for resource mobilization and management, promoting efficiency and scalability:

- Tier 1: Public Core Investments (GoK & Counties):** These focus on essential public goods that unlock private potential, including irrigation schemes, rural infrastructure, data platforms, laboratories, and research facilities. Financed via annual national budgets, county development votes, and intergovernmental co-financing agreements. Target share: Approximately 34% of the total envelope (KES 284 Billion), with clear milestones like completing 70% of infrastructure by Year 3.
- Tier 2: Private and Commercial Investments:** This tier emphasizes market-driven initiatives, such as

SMEs financing, value-chain enterprises, and agro-processing ventures. Mobilized through institutions like the Agricultural Finance Corporation (AFC), the Agriculture Development Fund, the National Blended Finance Platform, and County Agri-Investment Units. Incentives include credit guarantees to de-risk investments, targeting a 44% share (KES 373 Billion) by fostering PPPs that generate returns within 2–4 years.

- Tier 3: Development Partner and Concessional Support:** Provides specialized funding for capacity building, climate adaptation, digital tools, and blended mechanisms. Sourced from partners like IFAD, World Bank, and AfDB, with a 22% target share (KES 184 Billion). This tier includes performance-based grants to ensure achievability, with funds released upon meeting predefined benchmarks.



### 7.4 Investment Costing Summary (2026–2030)

The following table summarizes the indicative investments by flagship program, with breakdowns by funding source. Costs are phased to align with sequencing, and totals reflect

adjustments for realism based on economic projections (e.g., 5% annual inflation buffer).

Table 19: Investment Cost Summary

Flagship	Total costs-5 years (KES Billion)	Yr 1 (KES Billion)	Yr 2 (KES Billion)	Yr 3 (KES Billion)	Yr 4 (KES Billion)	Yr 5 (KES Billion)
1. Increasing Agri-food System production and productivity	90	18	22.5	22.5	13.5	13.5
2. Targeted Input & Services Wallet for vulnerable and high-need Farmers	51	10.2	12.75	12.75	7.65	7.65
3. Enhanced Medium-to-Large-Scale Production & Irrigation	190	38	47.5	47.5	28.5	28.5
4. Improving Agro-Industrialization and value addition	265	53	66.25	66.25	39.5	39.5

Flagship	Total costs-5 years (KES Billion)	Yr 1 (KES Billion)	Yr 2 (KES Billion)	Yr 3 (KES Billion)	Yr 4 (KES Billion)	Yr 5 (KES Billion)
5. Strengthening Food and feed safety for health, enhanced trade, and reduction of food loss and waste	49	9.8	12.25	12.25	7.35	7.35
6. Reinforcing Agri-food Systems Resilience to Shocks	128.2	25.64	32.05	32.05	19.23	19.23
7. Advancing Research, Data, and Innovation for Competitiveness	111.34	22.26	27.83	27.83	16.70	16.70
8. Boosting Agri-food System Financing	191	38.2	47.75	47.75	28.65	28.65
9. Strengthening Agri-food system's institutional and human capacity	5.0	1.0	2.0	1.0	0.5	0.5
<b>Total</b>	<b>1,080.54</b>	<b>216.1</b>	<b>270.88</b>	<b>269.88</b>	<b>161.58</b>	<b>161.58</b>

## 7.5 Flagship Intents

A summary of the key intents for each Flagship is shown in the notes in the table below.

No.	Flagship	Notes (basis & scope)
F1	Increasing Agri-food System production and productivity	From the F1 package table (digital identity, FECs, finance/insurance linkages, capacity & market infrastructure).
F2	Targeted Input & Service Wallet for Vulnerable/High-Need Farmers (Digital Bundle)	Platform expansion (0.5/yr×5 = 2.5), bundled inputs (~33-38.5), private delivery overhead (10-12.5), extension/soil health (6-8). Midpoint 57.
F3	Enhancing Medium-to-Large-Scale Production & Irrigation	As per detailed costing (PPP irrigation, solarization, digital water governance, market ecosystems, county irrigation).
F4	Improving Agro-Industrialization & Value Addition	AIPs/APHs, cold chain & logistics, green energy, SME upgrading, standards & traceability, youth clusters.
F5	Strengthening Food & Feed Safety for health, enhanced trade and reduction of Food Loss and Waste	NFFSA/platform, lab network (47 county + 4 regional), feed regulation, traceability, SMEs certification, risk-based inspection, awareness.
F6	Reinforcing Agri-food Systems Resilience to Shocks	Multi-hazard scope (climate + macro + market + conflict): NSFR reform, COMEX/WRS, green storage, CSA bundles/insurance, EWS, county resilience plans.
F7	Advancing Research, Data & Innovation for Productivity and Global Competitiveness	NARCF programs, research infrastructure modernization, KIAMIS national agriculture data hub, digital extension/CIHs, human capital, AIF windows.
F8	Boosting Agri-food Systems Financing	ADF windowing, AFC apex transformation, guarantees/risk-sharing, warehouse-receipt collateralization, thematic blended funds, agri/green bonds.
F9	Strengthening Agri-food system's institutional and human capacity	County Agri-food systems committees, County Agri-food systems Compacts, peer learning, professional certification, digital tracking, aggregation, collective marketing and market linked financing
<b>Total (9 Flagships)</b>		<b>Rounded sum of indicative packages above.</b>

Table 20: Summary of flagships

# 8. Financing Instruments & Mechanisms

## WHAT'S IN THIS CHAPTER

*Blended finance instruments (credit guarantees, concessional loans, equity, green bonds), County Agri-food System Investment Compacts (CASICs), digital resource tracking, and monitoring of investment performance.*

To ensure the successful implementation of NASIP 2026–2030, a diverse set of financing instruments and mechanisms has been designed to mobilize resources efficiently, mitigate risks, and promote accountability. These tools build on lessons from NAIP I, emphasizing blended finance to leverage public funds, attract private capital, and align with development

partner priorities. The framework prioritizes transparency, performance-based allocation, and digital integration to minimize inefficiencies and maximize impact across the nine flagships, while addressing the indicative investment envelope of KES 1.080.54 Trillion.

## 8.1. Blended Finance Instruments

Blended finance combines public, concessional, and private resources to de-risk investments and scale high-impact projects. NASIP leverages these tools to address barriers like high perceived risks in agriculture, aiming to mobilize at least 45% of total funding from private sources by 2030.

- **Credit Guarantees and Risk-Sharing Facilities:** Managed by the Agriculture Finance Corporation (AFC) in partnership with Development Finance Institutions (DFIs) such as the African Development Bank (AfDB) and International Fund for Agricultural Development (IFAD). These cover up to 50% of loan risks for smallholders and SMEs, with a target of guaranteeing KES 100–150 Billion in loans over five years. Eligibility is tied to NASIP flagships (e.g., irrigation under Flagship 3), with performance metrics like repayment rates (>85%) monitored quarterly. Priority is given to women- and youth-led enterprises (at least 40% allocation) to align with inclusivity goals.
- **Concessional Loans and Grants:** Sourced from climate funds (e.g., Green Climate Fund, Adaptation Fund) and bilateral partners (e.g., EU, JICA). These provide low-interest loans (2–4% rates) and grants for climate-smart initiatives, such as renewable irrigation

in Flagship 3 or resilience-building in Flagship 6. Allocation prioritizes vulnerable counties to disburse KES 50 Billion annually, conditional on achieving 80% of milestone targets.

- **Equity and Venture Capital:** Delivered through the County Agricultural Investment Fund (CAIF), targeting agri-tech startups and value-chain enterprises. Seed funding ranges from KES 10–50 Million per venture, focusing on innovations in digital traceability (Flagship 5) and agro-processing (Flagship 4). Exit strategies include IPOs or buyouts, with expected returns of 15–20% to attract investors.
- **Green and Climate Bonds:** Issued by the National Treasury for sustainable projects like solar-powered cold chains and regenerative farming. Bonds have 5–10 year maturities, below-market interest rates (4–6%), and are backed by carbon credit revenues. Target: Raise KES 100 Billion by 2027, aligned with the National Climate Change Action Plan (NCCAP).

**Contingency for Risks:** To address financing risks (e.g., fiscal deficits or donor shifts), a 10–15% reserve is maintained within the CAIF for reallocation to critical areas, ensuring resilience against disruptions.

## 8.2. County Agri-food System Investment Compacts (CASICs)

CASICs serve as devolved, costed financing agreements that align county priorities with NASIP flagships, ensuring each compact carries explicit investment cost estimates, measurable outputs, and clear financing sources to guarantee localized implementation and ownership. Oversight is provided by the NASIP County Agri-food Systems Steering Committee and the NASIP County Inter-Departmental Committee, which approve compacts and monitor alignment.

- **Structure and Development:** Each county develops annual CASICs through participatory processes involving County Executive Committee Members (CECMs), farmer organizations, and private sector representatives. These include budgeted activities (e.g., aggregation hubs under Flagship 4), timelines, and KPIs, integrated into County Integrated Development Plans (CIDPs).
- **Financing Mix:** Fifty percent from county development budgets (ring-fenced at 10–15% of total county allocations), 30% from Public-Private Partnerships (PPPs) for infrastructure like warehouses, and 20% from regional economic blocs (e.g., EAC, IGAD) for shared assets. Total projected county contribution: KES 150–200 Billion over five years, with at least 40% targeting women, youth, and vulnerable groups.
- **Implementation Support:** National technical assistance from the Agricultural Transformation Office (ATO) includes capacity building in financial management and digital reporting. Execution targets aim for 80% on-time delivery, with incentives like performance-based grants for high-performing counties.

### 8.3. Digital Resource Tracking and Transparency

Digital tools enhance accountability and reduce inefficiency, ensuring funds are used effectively.

- **Platforms:** The Kenya Integrated Agriculture Management Information System (KIAMIS) once upgraded into a national agriculture data hub will provide real-time tracking of expenditures, disbursements, and outcomes. Features include blockchain for tamper-proof traceability of subsidies (Flagship 2) and dashboards for stakeholders to monitor progress.

- **Key Metrics:** Track budget execution rates (target: 90%), fund leakage reduction (estimated 15% savings), and value-for-money (e.g., cost per beneficiary job created at KES 5,000). Audits are automated, with alerts for deviations >10%.
- **Integration:** Linked to the Integrated Financial Management Information System (IFMIS) for seamless national-county reporting, supporting compliance with the Public Finance Management Act (2012).

### 8.4. Resource Mobilization Strategy

NASIP's strategy is phased and multi-pronged, targeting KES 1,080.54 trillion total mobilization with a shift toward private-led sustainability.

- **Domestic Resource Mobilization (35% of total, KES 378.35 billion):** Integrate NASIP into the Medium-Term Expenditure Framework (MTEF) as a priority, allocating 15% of national agricultural budgets by 2026. Generate additional revenues through digitalized Agri-levies, user fees on services (e.g., certification under Flagship 5), and efficiency gains from digital systems, targeting KES 50 billion annually.
- **Development Partner e.g.gement (20% of total, KES 216.2 billion):** Secure commitments via annual donor roundtables and joint programming with partners like World Bank, AfDB, FAO, GIZ, and EU. Focus on pooled funds for Tier 3 investments (cross-cutting enablers), aiming for 80% coverage by Year 2. Alignment with

CAADP and Kampala Declaration ensures predictable flow.

- **Private Capital Mobilization (45% of total, KES 486.45 billion):** Launch de-risking facilities to attract investments in high-return areas like agro-industrial parks (Flagship 4). Launch investor roadshows and PPP frameworks, targeting KES 100 billion by 2027 through equity, loans, and impact funds.
- **Innovative Financing (Integrated across sources):** Pilot green bonds (KES 20 billion in 2025), diaspora remittances for community projects, and carbon credits from sustainable practices (e.g., Flagship 6). Scale to KES 50 billion by 2030, with proceeds reinvested in resilience-building.

**Phased Approach:** Year 1 focuses on public seed funding and donor pledges; Years 2–3 emphasize PPP scale-up; Years 4–5 prioritize private sustainability.

### 8.5. Monitoring and Reporting of Investment Performance

A performance-oriented system ensures adaptive management and accountability.

- **Tools and Frameworks:** The NASIP Results Framework tracks financial KPIs, including budget execution (90% target), leverage ratios (public-to-private >1:1.3), and ROI (e.g., KES 3–5 return per KES 1 invested). Data is disaggregated by gender, youth, and region for inclusivity.
- **Reporting Mechanisms:** Biannual scorecards by ATO, feeding into Annual Joint Sector Reviews (JSRs) and CAADP Biennial Reviews. Digital dashboards via NADH enable real-time stakeholder access. Corrective actions (e.g., reallocation) are triggered if KPIs fall below 80%.
- **Audits and Evaluation:** Independent annual audits assess value-for-money, with mid-term (2027) and end-term (2030) evaluations using OECD-DAC criteria. Findings inform adaptive adjustments, ensuring NASIP remains responsive to emerging challenges.

The NASIP Investment Costing Framework mobilizes an estimated total of KES 1,080.54 trillion over 2026–2030 through a balanced blend of public leadership (35%), development partner support (20%), and private dynamism (45%). This achievable portfolio transitions Kenya from donor dependency to self-sustaining, investment-driven growth, delivering transformative outcomes for farmers, investors, and citizens by embedding clear milestones, adaptive mechanisms, and inclusive strategies across all flagships and counties. By prioritizing blended instruments, devolved compacts, and digital transparency, NASIP ensures efficient resource use, risk mitigation, and alignment while building capacity for post-2030 sustainability through private-sector dominance and institutional reforms.

# 9. Budget & Financing Framework

## WHAT'S IN THIS CHAPTER

Current agricultural investment landscape, strategic direction for private capital mobilisation, sources and forms of finance, budget requirements, financing gap analysis, and governance of the financing mechanism.

### 9.1 Overview of the Agricultural Investment Landscape

Despite its crucial role in boosting economic growth, creating jobs and ensuring food security, public investment in the sector has historically been insufficient. Over the last decade, funding has averaged only 2.8% of the national budget, significantly below the 10% target set by the Malabo Declaration of the Comprehensive Africa Agriculture Development Program (CAADP). The low level of public investment in the Agri-food system has kept challenges alive, including low productivity, vulnerability to climate shocks, and limited market access, especially for smallholder farmers, who make up most producers.

The private sector and development finance institutions (DFIs) have injected considerable resources—through loans, equity, and grants but these flows remain fragmented, often concentrated in low-risk segments like large-scale export crops (e.g., tea, coffee, and horticulture), and exhibit a pronounced risk aversion toward smallholders and agri-small and medium enterprises (SMEs). High interest rates, stringent collateral requirements, and short-term lending horizons exacerbate this, leaving critical areas such as research, infrastructure, and value addition underfunded.

NASIP 2026–2030 addresses these gaps by establishing a coordinated, blended investment framework that harmonizes diverse financing sources. This approach shifts the paradigm from siloed, project-based funding, prone to duplication, inefficiencies, and dependency on donor cycles, to a sustained, result-oriented ecosystem. Rooted in public-private collaboration, the framework leverages public funds as catalytic capital to de-risk investments, attract private players, and ensure long-term sustainability. By fostering synergies, NASIP aims to enhance efficiency, reduce administrative burdens, and align investments with measurable outcomes, such as increased yields, job creation, and export revenues, ultimately supporting Kenya’s Vision 2030 and BETA.

