



MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES
**THE AGRICULTURE SECTOR TRANSFORMATION AND GROWTH STRATEGY (ASTGS-
TOWARDS 100% FOOD & NUTRITION SECURITY**

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Background

- Agriculture covers 100 value chains (crops, livestock and Fisheries)
- **Crops:** Industrial Crops contribute 69.7% of exports. Tea and Fresh Horticultural crops are the leading export crops. Food Crops contribute 32% of Food GDP and 0.5% of export earnings.
- **Livestock:** Over 10 million Kenyans in ASAL areas derive their livelihood from Livestock. Sector employs 50% of agricultural labour force
- **Fisheries:** Kenya's Annual Fisheries production valued at 22 Billion. Inland Capture Fisheries is 111,814 tonnes (83%), Marine Capture fisheries is 23,286 tonnes (17%). Aquaculture potential is estimated at 1.4 million ha. Only 2% is exploited.

An Overview of the Agriculture Policy

Environment	Knowledge	Production	Trade, Value Addition and Agroprocessing	Consumers	Financing
Land use	Biotech./ Genetics	Inputs (seeds, Fertilizer etc)	SPS issues	Nutrition	Credit
Water conservation	Research	Mechanization	International markets	Food availability	Stabilization funds
Irrigation	Technology	Pests and diseases	Domestic Trade	Food Safety	Commodity Funds
Soil conservation	Extension	Productivity/ Production costs	Agro-processing	Food Quality	Agricultural Insurance
Landscape restoration	Training & Capacity Building	Subsidies/ Incentives	Ware Housing	Cost of Food	Levies
Climate Change/ Weather/ Disaster Mngt.	Information and data/ Digitization	Production systems	Commodity Exchange	Strategic Food Reserves	Climate Funds

Cross cutting Issues

Regulations, Human Resource Development, Disaster Management, Institutional Strengthening, Corruption/Governance/ Enablers e.g energy, roads, water, transport, Financing, ICT

What is needed for Transformation to happen?

- Institutional and Policy Reforms at the National Level
- Start major programs, incentives and projects
- Institutional and Policy reforms at the County level
- Start Major county Programs, incentives and Projects
- Move Kenyans from subsistence to commercial agriculture
- Set up a strong working Coordination Mechanism between National and County Governments and other stakeholders
- Greater participation of Private Sector

Selected facts on Kenya's agriculture sector (1/2)

"FARMER" IMPLIES: (1) MIXED FARMERS – *who produce* CROPS, LIVESTOCK, FISH; (2) PASTORALISTS; (3) AND FISHERFOLK, UNLESS STATED OTHERWISE



Small-scale farmer incomes

 **~8.6 million**

farmers in Kenya representing ~4.5 million farming households, even if only ~350,000 formal jobs exist in the sector



Agricultural output and value addition

 **~33%**

of total GDP, **~80% from crops**, **~15% from livestock**, <2% fish and aquaculture, and the rest from others³



Household food resilience

 **21**

out of 100 score on Global Hunger Index (*1 is best*), ranked **better than regional peers**, particularly on **availability of food**



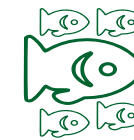
~60%

of production including **60-70% of all maize production from small-scale farmers**. But only **10-15% of incomes** for these farmers come from maize



~2.3%

of national budget spent on agriculture⁴ (~KES 60bn), of which **~KES 5bn spent on subsidies**, equivalent to ~13% of MoALF&I budget



3-4x

more potential for fisheries production in Lake Victoria than previous estimates, a significant opportunity for GDP and **protein nutrition in Kenyan diets**

