

Ministry of Agriculture, Livestock, Fisheries & Cooperatives (MoALFC)





Council of Governors

# Agriculture Sector Development Support Programme Phase Two (ASDSP II)

# Rapid Assessment Study on the Status of Implementation

# **A Consolidated National Report**

May, 2022





#### FOREWORD

Agriculture Sector Development Support Programme Phase II (ASDSP II) is a Government of Kenya (GOK) designed programme supported by Government of Sweden (GOS) and European Union (EU) to contribute to the transformation of crop, livestock and fisheries production into commercially oriented enterprises that ensure sustainable incomes and food and nutrition security (the sector goal). ASDSPII further contributes to realization of the Kenya's wider development goals expressed in the Vision 2030 and Kenya's Constitution and various sector relevant Global, regional and National aspirations, commitments and strategies.

ASDSP II which is implemented by all forty-seven (47) Counties along twenty-nine (29) priority value chains, aims to develop sustainable Priority Value Chains (PVCs) for improved income, food and nutrition security. The main focus is on four key result areas namely increase in productivity of priority value chains; strengthening entrepreneurial skills of priority value chain actors; improvement of access to markets by priority value chain actors and strengthening of structures and capacities for consultation, collaboration, cooperation, and coordination in the agricultural sector

To assess performance of projects and programs interventions and how this can be strengthened evaluations are critical. It was on this basis that after ASDSP II midterm evaluation a recommendation was given on need to conduct a rapid program evaluation. The rapid evaluation was more critical given that the program had experienced delays in startup and was equally affected by COVID 2019 pandemic among other challenges. This rapid evaluation therefore, has assessed all aspects of ASDSP II performance and will support learning and improvement as it provides information for consideration for programme extension or roll out of another phase. The rapid evaluation can also be used for policy decision towards design and redesigning of other sector interventions as well as resource mobilization. It is our pleasure to welcome all our stakeholders to read and utilize this document for the betterment of our agriculture sector development.

**Richard Ndegwa** 

**National Programme Coordinator** 

#### Agricultural Sector Development Support Programme Phase II (ASDSP II)

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#### Agriculture Sector Development Support Programme Phase II (ASDSP II)

## **Executive Summary**

Agriculture Sector Development Support Programme Phase II (ASDSP II) is a Government of Kenya (GOK) designed programme supported by Government of Sweden (GOS) and European Union (EU) to contribute to the transformation of crop, livestock and fisheries production into commercially oriented enterprises that ensure sustainable incomes and food and nutrition security (sector goal). This is the sector's strategy to contribute to Kenya's Vision 2030 aim of a *"globally competitive and prosperous country with a high quality of life by 2030*". This is expected to transform Kenya into "a newly industrialized, middle income country providing a high quality of life to all its citizens in a clean and secure environment"

ASDSP II developmental objective is to develop sustainable priority value chains **for Improved Income**, **Food and Nutrition Security** among the targeted 700,000 value chain actors. It is implemented by MOALFC and 47 county governments since 2017 to address four key identified sector challenges of low productivity, inadequate entrepreneur skills among service providers and value chain actors, inadequate access to markets and inadequate structures and capacity for consultation, cooperation and coordination in the sector within and among the multilayer and multidisciplinary actors.

From programme performance reporting and mid-term review, the agreement parties recommended that a rapid assessment of the status of implementation be undertaken so as to understand whether the programme will achieve intended results within the remaining period. Specifically, the study sought to assess achievements in each of the result areas; output and outcome objectives and effectiveness of the Programme's monitoring, evaluation and communication as well as identify additional actions/opportunities requiring additional time and resources to reach the intended objectives. The findings will be used to inform parties on the decision needed to ensure intended results are realized.

The assessment was undertaken between February and March 2022. The methodology involved use of different sampling techniques to derive a representative sample of value chain actors (VCAs) at the different nodes as well as collection of both primary and secondary data. This is a summary of the study findings on all the four result areas, the programme's monitoring, evaluation and communication and, the programme implementation and management.

#### **Characteristics of VCA**

Majority of the VCAs were above the age of 35 years comprising 85.5% of total respondents while youth comprised 14.5% compared to 17.9% in the baseline survey. Adult females were 42.2% and males 39.9% compared to 41.9% and 40.2% respectively in the baseline.

#### **Developmental objective**

At programme purpose level, most of the VCAs were involved in the production node at 81% and derived an average of 84% of their income from ASDSP value chains. The study findings show that overall, there was an increase of incomes among the VCAs from an average of KES 103 in 2019 to KES 428, an indication that the programme's contribution to achievement of vision 2030 goal of KES 1,100 is realizable. There was however mixed performance with some PVCs increasing and others declining. In addition, the study findings also indicate consistent increase of gross margins (GM) at the trade node in all the value chains.

On employment, there were 15,593 people on and off farm employment with an average of 4.8 employees per enterprise compared to an average of 4.3 at baseline. About 4,605 additional jobs had been created both at on and off farm levels an increase in the number of employees by 11.5%.

#### Increased productivity of priority value chains

The study did not establish the changes in productivity of the priority value chains. However, from others sources, agricultural productivity in Kenya is low, with yields for most key commodities comparing poorly with countries in the region. For instance, in the dairy industry, the average milk yield in 2021 was 7.918 Kg/ cow/ per day compared to as Zambia (13.919 Kg/cow/ day) and South Africa (38.173Kg/cow/day) (FAO Stat, 2021).

The study established that the low productivity is also a result of postproduction losses where 43% of post-production losses (PPL) experienced were more than 5% in both the youth and adult category. The post production losses across all value chains ranged from < 5% to between 5-10%.

The study recognized that the low productivity and high postproduction losses were attributed by among others, the inadequate knowledge and skills on technologies, innovations and management practices among the service providers and value chain actors. Overall, the findings indicate the public service providers were most utilized (49%) compared to other categories of service providers (private and civil society related). Across the value chain, the production node recorded the highest utilization of SP (81%) while processing node had the least (3%). The study noted that 16% of the VCAs did not utilize service from the different categories of service providers for various reasons; 43% of the VCAs were taking up innovations and 40% of climate smart technologies were in use. The overreliance of the public service providers and coupled with low uptake of innovations and climate smart technologies was seen as the main contributor to unrealized achievement on this result area.

#### **Entrepreneur skills enhanced**

There was an increase in VCAs that developed business plans (35%) from the 23%. Majority of the agro input suppliers (58%) and processors (56%) had developed business plans compared to other value chain actors. The youth were the majority in terms of business plans development at an average of 39% which is a 15% increase from the 24% at baseline. Majority (71%) of the business plans developed were being implemented as at the time of the study, which is a 59% increase from the 12% baseline data. The dominant uses of business plans were business operations, resource mobilization and utilization. To improve on business plan development and implementation, it is recommended that training on entrepreneurship development be complemented by mentorship, coaching and incubation services.

#### Improved access to markets

The study shows that 91% of the sampled VCAs accessed markets in 2022 compared with 74% in 2019. This was an increase of 17%. Across value chain nodes, transporters (98%) had more access of their products and services to markets while producers (91%) had the least. Across gender, there was minimal difference between male (96%) actors with high access to markets as compared to (90%) of female actors. A comparison between the baseline information and this rapid assessment shows no significant change between the baseline information and the rapid analysis.

The study noted that although there was improved access to market, about 30% of the VCAs had only two market outlets (linkages) and this limited maximum use of knowledge and skills, innovations and CSA to increase productivity. Moreover, the pull effect of market as an catalyst to increased productivity was further hindered by low limited access to financial services with only 23% of the amount expected realized. There is however good progress in the access to market information where it is reported that 93% of the VCAs accessed market information compared with 69% at baseline.

#### Enhancement of Capacities for structures for consultation, cooperation and coordination

The study found that 88% of the structures for consultation, cooperation and coordination as well as ASDSP II specific structures for coordination had been established and are with functional instruments. The study found that there was an awareness of conducive policy environment of 5% among the value chain actors with the highest awareness reported at production node, whereas the agro input supply, trade and processing had very low/negligible awareness levels. The study further established that there was low satisfaction levels of below 30% of VCAs with the number of policies, strategies, plans and regulations that influenced commercialization of PVCs.

#### Monitoring, evaluation and communication

The programme has a robust monitoring, evaluation, reporting and communication plan that encompasses indicators at outcome, output and input levels. The M&E plan which comprises the programme's logic model, performance monitoring framework and performance evaluation framework guides on analysis and interpretation of results reporting and dissemination. It also gives guidance on roles and responsibilities of various structures on M&E and ASDSP overarching work plan and budget. The study showed progress in all outputs with overall implementation at average of 46.9%, the highest being capacity knowledge enhancement of existing service providers on identified opportunities at 103% and the lowest being initiatives for establishment of the structures at 25.5%. The study also noted that the communication plan was used and enabled implementers to coordinate their actions within and with the beneficiaries and other partners and collaborators.

This realized achievement is contributed by the use of the robust monitoring plan that assisted in tracking performance and taking corrective decisions in a timely manner through the various instruments including monthly and quarterly meetings of the coordinating secretariats, bilateral review meetings including their filed missions, resolutions and recommendations and topical studies or investigations.

#### Implementation management

The study established that all the articles of the specific agreement were being implemented but noted challenges regarding article on financial management where it noted that more than half of the counties had not fully adhered to counterpart contribution. This was one of the main explanations as to why the programme had not realized the targets for the period under study in almost all result areas.

The study noted that the organizational management was in place with proper coordination channels guided by the intergovernmental relations act with regard to the two levels of government. There was noted challenges in some counties where programme staff were not adequate as was anticipated. There were noted capacity gaps to oversight the programme implementation at the national and county levels by JASSCOM and CASSCOMs structures.

The study concurred with midterm review findings that noted the programme was delayed in start and also went further to establish that the implementation itself was delayed by more than one year. From the performance reporting, it was noted that most of the foundational activities were not completed until the third year of implementation. Example was the strategic integrated value chain action plan (SIVCAP) and its associated capacity and innovation concepts that were to be the basis for engaging the value chain actors into commercialization of their value chain businesses at start but was not completed until 2020/21 plan period.

The study assessed the processes of financial reporting by all implementing stations and noted that all requirements were adhered to and in conformity with public financial management act of 2012 and 2015.

#### **Conclusions and Recommendations**

#### Conclusion

Overall, the study findings show a good progress in all programme objectives and in programme management and implementation supported by a robust monitoring, evaluation and communication plan. And some of the key findings relating to effectiveness resonates with those of the midterm review.

The findings imply that there is a need to ensure more equitable service provision along the value chain nodes and also make efforts to ensure that the 16% VCAs who do not access services are included in programme activities in future. The need to review the approaches and methodologies used by the service providers in view of the findings from the service provider study will go a long way to enhancing the capacity and skills of not only VCAs but SPs on the whole aspects of business development.

Technical solutions can only be effective when integrated with other interventions along the value chain. For example, improved on-farm storage will not ultimately lead to reductions in the produce loss if market prices do not provide profit gains from storage. Therefore, progress in reducing produce loss and waste will require an integrated value-chain approach including uptake of resilience building technologies and innovations, both for environment, Climate change and biodiversity and also for business growth.

Production at all nodes of the different value chains continues to mirror the low national averages and this will continue to constrain improved incomes among the VCAs and consequently hinder commercialization of agriculture. Therefore, there is more to be done to bring higher volumes to the

markets while at the same time expanding the market linkages to catalyze other services for commercialization.

Key consultation, cooperation and coordination structures have been established and functional except for the umbrella civil society organization. There is however need to ensure the sector structures are integrated into the respective systems for sustainability. In addition, the awareness of key policies, strategies, plans and regulations for purposes of supporting commercialization is low and will need to be strengthened.

#### Recommendations

- 1. The training of SPs and VCAs should be guided by the SP study recommendations and especially as regards a capacity needs assessment for all actors, training curriculum and its modules.
- 2. The activities for the remaining period to focus on building sustainability of results. For example, in result area 4, institutionalization of the structures and facilitating the establishment of those not already done be prioritized.
- 3. The Programme should identify and establish partnerships with institutions promoting mentorship, coaching and incubation services to facilitate SPs as well as VCAs leverage on their services.
- 4. Use experiences of how other programmes integrate environment, CC and biodiversity to supplement ASDSP II's technologies and practices.
- 5. Liaise with COG with a view to follow up with counties that are not to date with counterpart funding to ensure those counties adhere to MOUs in question.
- 6. Use the findings of this report and the mid-term review to seek and justify for an extension of the programme for at least one year, during which a new sector support programme should be developed to further the value chain business of ASDSP II with potential for commercialization into viable business enterprises.

## Abbreviations

ASALs:	Arid and Semi – arid Lands
ASDSP II:	Agricultural Sector Development Support Programme Phase two
ATT	Activity Tracking Tool
BP	Business plan
CASSCOM:	County Agriculture Sector Steering Committees
CC	Climate Smart
CECM	County Executive Committee Member
CoG	Council of Governors
CPS	County Programme Secretariat
CPC	County Programme Coordinator
CSA:	Climate Smart Agriculture
EU	European Union
FY	Financial Year
GCP:	Gross County Product
GDP:	Gross Domestic Product
GHG	Greenhouse Gas Emissions
GM	Gross Margin
GoK	Government of Kenya
GoS	Government of Sweden
JASSCOM	Joint Agriculture Sector Steering Committee
KES	Kenya Shillings
KNBS:	Kenya National Bureau of Statistics
M&E	Monitoring and Evaluation
MOALFC	Ministry of Agriculture Livestock Fisheries and Cooperatives
MoU	memorandum of Understanding
MSME:	Micro, Small and Medium Enterprises
MTR:	Mid Term Review
NPS	National Programme Secretariat
PPLs:	Post Production Losses
PVC:	Priority Value Chain
PVCA	Priority Value Chain actor
SME	small Medium Enterprise
SoE	Statement of Expenditure
SPs:	Service Providers
VCAs:	Value Chain Actors
VCD	value chain Development
VCO	Value chain Organization

## **Definition of Terms**

**Agricultural Sector GDP**: Agricultural Sector GDP is the total value of Crops, Livestock, Fisheries and associated services

**Climate Smart Agriculture:** Refers to the agricultural development that increases value chain adaptation and productivity for food and nutrition security and allows populations to transition from poverty to middle income livelihoods, with co-benefits in reductions in greenhouse gas emissions (GHGs) and environmental resilience.

Full Time Employment: Refers to salaried permanent working arrangement

**Gross Domestic Product:** Gross domestic product is a monetary measure of the market value of all the final goods and services produced in a specific time period, often annually. It represents the total value of all goods and services produced over a specific time period, often referred to as the size of the economy

**Gross margin:** Refers to the difference between revenue and the cost of producing goods and services. It may also be expressed as a ratio of profit over the total revenue.

Household: A household consists of people who live in the same dwelling and share meals.

**Household Income**: Is the combined incomes of all people, sharing a particular household. It includes every form of income, e.g. salaries and wages, retirement income and investment income among other sources.

**Market Access Linkage:** Refers to processes that support connection between the producers of goods or services and their consumers

**Market Information:** Refers to information on prices and quantities of widely traded products/Commodities.

**Market Segment:** Refers to an identifiable group of individuals, families, businesses or organizations sharing, one or more characteristics or needs in an otherwise homogeneous market. Market segments generally respond in a predictable manner to a marketing or promotion offer

**Off-farm Income:** Earnings derived from farming activities undertaken outside the household farm setting. The activities could be farming or non-farming in nature. Examples include farm wage labour, marketing of produce that is not of the household

**On-farm Income:** Earning derived from farming activities at the farm setting.

Part Time Employment: Refers working arrangement hired on need basis and attracts wages

**Peak season:** Refers to the period within the production cycle when the supply of a commodity is highest.

**Post-production losses:** Refers to the quantitative and qualitative loss incurred by the VCAs during various operations along the value chain

**Prioritized Value Chain:** Refers to specific agricultural value chains selected by stakeholders for programme support in each of the 47 counties

**Productivity:** Refers to the economic measure of output per unit of input, which mainly comprises land, labour, time and capital. Productivity is generally expressed as a ratio of revenue over inputs.

**Service providers:** Refers to individuals or group of individuals who provide specialized service(s) that are aimed at enhancing the knowledge and skills of the value chain actors or other service providers

**Structures for Consultation and Coordination:** Programme institutional arrangements established for enhanced programme implementation and efficiency of the sector

**Start-ups:** Newly established enterprises which have not undergone the full cycle of business development

**Value Chain:** Is a set of linked activities that work to add value to a product; it consists of actors and actions that improve a product while linking commodity producers to processors and markets

**Value Chain Actors:** Individuals or groups that are actually directly involved in value chain activities. In ASDSP this refers to individuals, groups or organizations undertaking a business development along the value chain

**Value Chain Organization:** Refers to a category of value chain actors undertaking similar activities come together for a common purpose. In ASDSP this could be common interest group, value chain groups, marketing federations, producer association, association of input suppliers etc.

**Value Chain Platform:** Multi stakeholder assembly that is value chain specific with representation from the three levels of a value chain i.e. Micro, Meso and Macro actors

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## **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background

Agriculture Sector Development Support Programme Phase II (ASDSP II) was designed in 2016/17 by the Ministry of Agriculture, Livestock, Fisheries and Cooperatives as one of the means to support the commercialization of agriculture in Kenya. In so doing, the sector would then contribute to realization of Kenya's Vision 2030 aim of a *"globally competitive and prosperous country with a high quality of life by 2030"*. This is expected to transform Kenya into *"a newly industrialized, middle income country providing a high quality of life to all its citizens in a clean and secure environment"* 

Agriculture sector is to contribute to this vision by commercializing agriculture as provided in various sector steering documents including Agriculture Sector Development Strategy, 2010-2020, Agricultural Policy (Draft) 2021, and Agriculture Sector Transformation and Growth Strategy (ASTGS) 2019-2029 among others. The objective of ASDSP II is to support the commercialization of Priority Value Chains (PVC) in all the 47 counties by reaching 700,000 Priority Value Chain Actors (PVCAs) to address four key challenges that hinder commercialization of value chains namely: low productivity, low access to markets, inadequate entrepreneur skills and inadequate structures and capacities for consultation, cooperation and coordination. The programme logic is therefore to work with the targeted PVCAs by enhancing their capacities to address these problems with an intention of improving their incomes to enable them reach the vision 2030 goal of a middle level income with citizens earning KES 1,200 per person per day.

By addressing these four problem areas, the Programme intends to attain four results or outcomes as set out below:

- 1. Productivity of priority value chains increased,
- 2. Entrepreneurial skills of priority value chain actors strengthened,
- 3. Access to markets by priority value chain actors improved and
- 4. Structures and capacities for consultation, collaboration, cooperation, and coordination in the agricultural sector strengthened

ASDSP II is a five-year Programme (2017-2022) financed by the Government of Kenya (National and County governments), the Government of Sweden and the European Union (EU). It is implemented by the Government of Kenya (national and 47 county governments) with strong participation of the private sector as direct beneficiaries or service providers.

#### 1.2 Study Rationale

The programme implementation started in 2018 after a delay of about six months. Further delays in implementation associated with non-adherence to agreement commitments, inadequate capacities and unpreparedness among implementing institutions and existing value chain organizations were encountered. The completion of foundational activities that would have enabled effective implementation did not take place until towards the end of 2020 calendar year, three years after agreement to implement the programme.

Through internal performance monitoring, the programme management at the National and County level recognized that these delays have affected realization not only of the purpose level objective, but also of the outcome and output level objectives. Further, an external evaluation, the midterm review (MTR) concluded that the programme required an additional period if the objectives of the interventions were to be achieved.

Whereas the midterm evaluation was undertaken in 2020/21 and provided recommendations that are being implemented within the framework of the approved annual work plan and budget, the report did not have sufficient details especially as regards effectiveness to provide management on what had not been achieved and what inputs including finance, human resource and time, would be required to realize the envisaged goal. The entire management of the programme implementation (CECMs and NPC) therefore concluded that there was need for a rapid assessment of the status of implementation to inform key areas that needed to be addressed during the remaining programme period as well as additional actions that require additional time and resources to reach the intended objective.

#### 1.3 Objective of the study

The overall objective of the study was to collect and analyze information that would inform programme management on key focus areas for remaining period as well as to whether there is a need for additional programme period and support to realize programme objective of commercialization.

#### **Specific objectives**

- *a)* Collect and analyze the milestones and the drivers for achievement or lack of it in each of the result areas output and outcome objectives;
- *b)* Assess the appropriateness and status of the monitoring and evaluation and communication in guiding decision making towards effective programme implementation;
- *c)* Identify additional actions and or opportunities requiring additional time and resources to reach the intended objective of commercialization.

#### 1.4 Limitations, challenges and mitigation measures of the study

- *a)* Value chain nodes and actors were not equitably distributed. This may lead to skewed information for particular chain nodes or actors.
- b) Unavailability of some respondents both physically and on phone during the scheduled interview times led to call backs and re-visits hence more time needed. In some instances, respondents' contacts were no longer in use while others had moved out of the County or dropped the value chain. Some respondents in arid and semiarid lands (ASAL) counties had moved in search of pasture due to drought. This necessitated replacement in consultation with NPS. They were replaced with value chain actors in the same value chain, node, locality and age bracket, while some respondents were not available
- *c)* Vastness of the Counties whereby location of respondents was far apart required enumerators to cover long distances to reach one respondent causing exhaustion and fatigue in counties where road network and public transport is poor.
- *d)* Delayed procurement of innovations means that the intended results are yet to be realized and thus cannot be reported for impact.
- e) Some questions were very personal, especially income to agro-input suppliers and so respondents linked the tool to Kenya Revenue Authority (KRA) surveillance. The enumerators assured the respondents of the privacy of the data collected and that they were not KRA staff. Some respondents even confirmed with the County Programme Coordinators (CPCs) before agreeing to give information. The enumerators were provided with identification badges and properly sensitized on how to handle respondents.
- *f)* There was language barrier since some terminologies used were hard to interpret in the local language
- *g)* Lack of set structures to control field enumerators since information was sent directly to the main server without the review of the county baseline teams (CBTs) at the county level.

#### CHAPTER TWO: APPROACH AND METHODOLOGY

This section presents the approach and methodology used in the assessment, data collection and how the data was analyzed.

#### 2.1 Study approach

The rapid assessment study adopted mixed methods where both primary and secondary data was collected. The primary data was collected from the PVCAs using the survey tool. Secondary data was collected from review of performance reports and documents of the last four years, internal reviews among the implementers, partners and stakeholders as well as objective observations and comparisons with similar programmes.