### 9.2 Current Landscape

The existing agri-food system financing ecosystem is characterized by a tripartite structure involving public, private, and development actors, each with distinct contributions, trends, and limitations. The following table provides a detailed snapshot:

Table 21: Current Trends

Financing Actor	Contribution Trend	Key Features	Limitations / Gaps
Public Sector (Government of Kenya GoK and Counties)	35–40% of total agricultural expenditure, with a slight upward trend due to devolution but constrained by fiscal deficits.	Focus on foundational investments like infrastructure (e.g., irrigation dams), research and development (R&D via KALRO), input subsidies (e.g., fertilizer programs), and institutional strengthening (e.g., extension services). Includes national budget allocations and county-level spending under devolved functions.	Fiscal constraints from competing priorities (e.g., health, education); delayed disbursements due to bureaucratic processes; weak linkages to monitoring and evaluation (M&E), leading to suboptimal impact assessment; and over-reliance on recurrent expenditure rather than capital investments.
Private Sector (Agribusinesses, Banks, Cooperatives)	40–45% (primarily in working capital and trade finance), growing steadily with rising interest in sustainable agribusiness but volatile due to economic shocks.	Concentrated in profitable value chains such as dairy (e.g., Brookside), tea (e.g., KTDA cooperatives), and horticulture exports. Involved with commercial banks like KCB and Equity Bank offering loans, alongside equity from agribusiness firms and cooperatives providing member financing.	High collateral requirements excluding smallholders; risk aversion leading to avoidance of high-vulnerability areas like ASALs; short-term lending (typically 1–3 years) unsuitable for long-gestation projects like perennial crops; and limited innovation in products tailored for agri-SMEs.
Development Partners / DFIs	20–25% through grants, loans, and technical assistance, with fluctuations tied to global aid trends but increasing focus on climate finance.	Thematic funding for areas like climate resilience digitalization, and inclusion. Includes multilateral DFIs like African Development Bank (AfDB) and bilateral partners like EU and JICA.	Often project-specific with finite timelines, leading to lack of continuity; dependency on donor priorities rather than national ownership; fragmented initiatives causing duplication (e.g., multiple overlapping resilience projects); and insufficient mechanisms for transitioning to sustainable local funding.

### 9.3 Strategic Direction

NASIP’s financing strategy is designed to mobilize and align these streams within a unified coordination framework, emphasizing leverage and sustainability. Key targets include:

- Achieving 40 – 45 percent private capital participation by 2030 through de-risking tools like guarantees and incentives, thereby reducing the burden on public coffers.
- Ensuring predictable public co-financing by embedding NASIP priorities into Medium-Term Expenditure Framework (MTEF) cycles, with multi-year commitments to avoid annual uncertainties.
- Securing 10–15% catalytic contributions from DFIs for high-risk areas like innovation and insurance, using blended instruments to crowd in private funds.

This direction promotes a shift toward performance-linked financing, where disbursements are tied to verifiable milestones, fostering accountability and efficiency.

### 9.4 Sources, Nature, and Forms of Finance

#### SOURCES OF FINANCE

NASIP identifies four primary sources of finance, each with sub-components and illustrative mechanisms to ensure a diversified and resilient funding pool. This approach mitigates over-reliance on any single source and enhances adaptability to economic fluctuations.

Table 22: Sources of Finance

Source	Sub-Components	Illustrative Mechanisms
Public Finance	National budget allocations (e.g., MoALD votes), county agricultural budgets (devolved funds), and parastatal investments (e.g., AFC loans).	Integration into MTEF budget lines for predictability; conditional grants to counties based on performance; development votes for flagship projects; leveraging the Agricultural Development Fund (ADF) and the National Irrigation Authority (NIA) for targeted infrastructure.
Private Finance	Agribusiness equity (e.g., from firms like Twiga Foods), commercial bank lending, impact investors (e.g., Acumen Fund), and cooperatives (e.g., SACCO savings).	Value-chain finance models like outgrower schemes, public-private partnerships (PPPs) for processing hubs, contract farming agreements, and venture capital for agri-tech startups.
Blended & Development Finance	DFIs such as AfDB, IFAD, World Bank, EU, USAID, GIZ, climate funds like Green Climate Fund (GCF), and Adaptation Fund.	Credit guarantees to lower lending risks; concessional loans with grace periods; result-based financing (RBF) tying payments to outcomes; matching grants for SMEs pilots.
Innovative & Non-Traditional Sources	Green bonds issued by the Treasury; diaspora remittances channeled via investment funds; carbon markets under Article 6 of the Paris Agreement; ESG (Environmental, Social, Governance) and impact funds.	NASIP Green Bond Facility for eco-friendly projects; crowd-funding platforms like M-Changa for community initiatives; reinvestment of agri-insurance premiums into resilience funds.

### 9.5 Nature and Form of Finance

The nature and form of finance are tailored to specific investment categories, ensuring alignment with flagship programs. This categorization promotes practical allocation, with instruments chosen for achievability and risk management.

Table 23: Forms of Finance

Investment Category	Nature of Finance	Key Instruments
Public Goods (Research, Roads, Irrigation)	Primarily concessional and budgetary, focusing on non-revenue generating assets.	Grants for initial setup, sovereign loans from DFIs, and public tenders for construction.
SME and Agribusiness Development	Commercial with blended elements to de-risk.	Credit lines from banks, equity investments, and PPPs for joint ventures.
Climate and Resilience	Green and concessional, emphasizing sustainability.	Green bonds for eco-projects, parametric insurance, and climate funds for adaptation.
Digital Transformation	Public-private co-investment for innovation.	Innovation grants, venture capital funds, and subsidies for tech adoption.
Social Inclusion	Targeted subsidies and safety nets for equity.	E-vouchers for inputs, premium subsidies for insurance, and conditional cash transfers.

## 9.6 Budget Requirements and Financing Gap Analysis

### ESTIMATED INVESTMENT ENVELOPE (2026–2030)

NASIP's total indicative envelope is KES 1,080.54 trillion phased over five years with annual escalations for inflation and growth. This is based on detailed costing from Phase 4 of the methodology (Chapter 2), incorporating unit costs, coverage targets, and ROI projections.

Financing Source	% Share	Estimated KES Billion	Illustrative Focus
Public Sector (National + County)	35%	378.35	Core infrastructure (e.g., roads, irrigation), R&D institutions, governance reforms, and subsidies for inputs and extension.
Private Sector	45%	486.45	Agro-processing facilities, market logistics, financial services, and value chain investments like storage and transport.
Blended / DFI / Donor Finance	20%	216.2	Risk-sharing instruments, catalytic funds for startups, climate adaptation projects, and technical assistance.
Total NASIP Envelope (2026–2030)	100%	1,081.54	Balanced across flagships for comprehensive sector coverage.

Table 24: Estimated Investment Envelope (2026–2030)

Phasing: 20% in Year 1 (setup and pilots), 25% in Years 2–3 (scaling), and 30% in Years 4–5 (consolidation and impact maximization).

### FINANCING GAP

Analysis reveals a projected gap of KES 250–300 billion (20–25% of the envelope), stemming from conservative public budget forecasts and unconfirmed donor pledges. Key gap areas include irrigation (KES 100 billion for large-scale schemes), agro-industrialization (KES 80 billion for parks), and resilience infrastructure (KES 70 billion for climate-proofing).

To bridge this:

- **PPP Concessions and Land-for-Equity Swaps:** Counties offer land leases in exchange for private investment in infrastructure, e.g., agro-parks in high-potential zones like the Rift Valley.
- **Green and Diaspora Bond Issuance:** Launch a KES 100 billion NASIP Green Bond series via Treasury, targeting institutional investors; diaspora funds through platforms like the Kenya Diaspora Alliance.
- **Expansion of Guarantee Facilities:** Partner with DFIs (e.g., AfDB's Africa Investment Forum) to scale guarantees, covering 30–50% of loan risks for SMEs.
- **Structured Trade and Export Finance:** Collaborate with regional banks (e.g., PTA Bank) for export credit lines, leveraging AfCFTA opportunities to unlock KES 50 billion in trade finance.

### INVESTMENT RETURNS

Economic modeling using cost-benefit analysis (CBA) tools from Phase 4 projects an average benefit–cost ratio of 1.9:1 across flagships, indicating strong viability. Potential impacts include:

- 6–7% annual agri-GDP growth through productivity gains.
- Creation of 2 million jobs, primarily in value addition and youth-led enterprises.
- Leverage of KES 500 billion in private capital, achieved via de-risking that multiplies public inputs by 3–4 times.

These returns are grounded in realistic assumptions, such as 5% inflation and 4% GDP growth, with sensitivity analyses for risks like droughts.

## 9.7 Governance and Coordination of the Financing Mechanism

NASIP establishes a multi-layered governance system to promote accountability, efficiency, and transparency, drawing on devolved structures for practicality.

Table 25: Governance and Coordination of the Financing Mechanism

Level	Institution	Core Roles
National Level	NASIP Steering Committee (SC) chaired by Principal Secretary–MoALD	Provides policy oversight, coordinates budgets across ministries (e.g., Treasury, Environment), resolves inter-agency disputes, and approves annual work plans.
	Agricultural Sector Transformation Secretariat (ASTS)	Acts as NASIP Secretariat, maintains financing database, operates blended finance platform, and generates real-time reporting dashboards for stakeholders.
	National Treasury & Planning (NT&P)	Handles budget allocations, coordinates fiscal policies, approves sovereign guarantees and green bond frameworks, and integrates NASIP into national debt strategy.
County Level	County Agricultural Investment Committees (CASICs)	Aligns county budgets with NASIP flagships, manages local PPPs, mobilizes community resources, and reports on devolved fund utilization.
Development Partner Platform (NASIP-DPG)	DFIs, donors, and partners	Harmonizes external resources, standardizes M&E frameworks, and minimizes duplication through joint programming.

## 9.8 Coordination Tools

- i. NASIP Financing and Accountability Platform (NFAP): A digital tool integrated with the Integrated Financial Management Information System (IFMIS) for real-time fund tracking, disbursement alerts, and audit trails.
- ii. Annual Joint Financing Forum: Multi-stakeholder event to review disbursements, performance, and adjustments, fostering dialog.
- iii. Integrated County–National Budget Reporting: Standardized templates linking county systems to national databases like the National agriculture data hub for seamless data flow.

This structure ensures clear roles, reducing overlaps and enhancing achievability through existing institutions.



Godfrey Kirimi displays freshly harvested tomatoes from his farm in Tharaka Nithi County. Photo: Farm Africa / Bertha Lutome

# 10. Resource Mobilization, Allocation, & Management Framework

## WHAT'S IN THIS CHAPTER

*Phased mobilisation strategies for public, private, and development partner capital; allocation principles including gender/youth ring-fencing; and resource management through digital tracking and quarterly reviews.*

### 10.1 Resource Mobilization

Mobilization strategies are phased and targeted, building on existing mechanisms for practicality.

#### PUBLIC SECTOR MOBILIZATION:

- Embed flagship financing into national and county MTEFs via annual submissions to Treasury.
- Strengthen intergovernmental fiscal compacts through CoG-MoALD agreements for 20% county co-financing.
- Utilize agencies like Agricultural Finance Corporation (AFC), NIB, and KALRO as implementation arms, with capacity-building for fund absorption.

#### PRIVATE SECTOR MOBILIZATION:

- Launch NASIP Blended Finance Facility (NBFF) as a KES 100 billion fund pooling guarantees, DFI seed capital, and private equity.

- Offer incentives like tax deductions for Agri-investments and accelerated depreciation for machinery.
- Host annual county investment forums to match entrepreneurs with financiers, targeting 500 SMEs per year.

#### DEVELOPMENT PARTNER AND CLIMATE FINANCE MOBILIZATION:

- Negotiate multi-year funds for priorities (e.g., AfDB for irrigation, IFAD for smallholders, GCF for resilience).
- Adopt RBF models, disbursing based on milestones like 10% yield increases.
- Prepare bankable proposals for NASIP Green Investment Fund under Treasury's SDG strategy, aiming for KES 150 billion.

### 10.2 Resource Allocation

- Direct 60% of public funds to enablers (e.g., infrastructure, R&D) and 40% to value chains for balanced growth.
- Implement performance-based allocations: Counties earn bonuses (e.g., 10% extra) for meeting KPIs like 80% budget execution.
- Ring-fence 10% for gender/youth programs, ensuring proportional benefits (e.g., 40% women beneficiaries).

### 10.3 Resource Management

- Deploy NFAP and national agriculture data hub for digital tracking, with mobile apps for real-time county reporting.
- Standardize integrated templates for quarterly reports, covering financial and outcomes.
- Conduct annual Joint Sector Reviews (JSRs) with independent auditors to assess efficiency and recalibration.

## II. Implementation Framework

### WHAT'S IN THIS CHAPTER

*The devolved, actor-centric delivery model; legal and institutional framework; the five-phase phased rollout and adaptive learning cycle; coordination mechanisms from national to county; and knowledge management and communication strategy.*

### 11.1 Overview

The Implementation Framework for the NASIP 2026–2030 serves as a definitive guide for translating the Plan's strategic vision into specific, accountable, and resilient actions. This framework draws on key lessons from the previous NAIP I (2019–2024), which underscored the need for stronger devolved coordination, increased private-sector participation, and flexible, evidence-based monitoring.

NASIP's implementation approach is fundamentally a county-led, multi-stakeholder partnership model. It is designed to operationalize the nine flagship initiatives through a phased, performance-driven rollout, ensuring institutional clarity and effective resource stewardship. The framework is fully aligned with BETA, Vision 2030, and the Kampala Declaration on Food Systems Resilience, thereby promoting inclusivity,

sustainability, and investor confidence. Implementation will depend on de-risking investments, particularly through blended finance, leveraging digital tools such as the national agriculture data hub, and linking fund disbursements explicitly to performance milestones and verifiable results.

Implementation will span five fiscal years (2026–2030), targeting a total investment envelope exceeding KES 500 billion, with a deliberate focus on mobilizing over 80 percent from private and blended financial sources. Oversight will be centralized under the Agri-food Systems Transformation Secretariat (ASTS), supported by annual Joint Sector Reviews (JSRs) and a comprehensive mid-term evaluation to facilitate adaptive management and timely course corrections.

### 11.2 NASIP's Devolved and Actor-Centric Implementation Model

NASIP 2026–2030 moves beyond a centralized, top-down approach. It is based on a collaborative institutional ecosystem that promotes a devolved and actor-centric delivery model. This model acknowledges that sustainable transformation is achieved through the coordinated efforts of interconnected stakeholders, with County Governments serving as the frontline implementers.

The success of NASIP hinges on this shared responsibility,

where each actor mobilizes unique resources, capacities, and innovations. This integrated ecosystem transforms NASIP from a policy document into a living system of partnerships that connects financing, knowledge, and action, moving Kenya toward a resilient and competitive Agri-food economy. The framework aims to mobilize up to 50%–60% private capital and ensure that at least 40% of all program beneficiaries are women and youth (as defined by the cross-cutting theme).

### 11.3 Legal Framework

At the national level, agriculture, livestock, and fisheries are governed by numerous laws and regulations that still need alignment with aspirations of the 2010 Constitution and a unified vision for a commercialized and sustainable agricultural sector. The National government in the Agricultural Sector is mainly responsible for policy, standards and regulation of services, international obligations and countrywide programs. The National government and its agencies will thus be responsible for policy, standards, regulation of agricultural services, international obligations, programs that may negatively impact on national economic interests and nationwide agriculture sector interventions.