1 Of irrigated land, 42% by small scale schemes ~15ha/scheme, 40% commercial over 45,000ha, 18% government schemes with avg. 2600ha/scheme, but only 2 countries (Tana, Kirinyaga) have capacity >8000ha | 2 Statistics fluctuate year on year e.g., 2016 was 11th largest in world and yields of 162 according to FAOSTAT | 3 Forestry and support activities | 4 CAADP target is 10% | 5 Measured in % terms for beans and maize (i.e. beans ~400%) to meet best-in-class peers including Ethiopia, S. Sudan, Uganda, Rwanda, Burundi and Tanzania, but kg/head for meat to match South Africa | 6 Measured by standard deviation in consumer price food indices, Kenya is at 7, EAC is at 4

SOURCE: Observations of Economic complexities; EIU; GEC; Kaves-USAID; APHILIS; FAOSTAT; Expert interviews; I_DEV; CBK; KIHBS; Kenya economic survey 2017; KNBS; World Bank; Kenya Bureau of Statistics; CommTRADE 2013; Kenya Demographic and Health Survey, FAO; Kenyan Demographic and Health survey 2014; UMCES Data Africa; IFPRI; APHTACIS; Kenya market trust; FAOSTAT; Tegemeo; National Water Master Plan; State Department of Fisheries

Selected facts CONT.....

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Small-scale farmer incomes



of small-scale farming land is irrigated, **most arable land is rain fed**¹



Agricultural output and value addition



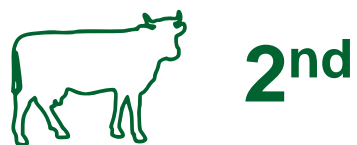
Opportunity for Kenya to capture from **closing yield gaps in maize, beans and tea** to best in class regional peers⁵



Household food resilience



chronically food insecure Kenyans in ASALs, primary due to drought. **Increases to 4mn Kenyan's during severe droughts** (average of 2.7mn year around)



largest livestock herd in Africa, **13th largest number of dairy cows in world, but 138th yields** due in part to cold chain storage²



value addition from agro-processing, below regional peers



more price volatility than rest of EAC peers⁶ including Uganda, Tanzania, Rwanda, Burundi for key staples

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What are the problems facing Kenyan Agriculture?

- Most of our farming activities are still driven by culture and sentimental value chains/subsistence **(we grow mainly maize yet only 5% of Kenya is very suitable for maize)**
- The policies, politics and governance seems to be aligned against our aspirations
- Data and evidence to track development is unreliable
- Coordination between various actors is very poor
- Most of the farmers rely on very poor genetics (plant and animal varieties)
- Climate Change is heavily impacting on our production systems
- Farmers have poor agronomic practices
- Productivity per acre (yields) are very low despite having the highest fertilizer use in the region

What would result from Agricultural Transformation?

BOX 5: DEFINING INCLUSIVE AGRICULTURAL TRANSFORMATION

Agricultural transformation: What it means and signs it is happening

What is meant by 'agricultural transformation'

For most agrarian economies, successful agricultural transformation is a decades-long process which involves:



Modernization of on-farm production and input markets, from subsistence to commercial agriculture serving local and export demand



A shift of the value in the value chain away from primary production and toward processing and retail



Ultimately a **shift of farmers out of farming** and into more productive jobs (in agricultural value chains or out of agriculture)



Changing demand in terms of the foods people eat (e.g., more processed foods, animal proteins and fruits/veg) and where they buy (e.g. more formal retailing)

How do we know it is happening?



Early indicators

Rising incomes and declining poverty

Productivity gains

Yield increases

Greater value-addition per worker

Increase in national agricultural output

Increase in demand for animal proteins, sweeteners, oils and processed foods

The ASTGS- 9 Flagships (Aligning to CAADP, SDGs and Devolution)

Increase Small Scale Farmers' incomes

1. Target 1 million farmers, pastoralists and fisherfolk in an initial 40 zones served by 1000 farmer-facing SMEs that provide inputs, equipment including for irrigation, processing and post-harvest aggregation

2. Shift nationwide subsidies focus to register 1.4million high-needs farming households and empower them to access a range of inputs from multiple providers, enabled by an e-voucher delivery system