The study was carried out by programme 48 implementing units (47 CPSs and NPS) as follows

- *a)* NPS and Technical Assistance team (TAs) developed the data collection tools and sensitized the counties on the tools and the study process
- *b)* Each implementing station (47 of them) collected the data, analyzed and drafted report mentored by NPS Specialists and presented to CASSCOMs for approval and subsequently shared with NPS who then consolidated the national status report

#### 2.2 Sampling Methodology

A total of 700,000 Priority Value Chain Actors (PVCAs), undertaking businesses along the twenty-nine prioritized value chains nationwide, represented the target population of the study across the Country. A sample size of 3,294 VCAs was selected across the 29 value chains from the 19,000 PVCAs (N) sampled from the target population for the baseline survey carried out in 2019. The five nodes (Agro Input Supply, Production, Trade, Transport and Processing) formed the primary sampling units, while the VCAs disaggregated by PVC, gender and age formed the secondary sampling units. Different sampling techniques were adopted, at different stages, to derive the final sampling framework as highlighted below:

- a) Multi-stage sampling (MSS): The VCAs were clustered into the five nodes across the three PVCs.
- *b)* **Probability Proportion to Size (PPS):** This was adopted because the total number of VCAs across each node was known and the probability of selecting one VCA was proportional to the total number of VCAs in that node.
- c) Purposive Sampling (PS): This was considered to ensure that across each node and PVC, when disaggregated by gender and age, the low samples (< 30) in a node were adjusted to be part of the final sample size. This was mostly applied to the Agro input supply, processing and transport nodes where the total population in the county was less than 30.</p>
- *d)* **Simple Random Sampling (SRS):** This was adopted to ensure each VCA, within a particular PVC, had an equal chance of being selected across the wards. Beginning from the VCA numbered 1, every ninth VCA in the lists of men, women and youth in the respective PVCs were selected.

#### Sampling Procedure

To determine the sampling size, the following steps were adopted:

**Step1:** This step was aimed at ensuring that the county VCA data sets are grouped into five clusters (Input Supply, Processor, Producers, Traders and Transporters) across the three PVCs and the information disaggregated by ward, gender and age.

**Step2:** The second step was to determine the total number of VCAs (N) disaggregated by PVC, nodes, gender and age.

**Step3:** The overall county sample size was determined using the Raosoft<sup>1</sup> sample size calculator based on the formula below. The Raosoft formula was adopted because the target population was known.

 $x = Z(c/_{100})^2 r(100-r)$ 

 $n = \frac{Nx}{((N-1)E^2 + x)}$ 

E = Sqrt [(N - n)x / n(N-1)]

Where:

- N = Total number of VCAs in the County
- r = the fraction of responses of interest = 50%
- Z(c/100) = the critical value for the confidence level c = 90%
- E = the margin of error = 10%

**Step4:** Probability Proportion to Size (PPS) sampling technique was adopted to apportion the calculated sample size in step 3 across each PVC, gender, and age.

**Step5:** Purposive sampling was adopted to select VCAs that had low population (<30) to be part of the study. Based on this, the derived sample size across the PVCs, gender and age in step 4 was adjusted upwards to accommodate the adjustments from the purposive selection.

**Step6:** Simple Random Sampling (SRS): was used to select specific VCAs to participate in the study across each PVC, gender, age and ward in the county.

Based on the above formula, the targeted overall sample was 3,294 PVCAs (derived by summing the total sample sizes derived across the 47 counties). Figure 1, shows the distribution of the PVCAS sampled

<sup>&</sup>lt;sup>1</sup> <u>http://www.raosoft.com/samplesize.html</u>



Figure 1: Distribution of the sampled PVCAs

#### **Data collection**

Data was collected from both primary and secondary sources. A combination of approaches, and tools with inbuilt validation mechanisms was used. These included Semi Structured Questionnaire (SSQ) and literature review of national and county relevant reports.

The SSQ tool was administered to 3,294 PVC across the 29 ASDSP II prioritized value chains and five nodes (Agro Input Supply, Production, Trade, Transport and Processing) using kobo collect tool. Whereas the secondary data was collected through literature review of key programme documents including performance, thematic and M&E reports, economic survey among others, the study focused on the collection and analysis of the following data:

- *i*) Level of achievements of strategic targets (output objectives)
- *ii)* Level of achievements of outcome objectives
- iii) Appropriateness and status of the monitoring and evaluation and communication
- iv) Effectiveness of the delivery mechanism

The data was collected in February to March 2022 and had a nationwide scope as seen in figure 1.

#### **Data Analysis**

After the data collection, the data was entered through the Kobo collect and a database designed. The field survey data was analyzed using descriptive statistics and the results presented in form of tables, charts and figures. Data from the secondary sources was analyzed using content analysis techniques, after which all the results were organized into various themes (outcomes, M&EC and implementation).

#### **CHAPTER THREE: FINDINGS AND DISCUSSIONS**

This chapter presents the findings and analysis of the study including the response rate of the sampled, characteristics of the respondents, objective indicators at purpose, outcome (increased productivity, enhanced entrepreneur skills; improved access to markets and enhancement of capacity for structures for consultation, cooperation and coordination) and output levels and monitoring, evaluation and communication.

#### **3.1 RESPONSE RATE**

The response rate was 100% with no significant variation between the planned sample and response rate across the nodes and categories of respondents as shown in table 1. This was ensured through replacement of unavailable respondents. It also means that representation of the respective categories was as designed and therefore could be relied on for inference.

	Planned Sample Size (n)			Response Rate (n)				
Nodes	All	Male	Female	Youth	All	Male	Female	Youth
Agro Input								
Supply	117	65	27	25	119	65	28	26
Processor	93	37	28	28	94	34	31	29
Producer	2651	1150	1169	332	2660	1153	1183	334
Trader	367	148	144	75	362	145	141	76
Transporter	61	36	12	13	59	35	13	11
Total	3289	1436	1380	473	3294	1432	1396	476

Table 1. Planned sample and response rate

### 3.2 Household characteristics

The household characteristics surveyed and analysed included the age and sex of the VCAs; value chain actors and their respective involvement in value chain nodes and the average monthly incomes from business in PVCs of the participating VCAs.

#### 3.2.1: Age and sex of VCAs

Majority of the VCAs were above the age of 35 years comprising 85.5% of total respondents as shown in table 2. Youth participation in VC development declined to 14.5% in 2022 from 17.9% in the 2019 baseline survey probably due to transition of some of the youth into adults and less youth joining the PVCs. During the same period women participation increased slightly from 41.9% to 42.2%. The findings correspond to the baseline study of 2019 whereby youth and women involvement in value chain development was found to be less than for men and necessitated a study on gender and social inclusion as well as review of the gender action plan. The study recommended upscaling and out-scaling of the women and youth innovation fund to increase their engagement in PVCs. The study further recommended mentorship of youth to enable them take advantage of available opportunities. This has however not been achieved and there is need for the programme to further come up with strategies, especially those that will attract more youth in value chain development. The current achievement for women participation (42.2%) is good but can be improved.

The low participation of youth in agriculture is also confirmed by the Kenya Youth Agribusiness Strategy 2018 - 2022 which points to low youth involvement in agriculture due to urban migration and to non-agricultural sectors. To engage more youth in agriculture there is need to come up with conducive and appropriate interventions among them, enhanced provision of knowledge, skills and extension services, promotion of innovative technologies and market linkages<sup>2</sup>.

Sex	Age	n	Percent (%)
Male youth	18 – 35 Years(male	232	7.0
Adult male	Above 35 Years(male	1427	43.3
Female youth	18 – 35 Years(female	245	7.4
Adult female	Above 35 Years(female	1390	42.2
	total	3294	100.0

Table 2. Value chain actors by sex and age group

#### 3.2.2 VCAs in Value Chain Nodes

Table 3 shows that most of the VCAs were involved in the primary production node at 81%. Adult females and youth females engaging in primary production were at 84.9% and 70.2% respectively, while for adult male and youth male it was 81.0% and 69.4%. The higher involvement of females in the primary production node may be attributed to gender roles in the home, making it more convenient for women to engage in primary production than other nodes that not only demand that they be away from home, but also have higher capital requirements which may not be readily accessible for women. The youth, both male and female, were more actively involved in agro input supply, processing and trade nodes compared to adults. This could be attributed to attractiveness of off-farm activities as well as land ownership and control which could have influenced the involvement of the youth. This means that women and youth can be targeted with the right interventions that match their circumstances.

VC nodes	Percent (%)						
		adult		male	youth		
	overall	male	adult female	youth	female		
	n= 3294	n=1427	n=1390	n=232	n=245		
Agro input supply	3.8	4.8	2.3	6.5	4.5		
Processing	2.9	2.2	2.4	4.3	7.8		
Production	81.0	81.0	84.9	69.4	70.2		
Trade	10.5	9.7	9.5	15.1	16.7		
Transport	1.8	2.3	0.9	4.7	0.8		

Table 3. Value chain actors in value chain nodes

#### 3.2.3 VCA Average Monthly Income

Overall, Value Chain Actors derive 84% of their income from the ASDSP value chain as shown in table 4. This confirms information from other sector reports that about 70% of the rural inhabitants depend on agriculture for their livelihoods and therefore highly relevant to Kenya's priorities. This means that

<sup>&</sup>lt;sup>2</sup> Kenya Youth Agribusiness Strategy 2018 – 2022 p.1

increasing the incomes of the agricultural producers has the greatest impact in reducing poverty levels and therefore calls for strengthened and enhanced interventions that would enhance income generation from the value chains they are engaged in to improve their livelihood with special focus on skills, knowledge and support systems on business development.

sources of income	overall n=3294	adult male n=1427	adult female n=1390	youth male n=232	youth female n=245
(i) on farm					
ASDSP Value Chain	83.7	84.2	84.3	81.0	80.4
(ii)off farm					
Employment	3.6	3.6	3.2	5.6	4.9
Others (Specify)	9.8	9.7	9.2	11.6	12.2
Remittances	2.8	2.5	3.3	1.7	2.4

Table 4. Value chain actors' sources of incomes

#### VCAs monthly income by node

Table 5 shows that for all VCs processors had the highest increase in average monthly income of 588% from shs 20,876 in 2019 to shs 122,748 in 2022. This was followed by agro input dealers and traders that registered increases of 238% and 145% respectively. Primary producers registered the lowest increase at 24% from shs 12,086 to shs 15,018 while transporters monthly income declined by 29% from shs 18,759 to shs 13,360 in the same period. These findings reflect the general trend of level of income earned by the different node actors in value chains. One explanation of the income differences between the nodes is explained by differences in knowledge and skills on entrepreneurship between those with higher incomes and those with low incomes. It is also associated with development of additional products from the raw product through value addition and the associated different market segments especially for processors. To ensure commercialization and sustainable development of the value chains, there is need for equity in sharing the income benefits among VCA at all nodes.

PVC node	2022	2019
	monthly income (Ksh)	monthly income (Ksh)
Production	15,018	12,086
Trade	41,876	17,112
Processing	122,748	20,876
Agro Input Supply	87,507	25,892
Transport	13,360	18,759

Table 5. Change in monthly income of VCAs by node

#### Average monthly income by age and sex

There were significant variations in the average monthly on-farm incomes of VCAs across sex and age categories as shown in table 6. Overall, the average monthly income of both male adults (KES

74,524) and male youth (KES 73,683) were substantially higher than for both female adults (KES 17,132) and female youth (21,440). There were also significant differences in average incomes across various gender and age groups. While the male adult dominated the processing node with an average income of shs 995,189, the male youth ruled the agro input and transport nodes with average incomes of shs 737,964 and shs 106,939 respectively. The only nodes where the female youth appeared to perform relatively well even if not the highest compared to other gender categories were in trade, processing and agro input dealerships. These findings tend to reflect the opportunities available to the VCA age and gender categories, as well as level of capital investment and entrepreneur factors. The information further suggests that since the majority of VCAs are involved in primary production (81%) which had one of the lowest incomes, there is need for innovative interventions to increase incomes of primary producers if the objective of poverty reduction is to be achieved. In addition, and more interestingly is the finding that both male and female youth have found profitable value chain spaces in inputs supply, trade, processing and transport which may require more targeted interventions to attract and support.

nada	Male Adult	Female Adult	Male Youth	Female Youth
node	Above 35 Years	Above 35 Years	18 – 35 Years	18 - 35 Years
	n=1213	n=1194	n= 194	n=205
Production	16,971	11,377	16,375	7,494
Trade	145,269	25,272	22,826	31,465
Processing	995,188	34,871	41,613	58,765
Agro Input Supply	414,755	60,936	737,965	76,825
Transport	19,787	10,567	106,937	12,244
Average	74,524.19	17,132.30	73,682.54	21,439.73

 Table 6. Average monthly income by sex and age (KES)

#### Average monthly income by value chain

The monthly income from PVCs had an overall increase with an average of 47.3% in comparison to the baseline survey as per table 7. The highest increase was registered by fish at 300% (Ksh 129,813/ 1,082 per capita), camel milk 241% (Ksh 39,862/ 332 per capita), maize 199% % (Ksh 53,846 / 449 per capita), cow milk 192 % (Ksh 71,519 / 596 per capita) and indigenous chicken 190% (Ksh 42,561/355 per capita). water melon, beef, rice and sorghum VCs also registered a significant increase in income ranging from 50 -100%. There were however value chains which exhibited decline in incomes like local vegetables by 74% (Ksh 7,314/ per capita 61), s 73% sweet potatoes 73 % (Ksh 3,572, per capita 30) and groundnut 59% (Ksh 3,309 / 28 per capita. The findings show an increase in average monthly income from Ksh. 18,158 during the baseline to Ksh.26 ,770. The highest change in monthly income was from fish as well as camel milk due to among others, increased off-take as a result of increased demand and opening up of fish processing plant in the western region

The shift of fish from among those that had reported the least average monthly income (< Ksh 10,000/ < 45 per capita) to the PVC with the highest increase demonstrates that with improved market opportunities, incomes of VCAs can improve significantly. It also points to the need for interventions to sustain the increase in incomes in view of the decline in incomes for some of the PVC.

PVC	Average m	onthly income	per capita income		
	2019	2022	2019	2022	
Fish	32,421	129,813	180	1,082	
Cow (Dairy)	24,456	71,519	136	596	
Maize	17,988	53,846	100	449	
French beans	25,136	52,340	140	436	
Rice	28,250	43,158	157	360	
I. chicken	14,691	42,561	82	355	
Meat goat	29,134	42,079	162	351	
Camel milk	11,685	39,864	65	332	
Beef	19,015	38,387	106	320	
Passion fruit	38,184	28,939	212	241	
Irish potato	17,221	22,929	96	191	
Watermelon	8,363	20,391	56	170	
Tomato	21,405	19,190	119	160	
Broiler	32,148	17,769	179	148	
Mango	22,488	16,899	125	141	
Sheep and goat	7,861	15,750	44	131	
Sorghum	7,665	14,895	43	124	
Honey	18,706	14,814	104	123	
Cassava	16,078	12,863	89	107	
Cashew nuts	12,992	10,905	72	91	
Cotton	8,113	10,786	45	90	
Pyrethrum	7,351	9,875	41	82	
Banana	16,612	9,218	92	77	
Green grams	16,169	9,132	90	76	
Kales	15,402	8,641	86	72	
Local vegetables	28,222	7,314	157	61	
Sweet potato	13,452	3,572	75	30	
Groundnut	8,052	3,309	45	28	

Table 7. Average monthly income of VCAs by value chain (KES)

#### Monthly Average Income by Value Chain and Node

The performance of the 29 value chains over the period differed substantially and even within value chains there were significant differences in average incomes for VCA across the nodes as shown in table 8. For example, fish value chain which had the highest increase, showed considerable variation in the average monthly incomes from Kshs 21,788 for production, Ksh 152,095 for trade, Ksh 47,929 for processing, Ksh 563,588 for agro input supply and Ksh 28,010 for transport compared to the baseline of Ksh 20,448 for production, Ksh 20,943 for trade, Ksh 14,661 for processing, Ksh 14,467 for agro input supply, and Ksh 18,717,800 59 for transport. The increase can be attributed to the adoption of innovations. The mixed

performance of the value chains reflects the mixed performance of the agriculture sector<sup>3</sup> which was attributed to the COVID 19 pandemic and inadequate rainfall.

PVC	production	trade	processing	agro input supply	transport
ABEC	9,620	2,442	54,656	-	25,641
Banana	7,717	13,707	7,196	52,426	22,135
Beef	24,738	278,613	251,616	10,619	37,427
Broiler	24,008	14,652	-	-	-
Camel milk	37,112	74,074	51,988	-	53,704
Cashew nuts	8,230	34,014	100,251	-	119,048
Cassava	17,147	-	16,620	-	-
Cotton	4,056	-	197,368	-	-
Cow (Dairy)	21,511	152,095	67,480	66,374	24,132
Fish	21,788	132,728	47,929	563,588	28,010
French beans	2,889	285,714	-	526,316	-
Green grams	9,099	17,493	4,474	49,946	-
Groundnut	7,286	2,105	-	3,809	-
Honey	13,350	54,814	86,842	22,602	190,476
I. chicken	20,119	13,982	49,893	205,700	20,252
Irish potato	23,859	3,326	20,886	55,973	63,492
Kales	18,514	44,700	-	-	-
Local vegetables	8,423	4,675	-	-	-
Maize	24,420	367,247	19,547	111,060	16,227
Mango	13,296	12,970	46,279	126,457	14,691
Meat goat	14,909	217,223	225,146	-	6,173
Passion fruit	10,882	-	339,912	290,570	-
Pyrethrum	13,580	-	-	-	-
Rice	57,180	-	-	-	-
Sheep and goat	4,012	119,048	328,947	-	-
Sorghum	22,272	5,212	-	-	-
Sweet potato	7,002	3,401	-	15,038	-
Tomato	21,537	38,905	-	40,241	10,417
Watermelon	17,072	62,500	-	-	-

Table 8. Monthly average income of VCAs by value chain and node (KES)

### 3.3 Overall Goal Indicators

ASDSP II overall goal is to contribute to the transformation of crop, livestock and fisheries production into commercially oriented enterprises that ensure sustainable incomes and food and nutrition security. The programme contribution to this goal is monitored with the following indicators: i) % increase in agricultural sector GDP, ii) % reduction in rural poverty, iii) % reduction in food insecurity and iv) % increase in full and part time employment and on-farm and off-farm employment.

<sup>&</sup>lt;sup>3</sup> Economic Survey 2021

**Agricultural Sector GDP**: The Economic Survey 2022, shows that Kenya's GDP growth rate since 2019 has averaged 4.1% annually. During the same period, agricultural GDP growth rate averaged 2.7% which was not only below that of whole economy but also far below the 7.0% per annum anticipated in Vision 2030. Agricultural sector performance was adversely affected by poor weather in 2021 and lingering effects of Covid-19 a result of which the growth of the sector declined by 0.2%. Despite this lackluster performance and challenges, the sector has remained the largest contributor to Kenya's GDP at an average of 22%.

At county level, the sector has equally been vibrant. As shown in Figure 2 the sector has contributed on average about 24% of the county GCPs during the period 2013-2020. There was however considerable variation between counties. In Nairobi, Samburu, Isiolo and Mombasa counties, agriculture contributed less than 1% while Meru, Nakuru, Muranga, Nyandarua and Kiambu counties it contributed more than 4% of agriculture GCP.



Figure 2. Average Contribution to Agriculture, Forestry and Fishing Activities, 2013-2020

**Rural Poverty:** The overall poverty rate in 2019 was 36.1%. The rural poverty was however more at 40.1% and the peri- urban poverty at 27.5%<sup>4</sup>.

**Food and Nutrition Security:** Generally, after almost 16 months of below-average income due to COVID – 19 effects, most urban poor households remained food insecure. The below-average long rains resulted in below-average crop production and household food stocks in the marginal agricultural areas. Inadequate livestock feed in pastoral areas resulted in declining livestock body conditions and below-average milk production. The short-rains season started in September 2021 over the western bimodal rainfall zones, with above to normal rainfall. However, much of the country remained abnormally drier

<sup>&</sup>lt;sup>4</sup> Kenya Economic Report, 2021

and hotter-than-normal, especially across the Kenya's northeastern, eastern and coastal pastoral zones<sup>5</sup>. Pandemics such as the COVID-19 brought to the fore unprecedented challenges that exacerbated the country's food poverty situation with varying intensities across and within counties thereby reversing the gains made towards reducing food poverty.

On-farm and off-farm employment: A total of 15,593 people were employed on (7883) and off (7710) farm with an average of 4.7 employees per enterprise as at 2022 - compared to an average of 2.1 employees at baseline as shown in Table 9. On farm employment constituted 51% while off farm employees comprised 49%. On this basis it is estimated that the programme has created 1.3 million jobs in the last four and half years.

Year	Sample Size	Number of Employees	Average Employment
2022	3294	15,593	4.7
2019	19017	39798	2.1
Additional jobs per enter	2.6		

Table 9. Number of on-farm and off-farm employment

#### **Employment by Gender**

Further analysis by sex and age showed that the majority (off farm – 54%, on farm – 31%) of the employees were adult male in all the cases as shown in figure 4. Although, about 17.3% of Kenyan youth are unemployed<sup>6</sup>, they still tend to avoid the agriculture sector. Both national and county governments are emphasizing the economic potential in the agri-food sector for young people but with no particular supportive environment for realizing the existing potential of the sector to reduce youth unemployment<sup>7</sup>. Therefore, the programme should support targeted approaches to attract the youth into the agriculture



sector.

Figure 4. On-farm and off-farm employment by sex and age of VCAs

<sup>&</sup>lt;sup>5</sup> ASDSP II, 2021/2022 Semi Annual Report

<sup>&</sup>lt;sup>6</sup> World Bank, 2016

<sup>&</sup>lt;sup>7</sup> GIZ, 2021

Further data analysis was undertaken to establish the number of household employees working on full time and or part time basis. Overall, 6649 household members were employed on full (54%) and part time (46%) basis on the farms. Across the gender divide, majority of the household employees on full time basis were adult males (45%) and adult females (41%) above 35 years old. On the other hand, analysis on part time employment revealed that adult males and females above 35 years old were 44% and 40% respectively as presented in figure 5.



Figure 3. Full and part time employment by sex and age

## 3.4 Development Objective (purpose) and Indicators

The programme purpose is to develop sustainable priority value chains for improved income, food and nutrition security. This is tracked through the following indicators:

- 1. Percentage (%) change in gross margins of VCAs by sex and age.
- 2. VCA level of satisfaction with share of revenue by sex and age

**Percentage (%) gross margin (GM) of prioritized value chains by sex and age**: Gross margin as applied in ASDSP II refers to the difference between revenue and cost of producing goods and services. It may also be expressed as a ratio of profit over total revenue. The higher the gross margin both as a ratio and in absolute terms, the greater the contribution of the value chain to the well-being of VCAs and to improved scope for commercializing the enterprise. It is a proxy indicator demonstrating the ability of the VC business at the node level to provide improved incomes, employment and food and nutrition security to the VCA. Table 10 compares GMs in the baseline year and the current status for the 29 programme prioritized value chains. A few value chains in each sub sector<sup>8</sup> have been selected based on their economic importance and contributions to food security in the Country to demonstrate changes in GM

**Camel milk value chain:** The results indicate that there was marked increase in the gross margins along all the nodes compared to the 2019 baseline data. The greatest change in GM was recorded at the trade

<sup>&</sup>lt;sup>8</sup> There are four subsectors, Crops, Livestock, Fisheries and Cooperatives

node (52%) while the least change was the processing node (18.6%). The high GM at trade level is attributed to the improvements in camel milk marketing prompted by increased consumer demand for Camel milk especially in urban areas. Other properties that may have contributed to the increased demand is its nutritional and medicinal properties.