County-level legislative development remains nascent and fragmented, often misaligned with national priorities. These gaps create challenges in cascading and adapting the national agricultural development agenda to the counties. Therefore, there is a need for technical support to organize, harmonize,

and align these frameworks for coherent and effective sectoral development across all levels of government.

For effective Agri-food systems implementation, counties require coherent policies and legislation addressing coordination, land governance, enforcement, mechanization, capacity building, data systems, productivity, post-harvest management, inclusion of youth and women, regulation of inputs, and cooperative governance. Both national and county governments, in consultation with stakeholders, will review and develop agricultural laws and regulations to ensure constitutional compliance and responsiveness to sector needs.

## 11.4 Institutional Framework

The National and the County Governments: Both levels of government will be actively involved in the implementation of NASIP 2026-2030. The Ministries in charge of crops, livestock and fisheries will implement NASIP 2026-2030 through their respective departments and agencies by developing subsector policies, strategies, laws, regulations and plans, attending to international obligations while coordinating the implementation of nationwide agricultural programs. County governments will be responsible for the implementation of NASIP 2026-2030.

NASIP will inform the development of the 4th generation CIDPs with the component of agriculture in the CIDPs aligned to the NASIP flagships. The counties will through the Council of Governors (CoG) guided to develop a 10-year agri-food systems implementation plan that aligns county agri-food

systems investments to those of NASIP. Through the 10-year county agri-food system investment plans, counties will be enabled to finance the investments that will transform the agri-food system. Counties will support the implementation of NASIP by operationalizing national policies and strategies. The Constitution 2010 provides for County Governments to be responsible for crop and animal husbandry, livestock sale yards, County abattoirs, plant and animal disease control, fisheries, animal control and welfare. Adherence to this provision will be critical in ensuring the success of NASIP.

**Other sector ministries and non-state actors:** Several other Sector Ministries and non-state actors provide the necessary environment for investment in the sector (Annex 3) through partnership, collaboration and technical support as required at all levels of government for implementation.

## 11.5 Strategic Implementation Plan: Phased Rollout and Adaptive Learning

NASIP’s implementation is divided into four sequential five-year phases designed to ensure continuous development, scalability, and long-term sustainability. This approach intentionally diverges from the fragmented execution of NAIP I by integrating capacity development, evidence-based planning, the Comprehensive Africa Agriculture Development Program (CAADP) compliance, and Value

Chain Development (VCD) as recurring themes within each phase. The phases are synchronized with national and county budget cycles, utilizing adaptive learning loops informed by national agriculture data hub dashboards and stakeholder feedback. An overview of the implementation is shown in the table below with an implementation matrix that incorporates indicators from SMEF in the annex section.

Table 26: Phased Implementation Matrix

Phase	Duration	Focus Area and Objective	Key Activities and Investment Priorities
1. Pre-Implementation	Oct 2026– Mar 2027	Institutional & Digital Readiness	Finalize NASIP document; Revamp ATO Secretariat structure to Agri-food Systems Transformation Secretariat (ASTS); Launch NADH minimum viable product (MVP); Sign Inter-Governmental Agreement on implementation. .
2. Setup and Foundational Capacity	April 2027 – Mid-2028	Building the Base: Establish institutional and human capacity at devolved levels to effectively launch Flagships.	Establish County Agri-food System Steering Committee (CASSCOM); Train 500+ officers in digital literacy, data analytics, and VCD; Develop operational guidelines for Flagships (e.g., Agriculture Innovation Fund - AIF); Conduct national baseline assessment via NADH expansion.
3. Scaling and Evidence-Driven Rollout	Mid-2028 – 2029	Accelerated Growth: Ramp up flagship execution, emphasizing data-driven adjustments and full CAADP domestication.	Mid-term implementation evaluation: Expand irrigation infrastructure (150,000+ ha under Flagship 3); Launch first five Agro-Parks (Flagship 4); Mobilize private finance via guarantees (e.g., initial USD 1.15 Billion); Advance VCD through large-scale PPPs for market linkages.
4. Optimization and System Integration	2029	Deepening Impact: Optimize performance through adaptive refinements and fully integrate CAADP resilience targets and sophisticated VCD strategies.	Scale innovation hubs (47 established under Flagship 7); Enhance food safety labs and standards compliance (Flagship 5); Strengthen strategic resilience reserves (Flagship 6). Use NADH for real-time portfolio reallocation.
5. Sustainability and Transition	2030	Consolidation and Handover: Institutionalize gains, prepare for post-NASIP continuity, and ensure lasting impact.	Final evaluation and knowledge transfer; Institutional linkages to post-2030 strategies; Full alignment with CAADP continental reporting; Shift focus to private-led maintenance of infrastructure and PPPs.

## 11.6 Coordination Mechanism

Various institutions will be involved in implementing this Policy, ranging from the National and County Governments, the Private Sector, and other stakeholders, with support from Regional and Global Institutions. A review of the existing policies and strategic documents reveals almost similar institutional frameworks, although under every policy and document, the roles and responsibilities vary slightly.

NASIP 2026–2030 implementation will make use of existing coordination mechanisms already established under ASTGS but borrows and harmonizes the coordination mechanisms from the Agricultural Policy 2021 and the National Agroecology Strategy for Food Systems Transformation 2024-2033, among others.

In the Agricultural Policy 2021, an Intergovernmental Secretariat (IGS) is proposed as the link between the national and the county governments in the implementation of the policy. In this NASIP, the IGS is comparable to JASCCOM. On the same note, the Intergovernmental Forum on Lands and Agriculture and the Summit in Agricultural Policy and the Agroecology summit in the National Agroecology Strategy for Food Systems Transformation compare or are taken to be the same as the National Agri-food Systems Summit proposed in the NASIP.

### 11.6.1 COORDINATION OF NASIP IMPLEMENTATION AT NATIONAL LEVEL

- NASIP National Steering Committee/JASCCOM:** Will form the apex national organ that will administer on the progress of implementation of the NASIP 2026-2030. Co-Chaired by the Cabinet Secretary, MoALD and the CoG, it will comprise the PS (Crops, Livestock, Fisheries, Irrigation, and other relevant departments; Development partners; Governors in Agriculture Committee, Private Sector. The steering committee will receive and approve annual progress reports from the NASIP Inter-Departmental Committee. In line with the provisions of Article 187 of the CoK 2010, seamless Intergovernmental relations between the two levels of government are necessary within the Agricultural Sector, and JASCCOM drawing membership from both levels of government will be strengthened and will work with the National Agri-Food Systems Steering Committee. JASCCOM will provide a mechanism for both levels of government to cooperate and consult on a regular basis. The highest leadership in the National and County governments will respectively take responsibility for overseeing the development of annual implementation plans for NASIP.

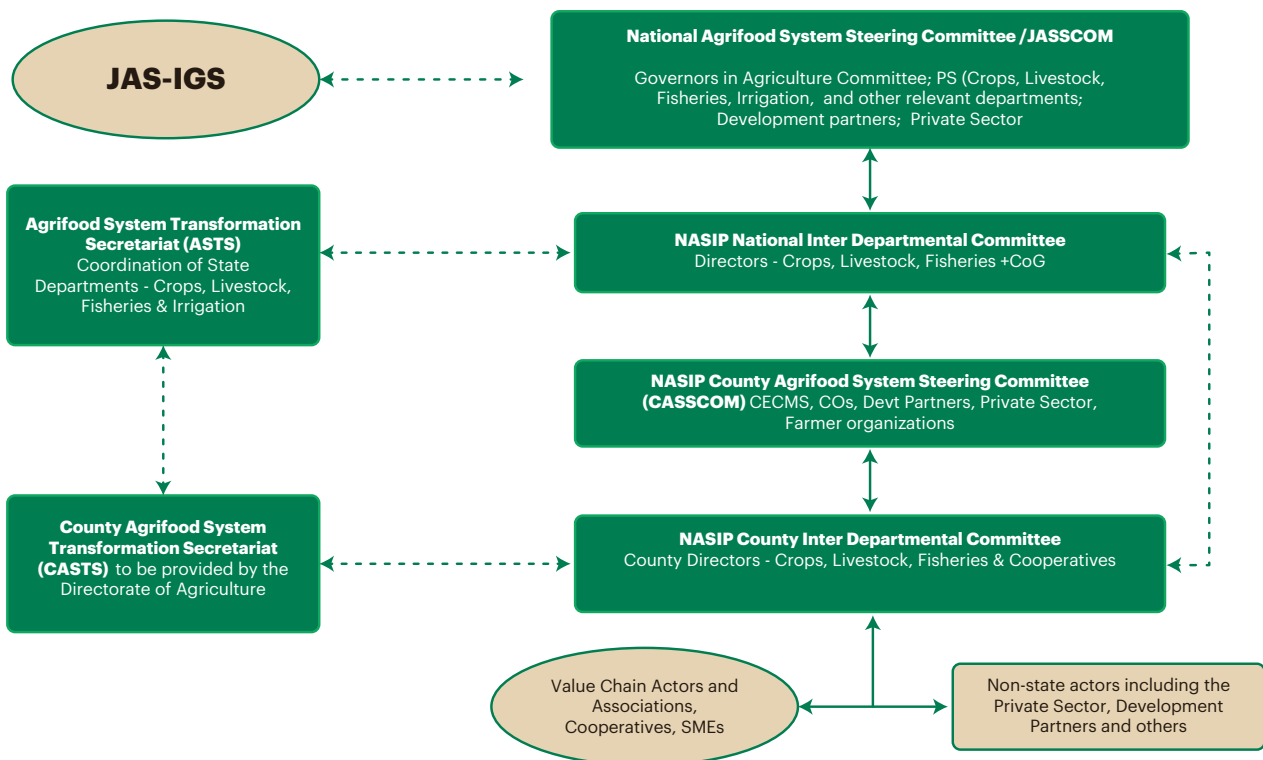


Figure 14: NASIP 2026-2030 Delivery Mechanism

- **NASIP Inter Departmental Committee:** The inter-departmental committee will be established at the national level to coordinate the mainstreaming and implementation of NASIP across all sectors (Agriculture, Livestock, Fisheries, Health, ASALs, education, trade, cooperatives, Water, and Environment) in Kenya. The Inter-Departmental Committee will be responsible for the overall coordination of the NASIP implementation. It will comprise directors in crops, livestock, fisheries, irrigation, cooperatives, and the CoG.
- **The Ministry of Agriculture and Livestock Development:** The MoALD will formulate, implement and monitor agricultural policy and regulation, while developing and coordinating programs to support crops and livestock development. Fisheries, irrigation and research that are critical to delivering the NASIP will be under the respective offices responsible for those docket. The Cabinet Secretary MoALD is ultimately responsible for delivering the targets for the agricultural sector and will work with the respective PSs to ensure high-level NASIP coordination and implementation across both MoALD state departments and the relevant ministries. The PS Crops will Chair the NASIP Steering Council and will be responsible for all the activities of the Agri-food System Transformation Secretariat (ASTS) that will be formed from the current Agricultural Transformation Office (ATO).
- **The Agri-food Systems Transformation Secretariat (ASTS):** This will be the national secretariat for inter-ministerial coordination, performance management and mutual accountability for the sector in implementing the ASTGS and consequently, NASIP. It will constitute director level staff from the state departments of agriculture, livestock and fisheries and other departments relevant to agriculture who will each be a flagship lead. It is recommended that JASSCOM will second a liaison to the ASTS to support day-to-day activities that affect counties.

The ASTS will operate under the leadership of a Technical Lead/ASTS Director, in consultation with the Cabinet Secretary. Key functions of the ASTS will include:

- Facilitate and coordinate broad, multi-sectoral collaboration for effective implementation of the ASTS with the CS.
- Provide technical support to the Steering Council by preparing progress reports using a database that the ASTS will maintain on the status and key issues affecting all ongoing transformation and food and nutrition security interventions.
- Provide an independent perspective on transformation performance management and monitoring and evaluation, validating data on implementation provided by MoALD state departments and the counties, and assessing these against the flagship KPIs.
- Provide guidance on how to embed sustainability across all flagships, and track the incorporation of sustainability interventions. The ASTS will further monitor and enforce compliance with sustainability policies and recommendations.

**TWGs:** The ASTS will align its work with the Technical Working Groups (TWGs) established under the Joint Agriculture Sector Steering Committee (JASSCOM) and may, where necessary, establish additional TWGs. The TWGS will address issues under various strategic objectives, namely

- fostering the transition to resilient and sustainable agriculture and food systems;
- promoting sustainable consumption and facilitating transition toward healthy and sustainable diets;
- creating an enabling environment and incentives for Agri-Food systems transitioning and scaling up;
- strengthening research, innovation, and training, to foster co-creation, and co-learning on Agri-Food systems approaches; and, enhancing social equity, inclusion and participatory governance in the food systems.

### 11.6.2. INTERGOVERNMENTAL COORDINATION MECHANISM FOR THE DELIVERY OF INVESTMENTS IN THE AGRICULTURAL SECTOR

**Council of Governors (CoG) and JASSCOM:** The MoALD CS will work closely with the Council of Governors at the highest levels of decision making on the NASIP. On more operational and interim strategic matters between sittings of the NASIP Steering Committee, the ASTS will collaborate closely with the Joint Agricultural Sector Consultation and Cooperation Mechanism (JASSCOM) that will take the lead in supporting the counties to operationalize NASIP and implementation on the ground, as part of their mandate to provide an interface between national and county governments on all intergovernmental matters related to the Agri-food system.

It is recommended that JASSCOM will second a liaison to the ASTS to support day-to-day activities that affect counties. The county-level delivery functions will be embedded within existing structures in the CoG, JASSCOM and county-level leadership, with the CoG encouraged to anchor ASTS activities at the county level within the CASSCOM. Additional resources and capacity building will be required for county leaders including CoG Agriculture Committee, agriculture CECMs and Chief Officers (Cos) to incorporate ASTS provisions as part of their CIDPs.

**County Agri-food Systems Steering Committee (CASSCOM):** A Technical Working Group will be established within County Agri-food Systems Steering Committee (CASSCOM) with roles and responsibilities as envisaged under the Intergovernmental Relations Act (2012). CASSCOM will be tasked with, among others mainstreaming of the NASIP 2026-2030 in the Annual Development Plans (ADPs) starting with the 2026/2027 fiscal year and in the 4th generation and subsequent CIDPs as well as coordination of the implementation of the same plans (See Annex 3).

### 11.6.3. NASIP COUNTY INTER DEPARTMENTAL COMMITTEE

This mirrors the inter-departmental committee at the national level and comprises the directors in the agriculture sector at the county level, value chain representatives, and Non-State Actors representatives at the county level. Its role will

be to coordinate the mainstreaming and implementation of NASIP across all sectors (Agriculture, Livestock, Fisheries, Health, ASALs, Education, Trade, Cooperatives, Water, and Environment) at the county level. See Annex 3 for more details.

## 11.7. Financial Framework

The agricultural sector is characterized by low funding despite being the engine of economic growth and development. Phase I (2019-2024) of the ASTGS implementation did not achieve its intended targets due to low funding from both the public and private sectors.