Increase agric. output and value addition

3. Set-up 6 agro-processing hubs across Kenya using a one-stop-shop rapid PPP process for local and export markets

4. Unlock 50 new large-scale private farms (>2,500 acres) with 150,000 acres under sustainable irrigation from existing infrastructure (e.g., rehabilitate dams, dual-purpose hydro-power), competitive bidding, and government provided infrastructure (e.g, power, roads)

Boost household food resilience

5. Restructure the Strategic Food Reserve (SFR) to better serve 4 million high-needs Kenyans through competitive digital reserve stock and cost management with private sector, and price stability managed through the Ministry of Finance

6. Boost food resilience of 1.2million farming, pastoralist, and fishing ASAL households through community driven design of interventions, and more active coordination of development partners and private sector resources through regional economic blocs

7. Launch 3 knowledge and skills building programs focused on technical and management skills in the field

for 200 national and county government transformation leaders, 1000 farmer-facing SMEs, and 3000 extension agents

8. Strengthen research and innovation, and launch priority digital & data use cases for better decision making and performance management

(e.g., first wave to include digital subsidy registration & delivery, farmer and SME performance, automated SFR buy / sell needs)

Actively monitor 2 key food system risks: i. sustainable and climate smart natural resource management

including sustainable irrigation and water basin health, soil quality and land use; and ii. crisis management for pests and diseases, climate and global price shocks

ANCHORS

ENABLERS

Transforming towards commercial agriculture

Challenges Facing Small Holder Farmers

- Access to affordable inputs (seeds, fertilizer, poor of mechanization, Quality of inputs is also poor)
- Small holder farmers are not organised and face governance challenges
- They have poor access to knowledge/Extension services
- Face onslaught from Pests and Diseases
- Face declining soil fertility
- Mostly rely on rain fed agriculture (only 7% irrigate)
- The lack access to financial services

How the ASTGS is addressing the Challenges (Pillar 1 and 2)

- Register and support 1.4 million small holder farmers
- Organize the farmers into farmer organizations according to value chains
- Choice of value chains should be based on suitability maps
- Register and support 1000 farmer supporting SMEs to provide a range of services including inputs, storage, offtake and processing
- Reform the Government fertilizer subsidy program and shift to e-voucher to provide a range of inputs to farmers through the private sector

Creating a market for agricultural products through agro-processing

Opportunities for scaling processing

-Textile, Fish, Fruits, Cereals/pulses, Meat and -Milk

Target: Create an initial 6 agro-processing hubs-Factors Impacting location of Hubs

- Quality, volume and reliability of raw agricultural inputs
- Proximity of raw input supply to agroprocessing locations and transport modes
- Distance to major domestic and export markets
- Competitiveness of proposed products when compared to non-Kenyan producers

Other key requirements

1. Selection based on feasibility
2. Transparent procurement procedures
3. Availability of Land (Public)
4. Minimize conflict of interest
5. Coordinated response to bottle necks
6. Private Sector execution
7. Infrastructure (roads, electricity, fibre, water)
8. Partnerships with AfDB, UNDP, ICDC, IFC

Agro-Processing Delivery Team (Agriculture, Industry, Trade, Works)

Creating Large Scale Farms (250,000 acres) to increase production

Challenges hampering large scale commercial farming

- Most of Kenya is in ASAL areas and therefore considered low potential
- Land fragmentation in high potential areas in high
- only 1% of Kenya's Land Mass is irrigated
- Only 24% of Kenya's land under irrigation is above 250 acres
- Security and access to land is a challenge. Communities invade large scale farms
- Access to land in the past has been politicised

Solutions proposed to increase area under large scale farming

- Make available land owned by Public Institutions (ADC, NIB, KALRO, Kenya Seed) to support establishment of new medium scale and large scale farms for crops and livestock
- Rehabilitate existing irrigation schemes/Dual use of Dams
- Encourage Private Sector Projects (PPP) in commercial production
- Choice of locations and value chains should be guided by International Level feasibility studies
- To access the ASALs there should be a deliberate efforts to shift to conservation Agriculture