**Cow milk value chain:** The trade node of the value chain recorded an increase in GM of 57.7% while production node recorded a slight decrease (-5.3%). This decrease is attributed to the high cost of feeds and concentrates, labour and low market price of milk<sup>9</sup>. To address the issue of high cost of animal feeds and labour, it is imperative that tax regimes on raw materials for concentrates be reduced. Another option is to move towards own feed formulation, either at farmer or cooperative level, which would likely reduce the cost of feeds. Reduction in labour cost could be by encouraging adoption of technologies such as chaff cutters, which could reduce the drudgery associated with dairy enterprise and could also minimize feed wastage. This calls for enhanced capacity for the VCAs.

**Beef value chain:** The results indicate a marked increase in GM at the trade and transport nodes of 41% and 27.8% respectively. The production node recorded a decline of -21% which is attributed to poor weather in the 2021 (Weather outlook KMD, 2021. The poor rainfall affected livestock feeds and water availability which are critical for livestock productivity. On the other hand, the increase at the trade and transport could be attributed to livestock destocking and transportation to other areas

**Honey value chain**: Data reveals a substantial increase in GM of 37% and 55% at the production and trade nodes respectively. The marked increase in GM reported in the production node is attributed to enhanced capacity building of the VCAs and uptake of technologies and practices such as the improved traditional log hive, improved queen rearing, colony feeding practices and honey aggregation as reported in the ASDSP II Service Provider study (2022).

**Maize value chain:** The trade recorded the highest increase in GM (72.2%) compared to input (1.9%), transport (5%) and (18.5%) processing nodes while production node recorded a decline of 3%. The decline in GM in maize is attributed to unfavorable weather conditions during the long and short rains period in 2020<sup>10</sup>. Maize yields in some Counties, notably Laikipia and Samburu (and others) were also affected by the locust invasion.

**Potato value chain:** High GMs increases of 80.3%, 60.3% and 69.8 % were reported at the production, processing and trade nodes respectively. This is attributed to enhanced utilization of SPs (81%) through which innovations in potato seed (apical cuttings), crop protection practices and product aggregation interventions were promoted. Text box 1 provides illustrates this case.

Banana **value chain:** The assessment findings show a general increase in GMs across all nodes except for the production and transport nodes which exhibited a decline of 22.9% and 23.5% respectively. The high

<sup>&</sup>lt;sup>9</sup> Tegemeo Institute, 2021

<sup>&</sup>lt;sup>10</sup> Weather outlook 2021

GMs in trade node is attributed to the entrepreneurial nature of VCAs who are able to source and aggregate bananas from multiple sources.

**Tomato value chain:** The findings show considerable increase (26.6%) in the GM at trade node compared to baseline year. The decline

recorded at the production and subsequently in transport nodes is attributed to the poor weather condition 2021 which marginally affected production and subsequently individual volumes transported.

**Mango Value Chain:** The study findings indicate a marked increase in GM of 21.6% at the trade node, while transport and processing nodes had increases of 9.6% and 9.2% respectively. The increase in GM in trade, transport and processing node are attributed to high demand of mangoes against supply leading to high selling prices at the respective nodes. At the production node, the decline in GM is attributed to high cost of inputs (fertilizers and crop protection agents) contributed to high cost of production.

#### $Box \ 1.$ Case study on GM changes in potato VC in Nyeri county

Alice Wanja Kahando is a potato producer from Kieni West Sub-county, Nyeri County and is a member of Sabeke Potato Cooperative. The cooperative was formed by ASDSP in phase I and is one of potato VC cooperatives being supported by the programme. In 2017, her potato production was at 25 bags (110kg) per acre, with a per capita income of 61. In April 2022, she reported having harvested 120 bags at a cost of production of KES 100,300 per acre and sold potato at a price of KES 200per bag. She is quoted during the SP study as:

"I almost hit a million jackpot and for the first time, I felt like a real woman", she said.

The increase in potato yields was gradual and climaxed in 2022. During this period, she especially benefited from good potato prices in 2019 of KES 5000 per bag, which helped her to put an additional 2 acres under potato which has helped her to practice profitable crop rotation. In 2021, her gross income from potato farming was KES 960,000 at a total production cost of KES 200,600, earning her a per capita income of KES 416.

The programme's support to Sabeke Cooperative has been in the form of trainings, both technical and business development, promotion of innovations and technologies such as apical cutting potato seed technology, cold storage facilities and precision spraying technologies (drones) and linkages to markets such as Twiga foods, Sereni fries and Njoro canners. Sabeke Cooperative has also spearheaded implementation of Irish potato regulations (2019), on the use of the 50 kg bags in Nyeri County through programme support.

**Fish value chain:** The value chain recorded a marked increase in gross margin in the trade node of 28.9% while the input, production and transport nodes reported decreases of 3.3%, 13.2% and 24.8% respectively. The high GM at the trade node is indicative of business orientation of traders displayed by their ability to get fish from multiple sources.

At the production node, overall fish output<sup>11</sup> was affected by hot and dry weather conditions which resulted in fish moving to deeper depths within the water bodies which led to a 7.2% decline in marine fisheries output - attributed mainly due to inadequate technologies for fishing in deeper waters<sup>12</sup>.

Overall, the study findings indicate consistent increase of GM at trade node in all the value chains, table 10. This is in line with the SPs study findings that indicated enhanced SP services targeting market access (49%) as well as VCAs in the trade node being more commercial oriented compared to those in the primary production node. In the remaining programme period, more emphasis should be given on improving entrepreneurial knowledge of VCAs especially at the production node.

Value Chain	Input S	upply	Product	ion	Trade		Transp	ort	Processi	ng
	2019	2022	2019	2022	2019	2022	2019	2022	2019	2022
ABEC	26.5	-	27.3	22.4	22.8	50	20	33.3	63	75
Banana	23.5	40.1	42.9	20	29.3	59.2	87.6	64.1	46	50.9
Beef	19.2	11.9	27.8	6.8	23.2	64.2	61.6	89.4	32.4	28.4
Broiler	10.5	-	29	29.6	24	60	0	-	13	-
Camel milk	25	-	17	54.1	16.7	68.7	56.5	76.5	26.1	44.7
Cashew nuts	-	-	53.3	44.6	26.3	50	87	40	60	60
Cassava	49.7	-	-42.2	99.4	-	-	-	-	36	37.8
Cotton	-	-	-30.9	47.7	-	-	-	-	75	40
Cow milk	23.7	18.4	12.9	39.3	22.7	80.4	57.1	79.5	41.1	54.2
Fish	31.8	28.5	55.1	41.9	29.8	58.7	78.5	53.7	45.1	58.8
French beans	14.3	33.3	45.9	41.6	76	60	50	-		-
Green grams	13.4	20.4	46.3	50.1	20.4	86.3		-	42.9	35
Groundnut	33.3	20	50	57.2	26.7	77.1	58.8	-	33.3	
Honey	30.9	21.4	-15.2	70.2	26.7	63.7		65	73.2	22.8
Indigenous chicken	27.3	34.5	38	-8.7	28.1	73.5	12.4	98.2	40.5	38.4
Irish potato	15.5	-7.7	13.2	93.5	24.3	94.1	64.8	33.3	39.7	100
Kales	25.1	-	22	52.5	12.6	62.3	49.8	-	50.5	-
Local vegetables	29.4	-	49.5	71.3	38.6	59.5	95	-	46.8	-
Maize	11.4	9.5	28.5	25.2	16.5	88.7	86.5	91.8	31.7	13.2
Mango	29.8	28.4	36.7	12.7	39.1	60.9	37.6	47.2	46	55.2
Meat goat	20.1	-	35.5	50.6	7.6	64	37.8	41.7	25.5	16.4
Passion fruit	44.7	28	27.5	74.6	30.2	-	33.3	-	24.4	42.9
Pyrethrum	-	-	49.1	58.6	-	-	-	-	-	-
Rice	15.3	-	27.4	59.3	46.2	-	96.6	-	71.6	-
Sheep and goat	-	-	-	71.1	-	78	-	-	-	-
Sorghum	28.8	-	21.9	70.7	24.4	50.8		-	29.9	-
Sweet potato	47	0	40	78.7	51.9	57.1	90.7	-	60.6	-
Tomato	17.1	31.7	22.7	9.7	34.8	61.4	70	33.3	43.7	-
Water melon	29.6	-	46.2	53.1	37.8	72.1	32.9	-	10	-

Table 10. Gross margin analysis of 29 PVCs

<sup>&</sup>lt;sup>11</sup> Capture fisheries is the dominant supplier of fish in Kenya

<sup>&</sup>lt;sup>12</sup> Economic survey 2021

VCA level of satisfaction with share of revenue by sex and age: This indicator measures the extent to which the ASDSP II VCAs are satisfied with their share of revenue from their PVC enterprise at their particular node of operation. The level of satisfaction here refers to the extent to which VCAs are content with the returns from their business. In this regard, a Likert scale with three levels i.e. satisfied, fairly satisfied and dissatisfied, was used to assess VCAs' level of satisfaction in relation to their GM as shown in Table 11.

Overall, a majority (58%) of sampled VCAs reported to be fairly satisfied with their share of revenue compared to 28.4 % in the 2019 Baseline report who reported to be satisfied. Generally, more adults participated in the programme than youth<sup>13</sup>. This data correlates with high level of SP utilization by adults as opposed to youth

	Female		Male		All
Level of satisfaction	18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years	
Satisfied	19%	15%	19%	17%	16%
Fairly Satisfied	62%	58%	61%	57%	58%
Not satisfied	19%	27%	21%	26%	26%
	100%	100%	100%	100%	100%

Table 11. level of satisfaction with share of revenue of VCAs by sex and age in 29 PVCs

An overall comparison by VC node, reveals that the highest proportion of VCAs fairly satisfied with their share of revenue was at production node (78%) while transporters had the least proportion (2%). This contrasts with the 2019 ASDSP baseline study findings which indicated that producers were the least satisfied (22.3%) while transporters had the highest satisfaction level (32.2%). The improved satisfaction at production node is attributed to enhanced capacity of the VCA and adoption of appropriate innovations.

## 3.5 Intermediary Objectives (Outcome) and Indicators

The programme has four outcome areas with eight indicators for tracking achievement of intermediary impacts. The four outcomes are increased productivity of VCs; enhanced entrepreneur skills of VCAs; improved access to markets and enhanced capacities for structures for consultation, cooperation and coordination.

### 3.5.1. Productivity of Prioritized Value Chains

Productivity is an economic measure of output per unit of input, which mainly comprises land, labor, time and capital. Productivity is generally expressed as a ratio of revenue over inputs. An improvement in productivity means one requires fewer inputs to produce a unit of output. Hence, there is a high correlation between increase in productivity and increase in gross margin.

<sup>&</sup>lt;sup>13</sup> ASDSP II Baseline 2019

Agricultural productivity in Sub-Saharan Africa (SSA) remains low and is falling farther behind other regions of the world. Although agricultural output growth in the region has accelerated since the 1990s, this has been primarily due to resource expansion rather than to higher productivity. Historical analysis of agricultural total factor productivity in sub-Saharan Africa shows that Kenya was one of the few countries to record steady, if modest, long-term growth between 1961 and 2008<sup>14</sup>. However, there are concerns that productivity is declining: maize yields per hectare were lower in 2014 than in 1994<sup>15</sup>. Between 1990/92 and 2014/16, Kenya was one of the few countries in sub-Saharan Africa to experience an overall decline in maize yields<sup>16</sup>. In general, agricultural productivity is low, with yields for most key commodities comparing poorly with countries in the region. For instance, in the dairy industry, the average milk yield in 2021 was 7.918 Kg/ cow/ per day compared to as Zambia (13.919 Kg/cow/ day) and South Africa (38.173Kg/cow/day)<sup>17</sup>.

The low productivity has been attributed to a variety of reasons, including climatic, topographical, low adoption of technologies and innovations, low marketing, poor access to finances, insecurity and inappropriate legal and regulatory frameworks. Hence, in order to address low productivity along the value chains, the programme's focuses on enhancing capacity of existing service providers on identified opportunities, supporting value chain innovations with high prospects for empowering women and youth and, strengthening environmental resilience. Progress towards achievement of each has been discussed in relation to its indicators as per data obtained from the programme's progress tracker and annual reports

At the outcome level. progress is monitored and measured using two sets of performance indicators:

- 1) Percentage increase of VCAs utilizing service providers; and,
- 2) Percentage reduction in VCAs post production losses.

**Utilization of Service Providers by VCAs**: Service providers play an important role in several aspects of agricultural development at the grass root level. The study identified three categories of service providers – Public, private and civil society organizations (CSOs). Public service providers comprise public sector organizations such as ministries, county departments, government agencies and regulatory organizations that provide advisory service to VCAs. Private service providers are composed of private agri-business firms, agricultural foundations, seed companies, private consulting firms, fertilizer companies, farmers 'associations, and agro-chemical companies among others. Overall, public service providers have been found to be majority (58%) offering services to VCAs, followed by private (31%) and CSOs (11%) – Service delivery Study, 2022.

Additionally, the programme also categorizes service providers by type of services offered i.e. technical services and business development services. Although business development includes technical, the separation is so that it eases the understanding of the skills and knowledge gaps of the different node

<sup>&</sup>lt;sup>14</sup> Resources, policies, and agricultural productivity in sub-Saharan Africa, Fuglie and Rada, 2013

<sup>&</sup>lt;sup>15</sup> World Bank, 2018

<sup>&</sup>lt;sup>16</sup> Agricultural growth trends in Africa. Agricultural Policy Research in Africa (APRA) Working Paper 13, Future Agricultures Consort Wiggins, S, 2018

<sup>&</sup>lt;sup>17</sup> FAO Stat, 2021

actor in the various PVC and to also lay emphasis on the two, technical and business knowledge and skills. Technical here refers to technologies, innovations and management services (TIMPS).

A study by Rivera 1991 criticized the public sector extension as not doing enough, not doing it well and for not being relevant worldwide<sup>18</sup>. Sureshkumar (1997) further supported Rivera's view by stating that information as a support system could be more effective with private extension services in the agricultural sector<sup>19</sup>, a concurrence with the concept of service providers in ASDSP II. But Van den Ban (1996), stated that more research was needed on the alternative service providers and their role in agricultural development<sup>20</sup>. The rapid assessment study therefore sought to understand the extent which the VCAs access and utilize service providers by type across the value chain.

Overall, the findings indicate the public service providers were most utilized (49%) compared to other categories of service providers (see table 12). This finding corroborates the Service Provider Study<sup>21</sup> (March 2022) which reported high utilization (73%) of public SPs. Across the value chain, the production node recorded the highest utilization of SPs (81%) while processing node had the least (3%). This contrasts with the 2019 baseline finding that agro-input suppliers had the highest utilization (58.7%) while the traders had the least (41.0%). The least utilized category of SPs were the CSOs/ NGO (4%). Additionally, it was also noted that a small percentage of VCAs (16%) did not utilize any services from SPs.

These findings imply a need to restructure service delivery to ensure:

- i. more equitable service provision along the nodes
- ii. the 16% VCAs who do not access services are included in programme activities.
- iii. build the capacity of the public SPs with focus on business knowledge and skills considering that they are most highly utilized. This fact is supported by findings from the SP study (March, 2022) which generally indicated that public service providers have mainly skills and competencies in TIMPS and have a wider outreach compared to the private sector SPs but had capacity gaps in business development skills.
- iv. more private SPs particularly those already involved in the business of the VC are engaged to ensure sustainability of the programme benefits. An assessment of extension delivery conducted by MOALFC (2022) revealed that the public sector extension services comprise a high proportion of aging staff which, without proper succession management would impact negatively on agricultural productivity in the long run.

According to the draft Kenya Agricultural Sector Extension Policy (KASEP) 2022, public SPs are still relevant as the majority of farmers are still at subsistence level. Further, the draft policy states that institutional mechanisms need to be put in place to ensure private sector SPs provide quality services. There is need to enhance the capacity of public SPs in localities where private SPs have no opportunities. Finally, all Counties need to ensure that succession management is implemented.

 <sup>&</sup>lt;sup>18</sup> Rivera, W.M. & D.J. Gustafson; (1991); New Roles and Responsibilities for Public Sector Agricultural Extension; IN:
 W.M. Rivera & D.J. Gustafson (Eds.), Agricultural Extension: Worldwide Institutional Evolution and Forces for Change; Amsterdam: Elsevier Science Publishers

<sup>&</sup>lt;sup>19</sup> Suresh K; (1997). Public Sector in Independent India

<sup>&</sup>lt;sup>20</sup> Van den Ban (1996). Agriculture Extension

<sup>&</sup>lt;sup>21</sup> Service Provider Study, ASDSP II, April 2022
Table 12 reveals that the production node had the highest utilization of services (81%) followed by trading node at a distant 11%. However, on a node by node basis there was no much difference in category of SPs that were utilized. In another study conducted by the programme (Service delivery Study, 2022), public sector SPs were large majority (58%) in terms of providing services to VCAs at the County level. This implies that future development interventions by both government and development partners need to focus on more equitable service provision along the entire chain

		· · · · · ·				
VC Node	Public	Private	CSO/NGO	All	None	Total
AIS	4%	6%	2%	5%	2%	4%
Production	82%	83%	87%	78%	78%	81%
Trade	10%	7%	6%	13%	14%	11%
Transport	2%	2%	1%	1%	3%	2%
Processing	3%	3%	4%	3%	2%	3%
Total	100%	100%	100%	100%	100%	100%

Table 12. Percentage utiliza	tion of service pr	oviders by VC node
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Table 13 reveals that public service providers had the highest utilization (49%) while NGOs/ CSO were the least utilized (4%). Generally, across the different SP categories, there was no significant differences in their utilization by age and sex.

	Female		ľ		
Service Provider	18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years	Total
All	11	14	16	13	14
NGO/CSO	4	5	3	3	4
None	20	17	16	15	16
Private Service Providers	13	17	16	19	17
Public Service Providers	51	47	49	51	49
Total	100	100	100	100	100

 Table 13. Percentage utilization of SP category by sex and age

**Percentage reduction in post-production losses by sex and age**: Post-production losses (PPL) refers to the quantitative and qualitative loss incurred by the VCAs during various operations along the value chain and are a major contributor to food inadequacy and must therefore be effectively addressed as a strategy to achieve the much-desired state of food security and increased VCAs incomes. The main value chain operations considered within the programme are at the agro input supply, production, transport, trade and processing nodes. The study therefore sought to understand the extent to which actors within the 5 value chain nodes experience PPL. The full range of PPL in the 29 value chains by sex and age and, by value chain are shown in the Annex 1

Overall, the majority of post-production losses (57%) experienced were less than 5% for both the youth and adult category. Post Production losses in select VCs are discussed briefly (the selection is based on their food security importance, income generation and potential for industrialization – some of the criteria used in the selection of VCs by counties).

**Maize:** Post-production losses in maize is estimated at 12 – 20% of the total national production which is estimated to be between 4.8 and 8 million bags annually<sup>22</sup>. The study findings are consistent with the Tegemeo study as the majority of VCAs (32%) were found to have PPL of 5-10%. The losses mainly include spillages during handling, transportation, processing and marketing; rotting and aflatoxin contamination due to improper handling and inadequate/inappropriate storage technologies; losses to pests such as birds, insects and rodents; and, mechanical damages during farm level elementary processing and offfarm value addition.

**Irish potato:** Irish potato is the second most important staple food crop in Kenya. A GIZ study (2014)<sup>23</sup> revealed that losses at the farm gate and retail (trade) are 15.6% and 24.4% respectively. The difference at the farm gate and retail point being attributed to poor handling practices at packaging and transportation. Because the bags are so heavy they are dragged and dropped which causes bruising or splitting of the tubers which eventually rot. Too much exposure to sunlight also contributes to spoilage, which turns them green. Heavy bags of potatoes result in splitting and bruising tubers, which eventually rot. Additionally, post production losses at the farm gate are caused in particular by inappropriate harvesting tools and methods. The same study estimates yearly losses at national level to be 815,000tonnes with a value of about KES 12.9 billion.

**Cow milk.** There is scant literature on cow milk post-production losses; However, milk losses through cooperative societies have been shown to be 1% - 5% on average but can go up to over 10 percent in the wet season when delivery rejections are common (FAO, 2003).

Lore et al  $(2005)^{24}$  revealed that post-production losses of milk at the farm represented 1.3 to 6.4 percent of the value of available milk at the farm level. This finding is consistent with the study findings that indicate that the majority (80%) of VCAs experience PPL of <5%.

**Beef:** Beef post production losses consist of mortality caused by disease, extreme drought. Pre-slaughter and slaughter practices are important for meat quality. Unfortunately, in Kenya, codes of practice for both pre-slaughter and slaughter are missing notably in the SME slaughter houses increasing the risk of low quality meat. A study to assess factors associated with post production beef quality loss in small and medium enterprise slaughterhouses in Kenya reviewed that cattle mortality rate during tracking was 6.2 % and the major cause of injury was from other animals (University of Nairobi, 2019)<sup>25</sup>. The study found 33% of VCAs reporting <5% losses; 20% VCAs reporting losses at 5-10% and above 20% respectively. At node level losses were equally distributed (25%) along the nodes.

<sup>&</sup>lt;sup>22</sup> Tegemeo Institute, 2017

<sup>23</sup> GIZ (2005) Post-harvest losses in potato value chains in Kenya: Analysis and recommendations for reduction strategies

<sup>&</sup>lt;sup>24</sup> Lore, T et al (2005) Types, levels and causes of post-harvest milk and dairy losses in sub-Saharan Africa and the Near East: Phase two synthesis report

<sup>&</sup>lt;sup>25</sup> Pre-Slaughter and Slaughter Factors Associated with Post-Harvest Beef Quality Loss in Small and Medium Enterprise Slaughterhouses in Kenya

**Fish:** Fish is highly perishable with deterioration starting immediately after harvest. This is particularly so in areas like Turkana where fishers' folk and traders lack cold storage facilities for landed fish and yet markets are far from the landing sites. The study findings indicate that 46% of VCAs experience PHL of < 5% with female youth and male youth experiencing significant losses.

# 3. 5.1.1 Output objective indicators for increased productivity

The output objectives that contributes to increased productivity include enhance capacity of service providers on identified opportunities, support to innovations and climate smart and green growth technologies.

# a) Capacity of existing service providers on identified opportunities enhanced

One of the programme's strategies on increasing agricultural productivity is to support capacity enhancement of service providers on identified VC opportunities. The achievement of this output is tracked through the following indicators.

- i. Number of opportunities identified per value chain
- ii. Number of service providers (public and private) trained on identified opportunities per value by sex and age

**Number of opportunities identified per value chain**: Value chain opportunities are gaps in the value chains that when addressed would result in raising the productivity at the node as well as across the entire value chain. From a value chain perspective, opportunities exist at all nodes and are either related to production or marketing.