To implement NASIP Investments, the bulk of the funding will be provided to the relevant Ministries, Departments, and Agencies (MDAs) by the National and County governments through the exchequer. The funding will be guided by the annual expenditure budgets for each flagship. The budget requirements to implement the flagships will be presented to the exchequer for funding in every annual budget cycle.

In addition, the private sector will be offered incentives to support the financing of NASIP. Direct financing and investments by the private sector through Public Private Partnerships (PPPs) will be critical to the success. Implementation of the NASIP, growth, and development of the Agri-food systems. For effective participation of the private sector, the National and County governments will create conducive environments to facilitate participation in

the agriculture sector. This should include strengthening rural credit institutions to support farmers' investments, savings, and risk management; introduction of simple procedures in providing loan facilities for agricultural activities and agro-based industries; ensuring availability of credit to farmers and other agricultural value-chain actors at concessionary interest rates; and introduction of appropriate agricultural insurance schemes to protect farmers from risks associated with natural calamities. The involvement of NGOs and civil society in resource mobilization, capacity development, and general oversight over governance, trade issues, and other policy interventions will be essential.

The resources from the national government will focus on the policy and regulatory elements, as well as aspects of the flagships that require the national government's attention, such as those described above. At the county governments, the funding will finance all the aspects that are related to the counties as defined in this plan. However, both the national and the county governments share a responsibility of mobilizing resources from development partners and ensuring that they are effectively used for the purposes intended.



## 11.8 Ongoing Programs

The implementation frameworks take cognizance of the ongoing programs within the agricultural sector especially in the input subsidy sector, markets and in building resilience to

climate among others. A list of ongoing programs is annexed in Annex 4.

## 11.9 Knowledge Management and Strategic Communications

Effective implementation of NASIP demands an integrated system for knowledge generation, learning, communication, and accountability. NAIP, I revealed weak communication and fragmented knowledge- sharing limited stakeholder ownership, transparency, and responsiveness. Under NASIP, Knowledge Management (KM) and Strategic Communication serve as core enablers of system transformation, ensuring that evidence flows efficiently across institutions, that data informs decisions, and that stakeholders participate meaningfully in agricultural development.

NASIP positions KM as the engine that converts data into insight, insight into dialog, and dialog into action, enabling national and county actors to co-create solutions, continuously refine implementation, and align investments with Kenya's long-term agricultural transformation goals. Strategic communication will strengthen visibility, build public trust, mobilize investment, support behavior change, and sustain engagement across the entire agri-food ecosystem, including farmers, county governments, private firms, financial institutions, researchers, development partners, youth innovators, and civil society.

NASIP's vision is to establish an open, digitally enabled, learning-oriented, and collaborative agricultural system in which scientific evidence, indigenous knowledge, local innovation, and real-time data collectively shape policy, guide investments, strengthen accountability, and drive productivity and resilience at farm and market levels.

To operationalize this vision, NASIP will establish an integrated knowledge management and strategic communications architecture linked to the national monitoring, evaluation, accountability, and learning (MEAL) framework and the National Agriculture Data Hub.

A dedicated NASIP knowledge management and strategic communications coordination unit will be embedded within the implementation structure to coordinate knowledge governance, strategic visibility, stakeholder engagement, digital communication systems, evidence dissemination, learning processes, and intergovernmental information exchange across national and county levels.

The KM and strategic communications architecture will pursue the following strategic objectives:

- Build national ownership of the NASIP agenda through clear, consistent, accessible, multilingual, and citizen-centered communication.
- Enhance accountability and transparency by providing real-time progress dashboards, open-data platforms,

evidence-based reporting, and public performance scorecards.

- Foster continuous learning and adaptive management by enabling counties, institutions, farmer organizations, and development partners to share lessons, innovations, and implementation experiences.
- Promote inclusivity by ensuring that women, youth, persons with disabilities (PWDs), pastoralists, Indigenous communities, smallholders, and marginalized populations actively participate in decision-making and knowledge creation processes.
- Strengthen public-private collaboration by linking innovation, research, finance, agribusiness, and technology actors through structured knowledge exchange platforms.
- Support investment mobilization and international positioning by communicating Kenya's agricultural transformation progress, investment opportunities, and impact stories to domestic and global audiences.
- Institutionalize two-way communication and citizen feedback systems that allow farmers and stakeholders to continuously inform implementation priorities, service delivery improvements, and policy refinement.
- Safeguard information integrity through crisis communication systems, misinformation response mechanisms, and evidence verification protocols.

This approach will be embedded throughout the NASIP implementation cycle to reinforce delivery and support the outcomes outlined below.

### Pre-Implementation (2025)

- National and county-level launch of NASIP.
- Clear communication of roles, expectations, and investment opportunities.

### During Implementation (2026–2030)

- Ongoing storytelling, real-time progress dashboards, and open dialog platforms.
- Regular county learning exchanges and national review forums.

### Post-Implementation (2030)

- Consolidation of knowledge products, evaluation reports, and documented lessons.
- Strategic advocacy to sustain momentum and inform the next investment cycle.

## DIGITAL KNOWLEDGE AND COMMUNICATION INFRASTRUCTURE

NASIP will leverage advanced digital public infrastructure, artificial intelligence (AI), geospatial systems, and interoperable data platforms to modernize agricultural knowledge systems and accelerate evidence-driven transformation. The National Agriculture Data Hub will serve as the central platform for integrating agricultural data, analytics, research outputs, extension information, market intelligence, climate advisories, and investment tracking systems across national and county institutions. Digital KM and communication systems will include:

- AI-enabled analytics and decision-support systems for planning, forecasting, and adaptive management.
- National and county-level real-time implementation dashboards.
- Digital repositories for research, policy briefs, learning products, and agricultural innovations.
- Farmer-facing digital advisory platforms accessible through mobile applications, SMS, USSD, radio, and community information systems.
- Geospatial visualization and climate-risk communication tools.
- Integrated feedback and grievance redress mechanisms.
- Multilingual communication platforms to improve accessibility and inclusion.

The architecture will ensure interoperability across government systems, county platforms, research institutions, development partners, and private-sector digital ecosystems while adhering to national data governance, cybersecurity, privacy, and data protection standards.

## KNOWLEDGE GENERATION, LEARNING, AND EVIDENCE USE

NASIP will institutionalize a culture of evidence-based implementation and continuous learning across the agri-food system. Knowledge generation will combine scientific research, implementation experience, indigenous knowledge systems, farmer-led innovation, and private-sector insights to strengthen policy responsiveness and practical problem-solving.

The program will support:

- Annual agricultural transformation and investment reports.
- County agricultural performance scorecards and benchmarking systems.
- Policy briefs and evidence translation products.
- Learning reports and implementation case studies.
- Innovation documentation and scaling frameworks.

- Knowledge-sharing forums and county learning exchanges.
- National agricultural review conferences and policy dialogs.
- Communities of practice linking researchers, extension agents, farmers, innovators, and investors.

Special emphasis will be placed on translating technical research into actionable information for farmers, policymakers, investors, and county implementers.

## STAKEHOLDER ENGAGEMENT, PUBLIC PARTICIPATION, AND BEHAVIOR CHANGE COMMUNICATION

Strategic communication under NASIP will go beyond information dissemination to support public participation, social accountability, trust-building, and behavioral transformation. Communication strategies will be tailored to different stakeholder groups and delivery channels to ensure accessibility, relevance, and inclusion.

Engagement mechanisms will include:

- National and county stakeholder forums.
- Public consultations and participatory planning sessions.
- Farmer feedback systems and digital engagement channels.
- Community radio programs and local-language campaigns.
- Youth innovation and agripreneurship communication initiatives.
- Social and digital media engagement.
- Investor roundtables and agribusiness visibility campaigns.
- Strategic advocacy on nutrition, climate resilience, food safety, sustainable land use, and technology adoption.

These mechanisms will strengthen citizen ownership, increase accountability, improve service delivery responsiveness, and support the adoption of transformative agricultural practices.

## CAPACITY DEVELOPMENT FOR KNOWLEDGE MANAGEMENT AND COMMUNICATION

NASIP will strengthen institutional and human-resource capacities required to sustain effective knowledge ecosystems across national and county governments. Capacity-building efforts will target technical officers, extension personnel, farmer organizations, research institutions, communication specialists, and local community structures.

Priority areas will include:

- Digital literacy and data management.
- Evidence generation and interpretation.
- Knowledge translation and policy communication.
- Strategic communication and media engagement.
- AI-enabled analytics and digital extension systems.
- Participatory learning and adaptive management.
- Monitoring, evaluation, and learning methodologies.
- Crisis communication and misinformation management.

### IMPLEMENTATION CYCLE AND LEARNING CONTINUUM

The KM and strategic communications system will be embedded throughout the NASIP implementation cycle to reinforce delivery, strengthen adaptive management, and sustain long-term transformation outcomes.

#### PRE-IMPLEMENTATION PHASE (2026)

- National and county-level launch and dissemination of NASIP.
- Stakeholder sensitization and public awareness campaigns.
- Communication of institutional roles, financing opportunities, and implementation expectations.
- Establishment of KM governance structures and digital systems.
- Baseline assessments and stakeholder mapping.

#### IMPLEMENTATION PHASE (2026–2030)

- Real-time implementation dashboards and public reporting systems.
- Ongoing storytelling, evidence dissemination, and visibility campaigns.
- Continuous county learning exchanges and national review forums.
- AI-enabled monitoring and adaptive management processes.
- Citizen feedback, grievance redress, and participatory accountability mechanisms.
- Annual knowledge products, investment reports, and policy dialogs.

#### POST-IMPLEMENTATION AND TRANSITION PHASE (2030 ONWARD)

- Consolidation of knowledge products, evaluations, lessons learned, and impact assessments.
- Documentation and scaling of successful models and innovations.
- Strategic advocacy to sustain reform momentum and guide future investment cycles.
- Institutionalization of long-term agricultural knowledge systems and digital public infrastructure.

### MONITORING, EVALUATION, AND PERFORMANCE INDICATORS

The effectiveness of NASIP's KM and strategic communications framework will be monitored through measurable indicators integrated into the national MEAL system. Key indicators will include:

- Number of knowledge products generated and disseminated annually.
- Percentage of counties utilizing real-time reporting systems.
- Stakeholder participation rates in learning and consultation forums.
- Farmer reach through digital advisory and communication platforms.
- Public access and utilization of open-data systems.
- Number of policies and investment decisions informed by evidence products.
- Frequency of county learning exchanges and national review forums.
- User satisfaction and responsiveness of feedback systems.
- Media and public engagement metrics.
- Levels of investor engagement and partnership mobilization.

Through this integrated and technology-enabled approach, NASIP will institutionalize a transparent, inclusive, evidence-driven, and adaptive agricultural transformation ecosystem capable of accelerating innovation, strengthening accountability, improving coordination, and sustaining long-term national agri-food systems transformation.



# 12. Monitoring, Evaluation & Learning (MEL) Framework

## WHAT'S IN THIS CHAPTER

*The Results Framework aligned to ASTGS, CAADP Kampala Commitments, and SDGs; M&E implementation processes; data and information management systems; mutual accountability structures; and the evaluation methodology and reporting schedule.*

## 12.1 Results Framework and Alignment to ASTGS and Kampala CAADP Commitments

The Ministry of Agriculture and Livestock Development (MoALD) developed a Sector-Wide Monitoring and Evaluation Framework (SMEF) that is aligned to devolved units- counties, regional, and national commitments to CAADP and SDGs. The SMEF captures indicators that define SDGs, CAADP - Kampala Commitments as well as indicators that assist in measuring the achievements of ASTGS and the Agricultural Policy 2021. The indicators for NASIP will be aligned with those of SMEF for consistency purposes.

The SMEF framework provides a –

- i. Systematic monitoring and evaluation for the agricultural sector-wide interventions in line with the Key Result Areas (KRAs) derived from the sector policies, strategies, programs and projects, and serve as an accountability and learning framework for the sector's stakeholders.
- ii. Result-based framework for periodic assessment and evaluation of achievements realized in the sector as well as Kenya's regional, continental and international commitments. It sets the basis for a transparent process by which the citizenry and other development stakeholders can undertake a shared appraisal of results. It also outlines the principles of a strong M&E system as an important instrument for driving the achievements of set goals under various development agendas in the sector.
- iii. Reference point for sector stakeholders in developing their projects and programs M&Es thereby allowing continuous monitoring, evaluation and reporting of sector performance. The data and information generated by the systems are for enhancing sector planning by providing evidence-based information thereby providing a common approach in evaluating

the sector's policies, programs, plans and/or projects.

- iv. Framework to improve accountability of resources, measure outputs and outcomes in the agricultural sector while drawing lessons that enhance resource allocation and planning and resource allocation in subsequent Agri-Food systems strategies.

**At the impact level**, ASTGS is fully aligned with four of the five CAADP outcomes including wealth creation through increased incomes; economic opportunities and prosperity through the number of farmers directly benefiting from the transformation; improved food security for all; and improved access to productive social protection through reducing the high-needs population (and providing minimum price controls using cash transfers instead of price stabilization through the strategic food reserve).

SMEF (Annex 5) provides an evaluation framework that captures the impact and outcomes in line with the ASTGS and the CAADP. At the impact level, SMEF captures poverty, food security and nutrition aligning to the Kampala Indicators and targets. The prevalence of undernutrition, food insecure population, poverty headcount and wasting are all indicators that capture the aspirations of the CAADP Kampala Commitments (Annex 6).

**At the Outcome level**, the SMEF captures income changes for the small-holder farmers an element that corresponds to the increase in the per capita income. The output level also captures an increase in agricultural productivity and value addition which corresponds to increased output of Agri-food production in the CAADP targets. The Kampala commitments also target post-harvest losses which are also captured in the SMEF.

## 12.2 Monitoring, Evaluation, Learning and Adaptive Management

Monitoring and Evaluation (M&E) is an integral part of the implementation of NASIP. In addition to performance management and mutual accountability, this M&E structure has the following purposes;

- i. Rigorous M&E builds credibility with investors and development partners. Objective, reliable data enables NASIP 2026-2030 funders to gauge the impact of their investments, increasing the likelihood of continued funding for successful interventions. In addition, they also provide a basis on which to request technical assistance for interventions that are behind target.
- ii. M&E fosters public accountability and helps garner public and political support for the interventions that have successful, measurable impact.
- iii. M&E framework provides the government/ministry and other stakeholders with a tool for Performance Monitoring (PM), tracking implementation progress and evaluating the gains of NASIP II.
- iv. It provides valuable insights into the outcomes and achievements of NASIP 2026-2030 helping stakeholders make informed decisions for future improvements on similar interventions that seek to transform the agricultural sector in Kenya.

Beyond tracking and reporting, the NASIP M&E framework is explicitly designed to generate and institutionalize learning across the Agri-food system. Learning will be documented through After-Action Reviews conducted after each quarterly reporting cycle, mid-term lesson-learning workshops involving national and county stakeholders, and annual Joint Sector Reviews that synthesize evidence across all nine flagships. Lessons learned will be packaged into knowledge products, including briefs, case studies, and dashboard narratives, and shared through the National Agriculture Data Hub, the ASTS communication platform, and stakeholder forums such as CASSCOM and CAADP Biennial Reviews. This ensures that insights from implementation reach decision-makers at both national and county levels in a timely and accessible format.