How to Unlock the 50 new Large Scale Farms on Public Land

- Undertaking smaller unit size of projects in multiple locations (a minimum size of 2,500 acres)
- Placing limited reliance on new dam capex programmes, which may restrict the roll-out of new production
- Delineating clear land ownership prior to commencing procurement
- Incorporating high levels of community participation
- Optimizing the cropping plan to fit the land characteristics –
- Ensuring high levels of private sector involvement, leaving government to focus on a limited number of project components, such as land and infrastructure provision, security and water supply (where appropriate)

Working with IFC, AFDB

Boosting Household Resilience food resilience

Reforming the Strategic Food Reserve/NCPB and Commodity Trading

- The strategic food reserve has faced serious challenges with conflicting mandates
- The NCPB has faced serious Governance and operational challenges

Proposed Interventions

- Merge NCPB and SFR to avoid duplication
- Implement the Warehouse Receipting System (WRS)
- Price stabilization function be done through treasury and not SFR.
- Treasury to use a range of fiscal instruments for sensitive commodities

Major Cross-Cutting Projects that are planned

- Seed and seedling Master Plan for Kenya
- Conservation Agriculture Intensification
- Irrigation for increased production
- Pest and Disease Control
- Capacity Building Programs and Extension
- Soil Conservation and crop suitability mapping
- A resilience program for ASAL Counties
- Mechanization Plan
- Farmer Organizations and Market Linkages
- Agricultural Data and Digitization
- Legislation
- Financing

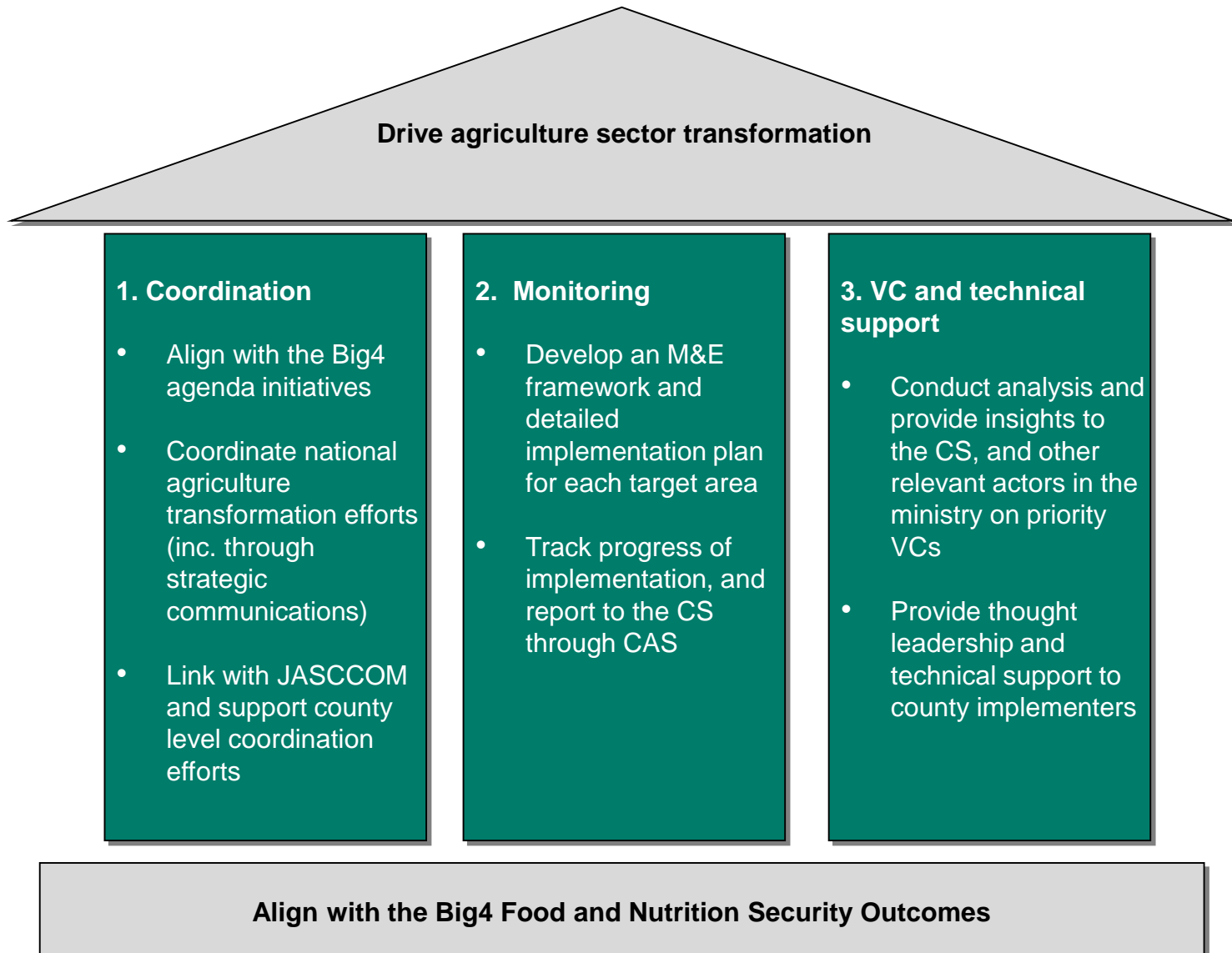
Agric. Statistics, Data and Digitization