As a first step towards supporting capacity enhancement, the programme has supported county implementing units to undertake a participatory VC analysis and prioritization of opportunities with a significant potential to increase productivity and gross margins of businesses along the entire value chain. As shown on table 14

, there has been achievement of 100% on VC opportunities identification and a slight overachievement-107.6% on the training of SP. Training of service providers on identified VC opportunities has been facilitated through the programme's capacity building extended concept which focuses on TIMPS as the first line of approach to increasing productivity. Examples of some of the TIMPS included breed improvement through artificial insemination (AI), bee colony management practices, marine ecosystem conservation, identification of and digital reporting of notifiable diseases<sup>26</sup>.

<sup>&</sup>lt;sup>26</sup> ASDSP II Annual report, 2020

Output Indicator (s)	overall Target	Progress	% achievements
Number of opportunities identified per Value Chain	2,145	2,145	100%
No. of service providers (Private and Public) trained on identified opportunities per VC by gender	1,565	1,684	107.60%

Table 14. Achievements on capacity enhancement of SPs on identified opportunities

Source ASDSP II progress tracker

#### Box 2. Effect of relationship between opportunities identified and capacity enhancement in cow milk VC

### Programme support to breeding services in Taita Taveta and Nyeri Counties.

Inadequate A.I services and high cost A.I was one of the gaps identified in Taita Taveta County as hindering the growth of the Cow milk value chain. To address this gap, the programme supported the knowledge and skills enhancement of 26 service providers on AI through AHITI Kabete and Kenya Animal Genetic Resource Centre (KAGRC)

(KAGRC). To support this initiative, the County has established A.I clinics which play a supportive role in enhancing AI success rates. These clinics which are operated by the trained SPs support the VCAs with knowledge on heat detection, timing of AI and breeding records. As a result, calving rate improved to 60% of which 55% are heifer calves. As at 2019, 761 VCAs (50 groups) have been reached and trained on breeding management of dairy cows and A.1 2019, Annual report, Taita Taveta County).

# b) Value chain Innovations with high prospects for women and youth economic empowerment supported

The programme defines innovations as technologies or best practice ((technologies, innovations and management Practices) that has not been tried before by VC actors within a node in a specific value chain and has the potential of increasing productivity or efficiency of the entire value chain. Innovations are thus directly linked to identified value chain opportunities and generally operationalize an opportunity. The achievement of this output is tracked through the following indicators and the discussions on each is based on data from the rapid assessment, programme tracker and annual reports.

- i. Number and type of innovations promoted
- ii. Number and type of innovations implemented
- iii. Number of VCAs taking up innovations
- c) Number and type of innovations promoted: Study findings indicated that 66% of respondents had participated in activities where VC innovations were promoted. Table 15 indicates VCAs at the production node had the highest awareness (82%) on innovations compared to other chain actors. VCAs at the processing and trade nodes has the least awareness (2%). On a sex by age basis, adult female and male VCAs at the production node had relatively higher awareness (85% and 82%)

respectively) compared to their youth counterparts. However, in the other nodes, though awareness on innovations was low, the youth VCAs had relatively higher awareness of innovations as opposed to their adult counterparts. The implication is that the programme need to put in more efforts to promote innovations to the other VC nodes i.e. trade, processing, agro input supply and transport nodes as well as to the youth VCAs category.

	Female		Male		
VC node	18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years	
Production	68%	85%	67%	82%	
Trade	18%	9%	16%	9%	
Processing	10%	3%	6%	2%	
Agro Input Supply	4%	2%	8%	5%	
Transport	1%	1%	3%	2%	
	100%	100%	100%	100%	

Table 15. Awareness on innovations by value chain node actors and by sex and age

Additionally, the programme tracker shows that 55% of targeted innovations have been promoted and 43% of VCAs are implementing the promoted innovations, table 16. This under achievement is attributed to issues related to delays in counterpart funding by some Counties and to some extent, the COVID restrictions that limited interactions.

Fable 16. Number of innovations promote	d and implemented by VCAs by sex and age
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Indicators	Overall target	Progress	% achievements
No and type of value chain innovations promoted	4,097	2,274	55.50%
No of value chain innovations implemented	19,109	12,698	66.50%
No of VCAs taking up innovations	485,778	208,968	43.00%

Source ASDSP II progress tracker

# *d)* Environmental resilience and climate smart agriculture (CSA) in the prioritized value chains strengthened

Climate smart agriculture, livestock and fisheries (CSA) is agricultural development that increases value chain adaptation and productivity for food and nutrition security and allows populations to transition from poverty to middle income livelihoods, with co-benefits in reductions in greenhouse gas emissions (GHGs) and environmental resilience. The strengthening of environmental resilience through climate smart interventions is tracked through the following indicators.

- i. Number of climate smart technologies promoted
- ii. Number of climate smart technologies in use
- iii. Number of VCAs using CSA technologies by sex and age

As with previous section, presentation in this section will be discussed based on data and information from the ASDSP II progress tracker, annual reports and the rapid assessment of the status of implementation.

**Number of climate smart technologies promoted**: The terms interventions, practices and technologies as alluded to in the Programme Implementation Framework (PIF) are combined and referred to as technologies. CSA technologies therefore refers to the physical infrastructure (hardware), knowledge and skills (software) and the capacity to organize and use both the hardware and software to address and reduce the impacts associated with climate change and variability as they affect VC productivity. CSA practices on the other hand are ways of adapting and mitigating the effects and impacts of climate change on value chain productivity.

Information from the programme tracker reveals that 52.6% of targeted CSA technologies have been promoted of which 39.7% were in use by approximately 43% of VCAs, table 17. This under-achievement is attributed to issues such as the delays in counterpart funding by some Counties and COVID restrictions that limited interactions.

Indicators	Overall target	Progress	%
			achievements
Number of climate smart technologies promoted	3,949	2,076	52.60%
No and type of CSA technologies in use	3,915	1,553	39.70%
Number of VCAs using climate smart technologies by	493,663	210,095	42.60%
gender			

Table 17. Number of CSA technologies promoted and implemented

Source: ASDSP II Progress tracker

Figure 18 and 19 indicates that there is higher awareness on CSA technologies by sex and age, while on a node basis, only production and trade nodes indicated higher awareness. VCAs in the agro input and transportation nodes did not report awareness on CSA technologies but had higher awareness on improved storage practices (45%) and transportation practices respectively (35%)

Types of technologies and	Female		Male	
management practices	18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years
Improved storage practices	6%	6%	8%	8%
Appropriate transportation	0%	0%	1%	1%
Automation	13%	16%	15%	16%
CSA	53%	52%	43%	49%
ICT marketing	14%	13%	21%	13%
Proper packaging	15%	14%	12%	12%
Total	100%	100%	100%	100%

 Table 18. Awareness on types of technologies and management practices by sex and age

Value chain node	Types of technologies and management practices	Female		Male	
		18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years
Production	CSA	55%	54%	52%	54%
	Automation	12%	17%	18%	17%
	Proper packaging /Equipment	14%	12%	6%	10%
	ICT marketing	15%	13%	19%	13%
	Improved storage practices	4%	5%	5%	6%
		100%	100%	100%	100%
Trade	CSA	62%	51%	48%	49%
	Automation	14%	9%	9%	16%
	Proper packaging	12%	27%	27%	22%
	ICT marketing	12%	13%	16%	13%
		100%	100%	100%	100%
Processing	0%	0%	0%	0%	0%
Agro Input Supply	Proper packaging	33%	24%	23%	21%
	ICT marketing	0%	22%	31%	19%
	Improved storage practices	67%	43%	34%	45%
	Appropriate transportation	0%	11%	11%	14%
		100%	100%	100%	100%
Transport	Automation	33%	60%	44%	32%
	Proper packaging	33%	20%	11%	35%
	ICT marketing	33%	0%	33%	23%
	Improved storage practices	0%	20%	11%	10%
		100%	100%	100%	100%

Table 19.Awareness on types of technologies and management practices by value chain node

# 3.5.2 Enhanced Entrepreneurship of Priority Value Chain Actors

Enhancing entrepreneurial skills of both priority VCAs and SPs is expected to lead to acquisition of desired skills, knowledge and mind set to facilitate the growth and establishment of commercial agro-based micro, small and medium enterprises (MSMEs) through viable business plan development and implementation. The programme targets 700,000 VCAs to have and implement viable business plans in five years through the following interventions:

- i) Train the service providers (SPs) on entrepreneurial skills,
- ii) Support the VCAs to develop viable BPs,
- iii) Support the VCAs to implement viable BPs.

The rapid assessment on the status of implementation assessed the increased number of VCAs implementing viable business plans by sex and age, and the increase in number and diversity of viable business plans implemented.

Number of VCAs with viable business plans: To arrive at the at the increased number of VCAs implementing viable business plans, the survey looked at the number of VCAs with viable business plans by sex and age. The findings in figure 6 show that overall; there was an increase in VCAs that have developed business plans to 35% in 2022 from the 23% baseline in 2019. However, this progress is quite low given that the programme is in its last year of implementation and about 98% (1,603) of the SPs have been trained by the programme on various aspects of entrepreneurship skills to facilitate the development and implementation of viable business plans.



Figure 4. status of business plan development

Analysis on business plans developed by value chain nodes show that the majority (58%) are the agro input suppliers and processors (56%) to have developed business plans compared to other value chain

actors at the trade, input supply, processing and transport nodes as shown in figure 7. Producers, though dominating in VCAs numbers were at 33% in-terms of business plans development. These findings demonstrate that the business concept through business plan development has not been fully embraced by majority (68%) of the producers. Therefore, the programme should target the nodes with low BPs with business development interventions to reverse the observed trends. In particular, service providers should first make a capacity needs assessment of the VCAs at node level and come up with training curriculum and associated modules appropriate for various node actors. In addition, there is need for targeted mind set change trainings that will all go a long way in reversing observed trends.



Figure 5. Percentage of VCAs with VBPs by VC node

Overall, the business plan development by each gender category is still quite low. However, the youths were the majority in terms of business plans development at an average of 39%. This is a 15% increase from the 24% business plan developed at baseline. Across the gender divide, male youth had the highest number (45%) of business plans developed as presented in figure 8. However, both adult male (36%) and female (32%) above 35 years old performed dismally relative to the baseline data which was at 39% and 31% for both adult male and female above 35 years old respectively<sup>27</sup>. Noteworthy, is the declining numbers (-ve 3%) of the adult male with viable business plans relative to the baseline data. The programme should embrace targeted approach in reaching out to the VCAs based on their identified needs and capacities to develop and implement the agreed plans.

<sup>&</sup>lt;sup>27</sup> ASDSP II, 2019 Baseline Report



Figure 6. Business plans implemented by VCAs by sex and age

The MTR also observed that the capacity of SPs had improved through ASDSP II supported trainings and from information sharing with other service providers<sup>28</sup>. However, this low achievement can be attributed to general delay in implementation of this outcome activities resulting in carry overs, inefficiencies in service delivery by the SPs, insufficient training and lack of business orientation by SPs. This is probably the reason why many of them continue to cite capacity gaps in business plan development, marketing and financial literacy among others. Besides, majority (73%) of the services providers enlisted for business support are from public sector with in adequate capacity in entrepreneurship related issues<sup>29</sup>. The recent service provider study firms up this by presenting the public and private service providers to be at 53% and 27% respectively<sup>30</sup>. These weaknesses from the service provider level are therefore transferred to the VCAs level resulting in low development of viable business plans.

Going forward, any training on entrepreneurship development among the SPs should target more of the private sector actors who are already with businesses within the PVCs to catalyze business plan development and to ensure sustainability of the gains made during the ASDSP II implementation. The secretariats are further encouraged to identify and establish partnerships with institutions promoting mentorship, coaching and incubation services to facilitate SPs as well as VCAs leverage on their services including funds as a bridge to the gaps already created by the misunderstanding in the SP concept and inadequate entrepreneurial skills of the SPs engaged by ASDSP II. However, it may not be possible for the SPs engaged to deliver the remaining 65% of the targeted VCAs to have viable business plans within the remaining period. The programme should therefore consider developing another programme to deliver on the business orientation and targets started by ASDSP II.

**Status of the Business Plans Implementation by the Value Chain Actors**: This section presents status of implementation of the business plans developed. The assessment sought to know whether the value chain actors who had developed the business plans were implementing them. Figure 9 shows that majority (71%) of the business plans developed were being implemented as at the time of the study, which is a 59% increase from the baseline data. At baseline, only 12% of the business plans developed were being implemented. These findings demonstrate that the VCAs are beginning to appreciate the importance of

<sup>&</sup>lt;sup>28</sup> ASDSP II MTR, 2021

<sup>&</sup>lt;sup>29</sup> ASDSP II, 2021 BDS Inventory

<sup>&</sup>lt;sup>30</sup> Service provider Study, ASDSP II, 2022

business planning in the growth of an enterprise. The support to innovations may also have contributed to this increased implementation of the business plans by VCAs. It is also important to note that development of business plans may not directly translate into business plans implemented.



Figure 7. Business plans implemented by VCAs

Across the gender divide, both adult male (72%) and youth (76%) value chain actors were the majority in terms of business plan implementation as presented in figure 10. Remarkably, there was no great variation between the business plan development status Figure 11 and the business plan implementation status by sex and age.



Figure 8. Status of business plan implementation by VCAs by sex and age

Overall, business plan implementation by node is quite impressive with the transporter node at 91%. However, producers were the least with 69% implementation as shown in figure 11. The data reveals that the business approach is still weak especially at the producer node and therefore, there is need to strengthen business development approaches in the sector. ASDSP II should further consider supporting capacity development to the facilitating teams including the service providers on market systems approach.



Figure 9. Status of business plan implementation by VCAs by node

**Value Chain Actors Utilization of their Business Plans**: This section presents and discusses the findings on how the VCAs use the business plans developed. Table 18 presents the uses of business plans developed as business operations, resource mobilization and utilization. Whereas the number of VCAs that participated in this question was 820, the total responses were 1,512. This can be attributed to multiple responses on how the VCAs had used their BPs.

		VCA by Sex		Total
VC Node	Use of BPs	Male	Female	(n=820)
A sug la sut	<b>Business Operations</b>	36	20	56
Agro Input	<b>Resource Mobilization</b>	28	9	37
Supply	<b>Resource Utilization</b>	27	10	37
	<b>Business Operations</b>	248	200	448
Droducor	<b>Resource Mobilization</b>	171	164	335
Producer	Resource Utilization	173	152	325
	Other (specify)	6	5	11
	<b>Business Operations</b>	38	29	67
Trader	<b>Resource Mobilization</b>	29	21	50
	<b>Resource Utilization</b>	18	14	32
	Business Operations	13	4	17
Transport	<b>Resource Mobilization</b>	7	1	8
	Resource Utilization	5	1	6
	Business Operations	17	19	36
Processor	<b>Resource Mobilization</b>	15	10	25
	Resource Utilization	10	11	21
	Other (specify)	1	0	1

Table 20. How business plans been used

Further data analysis showed that 41% of the VCAs used their business plans to support business operations, resource mobilization which is a key objective in the design of the programme registered 30% while resource utilization registered 29%. The text box 3 demonstrates a notable and beneficial use of the business plan in the Wajir camel milk enterprise case scenario.

### Box 3. Notable beneficial use of a viable business plan in camel milk, Wajir

Wajir camel milk enterprise was started in 2012 as an informal roadside milk traders operating in Wajir Township with five members. The group has registered a steady growth and at the same time experience challenges. The group suffered poor record keeping, weak group leadership and internal governance, inadequate business skills and poor milk handling and thus the desired benefits were not realized. ASDSP II swiftly intervened and supported intensive trainings for the group members. The training focused on group dynamics and internal governance, business plan development, milk and milk products development and climate smart agriculture and green technologies in relation to camel milk value chain. The group developed *a bankable business plan* which was used to secure *KES 8.5 M in kind grant* from Agriculture Cooperative Development International/Volunteers in Oversees Cooperative Assistance (ACDI VOCA). This was in form of land, water storage structure, and additional equipment for a new milk processing plant which is currently under construction and is expected to be commissioned by March 2022. This will further improve sales and profit margin. On average, the group gets a monthly profit of *KES 860,000* which is used to meet household needs including school fees. Analysis by priority value chain nodes further affirms that business plans are highly used for business operations across all the value chain nodes. Internode analysis reveal the highest use of business plans for business operations to be at the transporter node (55%) while the processor and agro input supply had a tie at 43% as shown in figure 12. These findings are consistent with the previous findings on business plans development and implementation where producers were the majority. These findings are also consistent with the previous findings on business plans implementation where transporters were the majority.



### Figure 10. Use of viable business plan by VCA and by node

Analysis by sex reveals male value chain actors as dominating in all business plan use category. In particular, the males were the majority (57%) in using the business plans in their business operations as presented in figure 13. Most men have access and control of most assets that are listed as collateral by most lending institutions. Even though the women have done fairly well in terms of use of business plans, the programme should deliberately support more sensitization programmes on the importance of a business plan and how they can make good use of the tool to support their value chain enterprises and link them with other benefactors like the case of Wajir camel milk who were given grants by VOCA to procure infrastructure equipment to improve their business.



#### Figure 11. Use of business plans by VCAs by sex and age

Other uses of the business plans were identified at the producer and processor nodes with producer node dominating. These ranged from acquisition of assets through to facilitating access to business support systems. By sex and age, adult male of above 35 years had many other uses of business plans compared with other gender categories.

### 3.5.3 Access to Markets by Value Chain Actors

Commercialization of agriculture in Kenya is hindered by poor access to markets because the products face stiff competition in the local, regional and global markets due to high cost of production, inefficient infrastructural services, non-compliance with local and international standards and trade barriers. In addition, inadequate access to market information and financial services have contributed to this low commercialization of agricultural value chains. In assessing whether the programme had enabled VCAs improve market access as one of the means to increase their GMs and subsequent realization of improved incomes, the study tracked:

- i. the increase in number of VCAs accessing markets by gender,
- ii. percentage increase in number of market segments,
- iii. percentage increase in handling capacity of the market segments.

**Increase in number of VCAs accessing markets by gender**: The study shows that (91%) of the PVCAs accessed markets in 2022 compared with 74% in 2019. This was an increase of 17%. Across value chain nodes, producers (73%) had greater access to markets of their products and services while traders (10%) had the least. From a sex and VC node perspective, 51% of the PVCAs accessing market were found to be males and majority being in transport node (75%). Table 18 illustrate this in details

 Table 18: PVCAs accessing market by gender

VC node					
	% of PVCAs accessing market by gender				
	overall n=3294	male n=1530	Female n=1472		
Agro input supply	4	66	34		
Processing	3	47	53		
Production	73	50	50		
Transport	2	75	25		
Trader	10	50	50		
overall	91	51	49		

An assessment of the ease of access to market by VCAs was also undertaken as part of understanding more about VCAs access to markets. Out of the 91% respondents interviewed who reported to be accessing market, 54% reported that access to markets was fairly easy while 39% reported that it was easy and only 7% faced difficulties in accessing markets, figure 14



Figure 14: PVCAs ease of access to market

Along the value chain nodes, the producers (41%) and transporters (35%) interviewed reported to have been accessing markets with ease. This was a change from the baseline where across the value chain, processors had better ease (45.5%) as compared to the other value chain actors, with agro-input suppliers being the least in accessing markets (31.0%). Ease of access to market may also have been as a result of the interventions of the programme in supporting aggregation of groups. The number of VCA groups aggregated to this end through various interventions had reached 70% out of those targeted. On the other hand, the market linkage instruments signed and operational was low at 33%.

# Increase in number of market segments (market Outlets)

The study further evaluated the improvement of access to markets by the VCAs by assessing the percentage increase in number of market segments accessed. The assessment looked at where the VCAs were selling their products. Table 19 shows the market outlets/segments access by gender and age across the value chain.

 Table 19. Market segments/outlets

	Male (n=153	0)	Female (n=14	172)	Overall (n=3002)
	Above 35	Below 35	Above 35	Below 35	
	Years	Years	Years	Years	
Agro Input	66	15	31	10	122
Supply					
Four and more	19	4	7	2	32
One	26	7	14	2	49
Three	8	1	1	1	11
Тwo	13	3	9	5	30
Processing	31	10	29	18	88
Four and more	8	2	7	5	22
One	13	3	7	6	29
Three	4	0	4	2	10
Тwo	6	5	11	5	27
Production	1064	143	1069	143	2419
Four and more	99	19	69	9	196
One	437	42	468	60	1007
Three	124	18	118	13	273
Тwo	404	64	414	61	943
Trader	126	32	123	35	316
Four and more	17	4	14	2	37
One	47	9	34	19	109
Three	12	1	16	1	30
Тwo	50	18	59	13	140
Transport	32	11	12	2	57
Four and more	5	1	4	0	10
One	12	5	4	0	21
Three	1	3	0	2	6
Two	14	2	4	0	20

Based on the findings 79% of the VCAs had one to two market outlets across the value chain. Only 10% of VCAs had access to four or more market outlets as illustrated in Figure 15. The same was the trend across gender and age. This implies that market outlets are a great impediment in value chain commercialization.



Figure 125: Number of market segments/outlets accessed

Access to market information: Access to markets by VCAs is constrained by information unevenness among various actors in the chain that leads to conflicting market signals and also undermines transparency along the chain significantly reducing operational efficiency. The assessment sought to know the number of VCAs assessing market information, the type of the market information and whether they were making use of the information.

Based on the findings 93% of the VCAs reported that they had access to market information compared with 68.8% at baseline. The same was the trend across gender, age and across the value chain nodes as shown in Figure 16



Figure 16: PVCAs access to market information

The study also sought to identify the type of market information demanded by VCAs. The VCAs were asked what type of market information they had access to in their businesses. Based on the findings, (2440) 51% of the VCAs reported to be seeking for information on prices of commodities followed by (1611) 34% who indicated that they sought information on market options while 51% said they sought technological information as shown in figure 17.



Figure 17. Types of market information sourced by VCAs

Across gender, adult males were found to have more access at 45% followed closely by their women counterparts at 40% while the youth who sought for different types of markets information were at 15% across the chain. (Figure 18)



Figure 18: PVCAs access to market information by Gender

Out of those who reported to be accessing market information, the study also sought to understand whether those who access information use it. From the findings, use of market information was also high (95%) among the VCAs.

# **Access to Financial Services**

To achieve commercialization of the priority value chains, adoption of innovations and technologies, increased scale of production and enterprise upgrade among others are needed. All these activities require financial support making access to financial services pertinent in value chain development. The study therefore sought to establish whether VCAs had access to financial services by assessing the number of VCAs accessing financial services by type, gender and the volume and type of financial services accessed. From the progress reporting system, the number of VCAs accessing financial services was at 42.4% while the volume of financial services accessed by VCAs and by type had performed dismally (currently at 27.6%) since the start of interventions.

**Number of VCAs accessing financial services by gender and age**: Based on the findings, 71% of the actors reported to have access to financial services as compared to 53.1% at baseline. Adult male actors were the highest at 44 %, an improvement from baseline where they were 38.9% and youth actors reporting the least at 14% as compared to baseline that was 23.2%. Across the nodes, producers (81%) reported to have high access to financial services, as compared to the rest, while transport had the least (2%).

The study also assessed the types of financial services accessed and established that savings in informal, friends and merry-go-round was the highest at 37%, followed by formal savings, credit from formal services, credit from informal, grants, and insurance at 22%, 20%, 12%, 3% and 2% respectively, (figure 19).