Adaptive management is the mechanism through which M&E findings translate into concrete course corrections. When monitoring data or evaluations reveal that a flagship is underperforming or that contextual conditions have changed, the ASTGS will trigger a structured response: (i) policy or regulatory adjustments, in coordination with relevant ministries; (ii) reallocation of resources from underperforming to high-performing flagships or counties; (iii) redesign of specific interventions based on evidence from county-level implementation; and (iv) feedback loops that channel insights from extension officers, county governments, and beneficiaries back into planning cycles. This adaptive approach ensures that NASIP remains responsive to evolving realities throughout the 2026–2030 implementation period.

The M&E Plan for the NASIP 2026-2030 follows the SMEF metrics which are aligned to the national goals of MTP IV and the BETA model, the CAADP Kampala Commitments, and the SDGs. The metrics are defined over a result-based framework that covers – Impact, Outcomes, Outputs and Inputs. To monitor the NASIP 2026-2030 implementation, performance will be measured against progress milestones as well as

result metrics at different levels – inputs, outputs, outcomes and impact for all the flagship interventions at each county and aggregated to a national metrics.

This flagship-level tracking will be used to determine linkages between national outcomes and flagship outcomes in each county, and to highlight any differences in target attainment between the flagships, as well as between different counties implementing the same flagship. In addition to the outcome metrics, operational-level input and output metrics will be tracked at the flagship level for each county to ensure that planned implementation milestones and operational targets are achieved as intended.

For each flagship, independent evaluators will be contracted to conduct M&E in each county where the flagship is being implemented. For flagships 1, 2 and 5, the independent evaluator will heavily leverage the data platforms that will be built as part of the data enabler in flagship 8. These M&E data from all the flagships will then be combined by the ASTS to create a transformation-wide visibility regarding progress against target inputs, outputs and outcomes, including where implementation is going as planned and where there are delays.

A summary of these three different levels of result metrics and their tracking at the overall NASIP level and flagship level is shown in Annex 5 which integrates the SMEF and the NASIP M&E framework. The NASIP M&E proposes to measure the impact and outcome as follows.

The NASIP M&E proposes to measure the impact and outcome as follows

- **IMPACT** The impact will be measured as the overall impact of the ASTGS implemented via NAIP I and NASIP 2026-2030 over the 10 years. The following metrics will be tracked or measured to examine the impact of NASIP /Impact of ASTGS.
  - Reduce poverty incidence (head count ratio), intensity (poverty gap index), and severity (squared poverty gap index).
  - Resilience to Climate Shocks and Food insecurity - Resilience Index
- **OUTCOME** To measure the achievement of outcomes of transformation in the agricultural sector three metrics as identified in ASTGS will be tracked
  - Increase average small-scale farmer incomes by ~30-40% and directly impact ~3 million small-scale farmers, pastoralists and fisherfolk
  - Increase agricultural GDP by 35% to KES 3.9 trillion

Reduce the food-insecure population to 0-1.3 million, while reducing the cost of the food basket by at least 15 percent and improving nutrition outcomes (reducing stunting in children under five years from 18 percent to below 13 percent, as measured by the National Nutrition and Health Survey).

## 12.3 Implementing the M&E framework

The implementation of the NASIP 2026-2030 M&E framework will follow the SMEF steps for the purposes of alignment and universality

- Carry out Sector M&E activities through existing systems as a bridge in the short-term, while supporting M&E capacity development in the long-term;
- Promote ownership of sector-wide monitoring and evaluation efforts at both national and county levels and across all the related sectors;
- Facilitate effective communication at both national and county levels and across the related sectors for effective M&E activities;
- Strengthen stakeholder engagement, collaboration, coordination and accountability mechanisms at all levels for effective and efficient M&E activities through implementation of the framework.
- Redesign the M&E institution arrangements for viability and complete operationalization of Agri-Food Systems Transformation Secretariat (ASTS) through adequate staffing and sufficient budgetary support;
- Strengthen human resource capacity at both national and county levels through training, adequate staffing, competitive remuneration and motivation of staff by submitting proposals to Public Service Commission at the National level and the County Public Service Boards at the County Governments level;
- Develop and improve the physical infrastructure through the provision of adequate office space for M&E, procurement of adequate office equipment and materials, procurement of tools and equipment for field data collection (e.g. phones, tablets) and transportation facilities (e.g. vehicles) for M&E activities;
- Secure adequate funding on a sustainable basis for the M&E sector-wide through the National Government budget, County Government budgets and dedicated support from development partners.

## 12.4 Data and Information Management

**Flagship 7** identifies investments to be undertaken in research, data and innovation. Data is a key input in the research agenda and in decision making in the development realm. The quality, validity and reliability of data is as good as the process of collection, collating and analysis.

Data for the implementation of the NASIP 2026-2030 will be collected from across the four levels : Impact, outcome, output and input. It will be collected from the county level and national level. At the county level, data for the input, output and some outcome level indicators will be collected with macro indicators associated with impact and outcome collected at national level.

Data collection tools and systems will be developed in line with the levels of monitoring and disseminated to the counties for use. A digital performance management system for data capture and storage will be developed for use in both levels of the government.

During implementation, performance data on input and output metrics, as well as progress against the implementation milestones at the operations level, will be entered into a digital performance management system by the designated County M&E Officer or County M&E Expert

within each county. These compiled data will be owned by GoK, and the Agri-food Systems Transformation Secretariat (ASTS) and other key stakeholders should have access through a data exchange protocol, enabling interoperability and joint performance analysis. The data will build on KIAMIS and expand into a comprehensive National Agriculture Data Hub integrating datasets from KNBS, NDMA, AFA, and county MIS systems.

This data should be interoperable with the Open Data Policy recommended in flagship 7, and work with the relevant existing GoK reporting modules (e.g., the Agriculture Marketing Information System – AMIS). All personally identifiable data will be coded securely by the system.

The digital performance management system will aggregate operation-level data into county level and national-level performance data for each flagship. It will also provide a dashboard that allows the NASIP, flagship leads (Director-level ministry supporters, *see table 30 for further information*), county governments as well as implementers to see up-to-date progress against targets at different levels, with varying degrees of visibility depending on the user.

Table 27: NASIP 2026-2030 Results Tracking

Results Metric	Description	Tracking	Flagship Level Tracking
Impact	High level impact level metrics measuring food and nutrition security, poverty alleviation and resilience against climate change and sustainability	-Impact measured by an independent consultant linking outcomes, outputs and inputs in line with the theory of change	Independent Consultant Evaluation
Outcome	High-level outcome metrics that are core to the NASIP’s objectives: Small-scale farmer income growth Agricultural GDP expansion Reduction in food-insecure population	Ag GDP – by KNBS Incomes – by ATO -Food-insecure population – by KFSSG	National level tracking and Aggregation of data and information from the County levels through a Data management system
Output	Operational-level output metrics for each flagship, e.g.: Yield improvement for small-scale farmers receiving subsidies Lead time to supply food aid to vulnerable populations during crises	Output metrics measured by the flagship by CASCOC at the county level	County Level tracking
Inputs	Operational-level output metrics for each flagship, e.g.: Actual subsidy amount disbursed Quantity of each commodity in the Strategic Food Reserve system	Input metrics measured by the flagship by CASCOC at the county level	County Level tracking

Table 28: NASIP 2026-2030 Implementation Performance Management Structure

Level	Description	Reporting Process	Reviewer and Review Frequency
National	Evaluation of NASIP Impact on food and nutrition security, Poverty alleviation and on Resilience to climate shocks and sustainability	Baseline 2025 Midterm Review 2027 End of Implementation evaluation 2030	Independent consultant(s) to collect the National and County data on all the flagships, and analyze them to examine the achievements
	Milestones, output and outcome metrics, (e.g. total production by value chain ~50 new farms; agri-GDP increase)	Digital tool aggregates data, validated bi/monthly by the Director in MoALD Periodically validated by an independent evaluator	ASTS reviews progress quarterly. Works with MoALD CS, JASCCOM, CASSCOM and other partners to resolve issues
County	Milestones, operation-level input and output metrics, (e.g. total county production by value chain from new farms)	Digital tool aggregates data, validated bi/monthly by CEC Periodically validated by independent evaluator	CASCOC/CATC reviews progress Quarterly and works with CECMs and other partners to resolve or escalate issues
Sub-County	Milestones, operation-level input and output metrics, (e.g. production by value chain for each new large farm)	Operations staff enter data into digital tools bi/monthly (i.e. aligned to existing process)	County CEC of agriculture and other implementation partners Monthly review progress and address issues as needed

## 12.5 Ensuring Mutual Accountability

The above M&E structure will be used for progress tracking and performance management and will be the foundation of mutual accountability for the stakeholders in the transformation. The role of each stakeholder in the structure is as follows:

- The MoALD Cabinet Secretary** is the ultimate custodian of the national outcomes of the ASTGS. The outcome metrics articulated within this NASIP 2026-2030 and the ASTGS will be embedded in the CS’s performance contracts and tied to performance incentives. The GoK flagship leads in consultation with the M&E specialist will define the operation-level input and output metrics that support the outcomes. The CS will report on the full set of performance (outcomes, outputs, and inputs) at the ASTGS Steering Council meetings. The CS will therefore be accountable for formulating, implementing and monitoring agricultural policy and regulation and supporting the MoALD to detail the flagships critical to delivering the ASTGS. The ASTS Technical Lead will support the CS with alignment of this accountability across all the state departments of the Ministry.
- GoK flagship leads and the M&E specialist** will define the operational-level input and output metrics for their respective flagships at the start of the transformation, in consultation with county representatives. These metrics will need to align with the NASIP 2025-
- 2030 outcome metrics and with SMEF.** These result metrics, along with the flagship milestones – will then be embedded in their performance contracts and tied to performance incentives. The flagship leads and subject matter specialists will therefore be held accountable for the delivery of both flagship progress and attainment of result metrics (inputs, outputs and outcomes) and will collaborate with the relevant county CECs of agriculture to achieve these targets. Broad visibility of progress against milestones and impact metrics – enabled through collection and public reporting by the ASTS – will be used to foster mutual accountability among the different stakeholders involved in each flagship and in the transformation. If a flagship misses implementation milestones or results metric targets, the flagship lead will need to work with the CECs and the ASTS lead to identify the root cause and come up with a solution

to debottleneck the issue. Flagships with prolonged delays or underperformance, or those with issues that cannot be resolved at the ASTS lead/ CEC level, will be escalated to the ASTGS Steering Council for resolution by the Cabinet Secretary for MoALD.

- **Council of Governors and County CECs of Agriculture** will lead the operationalization of the NASIP 2026-2030 and development of the county specific agricultural transformation plan for their counties with the support of JASSCOM (see the ASTGS document for details), collaborating with the GoK flagship lead and M& E specialist to set county-level progress and result targets. They will then lead the implementation of the NASIP 2026-2030 flagships in their respective counties based on these county transformation plans. During implementation, the county-level progress and result targets will be embedded in the CECs' performance contracts and tied to performance incentives. The CECs will therefore be held accountable for the delivery of both implementation progress and attainment of result metrics for the flagships in their counties, similar to the GoK Flagship leads. While the counties have expressed great interest in operationalizing NASIP, there is a capability gap between national and county governments that will need to be addressed through knowledge and skills building and transfers. This is provided for under Flagship 9. The CECs will need to collaborate with the CASSCOM, and the Flagship leads and the M&E specialists to accurately report on their counties' performance on these metrics, as well as gather the intra-county data

necessary for progress reporting. If a county misses its implementation milestones or results targets, the CEC will need to work with the relevant GoK flagship lead, and the ASTS to identify the root cause and come up with a solution to debottleneck the issue. Flagships with prolonged delays or underperformance, or those with issues that cannot be resolved at the ASTS lead/ CEC level, will be escalated to the ASTGS Steering Council for resolution by the Cabinet Secretary for MoALD.

- **The ASTS, through the M&E specialist** will be responsible for performance management of the entire transformation and will track progress against target milestones and result metrics at the national, flagship and county levels using data collected at the county level through the CASSCOM and the County M&E expert. The ASTS will publish these performance tracking results for broad visibility by different stakeholders, including transformation leaders at the national and county levels, implementers and the public, to foster public, mutual accountability among the partners involved in the transformation. In addition to being the custodian and broadcaster of the transformation performance tracking data, the ASTS will be responsible for identifying points of delay or underachievement of result metrics and working with the relevant GoK champion and county CECs of agriculture to resolve the issue. Flagships with prolonged delays or underperformance, or those with issues that cannot be resolved at the ASTS lead/CEC level, will be escalated to the ASTGS Steering Council for resolution by the Cabinet Secretary for MoALD.

## 12.6 Evaluation Methodology and Reporting

NASIP 2026-2030 will be evaluated by independent consultants hired through a competitive process. The evaluation will be in two phases the Midterm Review of implementation of the NASIP and the End Term Implementation Evaluation. The evaluation exercise will examine the progress and achievements of the flagship projects in comparison with the set targets.

- Annual: Professional capacity assessments and certification progress
- Annual: Market linkage and value chain performance reviews

The evaluation of the NASIP 2026-2030 will be guided by the Organization for Economic Co-operation and Development/ Development Assistance Committee (OECD-DAC1) framework. The OECD-DAC envisions five (5) thematic pillars including relevance, effectiveness, efficiency, impact, and sustainability. The evaluation framework allows for the inclusion of other pillars such as crosscutting themes of (gender and women empowerment, climate change, and environmental management). The contextualized OECD-DAC criteria for NASIP are shown below.

These will include details such as Data

- Monthly: Extension officer performance data collected through digital platform
- Quarterly: County performance reviews and public reporting
- Annual: Farmer adoption and income surveys in sample of 5,000 farmers

Table 29: The OECD-DAC Criteria for NASIP 2026-2030

OECD Criteria	Evaluation focus
Relevance and Coherence	Examine the extent to which the objectives of NASIP are consistent with the needs of the agricultural sector; regional and global needs. This includes coherence and the appropriateness of NASIP objectives to the problems that it is supposed to address, and to the physical and policy environment within which it operates.
Effectiveness	The effectiveness criterion concerns how far NASIP results have been attained and the specific objectives achieved, or expected to be achieved
Efficiency	(Sound management and value for money): The efficiency criterion concerns how well the various activities transformed the available resources into the intended results (sometimes referred to as outputs), in terms of cost, quantity, quality and timeliness. Comparison should be made regarding what was planned and existing projects.
Impact and spill overs	(Achievement of wider effects): The term impact denotes the relation between the mission of NASIP (overall and specific objective(s)). This will examine the linkage between the inputs and outcomes of the NASIP II. What outcomes e.g. better food security status for instance and how is this outcome related to the inputs/ activities?
Sustainability	(Likely continuation of achieved results): The sustainability criterion relates to whether positive outcomes of the NASIP and the flow of benefits are likely to continue after the expiry of the implementation time frame.
Gender mainstreaming	Examines the way women, youth and Persons Living with Disabilities (PWDs) were mainstreamed in interventions and outcomes of the NASIP project
Unintended consequences and lessons learnt	This criterion will examine whether there were resultant unintended outcomes from the NASIP project. Further, it will draw lessons from the implementation process and outcomes of the NASIP II. What cause-and-effect linkages can be deduced from the activities and the Theory of Change.