- The Ministry plans Registration 3 Million farmers by 2022
- The Ministry has developed a digitization strategy to have credible data to support decision making
- The Ministry will harness Artificial Intelligence for decision making
- Digital tools and satellites will be used to monitor productivity
- Some of the areas prioritized for digitization include:
 - The e-incentives/subsidy program
 - E-Extension/Knowledge sharing
 - E-Market Information
 - E-Financial Services
 - E-Weather information
 - E-Agricultural Insurance
 - Food Balance sheet
 - Monitoring and Evaluation of Projects
 - Land optimization modelling for crop suitability mapping

Kenya's Readiness to Transform

- No matter how good an agricultural transformation strategy one may have, it will not work if **institutional, organizational and political constraints** prevent progress and real impact.
 - **Managing a devolved agricultural transformation.** The ability to coordinate across county and national levels in agricultural policy and investments is key
 - **Mobilizing resources.** First, the contribution to agriculture in the national budget is ~2.3%, significantly below regional peers including Malawi at ~16% and Ethiopia at ~15%. **Which enablers are we funding?**
 - **Government needs to be more effective in coordinating** across ministries, ratifying fact-based policies, and implementing policies and regulations on time.

ATO has three main functions: Coordination, Monitoring and Technical Support



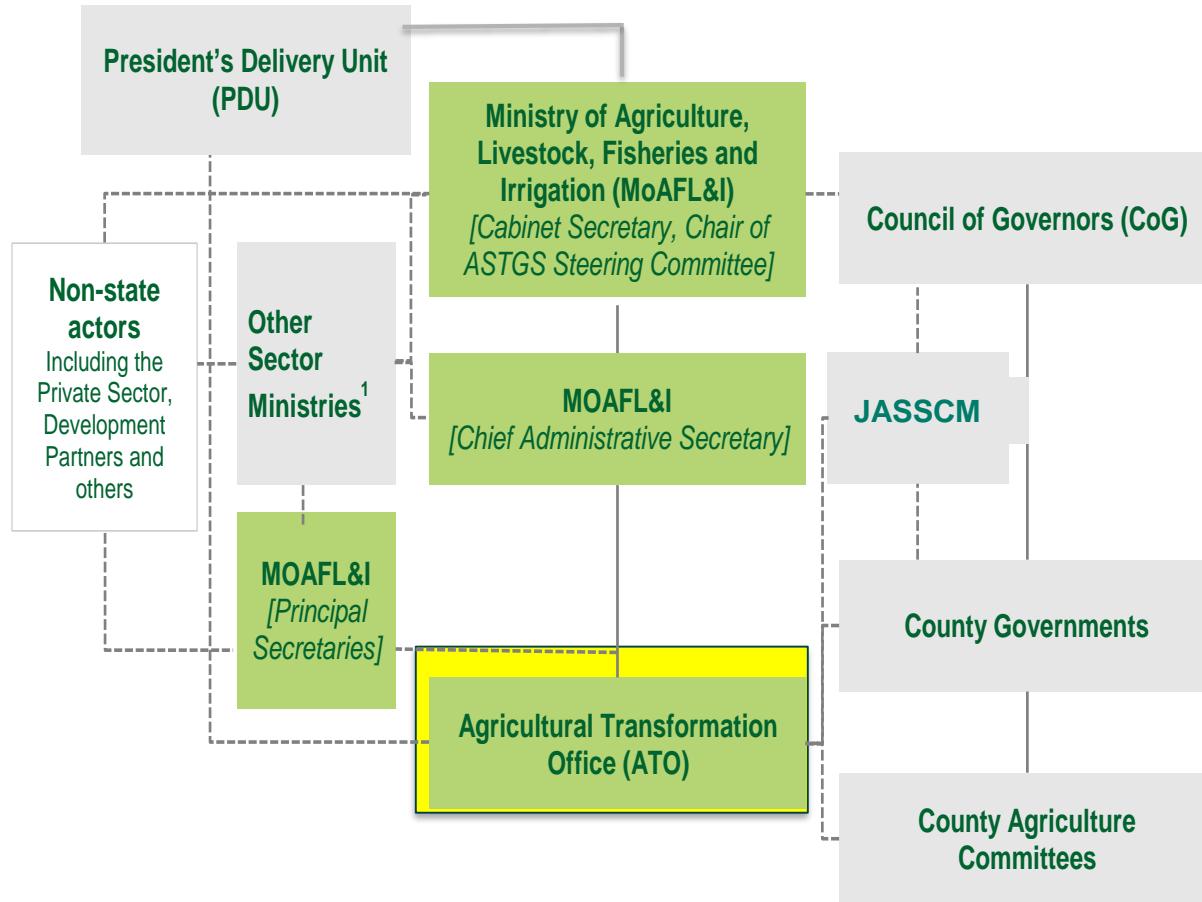
Various entities have critical role in delivering the ASTGS. The Agriculture Transformation Office (ATO) will be responsible for **inter-sectoral coordination, monitoring of implementation and analytical support**



Delivery mechanism roles and responsibilities