Figure 19. Type of financial services accessed by VCAs

# 3.5.4 Establishment and enhancement of capacities of the sector consultation, cooperation and coordination

This objective is aimed at establishment and enhancing the capacities of the sector structures for consultation, cooperation and coordination as well as ASDSP II specific structures for coordination. The rapid assessment on the status of implementation of this particular result area was to assess the percentage of VCAs and stakeholders satisfied with structures by gender and the number of VC related policies, strategies, regulations and plans reviewed and implemented.

In assessing the achievement of the outcome level objective, the assessment reviewed the number of structures established and with functional instruments, the number of structures with capacity to operationalize, the number of stakeholders involved in the sector consultation and the number of policies, strategies, plans and regulations prepared and launched.

**Number of structures established and with functional instruments**: The findings noted that among the three categories of the structures, the establishment of intergovernmental structures for consultation was fully achieved; 60% of national specific and 20% of the county specific structures. It was also established that there was 100% on the achievement of functional instruments on all the categories of the established structures, table 21. The achievement so far for all structures established is 36% and all of them have functional instruments.

The study noted that umbrella stakeholder structures and agriculture and rural development partner group at the counties and umbrella stakeholders at national level were not established and therefore no functional instruments put in place. There are efforts to explore possibilities of assessing some of the existing umbrella organizations at the national level and see whether they can play the role as foreseen in the programme design. These structures have been key in ensuring that there is strengthened inter and intra consultations at the national, intergovernmental and county levels. Specifically, for the programme coordination, a 100% of the structures were established and with functional instruments that has facilitated near smooth implementation as noted from the findings of this report and others made reference in different sections of this report.

	Strategic targ	ets	Findings 202	22	
Structure level	% Structures established	% Functional Instruments in place	% Structuree stablished	% Functional Instruments in place	Remarks
Sector Intergovernmental	100	100	(6 out of 6) 100	100	1 structure was to be established. Currently we have a JASSCOM in place and it organizes for IGF-A on scheduleJASSCOM Gazetted in 2021JASSCOM has a secretariat with 4 SWAGs (Policy, Legislation & Standards; Monitoring, Evaluation & Communication; Research, Extension & Capacity Building, and Inputs, Joint Programs &Projects)1 JASSCOM sub-committees that are Ad hoc (Fertilizer, Levies & Fees harmonization and, Trans boundary diseases)JASSCOM Strategic Plan and communication strategy in place

Table 21. Structures for consultation, cooperation and coordination established

Sector at National	100	100	4 out of 5 (80%)	60% ToRs, appointment letters provided for all staff & operational work plans in place Engagements with ASNET in progress	NPS is in place MEC needs strengthening Work in progress for Umbrella Private Sector Actors & Umbrella Civil Society Organisations DPs in place and have their own group (ARD Partners' group) and have leadership which is rotational. Interactions at activity levels have been recorded
Sector at Counties	100	100	4 out of 5 (80%)	60% ToRs, appointment letters provided for all staff & operational work plans in place 100% CASSCOMs established 90% CASSCOMs capacity built 30% of the counties have drafted bills to the county assemblies for institutionalizatio n 10% CASSCOM have draft strategic plans Engagements with ASNET in progress in two counties	<ul> <li>47 CPSs and 47 CASSCOMs in place</li> <li>Sectoral plans to be done in next FY through CASSCOMs</li> <li>Technical &amp; administrative staff in place in all CPSs with their respective</li> <li>DPs in place and have their own group (ARD Partners' group) and have leadership which is rotational. Interactions at activity levels have been recorded</li> <li>Work in progress for Umbrella Private Sector Actors &amp; Umbrella Civil Society Organisations</li> </ul>
Stakeholders	48	48	1 national governme nt and 47 County governme nts		Stakeholders group collaborating with the program are Sweden & EU as partners, GIZ etc.

**Number of structures with operational instruments**: The study noted that only 18% of the established structures in the three categories had operational instruments to enable them fulfil their mandate at the sector and programme level. This 18% is only from the programme coordinating structures at the national and county level. Therefore, it means that all the other structures, even those established and with functional instruments, do not have operational instruments and their capacity is inadequate to provide leadership in sector consultation, cooperation and coordination. For example, even if the JASSCOM and CASSCOMs have been established, they do not have strategic plans or any work plans guiding how they operate. In fact, none of the two have any budget specifically for them. They rely on programmes to support their activities and this is not sustainable. There is also the question of acceptability within those governed levels on their role in consultation, cooperation and coordination.

**Number of stakeholders involved in the consultation mechanism**: The study went further and assessed the number of stakeholders participating in the consultations, cooperation and coordination of program implementation. The study established that as at the time of assessment, 48 stakeholder organizations were involved in the consultation mechanism (1 national government and 47 County governments. This is a great achievement and has contributed greatly to the program since ASDSP II is a facilitator and not an implementer.

**Number of operational partnerships**: Other than programme specific partnerships, there were no operational partnerships entered considering that the umbrella organizations that were to develop these partnerships were not established. This is an area where the programme should focus its activities during the remaining and anticipated extended programme period.

Percent level of satisfaction of the stakeholders in the consultation mechanism: The study did not establish this and also the performance reports had not included it in the performance tracker.

The programme at both levels should, after establishment of the umbrella structures as recommended in the earlier section, start monitoring this indicator and include it in the programme performance tracker.

# 3.5.4.4 Sector policies, strategies, regulations and plans prepared and launched

This is the ultimate objective this outcome. It is expected that when structures for consultation, cooperation and coordination have functional and operational instruments, and that there will be supportive strategies to engage the participation of the relevant stakeholders, there will be better opportunities to develop and implement conducive policies, strategies, plans and regulations that will support the development of the sector and also support effective implementation of ASDSP II. The achievement is measured by the number of policies, strategies, plans and regulations inventorized, launched and rolled out.

**Number of policies, strategies, plans and regulations inventorized**: Inventories of all policy instruments including policies, strategies, plans and regulations were to be undertaken grouped according to four subsectors of crops, livestock, fisheries and cooperatives. The assessment did not consider this indicator during the assessment period as most were done during baseline and SIVCAP development and are county specific. The immediate section shows the policies that were launched and rolled out as an alternative. Programme will need to ensure it captures this indicator in the programme performance tracked.

**Number of policies, strategies, plans and regulations launched and rolled:** The programme had targeted 10 of each sectoral instruments (policies, regulations, plans and strategies) per value chain. From the assessment, the program is at 17% mark of policies launched nationally for all the value chains and 13 regulations rolled out, 29% plans launched and rolled out, and 17% strategies launched and rolled out. The overall assessment established those that had been prepared and are at different stages of Legislation as summarized in Table 22.

	TARGET	PROGRESS	OVERALL % ACHIEVED
Policies launched and rolled out	290	63	21%
Strategies launched and rolled out	290	62	21%
Plans launched and rolled out	290	111	38%
Regulations launched and rolled out	290	48	17%

Table 22. Summary of sector policies, strategies, plans and regulations on PVCs prepared and launched

### Outcome level indicators.

After assessing the achievements at output objective level, the question was then, "How has the realized achievement contributed to realization of the outcome objective on capacities for structures for consultation enhancement. To assess this contribution, the following indicators were assessed, the number of VC related policies, strategies, regulations and plans reviewed and implemented and the percentage of VCAs satisfied with structures for consultation by gender.

Number of VCA related policies, strategies, plans and regulations implemented: The assessment noted the following policies, strategies, plans and regulations by the subsectors of crops, livestock and others had been implemented and have been assessed to have supported the development of priority value chains, Table 23.

Table 23. Outcome level achievement through policy instrument	S
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Outcome 1: Increased productivity	Outcome2: Enhanced entrepreneur skills	Outcome3: Improved access to markets.
Crops	Crops	Crops
<ul> <li>Crop(potato) regulations</li> <li>E-Voucher</li> </ul>	• Youth in agribusiness strategy	<ul> <li>Youth in agribusiness strategy</li> <li>Warehousing Receipt Systems (WRS) Act 2019</li> </ul>
Livestock	Livestock	<ul> <li>Warehouse Receipt System Regulations 2021</li> </ul>
<ul> <li>Dairy industry regulations</li> <li>Sessional Paper No. 2 of 2020 on Veterinary policy 2.</li> <li>Sessional Paper No. 3 of 2020 on Livestock Policy</li> </ul>	Leather Development Strategy	
Other sub-sectors		
<ul> <li>Irrigation regulations 2021</li> <li>National Irrigation Services Strategy, 2022 – 2026</li> </ul>		

### Percent of VCAs satisfied with structures by gender:

Before assessing this indicator, it was found necessary to assess the VCAs' awareness level of the policies, regulations, strategies, and plans in the sector to understand whether they participated in their development and more importantly, whether they find them supportive in the development of their businesses along the PVCs. From the rapid assessment findings, VCA's awareness of policies, regulations, plans and strategies are as summarized in Table 24 by gender. The findings indicate that more adult males than females and youths are aware of the sector instruments for conducive VCD i.e. the policies, regulations, strategies, and plans. The level of VCAs by node who were aware is negligible, except in production node. The figures indicate the level of awareness of these instruments by gender are low supporting the fact that more effort needs to be put in place deliberately to enable the program achieve the desired set targets.

Node	Sub-sector	Male adult	Male Youth	Female adult	Female Youth	Total	% subsector awareness of policy instruments at Node levels
	Crops	43	8	22	11	84	1.7
	Livestock	49	11	22	8	90	1.9
A must be must	Fisheries	17	5	4	2	28	0.6
Agro Input Supply	Cooperatives	20	3	6	1	30	0.6
	Others (Specify)	0	0	1	1	2	0.0
	None	1	0	0	1	2	0.0
	Crops	604	88	610	109	1411	29.0
	Livestock	708	126	691	121	1646	33.9
	Fisheries	133	38	59	14	244	5.0
Production	Cooperatives	177	80	169	83	509	10.5
	Others (specify)	0	15	3	16	34	0.7
	None	6	33	5	39	83	1.7
Trade	Crops	52	13	39	9	113	2.3
	Livestock	94	20	60	18	192	4.0
	Fisheries	33	11	34	16	94	1.9
	Cooperatives	20	15	19	12	66	1.4
	Others (specify)	0	3	0	2	5	0.1
	None	0	1	1	3	5	0.1
	Crops	9	4	9	0	22	0.5
	Livestock	18	2	6	3	29	0.6
	Fisheries	3	3	2	0	8	0.2
Transport	Cooperatives	3	1	0	0	4	0.1
	Others (specify)	0	0	4	4	8	0.2
	None	0	0	0	2	2	0.0
	Crops	8	8	19	11	46	0.9
	Livestock	19	4	16	14	53	1.1
	Fisheries	6	3	3	3	15	0.3
Processing	Cooperatives	8	4	7	5	24	0.5
	Others (specify)	1	1	0	3	5	0.1
	None	0	3	0	1	4	0.1

Table 24. VCA's awareness of policies strategies, plans and regulations by VC node and by sex and age

# **Policy Satisfaction levels by the VCAs**

The survey then assessed the satisfaction levels of the VCAs with the policies, strategies, plans and regulations so as to understand how they benefited from these sector instruments to assist them improve productivity, enhance entrepreneurial skills and access markets. The findings on the VCA's satisfaction level is summarized in table 25. The study findings indicate that there is a moderate satisfaction level with policy instruments at Crops and Livestock subsectors (29% and 38%) respectively at the production node. This is in tandem with findings on outcome one that most of the VCAs are operating at production nodes. The study further indicated that there were policy instruments from other sectors (6%) besides agriculture especially at the production node which affect VCD. These include policies on Licensing and insurance, trade policies, public Health regulations, Environment related policies, labor policies, Irrigation policies, and Transport rules and regulations

Therefore, deliberate efforts on reaching VCA with policies, strategies, plans and regulations are required and need to have inter-sectoral approach so that others not directly for the sector but affects is development are considered.

		Female		Male			
Nodes		18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years	Totals	% subsector satisfaction with policy instruments at Node levels
Production	Crops	76	499	69	468	1112	29
	Livestock	89	630	80	632	1431	38
	Fisheries	5	31	26	99	161	4
	Cooperatives	9	127	16	129	281	7
	Others (specify)	12	114	8	88	222	6
Trade	Crops	7	35	11	34	87	2
	Livestock	13	48	17	83	161	4
	Fisheries	15	32	11	30	88	2
	Cooperatives	2	14	1	16	33	1
	Others (specify)	5	13	1	8	27	1
Processing	Crops	8	15	6	6	35	1
	Livestock	9	15	2	18	44	1
	Fisheries	2	3	2	3	10	0
	Cooperatives	2	6	2	4	14	0
	Others (specify)	1	5	0	4	10	0
Transport	Crops	0	8	4	7	19	1
	Livestock	2	4	2	18	26	1
	Fisheries	0	1	3	3	7	0
	Cooperatives	0	0	0	3	3	0
	Others (specify)	0	0	3	7	10	0
						3781	

Table 25. Percentage satisfaction le	vel by VCAs on policy instruments
Tuble Lot i crecillage satisfaction ic	

The survey concludes that:

- 1. Key consultation, cooperation and coordination structures have been established and functional except for the umbrella civil society organization at both national and county level.
- 2. There is noted low achievement on launched and rollout of polices/ regulations/strategies and plans, (average achievement is 24%)
- 3. There is a moderate satisfaction level by VCAs with policy instruments at crops and Livestock subsectors (29% and 38%) respectively at the production node. while other nodes had negligible/very small awareness levels

It is therefore recommended that:

- 1. more efforts towards facilitating establishment or using existing umbrella organizations be accelerated during the remaining and anticipated programme period ones at inter county levels and also between the national and county level governments.
- 2. More efforts to be invested in having enhancing the capacities of all structures to operationalize their functions with focus on assisting them to develop appropriate instruments such as gazettement, strategic plans and etc.
- 3. more deliberate efforts need to be done to improve level of awareness of policies on all VC nodes and especially at agro input supply, trade, processing and transport

# 3.6 Monitoring, Evaluation and Communication

To monitor and evaluate progress towards achievements of intended goal and purpose objectives, the programme has a robust monitoring, evaluation, reporting and communication plan that encompasses indicators at outcome, output and input levels as detailed in the Monitoring and Evaluation Plan 2017-2022. The overall purpose of the Monitoring and Evaluation (M&E) plan is to guide the programme implementers and other stakeholders in evidence based planning and decision making, building a culture of learning, accountability and transparency. The M&E plan which comprises the programme's logic model; performance monitoring framework; and performance evaluation framework guides on analysis and interpretation of results reporting and dissemination. It also gives guidance on roles and responsibilities of various structures on M&E and ASDSP II overarching work plan and budget.

The M&E plan therefore serves two functions namely, periodic assessment of programme implementation and performance of activities and output indicators and evaluation of results in terms of relevance, coherence, effectiveness, efficiency, sustainability and impact of programme interventions. It is the tool for the decision makers to use and take corrective measures to improve and ensure implementation remains in focus and for accountability and learning.

The rapid assessment study assessed the robustness of the programme's M&E plan to allow programme implementers, decision makers and beneficiaries to take advantage of the intervention for their satisfaction. The assessment recognized that the programme has a structured performance monitoring framework that was assessed to be adequate in measuring success. For example, the programme developed an Activity Tracking Tool (ATT) that provides nearly real time data on all the 33 output objectives from all the 47 counties. Figure 18 and 19 show the type of information captured by ATT.

The findings show different levels of implementation of the various outputs with the highest being capacity knowledge enhancement of existing service providers on identified opportunities at 103% and the lowest being initiatives for establishment of the structures with 25.5%. The average implementation level of the outputs was 46.9%. From the findings there was progress in implementation of all outputs. However, implementation was affected by various factors among them delay in start of the programme, effects of COVID 19, timeliness of financial disbursements as well as other economic factors.



Figure 138. Implementation level of output objectives



Figure 14. Completion of output indicator implementation

# Performance monitoring and assessment

The study also assessed the number and type of performance monitoring and assessment activities relied by the programme to monitor the programme progress over defined period. The findings show that the programme planned to use seven (7) different activities at both county and national level and 100% of the Performance monitoring and assessment activities were used. The assessment shows that over 68% of activities were undertaken on yearly basis along the seven different activities, table 26. These activities included monthly management meetings, quarterly review meetings, bilateral review meetings, progress reporting, M&E visits to the Counties, M&E visits to the VCOs /VCAs and financial management audit missions.

The average would have been about 75% but is lower because of low achievement on the internal audit which is associated with inadequacy capacity by the internal auditor at the MOALFC. This however did not have any negative effects on financial management as the ones in use were assessed to have been adequate.

Table 26. Progress on performance monitoring activities

Activity	implementing units	Units	Planned (annual)	Achieved (%)
Monthly management meetings for review of the status	National	No.	40	28 (70%)
for programme implementation	County	No.	1880	1,316 (70%)
Quarterly review meetings held	National	No.	20	14 (70%)
	County	No.	940	658 (70%)
Bilateral review missions held	National	No.	10	8 (80%)
Progress reports	National	No.	10	8 (80%)
	County	No.	470	376 (80%)
No. of M&E visits to the Counties	National	No.	10	5 (50%)
M&E visits to the VCOs /VCAs	County	No.	940	564 (60%)
Financial Audit	External	no	15	12 (80%)
	Internal	No.	20	7 (35%)
			4,355	2,996(Av. 67.7%)

### **ASDSP II Evaluation Framework**

The study assessed the programs' evaluation framework and established that adequate and appropriate tools were developed. A total of four tools were developed and 75% of them were used to inform the programme management on corrective measures to be undertaken for the implementation to remain in course and also provide learning lessons to implementers and beneficiaries to improve coordination of implementation and business development respectively, table 27. For example, the baseline undertaken during the early years of the programme has informed this rapid assessment especially the level of achievement of purpose and outcome level objectives. The progress report for example indicated that there was low capacity of CASSCOMs and service providers that necessitated the management to decide that two studies, one on capacity needs of CASSCOM and another on service providers' provision of services be undertaken. The tools for the program evaluation includes: The Evaluation Indicator Reference Sheet (EIRS), Evaluation Framework Matrix (EFM), Baseline Evaluation Framework, Midterm Evaluation Framework. Three frameworks have been achieved.

Table En Abbol in Soully purpose and outcome objective maleators demevements
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Result Level	Indicator	Baseline	Rapid
		2018/2019	assessm
			ent study 2022
Programme goal:	Percent increase in agriculture GDP	34.2	
Contribute to transformation of crop,			
livestock and fisheries production into commercially oriented enterprises that	Rural poverty of male and female population reduced (%)	35.8	36.1
ensures sustainable food and nutrition	Reduction in Chronically food insecure households (%)	33.9	N/A
	Percent increase in on farm and off farm employment (Average)	3.5	4.7
	Mean Monthly Income (KES) Per Capita Income	104	428
<b>Programme purpose:</b> Develop Sustainable Prioritized Value Chains for Improved	Percent change in Gross Margins of VCAs by gender	36.6	48.4
employment, Income and Food and Nutrition Security	VCAs level of satisfaction with share of revenue (%)	23.9	16
Outcome1: Productivity of Prioritized VCs increased	VCA utilization of service providers (%)	51.4	84
	Percent reduction in VCAs Post production loses	9.8	6.1
Outcome 2: Entrepreneurship of			
Prioritized VCAs strengthened/enhanced	Percent of VCAs with Viable Business Plans	23	35
	Percent of VCAs implementing the Business Plans	23.5	35
Outcome 3: Access to markets by Prioritized	Percent increase in number of VCAs accessing	73.9	91
VCAs improved	markets by Gender (%)		
	Percent increase in number of market segments	68.8	79
	Percent increase in handling capacity of the market		
	segment		
	VCAs accessing financial services (%)	53.1	71
Outcome 4: Structures and capacities for	Number of VCP related policies, strategies,	56	-
consultation and coordination in the sector	regulations and plans formulated/reviewed and		
strengthened	implemented		
	VCAs satisfied with consultation and coordination structures by gender (%)	79.1	68

An assessment of the midterm evaluation framework showed that its implementation is 50% against planned and the outcome of this implementation provided evidence that the programme is relevant, fairy effective and efficient. However, the MTR did not investigate progress at impact level and sustainability, but questioned the effectiveness of the delivery. It provided good lessons learnt and recommendations that informed subsequent annual work plans and budget. For example, the report provided 11 recommendations and 100% of them have been addressed in the work plans and budget and are being implemented.

The study further assessed the number of case studies and how they informed improved implementation. Assessment noted that 15 case studies were undertaken since the start of the programme to date. These studies were aimed at deepening understanding of various issues to strengthen development of value chains. Some of the studies are contained in the link <u>http://asdsp.kilimo.go.ke/videos/.</u> Others are reported in the respective outcomes' sections of this report and some are as illustrated below.

### Box 4. Sample of results monitored from various filed visits undertaken

Biogas from dairy cow manure in Narok County



*Mr. Kering's farm who has adopted Biogas technology.* "I save at least KE.S 7200 every year that would have been used to refill cooking gas" says Mr. Kering



Ms. Kering in her kitchen using biogas for cooking. Ms. Kering confesses that "Since we installed

biogas in our farm, am so happy my work having to struggle to fetch firewood has been greatly reduced and my kitchen is smoke free and cooking is very efficient

# Capacity for Implementation of M&E plan

At the onset, the programme established M&EC unit composed of the national M&E and communication specialist, County M&E and communication officers to take lead in implementation of the Programme M&E Plan. The study established that though the unit was functional, it was marred by frequent changes of the trained officers; over 60% of the current officers reported having limited capacity for analyzing, and reporting performance information. There is therefore need to capacity build the staff on the same

# **Results Reporting and Dissemination**

Besides assessing performance, the study went further and assessed how the information generated from the monitoring and evaluation plan implementation was disseminated and used. It was noted that there was 100% achievement on thematic reports produced and 80% on performance reports as shown in table 28 and 29 respectively. These are reports generated by the programme mainly for compliance, technical knowledge and tracking progress. They are generated to inform the programme implementation status, give in-depth analysis and provides best solution to some of the process that support or inhibits commercialization of the value chains. They also provide and promote programme visibility and awareness amongst stakeholders.