All the reports – Midterm Review Report, Annual Review Reports, and the End Term Evaluation report on implementation of the NASIP that will be presented to the Cabinet Secretary/ies responsible for crops, livestock, and fisheries for dissemination to the public and relevant stakeholders. NASIP will be reviewed periodically to address the sector challenges and emerging issues.

Table 30: Reporting Progress

Stage / Activity	Timing	Purpose / Description	Expected Output / Deliverable
NASIP Review	Periodic (every 2-3 years)	NASIP will be reviewed periodically to address sector challenges, implementation bottlenecks, and emerging issues in the Agri-food and livestock systems.	Updated NASIP policy directives and implementation guidelines.
Baseline (NASIP)	2025	Establishes the starting benchmarks for monitoring and evaluation of NASIP 2026-2030. The baseline will draw directly from the final evaluation of NAIP I (2019-2024) to ensure continuity and cumulative assessment of sector progress.	Baseline Report 2026 – including key indicators, targets, and reference data.
Continuous Monitoring	2026-2030 (Quarterly & Annual)	Continuous progress tracking through quarterly and annual implementation reports. Monitoring focuses on flagship delivery, financing, and outcomes, aligned to national and continental frameworks such as the Kampala Declaration and CAADP Biennial Reviews (BRs) and the Joint Agriculture Sector Reviews.	Quarterly / Annual Reports 2026 Quarterly / Annual Reports 2027 Quarterly / Annual Reports 2028 Biennial performance submissions under CAADP BRs and the JASR.
Midterm Evaluation	2027	Provides a comprehensive review of progress at the midpoint of NASIP implementation, assessing results, challenges, and course-correction needs.	Midterm Implementation Report 2027 – with findings and adaptive recommendations.
Final (End Term) Evaluation	2030	Conducted as part of the Performance Monitoring Plan (PMP) to assess overall impact, effectiveness, and sustainability of NASIP 2026-2030. This serves as the closing evaluation for NASIP and baseline input for future investment plans.	End Term Evaluation Report 2030 – summarizing outcomes, impact, and lessons for future agricultural transformation interventions.

# 13. Risks, Mitigation & Sustainability

## WHAT'S IN THIS CHAPTER

*Risk classification across financing, political/governance, institutional/delivery, market/economic, climate/environmental, technology/data, and operational dimensions; mitigation strategies and lead organisations; and sustainability measures embedded through devolved ownership, private-led models, and transition planning.*

The implementation of the National Agri-food Systems Investment Plan (NASIP) 2026–2030 involves inherent risks that could affect its delivery, results, and long-term sustainability. These risks stem from internal factors (such as institutional capacities) and external pressures (such as climate variability and geopolitical shifts). Drawing lessons from NAIP I (2019–2024), where shocks like droughts and COVID-19 reversed gains, NASIP uses a proactive, integrated risk management approach. This framework incorporates mitigation across all flagships, using digital tools (such as the national agriculture data hub, blended financing, monitoring, reporting, and learning systems, and adaptive learning to improve resilience. Sustainability is maintained through devolved ownership, private sector involvement, and alignment with post-2030 outlooks, including population growth and land constraints under Vision 2050.

Risks are classified into the following areas: financing, political/governance, institutional/delivery, market/economic, and climate/environmental. Mitigation strategies are based on data and performance, with contingency plans to reduce disruptions. Cross-cutting measures enhance system-wide resilience, while a summary risk matrix provides stakeholders, including investors seeking de-risked opportunities, with an overview. The table below provides an elaborate overview of the risks, mitigation strategies and the lead organizations.

Table 31: Risks and Mitigation Measures

Risk Category	Specific Risk	Mitigation / Contingency Measures	Lead / Responsible Entity
Institutional & Delivery Risk	Coordination Failures: Overlaps among ministries, counties, and partners reduce efficiency.	Implement the Joint Results Framework (JRF) with defined roles / milestones; monitor via national agriculture data hub dashboards and escalation protocols.	NASIP Secretariat; ICCA
	Capacity Gaps: Uneven technical skills across counties.	Roll out the National Capacity Development Program (NCDP) for training in project management, data analytics, and value-chain development; promote peer exchanges.	MoALD Capacity Division; CoG
Market & Economic Risk	Price and Trade Shocks: Volatility from global conflicts or tariffs affects input and output prices.	Provide real-time market intelligence through national agriculture data hub; diversify markets via aggregation hubs and digital marketplaces.	MoALD Agribusiness Directorate; KNCCI
	Demand Fluctuations: Economic downturns reduce consumer purchasing power.	Promote import-substitution and regional trade (AFCFTA/EAC); expand contract farming and warehouse-receipt systems to stabilize prices.	AFA; EAC Desk
	Economic Pressures: Inflation / currency depreciation raises input costs.	Facilitate risk pooling and insurance schemes within the AIF to cushion producers.	AIF Secretariat
Climate & Environmental Risk	Extreme Weather Events: Droughts and floods disrupt production and supply chains.	Integrate Climate-Smart Agriculture (CSA) drought-tolerant crops, and efficient irrigation into all flagships; use the national agriculture data hub geospatial mapping for risk assessment.	MoALD Climate Unit; NDMA
	Environmental Degradation: Soil and water depletion from unsustainable practices.	Promote regenerative agriculture and circular waste management systems; align interventions with the National Climate Change Action Plan (NCCAP 2023–2027).	MoALD Environment Division; NEMA
Technology & Data Risk	Digital Divide Risk: In areas with limited mobile connectivity or digital literacy, digital platforms may not be accessible or usable.	<ul style="list-style-type: none"> <li>Develop offline-capable apps that work without constant connectivity</li> <li>Provide digital literacy training for all users</li> <li>Establish community digital centers in areas with limited home connectivity</li> <li>Develop alternative paper-based systems for areas where digital is not feasible</li> </ul>	MoALD; ICT Authority; Counties; Private Sector

Risk Category	Specific Risk	Mitigation / Contingency Measures	Lead / Responsible Entity
Operational Risk	Capacity Constraints Risk: Limited availability of qualified mentors, peer facilitators, and digital platform developers may constrain implementation.	<ul style="list-style-type: none"> <li>Begin recruitment and training of mentors and facilitators in Year 1</li> <li>Partner with universities and training institutions to develop capacity</li> <li>Use phased rollout to allow capacity building before scaling</li> <li>Develop training programs for platform developers and support staff</li> </ul>	MoALD; Training Institutions; Private Sector
Market & Value Chain Risk	Market Linkage Failure Risk: Buyers may not engage with farmer groups, or market linkages may collapse if buyer relationships fail.	<ul style="list-style-type: none"> <li>Conduct thorough buyer engagement and relationship building before farmer training</li> <li>Establish written agreements with buyers specifying commitment periods</li> <li>Develop alternative market channels (direct sales, local markets) if primary buyers fail</li> <li>Establish farmer savings groups to buffer income volatility</li> </ul>	MoALD; Private Sector; Farmer Organizations
Cross-Cutting/ Systemic Mitigation	Institutional Continuity: Ensure permanent NASIP structures.	Establish permanent NASIP units in MoALD and county governments with performance mandates.	MoALD; Counties
	Data-Driven Monitoring: Weak feedback loops.	Operate national agriculture data hub dashboards for tracking fund flows, milestones, and risks.	ATO Secretariat
	Adaptive Learning and flexibility.	Hold quarterly reviews and annual learning sessions for mid-course adjustments.	NASIP Secretariat; ASDCG
	Capacity Strengthening: Continuous skills renewal.	Implement ongoing NCDP up-skilling for national and county officers.	MoALD Capacity Division
	Stakeholder e.g.gement: Need for sustained collaboration.	Convene annual multi-stakeholder forums with the private sector, civil society, and donors.	MoALD; Private-Sector Platform; Civil Society
Financing Risk	Public-Sector Financing Risk: Fiscal deficits (7% of GDP) and competing priorities may reduce allocations.	Ring-fence NASIP within the MTEF as a priority expenditure under BETA and Vision 2030; apply Program-Based Budgeting (PBB) for predictable county disbursements and conditional grants tied to flagship milestones.	MoALD Budget Division; National Treasury; Counties
	Development-Partner Financing Risk: Donor fiscal or geopolitical shifts could disrupt funding flows.	Conduct annual alignment reviews through the Agricultural Sector Donor Coordination Group (ASDCG); diversify financing via AIF blended-finance windows, including climate-finance instruments from partners such as GIZ and AGRA.	ATO Secretariat; ASDCG
	Private-Sector Financing Risk: Investor confidence may weaken due to perceived credit or policy risks.	Deploy AIF credit guarantees, equity co-investment schemes, and performance incentives; strengthen due-diligence frameworks and investment vetting.	AIF Secretariat; Private Sector Platform
	Contingency: Funding volatility across flagships or regions.	Maintain a 10–15% reserve within the AIF for reallocation to critical or underfunded areas.	AIF Secretariat
	Bureaucratic delays in funds disbursement	Prioritize the formation and strengthening of value chain groups to generate their own funds for enterprise development	Value chain actors
	Financing Sustainability Risk: Development partner financing may end after NASIP period, leaving systems unsustainable.	<ul style="list-style-type: none"> <li>Transition to government budget financing by Year 3</li> <li>Establish private sector financing mechanisms (agribusiness investment)</li> <li>Establish farmer contributions to systems (small fees)</li> <li>Demonstrate cost-effectiveness to justify government budget allocation</li> </ul>	MoALD; National Treasury; Private Sector; Counties



Risk Category	Specific Risk	Mitigation / Contingency Measures	Lead / Responsible Entity
Political & Governance Risk	Change in Political Leadership: Electoral transitions (e.g., 2027 elections) may alter priorities.	Institutionalize oversight through the Inter-Governmental Coordination Committee on Agriculture (ICCA) and County NASIP Steering Committees (CNSCs); embed NASIP in MTP IV to ensure cross-administration continuity.	MoALD; Council of Governors (CoG)
	Leadership Turnover in Ministries / Counties: Frequent rotation causes knowledge loss.	Implement a Transition Management Plan (2027–2028) with standardized procedures and national agriculture data hub-linked digital repositories for institutional memory.	ATO Secretariat; Kenya School of Government
	Public Transparency and e.g.ment: Limited citizen oversight could lead to politicization.	Publish progress updates on national agriculture data hub portals; hold annual citizen forums; integrate accountability sessions within Joint Sector Reviews (JSRs).	MoALD; Civil-Society Organizations
	Policy and Legal Delays: Slow enactment of key laws (e.g., AIF Act).	Establish a Policy Coordination Task Force to expedite parliamentary and regulatory approvals.	MoALD Legal Directorate; Parliamentary Liaison Office
	Political interference in project selection	Public participation transparent, merit-based processes and independent technical review during selection where applicable	MoALD; County government

## SUSTAINABILITY

Sustainability is embedded through devolved ownership (county compacts), private-led models (80% funding), and transition planning for post-2030 (e.g., land reforms for population pressures). Green incentives and knowledge management ensure legacy beyond 2030

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# 15. Annexes

## Annex 1: Multi Annual National Control Plan

A Multi Annual National Control Plan (MANCP) contains general information on the structure and organization of the systems for food and feed control, and animal health and animal welfare control. It outlines:

- i. Strategic objectives of the control institution and how prioritization of controls and allocation of resources reflect these objectives;
- ii. Risk categorization of Food Business Operators;
- iii. Designation of competent authorities and their tasks at county, national, regional and international levels, and the resources available to them;
- iv. General organization and management of official controls at county, national and regional levels including official controls in individual establishments;
- v. Control systems applied to different sectors and coordination among the different services of competent authorities responsible for official controls in these sectors;
- vi. Training of staff performing official controls;
- vii. Documented procedures for control and reporting;
- viii. Organization and operation of contingency plans for animal or food-borne disease emergencies, food contamination incidents and other human health risks; and
- ix. Organization of cooperation and mutual assistance between international competent authorities.

## Annex 2: Other institutions in the Agri-Food System

Institution	Role
Private Sector (farmers, development partners) – includes producers, farmers, processors, marketers and all other actors in the crops, livestock and fisheries Agri-food systems.	Collaborate with National and County governments in the implementation of the NASIP (2025-2030) through: development and review of subsector policies and strategies; legislation; investment ventures; and provision of goods and services in crops, livestock and fisheries Agri-food system.
Regulatory and Professional Bodies	
Agriculture Sector Support Institutions	
Ministries relevant to Agri-Food Systems Development – • Ministry of Health • Ministry of Energy • Ministry responsible for Transport and Infrastructure • Ministries responsible for Land, Water and Environment • Ministry responsible for Planning and National Treasury • Ministry responsible for Industrialization, Trade and Enterprise Development • Ministries Responsible For Internal Security, Labour, Trade and Devolution	<ul style="list-style-type: none"> <li>• Considering the factors linked to agricultural value chains in Kenya and the anticipated improvements, a multi-sectoral approach is inevitable.</li> <li>• This is prescribed under the Agri-Food system of the Kampala CAADP Declaration (2026 – 2035) which Kenya has signed and ratified. Key members of Kenya's Agri-Food system based on the prevailing challenges must include: <ul style="list-style-type: none"> <li>• Departments of crops, livestock and fisheries as duty bearers for food production, food processing, food distribution and food safety.</li> <li>• Department of Lands to address the constant subdivision of agricultural land by emphasizing spatial and land-use planning in counties.</li> <li>• Department of Water to lead efforts in preventing destruction of wetlands, water catchments and riparian lands so as to increase water resources for agriculture, domestic use and agro-industrialization.</li> <li>• Department of Environment to oversee the restoration and rehabilitation of degraded rangelands in conjunction with relevant crop and livestock experts.</li> <li>• Department of Cooperatives to educate and train small-scale farmers on: group formation especially agricultural value chain cooperatives, farmer group governance, and the importance of groups to agricultural value chains. This training will be conducted together with experts in crops, livestock and fisheries.</li> <li>• Department of Trade to advise on suitable trade infrastructure for crops, livestock and fisheries and enforce market standards.</li> <li>• Department of Public Health to educate and train families on hygienic living and suitable family planning approaches to control runaway rural and slum-dweller populations.</li> <li>• National Treasury to look into taxation bearing on agricultural value chains particularly agricultural inputs and energy, petroleum and electricity.</li> </ul> </li> </ul>

Institution	Role
Farmer and Fisherfolk Organizations	<ul style="list-style-type: none"> <li>• Mobilizing members around specific value chains that have common objectives</li> <li>• Lobbying and advocacy for funding for the implementation of NASIP II</li> <li>• Provide structures for membership of farmers at village levels</li> </ul>
Non-State Actors Civil Society Organizations (CSOs), Non-Governmental Organizations (NGOs), Faith based organizations (FBOs), and Community based organizations (CBOs), Business Member Organizations (BMOs)	Collaborate with the National and County governments in the implementation of the policy through the development and review of subsector policies strategies, legislations and in the implementation of agricultural programs and projects.
Development Partners – bilateral and multilateral partners.	<ul style="list-style-type: none"> <li>• Financing and providing technical support for the agricultural sector in collaboration with National and county governments.</li> <li>• Policy development and reviews, legislation and guidelines, sector reforms and development and implementation of agricultural programs and projects</li> </ul>
UN Organizations in Agriculture – UN-cluster organizations  Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), World Food Program (WFP), and United Nations General Assembly.	Provide funding and technical support toward agricultural development in various areas such as production, value addition, policy and legislative development, food security among others.
Global Standard-Setting Organizations in Crops, Livestock and Fisheries	Support the application of international standards to facilitate trade and international integration
*Regional Economic Communities (RECs) The African Economic Community (AEC). African Union (AU),  COMESA Common Market for Eastern and Southern Africa; EAC The East African Community; IGAD Inter-Governmental Authority on Development	Aim at facilitating socio economic development within the areas of jurisdiction through the creation of an enabling environment by policy harmonization in trade, labour and goods movement, customs among others.