- **The Cabinet Secretary (CS), MOALF&I:** ensure high level national oversight on strategy coordination and implementation
- **County Governors:** provide high level oversight on strategy coordination and implementation in their Counties
- **Council of Governors(CoG):** create linkage through the agriculture committee of the Council
- **Sector Ministries:** provide an enabling environment and synergy to support implementation of the strategy as spelt out in various flagships
- **Private Sector, Development Partners and Non-State Actors:** provide partnership and support at the two levels of Government in implementation of the Strategy
- **Chief Administrative Secretary (CAS):** coordinate implementation of the ASTGS in the Ministry's state departments in consultation with the Cabinet Secretary. The CAS will be responsible for the activities of the ATO
- **Principal Secretaries, MOALF&I:** coordinate implementation at respective State Departmental levels in the Ministry
- **Joint Agriculture sector Consultation and Cooperation Mechanism (JASCCM):** provide interface of National and County Governments on ASTGS and all other agriculture related issues. JASCCM also hosts the Sector Working Groups (SWAGs)
- **The Agriculture Transformation Office (ATO):** serve as the *national secretariat* for high level coordination and implementation at the national level under CAS leadership in consultation with the Cabinet Secretary. ATO will also monitor implementation at the County level and provide inter-ministerial linkages
- **Big4 Committee:** oversee implementation of the B4 agenda in the ministry and provide status report to the CS every quarter. The Committee is composed of members from state departments, including crops, research, fisheries, livestock, and irrigation