S.N o	Thematic Reports	Planned	Achieved	Key Message	
1.	Assessment of Service providers delivery mechanism	1	1 (100%)	<ul> <li>Establishment of outdoor signage for publicity of Value chain commodity aggregation centers.</li> <li>Enhanced private sector engagement on market information dissemination.</li> <li>Better matching and packaging of tailor-made training content to meet service provider and VCAs capacity needs.</li> <li>More emphasis on dissemination of innovations and technology for improved adoption.</li> </ul>	
2.	Capacity Needs Assessment Report	1	1 (100%)	<ul> <li>Packaging of relevant content for capacity needs of the CASSCOM members.</li> </ul>	
3.	Entrepreneurial Strategy	1	1 (100%)	<ul> <li>Collating lessons learnt, best practices for dissemination.</li> <li>Developing a monitoring system for tracking key performance indicators for transitioning VCAs</li> </ul>	
4.	Gender and Social Inclusion Strategy	1	1 (100%)	<ul> <li>Accelerating participation of Youth and Women in Value chain development through intensive dissemination of relevant information targeting women and youths.</li> </ul>	
5.	Innovations Concepts	143	143 (100%)	i. Development of outdoor signage for innovations centers with EU and SIDA donors logos	

 Table 28. Achievements on planned thematic reports

S.No	Performance Monitoring Reports	Planned	Achieved	Key Message
1	Monthly- NPS	60	48 (80%)	Activity planning, progress, and monitoring of implementation
2	Monthly- CPS	2820	2256 (80%)	Administrative planning purposes on programme implementation
3	Quarterly- NPS	20	16 (80%)	Presentation on programme progress implementation
4	Quarterly- CPS	940	752 (80%)	Approved by CASSCOM and guides the sector on key achievements on implementation and gives recommendations on action planning
5	Semi-annual- NPS	10	8 (80%)	CPS reports consolidated at National level for sharing and approval by JASSCOM. Shared with Embassy for guidance and auctioning
6	Semi-annual- CPS	470	376 (80%)	
7	Annual -NPS	5	4 (80%)	Key issues from the CPS are picked and consolidated into national report for sharing with JASSCOM and Embassy. Provides strategic areas for action planning.
8	Annual -CPS	235	188 (80%)	
		4560	3648 (AV. 80%)	

 Table 29. Achievements on performance monitoring reports

### **Reporting and Feedback Timelines**

The study went further to assess the reporting timelines and feedback mechanism. It was noted that reporting agreement articles was adhered to fully and that there was well structured feedback mechanism with steering committees approving the reports before sharing with stakeholders and sharing the reports internally through organized monitoring workshops with implementers and stakeholders. It was however noted that semi and annual progress reports were not shared as required in time by various coordinating units. Where such cases were found, it was established that the reporting authority informed the recipients of the anticipated delays.

### **Dissemination and Visibility**

The study assessed the dissemination and visibility plan of the programme and noted that the programme has developed an effective Knowledge Management Communication strategy (KMC) that acts as a means through which stakeholders create and share information on programme implementation in order to achieve its purpose. It has a comprehensive audience analysis that entail understanding different audience needs and corresponding right communication channels for information dissemination.

It was noted that there was an achievement of 80 % on the planned participation and convening of 10 national key events and 20 county-based events for dissemination and visibility (10 exhibitions, 10 field days, value chain-based forums and 4 Intergovernmental forums in Agriculture (IGF). It was further noted that the programme has developed innovative strategic communication channels such as programme website, WhatsApp thematic groups, Facebook platforms, Twitter accounts, print media, IEC materials, county specific outdoor signage, print media and branding of programme asset has made stakeholders
and VCAs improve engagement with the programme. Website, Tweeter and Facebook google analytics shows increased improved visibility of the programme has created increased partnership with other stakeholders, figure 20.



Figure 15 Communication by VCAs and stakeholders through programme tweeter accounts

Figure 20 represents the tweets google analysis on the communication by VCAs and stakeholders on through programme tweet accounts. This shows improved information sharing through the social media communication channels.

### 3.7 FINANCIAL AND ASSET MANAGEMENT

This section covers the funds sources, cumulative disbursements, cumulative expenditure, available balances and financial management reporting mechanisms relating to the programme during the report period

### 3.7.1 Budgetary source and allocation

The assessment of budgetary sources and allocation noted that the total overall programme budget for five years is MKES. 5,692<sup>31</sup> comprising of MKES 3,600 (300 MSEK and 5.5M Euros) and from the Government of Sweden and EU, and MKES 2,092 in cash from the Government of Kenya, table 30. The contribution from the European Union is channeled through the Government of Sweden.

<sup>&</sup>lt;sup>31</sup> Specific Agreement between GOK and GOS on ASDSP II

FY	SIDA Donor ( KES)	National Contributions (KES	County Contributions (KES)	Total (KES)
2017/2018	720,000,000	160,000,000	258,500,000	1,138,500,000
2018/2019	720,000,000	160,000,000	258,500,000	1,138,500,000
2019/2020	720,000,000	160,000,000	258,500,000	1,138,500,000
2020/2021	720,000,000	160,000,000	258,500,000	1,138,500,000
2021/2022	720,000,000	160,000,000	258,500,000	1,138,500,000
Total	3,600,000,000	800,000,000	1,292,500,000	5,692,500,000

Table 30. Planned sources of programme funds (KES))

### Contributions of funds to date

The assessment noted that the Government of Sweden has disbursed KES 3,499,090,578 to the Central Bank Account, out of which KES 2,642,145,380 has been disbursed to the implementation stations (NPS and 47 counties) programme. The balance of 856,945,198 is still held at the Central Bank to await counterpart disbursements in conformity with specific agreement, table 31.

The Ministry of Agriculture, Livestock, Fisheries and Cooperatives has Contributed 70% (KES 562, 158, 243,) out of agreed commitments (KES 800,000,000). The balances of KES 237,841,757 have been budgeted for, i.e. KES 124,500, 000 will be provided in  $2^{Nd}$  Half of FY 2021/2022 and expect the balance of KES 113,341,757 to be provided for in budget estimates FY 2022/2023.

The County Government had contributed 67% (KES 869,535,803) out of the agreed amount (KES 1, 292,500,000). The balances of KES 422,964,197 are expected to be provided for in the  $2^{Nd}$  Half of FY 2021/2022 and in the budget estimates FY 2022/2023.

Government of Sweden and EU has contributed 97% (KES 3,499,090,578) out of the agreed amount of KES 3,600,000,000. The balance of KES 100,909,422 will be provided by 1<sup>st</sup> half of FY 2022/23 to be provided for in budget estimate for FY 2022/23.

FY/budget source	Sida/EU *****	National	Counties	Overall budget contribution
2017/2018	811,456,788	5,407,093	8,000,000	824,863,881
2018/2019	265,692,162	90,200,000	297,766,153	653,658,315
2019/2020	1,009,855,434	228,051,150	276,064,660	1,513,971,244
2020/2021	931,997,196	114,000,000	224,454,990	1,270,452,186
2021/2022	480,088,998	124,500,000	63,250,000	667,838,998
Total	3,499,090,578	562,158,243	869,535,803	4,930,784,624

Table 31. Contribution of funs by Agreement Parties (KES)

Note: \*\*\*\*\*Sida/EU amount is converted at KES 114 per Euro (30,693,777\*114)

### 3.7.2 Funds disbursement

The Government of Sweden and the national government has disbursed funds as per the table 32.

Table 32. Funds disbursements to implementing units from Sida, MOALFC and 47 CGs (MKES)

implementing						Total
Units/FY	2017/018	2018/019	2019/020	2020/021	2021/022	(Cumulative)
Donor (NPS) ****	100	210	610	183	93	1,196
GOK ( NPS) ****	5	90	40	20	10	165
Total (Cumulative)	105	300	650	203	103	1,361
Counties ****	8	298	276	224	63	869
Total disbursements						
((Sida, National &						
Counties)	113	598	926	427	166	2,230

Table 33.	Shows the	number of	times and a	mount co	ntributed	against r	blanned	number of	disbursements

FY	Expected (no)	Contributed (Nos)	Amount contributed (KES) Million
2017/2018	47	2	8
2018/2019	47	43	298
2019/2020	47	41	276
2020/2021	47	36	224
2021/2022	47	7	63
Total			869

### Programme Fund expenditure

This represents the expenditures from the funds disbursed to the implementing units, table 34.

						Total
Unit/FY	2017/018	2018/019	2019/020	2020/021	2021/022	Cumulative
Donor ( NPS)	62	258	480	196	149	1,145
Nationa I ( NPS)	5	29	88	32	11	165
Total	67	287	568	228	160	1,310
Countie s	3	189	318	760	645	1,915
Grand						
Total	70	476	886	988	805	3,225

Table 34. Expenditure at NPS and 47 Counties (MKES)

Figure 16. Result area expenditures (MKES)



### Balance of unspent funds

There is total balance of approx. 813 MKES held by National Programme Secretariat and the Counties and KES 857 MKES held at the Central Bank arising from cumulative carryovers from the previous years and current year. The balances can be traced to the County and National Programme accounts and the programme account at the Central Bank of Kenya (CBK), table 35.

Accounts /balances	Amount in MKES)
CBK (EUROS)	857( 8.4 MN Euros)
Programme commercial accounts (donor)	51.6
Programme commercial accounts (GoK)	2.4
County accounts	759
Total	1,671

Table 35. Balance of unspent funds at different accounts

### 3.7.3 Financial reporting

The study assessed the processes of financial reporting by all implementing stations and noted that all requirements were adhered to and in conformity with public financial management act of 2012 and 2015 and the specific agreement on ASDSP II. The following reports were prepared and submitted timely and in the format agreed upon;

**i) Statement of Expenditure (SoEs):** The Implementing units shall be required to prepare and submit monthly statement of expenditure not later than 5<sup>th</sup> day of the subsequent month following the end of the month under review. Assessment noted that although there were some stations that did not present by 5<sup>th</sup> of every month, the requirement 100% achieved

**ii) Annual Financial Reports:** The report represents all the activities and all the financial transaction. All the implementing stations are required to prepare annual financial reports and presented to the Office of Auditor as required by Law every year. As with statement of expenditures, there were delays in the submission but despite this, the requirement was 100% achieved.

Auditing /Funds Accountability: The study did review the audit process to confirm whether it was undertaken in accordance with the specific agreement as well as in accordance to international standards on audits. The assessment confirmed that all the three audit processes were carried out according to agreement and in conformity to international standards of audit.

The assessment noted that there was an achievement of 25% on planned audit missions as shown in table 36. This underachievement is explained by inadequate funds and staff at the Ministry to facilitate the activity and the effect of Ministry of health and Covid 19 related Protocols

System	Auditors	Frequency	Total ( Programme Period)	Achieved
Internal audit	MoALFC(auditing unit) (Ministry)	Quarterly	20	3(15%)
	County government auditing unit	Quarterly	20	4(20%)
Rolling Audit	PWC	Semi Annual	5	4(80%)
External Annual Audit	PWC	Annual	5	4(80%)
External Annual Audit	Office of the Auditor General	Annual	5	4(80%)

Table 36. Achievement on programme audit functions

### Noted challenges that affected financial management requirements

It was noted that some of the low achievements of the strategic targets in outcome objectives as well as the delayed achievements on intermediary impacts is associated with timely disbursements to implementation stations. This delayed disbursement is assessed to have been coursed by:

- Delayed start date that led to delayed in the implementation. For example, inception phase was delayed for almost a year with consequences on setting up the necessary structures for coordination such as County Agriculture Sector Steering Committees (CASSCOM) in some Counties.
- Delayed transfer of shared revenue by national government to the counties that
- Delayed transfer of funds from the County Revenue Fund (CRF) to the Programme designated Account (SPA) and to the operational Commercial Bank account. The counties were holding over 759 Million as at 31<sup>st</sup> March,2022
- Delayed release of counterpart funds that is triggers disbursement.
- Protocols put in place to manage the Covid19.

### **Recommendations and action taken**

Considering that the major challenge is associated with disbursements, there is need for the implementing stations to ensure they factor the balances of undisbursed funds to the 2022/23 budget estimates.

More targeted monitoring visits to counties that do not transfer programme funds to commercial account be taken in partnerships with representation from COG and where necessary with representation from treasury.

The Agreement Parties may consider extending the requirement of disbursement of counterpart funds before donor funds to second half of every plan period. This is to address the issue of delayed national revenue sharing to the counties associated with delayed disbursement of counterpart funds.

Implementing stations seek a no objection for a no cost extension for a period of one year to allow for lost time and to enable them utilize the balances to accomplish their set targets.

### 3.7.4 Programme assets and human resources

This section presents a summary of the programme assets and human resources that was availed to support the implementation of the programme at the national and county level and in accordance with specific agreement, the MOUs between MOALFC and 47 county governments on financial management and on assets and human resources.

### **Programme Assets**

At the end of ASDSP I, all programme assets were transferred to stations holding those assets and a transfer register endorsed by all implementing stations was shared with 47 counties and the NPS. Additional assets were bought during ASDSP II and the register has been updated and summarized as shown in table 37.

The assessment noted that the assets have been useful in the programme coordination activities and especially as regards mobility to reach various VCAs and implementation partners. The vehicles have also been shared with collaborators who were involved in various programme activities. There were noted cases where vehicles from other programs were used to support programme activities and vice versa. Although there were reported cases of some counties using programme vehicles outside intended purposes, remedial measures by management were taken in good time and programme activities were not affected

Communication assets including computers, printers, photocopiers and others, facilitated the efficiency of the programme and especially as regards programme performance reporting and communication and visibility as discussed under the section on monitoring and communication.

Some of the assets were found to be old and not efficient and the programme should make a more targeted analysis of these old asserts with a view to requesting for their replacement using available budget balances or seeking additional during anticipated extension period.

Description         Reservation         Than S Years Lifespan         Lifespan         Lifespan         Not working         Not working           1.         Laptop Computers         National         21         1.         Good         10         Maximum life span reached           Laptop Computers         County         219         -         -         123         96         Maximum life span reached           Computers         National         15         5         Good         10         Maximum life span reached           Desktop         National         15         5         Good         10         Maximum life span reached           Omputers         County         140         -         -         81         59         Maximum life span reached           Omputers         County         140         -         -         81         59         Maximum life span reached           Omputers         County         140         -         -         81         59         Maximum life           Omputers         County         140         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	S/No.	Item		Quantity	Less	Status	Above Five	e Years	Remarks
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Image: constraint of the symbol of the sym					5 Years		Working	Not	
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A.PhotocopiersNational221 - Serviceable 1 - FaultyPhotocopiersCounty2111 - Serviceable 1 - Faulty5.ScannersNational3Good condition1Faulty6.CameraNational1Good condition-8-6.CameraNational1Good condition6Good condition									(expensive to
4.PhotocopiersNational221 - Serviceable 1 - FaultyPhotocopiersCounty2111 - Serviceable 1 - Faulty5.ScannersNational3Good -11Faulty5.ScannersCounty8-8-Good condition6.CameraNational1Good Good condition									maintain)
Image: Second	4.	Photocopiers	National	2	-	-	2		1 – Serviceable
PhotocopiersCounty2111-Serviceable 1 - Faulty5.ScannersNational3Good condition1Faulty5.ScannersCounty8-8-6.CameraNational1Good condition6				-					1 - Faulty
Scanners     National     3     Good condition     1     Faulty       6.     Camera     National     1     Good condition     -     8     -     Good condition		Photocopiers	County	2	-	-	1	1	1 – Serviceable
Scanners     National     3     Good     1     Faulty       Scanners     County     8     -     8     -       6.     Camera     National     1     Good     -     -       0     Camera     National     1     Good     -     -		6	National	2		Casel	1		1 - Faulty
Scanners     County     8     -     8     -     Good condition       6.     Camera     National     1     Good     -     -     Good condition	5.	Scanners	National	3		GOOD	L		Faulty
6.     Camera     National     1     Good     -     8     -     Good condition			County	0		condition	0		Cood condition
6. Camera National I Good Good condition		Scanners	County	0		-	0	-	Good condition
	6.	Camera	National	1		GOOD	-	-	Good condition
Comoro County 20 10 10 10 001/ ono faulty		Comoro	County	20		condition	10	1	Only one faulty
Camera County 20 - 19 1 Only one rauity	_	Camera	County	20		-	19	1	Only one faulty
/ Motor National 11 - 11 2, Good	/	Wotor	National	11		-	11		2, GOOD
Venicies Condition		venicies							
o - Fairly III good									o - Fairly III good
									expensive to
									maintain
									1 – Grounded
Motor County 98 - 76 22 Eairly in good		Motor	County	98			76	22	Eairly in good
vehicles		vehicles	county	50		_	70	22	condition
9. Eurniture National Assorted Good Eairly in good	9.	Furniture	National	Assorted		Good			Fairly in good
	5.					condition			condition
		<b>5</b>	<u> </u>					A	
Furniture County Assorted - Assorted Assorted Fairly in good		Furniture	County	Assorted		-	Assorted	Assorted	rairiy in good

Table 37. Status of programme assets at national and 47 counties

#### **Human resources**

The implementing levels, the MOALFC and the 47 County Governments committed to provide adequate human resources for the implementation of the programme in accordance with an MOU between the two levels to deploy human resources who were implementing ASDSP I. A total of 429 staff were available for the programme implementation majority being at the county level where most of the activities take place. Through the program, induction was done for over 300 county program staffs and sensitization sessions held for all county leadership teams 47 of each (CECMs, COs, accounts clerks and auditors) on program operations.

The assessment noted that the MOU was adhered to by more than 90% of the implementing stations. The 10% not realized is explained by some counties not providing the required numbers of staff to the programme and inadequate office accommodation. Programme performance reports indicate that due to attrition through retirement, many counties had challenges in providing replacements and instead some of the specialists were taking responsibilities for two specialists as stop-gap. Table 38 shows the human resources availed to programme implementation at the time of the assessment.

Level	Staff by ger	Total	
National (Technical)	Male	Female	
	3	5	8
National (Administrative)	8	3	11
National Total	11	8	19
County (Technical)	149	75	224
County (Administrative)	107	79	186
County total	256	154	410
Grand total program staff	267	162	429

 Table 38. programme human resource and by gender

## CHAPTER FOUR: CONCLUSION AND RECOMMENDATIONS

This section presents and discusses conclusions and recommendations drawn from the findings of the assessment in almost all the assessed areas. Some of the conclusions and recommendations are from discussions among the writers of this report.

### 4.1 Conclusions

Overall, the study findings indicate a considerable achievement at output level objectives with most of the strategic targets achievements averaging over 60% in spite of the external and internal challenges faced during the period. There is also noted good achievement of outcome and purpose level objectives as measured by the specific indicators where incomes at purpose level has increased from KES 103 to KES 425 per person per day as demonstrated by the average increase in gross margin of the business across the value chains This is an indication that the programme implementation is in focus and shows it is an effective intervention to create changes among the value chain actors. There is also credible evidence that it is relevant to sector priorities evidenced by the level of commercialization of the priority value chains resulting in creating additional jobs and proving means for accessing food and nutrition for the targeted value chai actors.

The findings imply that there is a need to ensure more equitable service provision along the value chain nodes and also make efforts to ensure that the VCAs who do not access services are included in programme activities in future and especially the youth and women.

Technical solutions can only be effective when integrated with other interventions along the value chain. For example, improved on-farm storage will not ultimately lead to reductions in the produce loss if market prices do not provide profit gains from storage. Therefore, progress in reducing produce loss and waste will require an integrated value-chain approach.

VCAs are beginning to appreciate the importance of business planning as a tool for guiding and monitoring growth of an enterprise as shown by increase in the number of VCAs with viable business plans compared to the baseline. This progress though quite low can be attributed to ASDSP II trainings to the service providers and cross learning by service providers from their colleagues. The business approach is still weak especially at the producer node. This is demonstrated by low numbers of business plans developed and implemented by producers relative to the other node actors, consequently low gross margins and daily per capita incomes in some of the 29 priority value chains.

Key consultation, cooperation and coordination structures have been established and functional except for the umbrella civil society organization. There is however urgent need to enhance their capacities so that they operationalize their functions effectively. Towards this end, the gazettement of JASSCOM is in the right direction and this should be applied for CASSCOMs.

There is also a general low awareness of conducive policy instruments that affect commercialization of agriculture value chains among the service providers and the value chain actors.

The monitoring and evaluation and communication plan has been effective in informing corrective decision taking while at the same time providing information to relevant stakeholders on the progress

implementation but there is need to enhance the capacity of those responsible for M&E at the counties to improve on the implementation of the plan.

### 4.2 Recommendations

- Future training on entrepreneurship development among the SPs should target more of the private sector actors who are already with businesses within the PVCs to catalyze business plan development and to ensure sustainability of the gains made during the ASDSP II implementation. Implementing teams should work with VCAs in all the nodes in equal measures while embracing market systems approach.
- ii. The low gross margins and daily per capita incomes presented by some of the 29 priority value chains even after intervention by ASDSP II and investment by the VCAs should be acted upon. There may be a need to drop those priority value chains with low propensity to commercialization in future agricultural sector supported programmes with a commercialization objective.
- iii. The Programme to identify and establish partnerships with institutions promoting mentorship, coaching and incubation services to facilitate SPs as well as VCAs leverage on their services including funds to bridge the gaps on inadequate entrepreneurial skills by both the VCAs and the SPs. It is also important to target mind set change trainings would go a long way in reversing dearly held assumptions and beliefs.
- iv. More efforts be geared towards strengthening the VCAs to increase their marketable products by encouraging aggregation of suppliers and products and accessing additional market linkages/segments in the current programme and future sector support.
- v. Whereas capacity enhancement of VCAs to increase production has been successfully undertaken, productivity is still low among the VCAs across all nodes and VCs. The programme to review their training approaches and methods so this trend can be reversed and as recommended by the service provider study report. In addition, support additional innovations and technologies especially those related to climate smart agriculture.
- vi. Regarding access to market information, there is need to accelerate the development and implementation of a robust E-commerce framework through a multi sectoral to facilitate VCAs, and product users access expanded market.
- vii. The programme through its SP approach should target to improve youth participation in the programme activities by promotion of more youth friendly activities Further interventions are key among them enhanced provision of knowledge, skills and extension services, promotion of innovative technologies and market linkages.
- viii. The assessment has established that umbrella stakeholder organizations have not yet been established at the two levels of implementation and to assure better participation of stakeholder in policy development, programme to find ways on how this can be accomplished during the remaining programme period.
- ix. Whereas the established structures are functioning, there is need to enhance their capacities to operationalize with a view to ensuring effective sector consultation, their sustainability and sustainability of the programme results.
- x. The programme at both levels of implementation review the performance tracker and include indicators not already included and as established by this assessment. This to be accompanied by

further improving communication and visibility of programme results and best practices that others can use to improve their programme implementation.

xi. Considering that the programme implementation was delayed for various reasons as explained in previous sections, the programme management seek an extension of the programme period by preparing a concept for justification of extension with focus on key activities, budget and sources and period of extension.