## Annex 3: Functions and Composition of National Agri-food System Steering Committee/JASSCOM, CASSCOM and CASTS

### NASIP NATIONAL AGRIFOOD SYSTEM STEERING COMMITTEE/JASSCOM

The National Agri-food System Steering Committee/JASSCOM, chaired by the Principal Secretary, State Department of Agriculture, MoALD is the top governing body of the NASIP, with the following guidance for operations:

Its mandate is to ensure implementation of the NASIP 2026-2030, and coordination with other relevant Ministries on areas that overlap, which will include activities to:

- Drive NASIP 2026-2030 implementation and mutual accountability, at the highest level, across the private sector, government and development partners
- Oversee commitment of national resources for effective implementation of NASIP 2026-2030
- Provide policy direction, guidance and oversight on food and nutrition security matters
- Facilitate knowledge and skill building, research and cross-sector collaboration to drive implementation and performance management across the NASIP 2026-2030
- Facilitate cross-sectional collaboration and cooperation between government ministries, development partners, civil society, the private sector and academia in addressing Food and Nutrition Security matters
- Approve the NASIP 2026-2030 annual status report prepared by the ASTS

Permanent members include all the Permanent Secretaries in the MoALD, the ASTS Director, and representation from CoG and JASSCOM. Attendance will be requested from the Principal Secretaries of the eight defined relevant Sector Ministries (MoALD, Devolution, Environment, Industry, Lands, Transport, Water and Treasury), with the addition of Interior Ministry during planning for disasters and emergencies.

- Meet approximately four times per year
- Have An additional-10 slots for an Advisory Sub-committee composed of non-state actors including industry players, development partners, commercial lenders, implementers and knowledge experts.
- The sub-committee will be self-funded and arrange to meet around the National Agri-food System Steering Committee/JASSCOM meetings to discuss key issues relevant to non-state actors for the agenda, and the subsequent actions to be taken to remove the bottlenecks raised during the meetings. The sub-committee will nominate
- -5 people to attend the Steering Committee meeting, depending on the agenda and expertise needed by the Steering Committee, to ensure that implementation is funded and policies created are in line with the priorities of all stakeholders.

In line with the Intergovernmental Relations Act (2012), the National Agri-food Systems Steering Committee/JASSCOM will comprise the following institutions and actors, but not limited to;

1. Line Ministries responsible for Agriculture, Livestock, Fisheries, Cooperatives, Health, Environment, Education, Water, Irrigation, ASALs and National Treasury
2. Representative of the Council of Governors
3. Representative of farmers and growers' organizations
4. Research and Academia
5. State Agencies including Agriculture and Food Authority (AFA), Kenya Bureau of Standards (KEBS) and, Kenya Plant Health Inspectorate Service (KEPHIS)
6. Kenya Representative of Civil Society Organizations
7. Two representatives of processors or manufacturers and marketing organizations
8. Representative of Development Partners
9. Representative of Consumer organizations
10. Representative of other stakeholder groups that may be co-opted by the committee

### NASIP NATIONAL INTER DEPARTMENTAL COMMITTEE

Key functions of the NASIP National Inter Departmental Committee will include:

- Facilitate and coordinate broad, multi-sectoral collaboration for effective implementation of the NASIP 2026-2030.
- Provide technical support to the NASIP -National Agri-food Steering Committee/JASSCOM by preparing progress reports.
- Provide an independent perspective on transformation performance management and monitoring and evaluation, validating

data on implementation provided by the Ministry responsible for Agriculture, Livestock, and Fisheries, and assessing these against the flagship KPIs

- Guide on how to embed sustainability across all the intervention flagships and track the incorporation of sustainability interventions. The NASIP National Inter Departmental Committee will further monitor and enforce compliance with sustainability policies and recommendations.

### County Agri-food Steering Mechanisms (CASSCOM)

1. Operationalization and mainstreaming of the National Agri-food Systems Investment Plan (NASIP) for Food System Transformation in CIDPs, Annual Development Plans (ADPs) and coordination of the same plans.
2. Overall County coordination of NASIP Implementation
3. Collectively determining and advising the respective CECMs, as appropriate, on measures to be undertaken for the implementation of NASIP
4. Develop and supervise the adoption of the County Agricultural Investment Action Plans
5. Assessing progress and steering the consolidation of reporting and reports on the achievement of NASIP implementation results (outputs and outcomes) at County level.
6. Facilitate regular communication and flow of information on Agri-food systems management
7. Facilitate sector-wide intra and cross-county linkages on Agri-food systems
8. Facilitate and coordinate NASIP input and output level data collection and inputting into the national data platform with an M&E expert (County M&E) or M&E Consultant.

### NASIP County Inter Departmental Committee

Key functions of the NASIP County Inter Departmental Committee will include:

- Facilitate and coordinate broad, multi-sectoral collaboration for effective implementation of the NASIP and development of county Agri-Food system investment compacts 2027-2037.
- Provide technical support to the CASSCOM by preparing progress reports.
- Provide an independent perspective on transformation performance management and monitoring and evaluation, validating data on implementation provided by the Department responsible for Agriculture, Livestock, and Fisheries, and assessing these against the flagship KPIs
- Guide on how to embed sustainability across all the intervention flagships and track the incorporation of sustainability interventions. The NASIP County Inter Departmental Committee will monitor and enforce compliance with sustainability measures and recommendations.

### Composition of the NASIP County Inter Departmental Committee

In line with the Intergovernmental Relations Act (2012), the NASIP County Inter Departmental Committee – will comprise the following institutions and actors, but not limited to;

- Departments for Agriculture, Livestock, Fisheries, Health, Education and Environment
- Regional/County Offices responsible for AFA and KEPHIS
- Representatives of Farmer Organizations
- Representative of the Regional Kenya Association of Manufacturers (KAM)
- Representative of Civil Society organizations at the regional level
- Representative of Development Partners working within the County
- Representative of Food Transporters/logistics organizations working within the county
- Representatives of universities, academic institutions, and research organizations
- Representatives of other stakeholder groups that may be nominated by the committee

In addition, in every county where a flagship is being implemented, a County M&E expert should be incorporated into the CASSCOM to guide effective and efficient data and information gathering for evidence-based decision making.

## Annex 4: Ongoing programs relevant to agricultural sector development

Program	Year	Focus
National Value Chain Support Program (NVSP)	2019-2030	To provide increased access to inputs by needy farming households
Capacity Development Project for Enhancement of Rice Production in Irrigation schemes in Kenya (PHASE 2)	(2024-2028)	To ensure domestic distribution of paddy produced in the target irrigation schemes is increased through enhancement of production and productivity of paddy and strengthening the domestic value chain
Boosting Sustainable Food Production (BOOST) -	2024-2027	To boost sustainable food production through promotion of agroecological practices and enhanced access to subsidized agricultural inputs, technologies and services
National Agricultural Value Chain Development Project (NAVCDP)	2022-2027	To increase market participation and value addition for targeted farmers in select agricultural value chains in project areas; develop a comprehensive and centralized dataset that would facilitate effective agricultural planning, farmer identification, resource allocation, disaster preparedness and response, market access, research development, and policy formulation
Livestock Value Chain Support Project (Phase 2)	2022-2027	To enhance the value addition, market access and competitiveness of dairy and cereal investments
Kenya Agri-Business Development Project (KABDP)	2024-2030	To improve market access for targeted agricultural value chains, increase incomes and food security, and create employment opportunities
Kenya Livestock Commercialization Project (KeLCOP)	2021-2027	To promote the commercialization of livestock production and enhance access to lucrative markets
Program to Build Resilience For Food and Nutrition Security in the Horn of Africa (BREFONS)	2022-2027	To build resilience (including for women and the youth) to food and nutrition insecurity and climate change, as well as peace and security in the Horn of Africa.
Kenya Agricultural Insurance Program (KAIP)	2017-2030	To cushion farmers against natural disasters
Food Systems Resilience Program (FSRP)	2024-2030	Ensuring food security and building resilience
De-Risking, Inclusion & Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE)	2022-2027	To support the pastoral production system
Youth and Women Empowerment in Modern Agriculture Project (Y-MAP)	2013-2030	To increase youth and women participation in horticultural production, agribusiness, and agro-processing thereby creating employment and poverty reduction; build the capacity of youth and Women in new technologies and skills that have high income generating ability
FAO programs based on the CPFs1 2018-2022 &.	2022 – 2026	To support the 2030 Agenda for Sustainable Development through transformation into more efficient, inclusive, resilient and sustainable, agri-food systems for better production, better nutrition, a better environment, and a better life, leaving no one behind.
National Agricultural Value Chain Development Project (NAVCDP), . Participating counties - 33.	2022 – 2027	To increase market participation and value addition for targeted small-scale farmers in select value chains in project areas.
Aquaculture Business Development Program, Counties: Migori, Kakamega, Homa Bay, Nyeri, Meru, Kirinyaga, Tharaka-Nithi, Kisii, Kisumu, Siaya, Busia, Embu, Kiambu, Machakos and Kajiado.	2017 – 2026	To strengthen the capacity of smallholder farmers, mostly aquaculture pond farmers, to increase production and improve productivity as well as to create opportunities for non-fish farming actors interested in developing microenterprises along the aquaculture value chain.
Toward Ending Drought Emergencies (TWEENDE), Counties - Samburu, Marsabit, Isiolo, Garissa, Tana River, Meru, Tharaka Nithi, Kitui, Taita Taveta, Makueni and Kajiado.	2020 – 2026	To reduce the cost of climate change induced drought on Kenya's national economy by increasing resilience of the livestock and other land use sectors in restored and effectively governed rangeland ecosystems.
De-risking, Inclusion and Value Enhancement (DRIVE3), Is in 22 counties.	2022 – 2027	To enhance pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the Horn of Africa.

Program	Year	Focus
Kenya Livestock Commercialization Project (KeLCoP). Counties - Semi-Arid counties (e.g. Marakwet and Baringo), Arid counties (Marsabit and Samburu). and other areas are Busia, Bungoma, Kakamega, Siaya, Nakuru and Trans Nzoia.	2020 – 2027	To contribute to the Government's agriculture transformation agenda of increasing rural small-scale farmers' incomes, food and nutrition security.
Livestock Value Chain Support Project (Phase 2), Counties: all except Mombasa and Nairobi.	2024 – 2027	To enhance value addition, market access and competitiveness of dairy and cereal investments.
National Value Chain Support Program (NVSP). Counties: all except Mombasa and Nairobi.	2019 – 2030	To enhance sustainable food and nutrition security, incomes, employment and wealth creation for the targeted beneficiaries.
Program to Build Resilience for Food and Nutrition Security in the Horn of Africa (BREFONS), Counties – Baringo, Garissa, Isiolo, Marsabit, Samburu, Turkana and West Pokot.	2022 – 2027	To contribute building resilience (including for women and the youth) to food and nutrition insecurity and climate change, as well as peace and security in the Horn of Africa.
Youth and Women Empowerment in Modern Agriculture Project (Y-MAP), Counties: all.	2013 – 2030	To train youth and women on agribusiness skills and equip them with modern agricultural equipment, certified seeds, and breeding stock.

## Annex 5: Agricultural Sector Monitoring and Evaluation Framework (SMEF)

Indicators of the National Agri-Sector Monitoring and Evaluation Framework (SMEF) aligned to NIMES	
Result-based Level	Description
Impacts	Improved Food and nutrition security <ul style="list-style-type: none"> <li>• Prevalence of undernourishment [Percent of population]</li> <li>• Prevalence of undernourishment [Percent of population]</li> <li>• Food-insecure population</li> <li>• National food poverty headcount rate</li> <li>• County food poverty headcount rate</li> <li>• Prevalence of underweight children [Percent of children under 5 years of age]</li> <li>• Prevalence of wasting [Percent of children under 5 years of age]</li> <li>• Proportion of women of productive age who are consuming minimum dietary diversity [women]</li> <li>• Percentage of infants consuming minimum acceptable diet [Percent of infants 6-23 months]</li> </ul>
	Poverty alleviation <ul style="list-style-type: none"> <li>• Employment rate in agriculture (% of population)</li> <li>• Income gap [Percent of population](disparity e.g. as measured by Gini Coefficient)</li> <li>• Number of new jobs created in Agriculture [Number]</li> <li>• Poverty gap at national line [Percent of population]</li> <li>• Proportion of population living below the national poverty line, by sex and age</li> <li>• Proportion of rural population living in absolute/hardcore poverty [Percent of total population]</li> </ul>
	Resilience and Sustainability <ul style="list-style-type: none"> <li>• Proportion of agriculture households that have improved their resilience capacity to climate and weather-related risks (Improved Resilience Capacity Index (IRCI))</li> <li>• Proportion of HH receiving food aid</li> <li>• Proportion of HH receiving cash transfer</li> <li>• Human sustainable development index</li> </ul>
Outcomes	Increased Small-Scale Farmers' Income <ul style="list-style-type: none"> <li>• Annual small-scale farmers' income [KES]</li> <li>• Household food expenditure per capita per month</li> <li>• Number of agricultural workers [Numbers]</li> <li>• Percentage change in small-scale farmers' income, by sex and age</li> </ul>
	Increased agricultural output and value addition <ul style="list-style-type: none"> <li>• Agriculture production index</li> <li>• Agriculture sector contribution to GDP</li> <li>• Agriculture value added [KES] in constant prices</li> <li>• Agriculture value added [KES] in current prices</li> <li>• Annual agriculture GDP growth rate [Percent]</li> <li>• Cereal import dependency ratio</li> <li>• Growth in agricultural value added per agricultural worker</li> <li>• Growth in agricultural value added per Ha of arable land</li> <li>• Growth in crop yields (Production volumes per area under production of priority crop value chains) [Tonnes/Ha]</li> <li>• Growth in fish capture systems (Production volumes)</li> <li>• Growth in aquaculture yields [Production volumes per area under culture system]</li> <li>• Growth in livestock yields (Production volumes per No. of production units) [e.g., Carcass weight [Average Tonnes per slaughtered animal]]</li> <li>• Percent of change in post-harvest losses, by value chain</li> <li>• Size of arable land as a percentage of total land size [Ha]</li> </ul>