1. Coordination: Roles and responsibilities of relevant actors vis-à-vis the ATO



Description

Council of Governors (CoG) – Agriculture Committee

- Evaluates Counties on their ASTGS implementation performance and provides strategic direction
- ATO uses COG through JASSCOM on county level engagement

Joint Agriculture Sector Steering Committee (JASSCOM)

- Facilitates consultations and cooperation between the national and county governments & other key sector stakeholders on ASTGS implementation
- Meets every quarter, and is chaired by CS MoAFL&I and Chair Council of Governors Agriculture Committee
- ATO links with JASSCOM through the CS and can be part of the SWGs as appropriate for M&E

Country Executive Committee (CEC) Agriculture

- The technical expert in charge of agriculture sector activities at the counties
- The ATO county team works closely with and supports the CEC in charge of agriculture

¹ Sectoral ministries include National Treasury; Industry; Trade and Co-operatives; Transport; Water and Sanitation; Devolution and ASAL areas; Environment and Forestry; others as relevant to specific issues including Education, Science and Technology, Health, EAC Labour and Social Protection, ICT

2. Monitoring and progress evaluation structure

Government reports
Non-state actors
platform



	Definition	Purpose	Frequency
County reports	<ul style="list-style-type: none"> Monthly county implementation report to ATO coordinator from counties 	<ul style="list-style-type: none"> Update on monthly progress of activities, to feed into the monthly briefing to the CS Surface other issues that may affect performance and where support and direction is required from the Ministry 	<ul style="list-style-type: none"> Monthly
Monthly briefings	<ul style="list-style-type: none"> Brief progress update briefing for MoALF&I CAS/PS 	<ul style="list-style-type: none"> Update on progress and warning signs of risks Identify areas where SC needs to make decisions or recommendations Surface other issues that may affect performance and where support and direction is required 	<ul style="list-style-type: none"> Monthly
Quarterly stock-takes	<ul style="list-style-type: none"> ASTGS Steering Committee meeting with delivery actors SC Chairs, ATO Coordinator serves as a Secretary 	<ul style="list-style-type: none"> Evaluate delivery progress to date Enable SC to hold individuals accountable Provide focus, clarity, and a sense of urgency Make decisions on necessary actions Remove barriers to cross-departmental work 	<ul style="list-style-type: none"> Quarterly
Bi-annual reports	<ul style="list-style-type: none"> Comprehensive assessment of the status of all of the system's key priority areas 	<ul style="list-style-type: none"> Evaluate delivery performance over longer time horizon Define success for next six months Determine key next steps/actions plan Make recommendations to confront issues Held post PPD dialogues, to ensure non-state actors issues are incorporated 	<ul style="list-style-type: none"> Quarterly
Public, Private, Development Partners Dialogue	<ul style="list-style-type: none"> Dialogue with private sector and non-state actors Chaired by ATO Coordinator 	<ul style="list-style-type: none"> Discussion around sector performance and status of flagships Unlock challenges faced by the private sector and identify support required from government Gather critical issues hindering investment and private sector performance, to escalate to SC and PDU 	<ul style="list-style-type: none"> Quarterly



Conclusion

- NDITC and Cabinet to adopt the ASTGS and rally Kenyans, Farmers, Civil Society and development partners towards Agricultural Transformation.
- Funding Agriculture will create wealth and employment
- Good Governance and ending corruption holds the Kenya to success.