## **5: ANNEXES**

# Annexes1: Post production losses in PVCs by age and sex

Value		Gender of VCA					
chain		Female Male				TOTAL	
	Post	18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years		
	production						
	losses						
ABEC	< 5%	100%	71%	100%	85%	75%	
	Between	0%	7%	0%	8%	7%	
	10 ≥15%						
	Between 5	0%	12%	0%	8%	11%	
	- 10 %						
	20 & above	0%	2%	0%	0%	2%	
	Not able to	0%	7%	0%	0%	5%	
	estimate						
_		100%	100%	100%	100%	100%	
Banana	< 5%	29%	40%	100%	39%	40%	
	20 & above	0%	2%	0%	8%	5%	
	Between	0%	8%	0%	8%	7%	
	10≥15%						
	Between 5	57%	40%	0%	34%	37%	
	- 10 %	09/	20/	00/	20/	20/	
		0%	2%	0%	3%	Ζ%	
	Between	1/1%	8%	0%	8%	8%	
	15 > 20%	1470	870	078	870	070	
	10 2 20/0	100%	100%	100%	100%	100%	
Beef	< 5%	67%	65%	100%	36%	49%	
	20 & above	0%	12%	0%	11%	10%	
	Between 5	33%	0%	0%	39%	24%	
	- 10 %						
	Between	0%	0%	0%	4%	2%	
	15 ≥ 20%						
	Between	0%	12%	0%	7%	8%	
	10 ≥15%						
	Not able to	0%	12%	0%	4%	6%	
	estimate						
		100%	100%	100%	100%	100%	
Broiler	< 5%	100%	83%	0%	33%	54%	
	20 & above	0%	17%	33%	0%	15%	
	Between	0%	0%	0%	33%	8%	
	15 ≥ 20%						
	Between 5	0%	0%	67%	33%	23%	
	– 10 %						
		100%	100%	100%	100%	100%	

Camel milk	Between 10≥15%	13%	14%	20%	13%	14%
	Between 15 ≥ 20%	0%	5%	0%	0%	3%
	< 5%	19%	22%	0%	20%	20%
	Between 5 - 10 %	63%	55%	80%	67%	60%
	Not able to estimate	6%	3%	0%	0%	3%
		100%	100%	100%	100%	100%
Cashew nuts	Between 10 ≥15%	0%	25%	0%	11%	11%
	< 5%	0%	5%	0%	40%	10%
	Between 15 ≥ 20%	0%	0%	0%	4%	4%
	Between 5 - 10 %	0%	38%	0%	54%	54%
		0%	100%	0%	100%	100%
Cassava	Between 10≥15%	0%	9%	0%	0%	5%
	< 5%	100%	73%	0%	88%	81%
	20 & above	0%	18%	0%	13%	14%
		100%	100%	0%	100%	100%
	Not able to estimate	0%	25%	0%	0%	6%
Cotton	Between 10≥15%	0%	0%	0%	30%	19%
	Between 15 ≥ 20%	100%	25%	0%	10%	19%
	Between 5 - 10 %	0%	50%	100%	60%	56%
		100%	100%	100%	100%	100%
Cow milk	< 5%	75%	82%	70%	80%	80%
	20 & above	0%	0%	0%	0%	0%
	Between 10 ≥15%	6%	1%	5%	2%	2%
	Between 15 ≥ 20%	3%	1%	0%	1%	1%
	Between 5 - 10 %	17%	12%	23%	13%	13%
	Not able to estimate	0%	3%	3%	3%	3%
		100%	100%	100%	100%	100%
Fish	< 5%	24%	49%	39%	50%	46%
	Between 10≥15%	33%	18%	21%	10%	16%
	Between 15 ≥ 20%	5%	0%	3%	5%	3%
	20 & above	5%	2%	0%	2%	2%

	Between 5 - 10 %	29%	22%	32%	28%	27%
	Not able to estimate	5%	9%	5%	5%	6%
		100%	100%	100%	100%	100%
Fr. Beans	< 5%	0%	0%	100%	50%	50%
	Between 5 - 10 %	0%	100%	0%	50%	50%
		0%	100%	100%	100%	100%
	< 5%	50%	21%	0%	42%	27%
	Between 10 ≥15%	0%	27%	100%	8%	23%
Green grams	Between 15 ≥ 20%	50%	3%	0%	17%	8%
	Between 5 - 10 %	0%	48%	0%	33%	42%
		100%	100%	100%	100%	100%
Ground	< 5%	0%	22%	0%	0%	13%
nuts	20 & above	0%	22%	0%	33%	25%
	Between 10 ≥15%	100%	11%	0%	17%	19%
	Between 15 ≥ 20%	0%	22%	0%	0%	13%
	Between 5 - 10 %	0%	22%	0%	50%	31%
		100%	100%	0%	100%	100%
Honey	< 5%	33%	36%	20%	29%	31%
	20 & above	17%	0%	0%	0%	3%
	Between 15 ≥ 20%	0%	0%	0%	7%	3%
	Between 5 - 10 %	33%	45%	40%	50%	44%
	Not able to estimate	17%	18%	40%	14%	19%
		100%	100%	100%	100%	100%
Indigenous	< 5%	60%	45%	55%	50%	49%
chicken	20 & above	0%	4%	0%	7%	4%
	Between 10≥15%	5%	8%	18%	7%	8%
	Between 15 ≥ 20%	7%	5%	0%	3%	4%
	Between 5 - 10 %	28%	31%	21%	28%	29%
	Not able to estimate	0%	7%	5%	6%	6%
		100%	100%	100%	100%	100%
Irish	20 & above	0%	0%	0%	3%	2%
potato	< 5%	67%	54%	0%	66%	60%
	Between	0%	8%	0%	16%	12%

	Between 15 ≥ 20%	0%	4%	0%	0%	2%
	Between 5 – 10 %	33%	29%	100%	16%	23%
	Not able to estimate	0%	4%	0%	0%	2%
		100%	100%	100%	100%	100%
Kales	Between 15 ≥ 20%	0%	6%	0%	17%	7%
	< 5%	33%	41%	33%	58%	44%
	Between 10≥15%	22%	0%	0%	8%	7%
	Between 5 - 10 %	33%	53%	67%	8%	37%
	Not able to estimate	11%	0%	0%	8%	5%
		100%	100%	100%	100%	100%
Local	< 5%	0%	33%	0%	38%	31%
vegetables	20 & above	67%	7%	0%	0%	12%
	Between 10 ≥15%	0%	13%	0%	13%	12%
	Between 15 ≥ 20%	0%	0%	0%	13%	4%
	Between 5 - 10 %	33%	47%	0%	38%	42%
		1000/				
		100%	100%	0%	100%	100%
	< 5%	<b>100%</b> 42%	<b>100%</b> 64%	<b>0%</b> 29%	<b>100%</b> 62%	<b>100%</b> 58%
	< 5% 20 & above	100%           42%           0%	100%           64%           2%	0% 29% 0%	100%           62%           0%	<b>100%</b> 58% 1%
Maize	< 5% 20 & above Between 10 ≥15%	100%           42%           0%           0%	100%           64%           2%           8%	0%           29%           0%           7%	100%           62%           0%           2%	100%           58%           1%           5%
Maize	< 5% 20 & above Between 10 ≥15% Between 5 - 10 %	100%       42%       0%       0%       50%	100%         64%         2%         8%         25%	0%           29%           0%           7%           57%	100%           62%           0%           2%           30%	100%           58%           1%           5%           32%
Maize	< 5% 20 & above Between $10 \ge 15\%$ Between 5 -10% Not able to estimate	100%       42%       0%       0%       50%       8%	100%         64%         2%         8%         25%         2%	0%           29%           0%           7%           57%           7%	100%           62%           0%           2%           30%           6%	100%           58%           1%           5%           32%           4%
Maize	< 5% 20 & above Between $10 \ge 15\%$ Between 5 -10% Not able to estimate	100%         42%         0%         0%         50%         8%         100%	100%         64%         2%         8%         25%         2%         100%	0%           29%           0%           7%           57%           7%           100%	100%         62%         0%         2%         30%         6%         100%	100%         58%         1%         5%         32%         4%         100%
Maize	< 5% 20 & above Between $10 \ge 15\%$ Between 5 -10% Not able to estimate < 5%	100%         42%         0%         0%         50%         8%         100%         40%	100%         64%         2%         8%         25%         2%         100%         64%	0%           29%           0%           7%           57%           7%           100%           50%	100%         62%         0%         2%         30%         6%         100%         31%	100%         58%         1%         5%         32%         4%         100%         46%
Maize	<pre>&lt; 5% 20 &amp; above Between 10 <math>\geq</math>15% Between 5 - 10 % Not able to estimate &lt; 20 &amp; above </pre>	100%         42%         0%         0%         50%         8%         100%         40%         0%	100%         64%         2%         8%         25%         2%         100%         64%         5%	0%           29%           0%           7%           57%           7%           100%           50%           7%	100%         62%         0%         2%         30%         6%         100%         31%         15%	100%         58%         1%         5%         32%         4%         100%         46%         8%
Maize	< 5% 20 & above Between $10 \ge 15\%$ Between 5 -10% Not able to estimate < 5% 20 & above Between $10 \ge 15\%$	100%         42%         0%         0%         50%         8%         100%         40%         0%         20%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%	0%           29%           0%           7%           57%           7%           50%           7%           7%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%	100%         58%         1%         5%         32%         4%         100%         46%         8%         8%
Maize	< 5% 20 & above Between 10 ≥15% Between 5 - 10 % Not able to estimate < 5% 20 & above Between 10 ≥15% Between 15 ≥ 20%	100%         42%         0%         0%         50%         8%         100%         40%         0%         20%         10%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%         5%	0%           29%           0%           7%           57%           7%           100%           50%           7%           7%           7%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%         0%	100%         58%         1%         5%         32%         4%         100%         46%         8%         4%
Maize	<pre>&lt; 5% 20 &amp; above Between 10 ≥15% Between 5 -10 % Not able to estimate &lt; 5% 20 &amp; above Between 10 ≥15% Between 15 ≥ 20% Between 5 -10 %</pre>	100%         42%         0%         0%         50%         8%         100%         40%         0%         20%         10%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%         5%         18%	0%           29%           0%           7%           57%           7%           100%           50%           7%           7%           14%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%         0%         23%	100%         58%         1%         5%         32%         4%         100%         46%         8%         4%         18%
Maize	<pre>&lt; 5% 20 &amp; above Between 10 ≥15% Between 5 - 10 % Not able to estimate </pre> <pre>&lt; 5% 20 &amp; above Between 10 ≥15% Between 15 ≥ 20% Between 5 - 10 % Not able to estimate </pre>	100%         42%         0%         0%         50%         8%         100%         20%         10%         20%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%         5%         18%         9%	0%           29%           0%           7%           57%           7%           100%           50%           7%           7%           14%           14%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%         0%         23%         19%	100%         58%         1%         5%         32%         4%         100%         46%         8%         4%         18%         15%
Maize	< 5% 20 & above Between $10 \ge 15\%$ Between 5 -10% Not able to estimate < 5% 20 & above Between $10 \ge 15\%$ Between $15 \ge 20\%$ Between 5 -10% Not able to estimate	100%         42%         0%         0%         50%         8%         100%         40%         0%         20%         10%         20%         100%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%         5%         18%         9%         100%	0%         29%         0%         7%         57%         7%         100%         50%         7%         14%         14%         100%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%         0%         23%         19%         100%	100%         58%         1%         5%         32%         4%         100%         4%         18%         15%         100%
Maize Maize Mango Mango	<pre>&lt; 5% 20 &amp; above Between 10 ≥15% Between 5 - 10 % Not able to estimate </pre> <pre>&lt; 5% 20 &amp; above Between 10 ≥15% Between 15 ≥ 20% Between 5 - 10 % Not able to estimate </pre> <pre>Between</pre> 10 ≥15%	100%         42%         0%         0%         50%         8%         100%         20%         10%         20%         10%         10%         10%         14%	100%         64%         2%         8%         25%         2%         100%         64%         5%         0%         18%         9%         100%         0%	0%         29%         0%         7%         57%         7%         100%         50%         7%         7%         14%         14%         0%         0%	100%         62%         0%         2%         30%         6%         100%         31%         15%         12%         0%         23%         19%         100%         47%	100%         58%         1%         5%         32%         4%         100%         46%         8%         4%         18%         15%         33%

	< 5%	43%	17%	20%	25%	26%
	Between 5	29%	83%	80%	19%	33%
	- 10 %	001	- 00/	001		40/
	Not able to	0%	0%	0%	0%	4%
	estimate	100%	100%	100%	100%	100%
Passion	Not able to	0%	0%	0%	8%	5%
fruit	estimate	• • •				
	< 5%	100%	40%	100%	69%	67%
	Between 10 ≥15%	0%	20%	0%	0%	5%
	Between 5	0%	40%	0%	23%	24%
	10 /0	100%	100%	100%	100%	100%
Pyrethrum	< 5%	0%	33%	50%	50%	40%
,	Between 5 - 10 %	0%	67%	50%	50%	60%
		0%	100%	100%	100%	100%
Rice	< 5%	0%	100%	0%	50%	67%
	Between 5 – 10 %	0%	0%	0%	50%	33%
		0%	100%	0%	100%	100%
Shoats	< 5%	0%	100%	0%	67%	80%
	Between 5 - 10 %	0%	0%	0%	33%	20%
		0%	100%	0%	100%	100%
Sorghum	< 5%	67%	37%	50%	40%	41%
	20 & above	0%	3%	0%	10%	4%
	Between 10 ≥15%	0%	20%	0%	10%	14%
	Between 15 ≥ 20%	33%	7%	0%	0%	6%
	Between 5 – 10 %	0%	27%	50%	40%	31%
	Not able to	0%	7%	0%	0%	4%
		100%	100%	100%	100%	100%
Sweet	< 5%	0%	50%	75%	50%	53%
potato	20 & above	0%	50%	0%	0%	7%
	Between 10 ≥15%	0%	0%	0%	13%	7%
	Between 5 - 10 %	100%	0%	25%	38%	33%
		100%	100%	100%	100%	100%
Tomato	< 5%	8%	24%	60%	28%	26%
	20 & above	0%	5%	0%	7%	5%
	Between 10≥15%	25%	22%	20%	21%	22%
	Between 15 ≥ 20%	0%	8%	0%	14%	9%

	Between 5	67%	41%	20%	30%	38%
	- 10 %					
Water		100%	100%	100%	100%	100%
melon	< 5%	0%	13%	0%	40%	23%
	Between 5 - 10 %	100%	88%	100%	60%	77%
		100%	100%	100%	100%	100%

### II. Post Production losses by Node

		VALUE CHAIN NODES					
		Agro Input supply	Production	Trade	Transport	Processing	Total
ABEC	< 5%	0%	78%	100%	67%	33%	75%
	Between 5 – 10 %	0%	10%	0%	0%	33%	11%
	Between 10 ≥15%	0%	4%	0%	33%	33%	7%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	2%	0%	0%	0%	2%
	Not able to estimate	0%	6%	0%	0%	0%	5%
	Total	0%	100%	100%	100%	100%	100%
Banana	< 5%	100%	38%	22%	100%	25%	40%
	Between 5 – 10 %	0%	40%	44%	0%	25%	37%
	Between 10 ≥15%	0%	7%	11%	0%	25%	7%
	Between 15 ≥ 20%	0%	9%	0%	0%	25%	8%
	20 & above	0%	5%	11%	0%	0%	5%
	Not able to estimate	0%	2%	11%	0%	0%	2%
	Total	100%	100%	100%	100%	100%	100%
Beef	< 5%	50%	25%	25%	100%	25%	33%
	Between 5 – 10 %	0%	25%	25%	0%	25%	20%
	Between 10 ≥15%	50%	0%	0%	0%	0%	7%
	Between 15 ≥ 20%	0%	25%	0%	0%	25%	13%
	20 & above	0%	25%	25%	0%	25%	20%
	Not able to estimate	0%	0%	25%	0%	0%	7%
	Total	100%	100%	100%	100%	100%	100%
Broiler	< 5%	0%	58%	0%	0%	0%	54%
	Between 5 – 10 %	0%	17%	100%	0%	0%	23%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	8%	0%	0%	0%	8%
	20 & above	0%	17%	0%	0%	0%	15%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	100%	0%	0%	100%
Camel Milk	< 5%	0%	17%	25%	33%	50%	27%
	Between 5 – 10 %	0%	17%	25%	33%	0%	20%
	Between 10 ≥15%	0%	17%	25%	33%	0%	20%

	Between 15 ≥ 20%	0%	17%	25%	0%	50%	20%
	20 & above	0%	17%	0%	0%	0%	7%
	Not able to estimate	0%	17%	0%	0%	0%	7%
	Total	0%	100%	100%	100%	100%	100%
Cashew nuts	< 5%	0%	25%	100%	100%	100%	57%
	Between 5 – 10 %	0%	25%	0%	0%	0%	14%
	Between 10 ≥15%	0%	25%	0%	0%	0%	14%
	Between 15 ≥ 20%	0%	25%	0%	0%	0%	14%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	100%	100%	100%	100%
Cassava	< 5%	0%	94%	0%	0%	0%	81%
	Between 5 – 10 %	0%	0%	0%	0%	0%	0%
	Between 10 ≥15%	0%	0%	0%	0%	33%	5%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	6%	0%	0%	67%	14%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	0%	0%	100%	100%
Cotton	< 5%	0%	0%	0%	0%	0%	0%
	Between 5 – 10 %	0%	60%	0%	0%	0%	56%
	Between 10 ≥15%	0%	20%	0%	0%	0%	19%
	Between 15 ≥ 20%	0%	20%	0%	0%	0%	19%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	100%	6%
	Total	0%	100%	0%	0%	100%	100%
Cow milk	< 5%	33%	17%	20%	25%	33%	24%
	Between 5 – 10 %	33%	17%	20%	25%	33%	24%
	Between 10 ≥15%	0%	17%	20%	25%	0%	14%
	Between 15 ≥ 20%	0%	17%	20%	0%	33%	14%
	20 & above	0%	17%	0%	0%	0%	5%
	Not able to estimate	33%	17%	20%	25%	0%	19%
	Total	100%	100%	100%	100%	100%	100%
Fish	< 5%	83%	42%	48%	22%	55%	46%
	Between 5 – 10 %	17%	24%	26%	56%	36%	26%
	Between 10 ≥15%	0%	16%	18%	22%	9%	16%
	Between 15 ≥ 20%	0%	6%	1%	0%	0%	3%
	20 & above	0%	3%	1%	0%	0%	2%
	Not able to estimate	0%	8%	5%	0%	0%	6%
	Total	100%	100%	100%	100%	100%	100%
French	< 5%	100%	0%	100%	0%	0%	50%
beans	Between 5 – 10 %	0%	100%	0%	0%	0%	50%

	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	0%	0%	100%
Green grams	< 5%	0%	25%	0%	0%	0%	17%
	Between 5 – 10 %	17%	25%	100%	0%	0%	50%
	Between 10 ≥15%	0%	25%	0%	0%	0%	17%
	Between 15 ≥ 20%	0%	25%	0%	0%	0%	17%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	0%	0%	100%
Ground nuts	< 5%	0%	20%	0%	0%	0%	13%
	Between 5 – 10 %	100%	20%	50%	0%	0%	38%
	Between 10 ≥15%	0%	20%	0%	0%	0%	13%
	Between 15 ≥ 20%	0%	20%	0%	0%	0%	13%
	20 & above	0%	20%	50%	0%	0%	25%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	0%	0%	100%
Honey	< 5%	0%	20%	33%	100%	33%	31%
	Between 5 – 10 %	100%	20%	33%	0%	33%	31%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	20%	0%	0%	0%	8%
	20 & above	0%	20%	0%	0%	0%	8%
	Not able to estimate	0%	20%	33%	0%	33%	23%
	Total	100%	100%	100%	100%	100%	100%
Indigenous	< 5%	20%	17%	20%	33%	33%	23%
Chicken	Between 5 – 10 %	20%	17%	20%	33%	33%	23%
	Between 10 ≥15%	0%	17%	20%	0%	0%	9%
	Between 15 ≥ 20%	20%	17%	0%	0%	0%	9%
	20 & above	20%	17%	20%	0%	33%	18%
	Not able to estimate	20%	17%	20%	33%	0%	18%
	Total	100%	100%	100%	100%	100%	100%
Irish Potato	< 5%	50%	79%	67%	0%	0%	76%
	Between 5 – 10 %	0%	13%	0%	0%	100%	13%
	Between 10 ≥15%	0%	3%	33%	0%	0%	4%
	Between 15 ≥ 20%	0%	3%	0%	0%	0%	2%
	20 & above	50%	0%	0%	0%	0%	2%
	Not able to estimate	0%	3%	0%	0%	0%	2%
	Total	100%	100%	100%	0%	100%	100%

Kales	< 5%	0%	53%	0%	0%	0%	44%
	Between 5 – 10 %	0%	32%	57%	0%	0%	37%
	Between 10 ≥15%	0%	6%	14%	0%	0%	7%
	Between 15 ≥ 20%	0%	3%	29%	0%	0%	7%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	6%	0%	0%	0%	5%
	Total	0%	100%	100%	0%	0%	100%
Local	< 5%	0%	29%	50%	0%	0%	31%
Vegetables	Between 5 – 10 %	0%	42%	50%	0%	0%	42%
	Between 10 ≥15%	0%	13%	0%	0%	0%	12%
	Between 15 ≥ 20%	0%	4%	0%	0%	0%	4%
	20 & above	0%	13%	0%	0%	0%	12%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	100%	0%	0%	100%
Maize	< 5%	50%	61%	46%	0%	33%	58%
	Between 5 – 10 %	50%	30%	38%	33%	67%	32%
	Between 10 ≥15%	0%	4%	15%	33%	0%	5%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	1%	0%	0%	0%	1%
	Not able to estimate	0%	4%	0%	33%	0%	4%
	Total	100%	100%	100%	100%	100%	100%
Mangoes	< 5%	40%	41%	56%	0%	62%	46%
	Between 5 – 10 %	40%	11%	33%	0%	8%	17%
	Between 10 ≥15%	0%	11%	0%	0%	15%	9%
	Between 15 ≥ 20%	0%	3%	11%	0%	8%	4%
	20 & above	0%	14%	0%	0%	8%	9%
	Not able to estimate	20%	22%	0%	0%	0%	14%
	Total	100%	100%	100%	0%	100%	100%
Meat goat	< 5%	0%	20%	33%	0%	0%	25%
	Between 5 – 10 %	0%	20%	33%	0%	0%	25%
	Between 10 ≥15%	0%	20%	33%	0%	0%	25%
	Between 15 ≥ 20%	0%	20%	0%	0%	0%	13%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	20%	0%	0%	0%	13%
	Total	0%	100%	100%	0%	0%	100%
Passion fruit	< 5%	100%	33%	0%	0%	50%	50%
	Between 5 – 10 %	0%	33%	0%	0%	0%	17%
	Between 10 ≥15%	0%	33%	0%	0%	0%	17%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	50%	17%

	Total	100%	100%	0%	0%	100%	100%
Pyrethrum	< 5%	0%	40%	0%	0%	0%	40%
	Between 5 – 10 %	0%	60%	0%	0%	0%	60%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	0%	0%	0%	100%
Rice	< 5%	0%	67%	0%	0%	0%	67%
	Between 5 – 10 %	0%	33%	0%	0%	0%	33%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	0%	0%	0%	100%
Sheep and	< 5%	0%	100%	100%	0%	0%	100%
goat	Between 5 – 10 %	0%	0%	0%	0%	0%	0%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	0%	100%	100%	0%	0%	100%
Sorghum	< 5%	0%	17%	100%	0%	100%	38%
	Between 5 – 10 %	0%	17%	0%	0%	0%	13%
	Between 10 ≥15%	0%	17%	0%	0%	0%	13%
	Between 15 ≥ 20%	0%	17%	0%	0%	0%	13%
	20 & above	0%	17%	0%	0%	0%	13%
	Not able to estimate	0%	17%	0%	0%	0%	13%
	Total	0%	100%	100%	0%	100%	100%
Sweet	< 5%	100%	54%	0%	0%	0%	53%
ροιαιο	Between 5 – 10 %	0%	31%	100%	0%	0%	33%
	Between 10 ≥15%	0%	8%	0%	0%	0%	7%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	8%	0%	0%	0%	7%
	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	0%	0%	100%
Tomato	< 5%	50%	25%	21%	0%	0%	26%
	Between 5 – 10 %	33%	37%	50%	0%	0%	38%
	Between 10 ≥15%	17%	20%	29%	100%	0%	22%
	Between 15 ≥ 20%	0%	12%	0%	0%	0%	9%
	20 & above	0%	7%	0%	0%	0%	5%