Result-based Level	Description	Indicators of the National Agri-Sector Monitoring and Evaluation Framework (SMEF) aligned to NIMES
Outcomes	Increased agricultural output and value addition	<ul style="list-style-type: none"> <li>• Total value created from agro-processing [KES]</li> <li>• Value of agricultural exports [Value in KES, by commodity]</li> <li>• Value of agricultural imports [Value in KES, by commodity]</li> <li>• Volume of agricultural imports [Tonnes by commodity]</li> <li>• Volume of agricultural exports [Tonnes by commodity]</li> </ul>
Outcomes	Increased household food resilience	<ul style="list-style-type: none"> <li>• Post-harvest losses</li> <li>• Percentage reduction in the cost of food, by the value chain</li> <li>• Proportion of households protected against shocks, by county</li> <li>• Food reserves in terms of volumes</li> <li>• Feed reserves in terms of volumes</li> <li>• National food balance</li> <li>• Domestic food price index volatility</li> <li>• Percentage reduction in staple deficit</li> <li>• Consumer food price index [Index value] -2010=100</li> <li>• Food reserves in terms of months</li> <li>• Proportion of households using bio-fortified foods</li> </ul>
Outputs	Increased agricultural production and productivity	<ul style="list-style-type: none"> <li>• Number of counties impacted by the NASIP 2025-2025 [Number, by flagship]</li> <li>• Number of farmers impacted by the NASIP 2025-2025</li> <li>• Production volume, by value chain for crops [Tonnes by location]</li> <li>• Production volume, by value chain for livestock products [Tonnes/liters by location]</li> <li>• Production volume, by value chain for fish [Tonnes by location]</li> <li>• Value of subsidies provided to farmers per value chain [KES]</li> <li>• No. of marketing cooperatives registered (membership) [Number]</li> <li>• Value of agricultural produce by value chain marketed through cooperatives [KES]</li> <li>• Yields of selected forage Tonnes/hectare</li> <li>• Quantity of farmer-produced seeds [Volumes by value chain by county]</li> </ul>
Outputs	Increased agro-processing and irrigation	<ul style="list-style-type: none"> <li>• Number of SMEs engaged in agricultural food processing by county</li> <li>• Number of SMEs engaged in agricultural food distribution by county</li> <li>• Number of inclusive employment opportunities in industries related to agriculture value chains</li> <li>• Number of agro-processing hubs established [Number of processing plants, Number of technologies, No. of products]</li> <li>• Number of processing plants in the agricultural sector by product and technology</li> <li>• Area under irrigation [Ha]</li> <li>• Area of land under newly operational large-scale farms [Ha]</li> <li>• Number of new jobs created in agriculture [Number], by sex and age</li> <li>• Percentage of population employed in agriculture [by Sex and age group]</li> <li>• Percentage of population employed in the agriculture sector out of the total labor force [by Sex and age group]</li> <li>• Agriculture area under ecological/organic agriculture</li> </ul>

Result-based Level	Description	Indicators of the National Agri-Sector Monitoring and Evaluation Framework (SMEF) aligned to NIMES
Outputs	Improved food stock levels and livelihood resilience	<ul style="list-style-type: none"> <li>• Agricultural land under sustainable land and water management/climate smart agriculture [Ha]</li> <li>• Number of farmers, pastoralists and fisherfolk under the insurance program [Number]</li> <li>• Number of food insecure households supported during emergencies</li> <li>• Percentage of economic loss as a result of diseases and pests per value chain</li> <li>• Post-harvest losses [Tonnes by location, value chain]</li> <li>• Net greenhouse gas emissions from the agricultural sector</li> </ul>
	Increased use of information for better management	<ul style="list-style-type: none"> <li>• Number of farmers electronically registered</li> <li>• Percentage of farmers reached through digital extension services [Percent of total farmers]</li> <li>• Percentage of farmers involved in the warehouse receipt system [Percent of total farmers]</li> <li>• Ratio of extension workers to farmer population [Ratio]</li> <li>• Percentage of farmers using machines for plowing, seeding and harvesting activities.</li> </ul>
	Access to agricultural inputs	<ul style="list-style-type: none"> <li>• Fertilizer consumption (tonnes/hectare)</li> <li>• Agricultural input prices (trend)</li> <li>• Number of farmers engaged in contract farming and outgrower schemes</li> <li>• Seed Index</li> <li>• Quantity of farmer-produced seeds [volumes by value chain by county]</li> </ul>
Inputs	Research, innovations and data use strengthened	<ul style="list-style-type: none"> <li>• Public investment in agricultural research as a percentage of GDP from the agriculture sector.</li> <li>• Public investments in agricultural research as a percentage of the agricultural budget</li> <li>• Number by type of genetic resources conserved and utilized</li> </ul>
	Compliance with global standards	<ul style="list-style-type: none"> <li>• Number of certified processing plants by value chain</li> <li>• Number of certified processing plants by value chain</li> <li>• Number of certified products</li> </ul>
	Increased sustainability and better crisis management	<ul style="list-style-type: none"> <li>• Existence of harmonized food safety regulatory frameworks</li> <li>• Existence of national dietary guidelines and nutrition extension packages</li> <li>• Ratification of EAC SPS Protocol</li> </ul>

## Annex 6: CAADP Kampala Commitments and Goals

The Kampala Declaration Social, Economic and Environment policy targets	
Social	<ul style="list-style-type: none"> <li>• Zero Hunger</li> <li>• Reduce stunting by 25%</li> <li>• Reduce waste by 25%</li> <li>• Reducing poverty by 50%</li> <li>• 60% of the population can afford a healthy diet</li> <li>• Reducing the yield gap between male and female farmers by 50%</li> <li>• Empowering 30% youth</li> <li>• Empowering 30% women</li> <li>• Empowering 30% vulnerable groups</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Increasing Agri-Food output by 45%</li> <li>• Reducing post-harvest loss by 50%</li> <li>• Tripling Intra-African trade</li> <li>• Raising the share of locally processed food to 35% of Agri-Food GDP</li> <li>• Mobilizing a tota of I \$100 billion</li> <li>• At least 10% of annual public expenditure is allocated to Agri-Food systems</li> <li>• 15% of Agri-Food GDP is reinvested annually</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• At least 30% of the agricultural land is under SLM</li> <li>• 40% of the households are protected from shocks</li> </ul>



Intervention		Indicators		Achievements/Milestones											Budget		Lead / Partners		Means of Verification						
				Baseline (2026)		Y1	Y2	Y3	Y4	Y5	Target 2030	Y1	Y2	Y3						Y4	Y5	Budget 2030 (KES Billion)			
Investment Area		Key Performance Indicators		Y1	Y2	Y3	Y4	Y5	Target 2030	Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	Y1	Y2				
Outcome	Increase farmer incomes and contribution of the agri-food system to GDP	Number of new jobs created in Agriculture [Number]	Percent of change in post-harvest losses, by value chain																						
				Percentage reduction in cost of food, by value chain																					
					Proportion of HH receiving food aid																				
						Proportion of HH receiving cash transfer																			
							Proportion of households using bio-fortified foods																		
<b>Flagship 1: Increasing Agrifood System production and productivity</b>																									
Outputs/ Inputs	Enhancing investment in crop production and productivity	% Increase in crop Productivity/Yields (Production volumes per area under production of priority/selected crop value chains) [Tonnes/Ha]	% increase in animals inseminated by species.						50% increase in production of various crops						30					Agriculture Secretary &					
				% Increase in income of livestock producers/ fisherfolk.						At least 50% of livestock farmers adopt and use ART						2					*DVS & Respective county departments.				
					% Decrease in incidents of disease outbreaks.						50%						15					DLP;			
						% Increase in inter-African and international trade regarding animals & animal products.						30%						20					DG-KFS & Respective county departments.		
							# of farmer onboarded on an integrated KIAMIS and IFMIS platform						Eradicate FMD, PPR, CCPP and CBPP						5					DVS & Respective county departments.	

Intervention		Indicators		Achievements/Milestones										Budget			Lead / Partners	Means of Verification														
Investment Area		Key Performance Indicators		Baseline (2026)		Y1		Y2		Y3		Y4		Y5		Target 2030		Y1		Y2		Y3		Y4		Y5		Budget 2030 (KES Billion)				
Outputs / Inputs	Farmer Enterprise Clusters (FECs)	# of clusters established and operationalized with infrastructure, training and digital systems															500											10	Commissioner Cooperatives in conjunction with **SDC, SDL & KFS & Respective county departments.			
	Capacity Building & Digital Hubs	# number of farmers Trained on Digital services in agriculture in the following services (Sourcing inputs, Accessing Extension, Accessing Price Information, Linking to output Markets) by County (47 Counties).															50%											8	DLP for feeds;			
		# Reporting use of the digital services in any of the services (Sourcing inputs, Accessing Extension, Accessing Price Information, Linking to output Markets)															40%													DVS for animal diseases and animal genetics;		
<b>Flagship 2: Targeted input and service wallet to the needy and vulnerable farmers</b>																																
Outputs / Inputs	e-Voucher Platform Expansion	# of registered farmers with active e-wallets	2M														5M												2.5	MoALD/MoFBE/CoG		
	Input & Service Bundles	# of farmers receiving bundled inputs (Cash transfer/redeemable coupons)	0.8M														1.5M												30	MoALD/MoFBE/CoG		
	Private-Sector Operations	# of private agro-dealers integrated into system	0														2000												10	MoALD/MoFBE		
	Extension & Soil Health Services	% of targeted smallholder farmers reporting increase in crop yield	0															0.15												7	MoALD/MoFBE/CoG	
		Increase in annual small-scale farmers' income, by sex and age (KES)	20500															up to 30,750													KNBS	
Monitoring & Graduation System	% Graduated farmers attaining self-reliance	0															0.7													1.5	MoALD/MoFBE/CoG	
	Agriculture sector contribution to GDP (KES Billion per year)																24 - 49 B													KNBS/MoALD		



Intervention	Indicators	Baseline (2026)	Achievements/Milestones										Budget					Lead / Partners	Means of Verification				
			Key Performance Indicators										Budget 2030 (KES Billion)										
Investment Area			Y1	Y2	Y3	Y4	Y5	Target 2030	Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5					
<b>Flagship 4: Agro-Industrialization and Value Addition</b>																							
Outputs / Inputs	Support commercial aggregation, farmer to factory linkages	Value (KES) of agricultural produce aggregated and sold through aggregation hubs							50%										60		MoALD, MoFBE, Private Sector		
	Upgrade FPOs and Cooperatives	# of FPOs upgraded to Cooperatives						Up to 2000 FPOs, SMEs and Coops											25		MoALD, KNCCI, DFIs		
	Develop and strengthen County aggregation and industrial parks (CAIPs)	# of CAIPs established						47											10		Counties		
		# of farmers using CAIPs disaggregated by Sex and Age																			Counties		
		# of Jobs (direct) created through CAIPs						250													Counties		
		# of medium and large-scale Agro-Industrial parks and processing hubs established						15 -20 AIPs												120		MoALD, CoG, Private Sector	
		# of Jobs created through AIPs and PHs						300000 new jobs														MoALD, CoG, Private Sector	
		Integrate Green and Renewable Energy systems in Agro-Industrial Parks (AIPs) and Processing Hubs (PHs)	% of AIPs and PHs using renewable energy						>60%											20		MoEnergy, Private Sector	
	Facilitate Standards, Certification, Digital Traceability and trade	# of AIPs certified under GAPs																					
		# of AIPs and PHs using traceability technology																	15		KEBS, MoH, KEPHIS, KRA, KNBS		
		Value (KES) of produce from AIPs and PHs sold disaggregated by Domestic and international markets																					
	Promote Capacity building, Skill development, R&D and technology adoption in Post Harvest Loss Management	% of AIPs and PHs who use PHLM technologies																	15		MoALD, Ministry of Education (TVETs),		

Intervention		Indicators		Achievements/Milestones										Budget		Lead / Partners		Means of Verification			
Investment Area		Key Performance Indicators		Baseline (2026)		Y1	Y2	Y3	Y4	Y5	Target 2030		Y1	Y2	Y3	Y4	Y5	Budget 2030 (KES Billion)			
<b>Flagship 5: Strengthening Food and feed safety</b>																					
Integrated governance & coordination.	Establish a national food and feed safety control agency.											100% interagency coordination						5		Cabinet Secretary Agriculture & Cabinet Secretary health in consultation with all food and feed safety regulatory agencies.	
		Develop Food safety inspection plans.											1								Respective departments & agencies in food safety control.
	Annual Food business rating reports.												5								Food business ratings; Director Public Health.
	Develop a Multi Annual National Control Plan (MANCP).												1						5		National Food Safety Coordination Committee or its successor & county governments.
	% reduction in prevalence of foodborne illnesses.												70%						4		Foodborne illnesses: DG – Health & county governments.
	% reduction in chemical/medicine residue levels in food in the market.												80%						2		Pest Control Products Board for chemical/pesticide residues. Veterinary Medicine Directorate for medicine residues & county governments.
Risk-Based Inspection, Early-Warning Systems and certification support.																					
Safe use of agro-chemicals, pesticides, herbicides and medicines.																					
Outputs/Inputs																					









## Annex 8: NASIP Risk Assessment and Ranking

Methodology: Risks scored 1–5 on Likelihood and Impact.

Scoring guidance: 1 = Very Low, 2 = Low, 3 = Moderate, 4 = High, 5 = Very High.

#	Risk	Category	Likelihood	Impact	Mitigation / Contingency Measures	Level
1	<b>Change in political leadership</b> Electoral transition risk (2027)	Political & Governance	5 / 5	5 / 5	Institutionalize oversight through the Inter-Governmental Coordination Committee on Agriculture (ICCA) and County NASIP Steering Committees (CNSCs); embed NASIP in MTP IV to ensure cross-administration continuity.	Critical
2	<b>Public-sector financing risk</b> Fiscal deficit and competing priorities	Financing	4 / 5	5 / 5	Ring-fence NASIP within the MTEF as a priority expenditure under BETA and Vision 2030; apply Program-Based Budgeting (PBB) for predictable county disbursements and conditional grants tied to flagship milestones.	Critical
3	<b>Policy and legal delays</b> Slow enactment of the AIF Act and key legislation	Political & Governance	4 / 5	4 / 5	Establish a Policy Coordination Task Force to expedite parliamentary and regulatory approvals	High
4	<b>Bureaucratic delays in disbursement</b> Systemic delays across the delivery chain	Financing	4 / 5	3 / 5	Prioritize the formation and strengthening of value chain groups to generate their own funds for enterprise development.	High
5	<b>Development-partner financing risk</b> Donor fiscal or geopolitical shifts	Financing	3 / 5	4 / 5	Conduct annual alignment reviews through the Agricultural Sector Donor Coordination Group (ASDCG); diversify financing via AIF blended-finance windows, including climate-finance instruments from partners.	High
6	<b>Political interference in project selection</b> Undermines merit-based allocation	Political & Governance	4 / 5	3 / 5	Public participation in transparent, merit-based processes and independent technical review during selection, where applicable.	Medium
7	<b>Leadership turnover in ministries/counties</b> Institutional memory and continuity loss	Political & Governance	4 / 5	3 / 5	Implement a transition management plan (2027–2028) with standardized procedures and National Agriculture Data Hub-linked digital repositories for institutional memory	Medium
8	<b>Private-sector financing risk</b> Investor confidence, credit, and policy risk	Financing	3 / 5	3 / 5	Deploy AIF credit guarantees, equity co-investment schemes, and performance incentives; strengthen due diligence frameworks and investment vetting	Medium
9	<b>Funding volatility across flagships/regions</b> AIF reallocation contingency	Financing	3 / 5	2 / 5	Maintain a 10–15% reserve within the AIF for reallocation to critical or underfunded areas.	Low
10	<b>Public transparency and engagement risk</b> Limited citizen oversight, politicization	Political & Governance	2 / 5	3 / 5	Publish progress updates on national agriculture data hub portals; hold annual citizen forums; integrate accountability sessions within Joint Sector Reviews (JSRs).	Low