	Not able to estimate	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	0%	100%
Water melon	< 5%	0%	10%	33%	0%	0%	23%
	Between 5 – 10 %	0%	90%	67%	0%	0%	77%
	Between 10 ≥15%	0%	0%	0%	0%	0%	0%
	Between 15 ≥ 20%	0%	0%	0%	0%	0%	0%
	20 & above	0%	0%	0%	0%	0%	0%
	Not able to estimate	0%	0%	0%		0%	0%
	Total	0%	100%	100%	0%	0%	100%

		Female		Male			
Nodes		18 – 35 Years	Above 35 Years	18 – 35 Years	Above 35 Years	Totals	% subsector satisfaction with policy instruments at Node levels
Production	Crops	76	499	69	468	1112	29
	Livestock	89	630	80	632	1431	38
	Fisheries	5	31	26	99	161	4
	Cooperatives	9	127	16	129	281	7
	Others (specify)	12	114	8	88	222	6
Trade	Crops	7	35	11	34	87	2
	Livestock	13	48	17	83	161	4
	Fisheries	15	32	11	30	88	2
	Cooperatives	2	14	1	16	33	1
	Others (specify)	5	13	1	8	27	1
Processing	Crops	8	15	6	6	35	1
	Livestock	9	15	2	18	44	1
	Fisheries	2	3	2	3	10	0
	Cooperatives	2	6	2	4	14	0
	Others (specify)	1	5	0	4	10	0
Transport	Crops	0	8	4	7	19	1
	Livestock	2	4	2	18	26	1
	Fisheries	0	1	3	3	7	0
	Cooperatives	0	0	0	3	3	0
	Others (specify)	0	0	3	7	10	0
						3781	

## Annex 2: Policy instrument satisfaction levels of VCAs

## Annex 3: Summary of status of Policies, regulations, plans and strategies

## Fisheries and Blue economy status

Policy/plan/regulation/acts	status
Kenya fish marketing strategy	Awaiting national validation.
The fisheries management and development (fish	Awaiting national validation and RIA.
levy trust fund) regulations ,2022	
Fish levy order 2021	Awaiting national validation.
National plan of action to prevent, deter and	Undergoing county stakeholder consultations
eliminate illegal, unregulated and unreported fishing	
Draft lake Turkana fisheries management plan	Awaiting county stakeholder consultations
Draft national aquaculture regulations	Awaiting SWAG-PLS and RIA process.
Draft national aquaculture guidelines	Awaiting SWAG-PLS process.
Draft national aquaculture strategy and county	Awaiting SWAG-PLS process.
implementation framework	

The fisheries management and development (marine	Refer to No. 17
fisheries access) regulations 2020	
The national oceans and fisheries policy	Awaiting CECM Caucus and national validation.
Fisheries Management and Development (Safety and	Awaiting RIA
Quality) Regulations 2021	
Fisheries Act CAP 378 (Revised) 2012	Repealed by Fisheries management and Development Act 2016
Lobster Fishery management plan, 2012	Awaiting RIA
Fisheries (Foreign Fishing Craft) Regulations, 1991	Under review
Fisheries (Prohibitions) Regulations, 2003	Under review
Fisheries (Safety of Fish, Fishery Products and Fish	Under review
Feed) Regulations, 2007	
Fisheries management and development (marine	Undergoing Public participation
fisheries access) regulations 2020	
Development of Marine Spatial Plan	Under drafting
National Aquaculture Strategy and Development	Awaiting SWAG-PLS process.
Plan, 2010	
Blue Economy Strategy	Under drafting
Tuna Fishery Development Strategy	Awaiting review, in existence since 2013
National aquaculture strategy	In existence since 2011

### **Cooperative sub-sector Policies Status**

Reform/ Strategy	Status 12 <sup>th</sup> April 2022)		
Draft Cooperatives Bill 2022	<ul> <li>The Bill was successfully presented to legal committee of NDITC.</li> </ul>		
	• The legal committee adopted the Bill for presentation to the full committee and transmission		
	to the Cabinet.		
	The Bill has been forwarded to AG for concurrency.		
Draft Kenya Society of	ciety of • The draft bill is now being scrutinized by SDC before being subjected to stakeholders'		
Professional Cooperators Bill	participation		
2021			
Specified Non-Deposit Taking	<ul> <li>The regulations are now under implementation by SASRA</li> </ul>		
Business Regulations 2020			
Draft Sacco Societies	• The Draft Bill was approved by the Cabinet and forwarded to Parliament for further action.		
(amendment) Bill 2020	• Sacco Shared services cooperative registration documentation was received by the		
	Commissioner and soon a certificate of registration will be issued		

Institutional Reforms: Reforms	• Modernization of Luanda Cotton Cooperative Union Ginnery in Busia County has been					
in Cotton subsector	successfully completed.					
	The project is now ready for handing over					
Coffee Farm Input Subsidy	• This programme is being implemented under New Kenya Planters Cooperative Union Limited					
Programme	(New KPCU)					
	<ul> <li>The Programme was allocated with Ksh. 2 billion by the Government</li> </ul>					
	• New KPCU has sensitized or coffee growing counties apart from Trans Nzoia, Bungoma, Taita					
	Taveta and Baringo.					
	These four counties will be sensitized before the end of this financial year					
	• The rolling out of the programme has started with a number of farmers benefiting from the					
	subsidy					
	beneficiates have been sensitized and the programme implementation has commenced.					
Modernization of Kenya	• KNTC is mandated by the government to mitigate against post-harvest losses through					
National Trading Corporation	mopping of farmers' excess produce, provision of warehousing and market access					
	• In 2021/2022, KNTC was allocated Ksh. 25 million to modernize its warehouses that are					
(KNTC)warehouses	situated in various counties. The project entails removal of the asbestos roof and replacing					
	with iron sheets, and installation of cyclones					
	<ul> <li>So far warehouses in Nairobi, Kisumu and Nakuru have been rehabilitated</li> </ul>					
Public Transport Reforms	In support of reforms in boda boda public transport sector, the State Department: -					
(Boda boda Public Transport	• Issued a circular to all County Directors for Cooperatives on registration and operations of					
	Boda Transport Cooperatives					
Cooperatives)	• Formulated and disseminated model by laws for adoption by the proposed Boda Transport					
	Cooperatives					

## Livestock sub-sector policy instruments status

Pol	icy Instrument	Status	Remarks		
Pol	Policies				
1.	Agriculture Policy	Finalized	Presented to Cabinet		
2.	Sessional Paper No. 3 of 2020 on Livestock Policy	Finalized & approved	Requires development of implementation plan, dissemination		
3.	Sessional Paper No. 2 of 2020 on Veterinary policy	Finalized & Approved	Requires development of implementation plan		
4.	Agriculture Insurance Policy	Draft policy in place	To be forwarded to Cabinet for discussion and approval		
5.	Livestock Breeding Policy	Experts draft developed	To be converted into strategy (Recommended)		
6.	Livestock Feeds Policy	Experts draft developed	To be converted into strategy (Recommended)		
7.	Dairy Policy Dairy strategy under development	Expert Draft Developed	To be converted into strategy (Recommended)		
8.	Apiculture Policy	Expert drafts developed	To be converted into strategy (Recommended)		
9.	Camel Policy	Expert draft developed	To be converted into strategy Consult Range division		
10.	Poultry policy	Expert Draft developed	To be converted into strategy (Recommended)		
Bill	s & Regulations				
1.	Livestock Bill, 2020	Finalized and sent to parliament	In abeyance for further consultations by parliament		
2.	Animal Health Bill	Validated and sent to Attorney general	Undergoing minor alterations as advised by AG before submission to cabinet		
3.	Veterinary Public Health Bill	Validated and sent to Attorney general	Undergoing minor alterations as advised by AG		
4.	Animal Protection and Welfare Bill	Validated and sent to Attorney general	Undergoing minor alterations as advised by AG		
5.	Animal Production Professionals Bill	Draft Bill in place	Awaiting stakeholder consultations		
6.	Dairy Industry Regulations	Finalized, validated and consented by parliament	Launched and ready for implementation		
7.	Livestock identification and Traceability Regulations	Finalized, validated	Undergoing final editing by legal experts		
8.	Feeds Regulations	Zero draft developed	Final Expert draft to be taken to stakeholder consultation		
9.	Breeding Regulations	Zero draft developed	Final Expert draft to be taken to stakeholder consultation		
10.	Beekeeping Regulations	Zero draft developed	Final Expert draft to be taken to stakeholder consultation		
11.	Livestock Marketing Regulations	Zero draft developed	Final Expert draft to be taken to stakeholder consultation		
12.	Animal Diseases Act, Cap 364	Being repealed	Drafted into animal Health Bill		
13.	Meat Control Act, Cap 356	Being repealed	Drafted into veterinary public Health Bill		
14.	Rabies Act, Cap 365	Being repealed	Drafted into Animal Health Bill		

Policy Instrument	Status	Remarks
15. Veterinary Surgeons and Veterinary Para- professional Act, Number 29 of 2011	An Act of parliament	Implementation on-going
16. Branding of Stock Act, Cap 357	Being repealed	Drafted into Animal Health Bill
17. Stock and Produce theft, Cap 355	Being repealed	Drafted into Animal Health Bill
18. Prevention of Cruelty to Animals Act, Cap 360	Being repealed	Drafted in Animal protection and Welfare Bill
19. Cattle Cleansing Act , Cap 358	Being repealed	Drafted into Animal Health Bill
20. Hides , Skins and Leather Industry Act, Cap 359	An Act of parliament	Implementation on-going
21. Kenya Meat Commission Act, Cap 363	An Act of parliament	Implementation on-going
22. Dairy Industry Act, Cap 336	Under review	Stakeholder consultation on-going
23. Uplands Bacon Factory Act, Cap 362	An Act of parliament	Implementation on-going
Other Acts that apply to livestock		
24. Public Health Act, Cap 242		Aspects of livestock being consolidated into VPH Bill
25. Food Drugs and Chemicals Act Cap 254		
26. Pharmacy and poisons Act Cap 244		
27. Fertilizer and Animal Foodstuff Act, Cap 345	Undergoing review for amendments'	
28. Narcotics Drugs and Psychotropic Substances Control Act Cap 245	Being implemented	
29. Pest Control Products Act, Cap 346	Being implemented	
30. Standards Act Cap 496	Being implemented	
31. Fisheries Act Cap 378	Being implemented	
32. Wildlife Conservation and Management Act Cap 2013	Being implemented	
33. Customs and Exercise Act Cap 472	Being implemented	
34. Bio-Safety Act Number 2 of 2009	Being implemented	
35. Witchcraft Act Cap 67	Being implemented	
Strategies & Plans		
1. Strategic Plan of state Department for Livestock 2018-2022	Developed	Requires review for 2023- 20 2028
2. Livestock Masterplan	Development on-going	
3. Communication Strategy for State Department for Livestock	Draft in place	
4. Dairy Masterplan	Review of Plan undergoing	
5. Leather Development Strategy	Finalized	Being implemented

Poli	cy Instrument	Status	Remarks
6.	Veterinary Public Health Strategy	Finalized	Being implemented
7.	Rabies Disease Development Strategy	Finalized	Being implemented
8.	PPR Disease Development Strategy	Finalized	Being implemented
9.	Food and Mouth Disease Control strategy	Finalized	Being implemented
10.	Tsetse and trypanosomiasis Development Strategy	Finalized	Being implemented
11.	Livestock Commercialization strategy	Not developed	
12.	Livestock Identification and Traceability Strategy	Finalized	Ready for implementation
13.	Livestock Insurance Strategy		
14.	Rangeland and Pastoralism Development Strategy	Finalized	Ready for implementation
15.	Beef Industry Strategy	Development on-going	
16.	Camel Development Strategy	Finalized	
17.	Rabbit Development Strategy	Finalized	Implementation on-going
18.	Donkey Development Strategy	Finalized	Implementation on-going
19.	Emerging Livestock Development Strategy	Finalized	Implementation on-going
20.	Poultry Development Strategy	Finalized	Implementation on-going

Dairy industry regulations

- 1. The dairy industry (registration, licensing, cess and levy) regulations, 2020
- 2. The dairy industry (returns, reports and estimates) regulations, 2020
- 3. The dairy industry (compliance officers) regulations, 2020
- 4. The dairy industry (raw milk sales contract) regulations, 2020
- 5. Dairy industry (produce traceability and recall) regulations, 2020
- 6. The dairy industry (pricing of dairy produce) regulations, 2020
- 7. The dairy industry (imports and exports) regulations, 2020
- 8. The dairy industry (dairy produce safety) regulations, 2020

### Irrigation specific policies plans, strategies and regulations

Policy/regulation/strategy/plans	Status
Irrigation regulations 2021	Gazetted and Approved by parliament
Land reclamation policy	Just a zero draft. Yet to be taken through consultations
National Irrigation Services Strategy, 2022 – 2026	Already signed by CS and awaiting printing

Policy/Legal Instrument	Current Status		
1. Agricultural Policy, 2021	Received Cabinet approval and allocated Sessional paper No 2 of 2021		
2. Draft Sugar Industry Policy	Reviewed in February 2021 to accommodate new developments and align to sugar task force report		
3. Draft National Agricultural Insurance Policy	Finalized and awaiting CS concurrence prior to presentation to Cabinet for approval		
	Draft implementation framework developed		
4. Draft Agricultural Soil Management Policy	Under review by Attorney General in preparation for Cabinet presentation.		
5. Agriculture Mechanization Policy	Finalized and awaiting CS concurrence prior to presentation to Cabinet for approval		
6. Draft Coffee Industry Policy	Awaiting national validation		
7. Draft National Agricultural Research System Policy	Finalized and awaiting CS concurrence prior to presentation to Cabinet for approval		
8. Draft Food Safety Policy	National Validation		
9. National Food and Nutrition Security Policy 2012	• The Implementation Frame work is due for review in 2022.		
10. Draft Tea Policy	Draft developed and finalized in 2015		
	<ul> <li>Draft opened for review following completion of Tea Task force</li> <li>Review draft to incorporate Tea task-force</li> </ul>		
11 National Soud Policy	recommendations		
2011	<ul> <li>Roadmap and activity plan for review developed and adopted in November 2019</li> </ul>		
12. National Agriculture Sector Extension Policy (NASEP) 2012	Finalized and awaiting CS concurrence prior to presentation to Cabinet for approval		
13.Warehousing Receipt Systems (WRS) Act 2019	<ul> <li>Need for budgetary allocation for operationalization of the Council</li> </ul>		

## Annex 4: Summary of Policies and Legal Frameworks Developed

Policy/Legal Instrument	Current Status			
	• Section 17 need amendment to promote ownership of			
	chain warehouses across counties.			
13. Plant Protection Bill,	Finalized and awaiting CS concurrence prior to presentation to			
2021	Cabinet for approval			
	Draft implementation framework developed			
14. Mechanization Bill,2021	Finalized and awaiting CS concurrence prior to presentation to Cabinet for approval			
	Draft implementation framework developed			
15. National Food Reserve and Trading corporation Bill (NCPB Bill), 2021	<ul> <li>Cleared by SWAG on PLS for National Validation.</li> </ul>			
16. Food Safety Bill, 2021	• Draft Bill cleared by 2 <sup>nd</sup> SWAG on PLS for National validation			
17. Crops Act 2013	Under implementation but contested by Counties			
	Proposed review to allow for co -development of the crops by			
	both the National and County Governments			
18. Agriculture and Food	Under implementation but contested by Counties			
Authority Act 2013	<ul> <li>Proposed amendment to create 5 regulatory agencies as follows:</li> </ul>			
	i. Tea,			
	ii. Coffee,			
	iii. Sugar,			
	iv. Food Crops/Horticultural Crops and			
	v. Industrial Crops to include all other scheduled crops			
19. The Pyrethrum Act, 2013	<ul> <li>Act is in force but is duplicating the Crops Act 2013 and is contested by Counties.</li> </ul>			
	• The Act need to be repealed.			
20. Tea Act 2021	<ul> <li>Under implementation but contested by Counties</li> </ul>			
21. Coffee Bill 2021	• In first reading in the National Assembly. A parallel Bill, Coffee Bill 2020 by Private member is at Committee level in the Senate.			

Policy/Legal Instrument	Current Status	
22. Sugar Bill 2020	Introduced into National Assembly as private members Bill	
Policy/Legal Instrument	Current Status	
1. Crops Regulations by AFA	Approved and Gazetted	
, ,	1 Crans (Inich Detete) Desulations	
	1. Crops (Irish Polato) Regulations	
	2. The Crops (Coffee) Regulations	
	The Crops (Collect) Regulations     The Crops (Colls and Nut Crops) Regulations	
	5 The Crops (Sugar) Regulations	
	6 The Crops (Food Crops) Regulations	
	7 The Crops (Nairobi Coffee Exchange) Regulations	
	8. The Crops (Horticultural Crops) Regulations 2020	
	All above are under implementation. All discussed and	
	negotiated with the Counties	
	The Crops (Pyrethrum and Other industrial Crops) Regulations	
	- Regulations with the AG, facing challenges due to existence	
	of Pyrethrum Act 2013 which also regulates pyrethrum as well	
	as Crops Act 2013.	
2. Warehouse Receipt System	Gazetted and approved	
Regulations 2021		
3. Draft Crops (Blending and	Approved for National Validation and Regulatory impact	
compositing Flour)	assessment recently completed	
Regulations	, ,	
4. Draft Fertilizers & Animal	Approved by SWAG for National validation	
Food stuffs (Fertilizers)		
Regulations		
5. Draft National Cereals and	<ul> <li>Approved for National validation</li> </ul>	
Produce Board (National		
Food Reserve ) Regulations		
6. Draft Crops (Crops	<ul> <li>Approved for National validation</li> </ul>	
Compensation Rates)		
Regulations		
Agriculture Sector		
Iransformation and Growth	Now under implementation.	
Strategy (2019-2029)		
Root and Tuber Crops	It is awaiting the national validation.	
Strategy:		

Policy/Legal Instrument	Current Status
National Youth in Agri-business	Finalized and launched on 10 <sup>th</sup> July, 2019.
Strategy: 2012	
Urban and Peri-urban	was finalized and is awaiting printing
Agriculture, Livestock	
.Fisheries Strategy (UPALF)	
,,	
Cotton Strategy	

STATION	SIDA&EU ( Kes)	COUNTY ( Kes)	MoALF&I( Kes)	TOTAL
County budget	2,675,420,800	1,292,500,000	587,500,000	4,555,420,800
NPS budget	924,579,200	-	212,500,000	1,137,079,200
				5,692,500,00
Total budget	3,600,000,000	1,292,500,000	800,000,000	0

### Annex 5: ASDSP 11- PROGRAMME budget framework

### Annex 6 ASDSP II - SUMMARY - DONOR FUNDING TO COUNTIES TO DATE -

	Α	В	С	D	E	F	G=B To F	A-G
Counties	Approved 5 Yrs	Fy 2017/2018	Fy 2018/2019	Fy 2019/2020	Fy 2020/2021	Fy 2021/2022	Total ( 5 Years)	Balances
Baringo	55,288,227	-	7,543,234	13,072,056	11,058,503	-	31,673,793	23,614,434
Bomet	54,721,832	-	7,458,275	12,930,458	10,945,216	-	31,333,948	23,387,884
Bungoma	59,380,304	-	8,157,046	14,095,076	11,876,983	-	34,129,105	25,251,199
Busia	57,524,851	-	7,878,728	13,631,213	11,505,863	-	33,015,803	24,509,048
Elgeyo-								
Marakwet	52,109,073	-	7,066,361	12,277,269	10,422,624	-	29,766,254	22,342,819
Embu	48,061,562	-	6,459,234	11,265,390	9,613,058	-	27,337,682	20,723,880
Garissa	65,066,727	-	9,010,009	9,010,009	13,073,337	-	31,093,355	33,973,373
Homabay	56,193,344	-	7,679,002	7,679,002	11,239,541	-	26,597,545	29,595,799
Isiolo	58,468,373	-	8,020,256	13,867,094	11,694,582	-	33,581,932	24,886,441
Kajiado	54,286,361	-	7,392,954	12,821,590	10,858,115	-	31,072,659	23,213,702
Kakamega	62,705,720	-	8,655,858	14,926,430	12,542,117	-	36,124,405	26,581,315
Kericho	51,384,972	-	6,957,746	6,957,746	10,277,792	-	24,193,283	27,191,689
Kiambu	54,680,731	-	7,452,110	7,452,110	10,936,995	-	25,841,214	28,839,517
Kilifi	62,412,316	-	8,611,847	14,853,079	12,483,432	-	35,948,358	26,463,958
Kirinyaga	45,045,022	-	6,006,753	6,006,753	9,009,703	-	21,023,209	24,021,813
Kisii	58,425,511	-	8,013,827	13,856,378	11,686,008	-	33,556,212	24,869,299
Kisumu	53,430,757	-	7,264,613	7,264,613	10,735,414	-	25,264,641	28,166,117
Kitui	64,643,224	-	8,946,484	15,410,806	12,929,648	-	37,286,938	27,356,286
Kwale	61,162,108	-	8,424,317	14,540,528	12,233,371	-	35,198,215	25,963,893
Laikipia	52,084,074	-	7,062,611	12,271,019	10,417,623	-	29,751,253	22,332,821
Lamu	44,219,988	-	5,882,997	5,882,997	8,844,684	-	20,610,678	23,609,310
Machakos	56,232,211	-	7,684,832	13,308,053	11,247,314	-	32,240,199	23,992,012
Makueni	60,170,449	-	8,275,568	14,292,613	12,035,024	-	34,603,204	25,567,245
Mandera	72,740,241	-	10,161,036	17,435,060	14,549,177	-	42,145,273	30,594,968
Marsabit	71,553,959	-	9,983,094	17,138,490	14,311,903	-	41,433,487	30,120,472
Meru	55,250,697	-	7,537,604	13,062,674	11,050,997	-	31,651,275	23,599,422
Migori	56,018,239	-	7,652,736	7,652,736	11,204,518	-	26,509,990	29,508,249
Mombasa	51,249,875	-	6,937,481	12,062,469	10,250,771	-	29,250,721	21,999,154
Muranga	51,230,175	-	6,934,526	12,057,544	10,246,830	-	29,238,900	21,991,275
Nairobi	67,279,467	-	9,341,920	9,341,920	13,517,925	-	32,201,765	35,077,702
Nakuru	58,358,336	-	8,003,750	13,839,584	11,672,572	-	33,515,906	24,842,430
Nandi	51,690,617	-	7,003,592	12,172,654	10,338,925	-	29,515,171	22,175,446
Narok	55,977,450	-	7,646,618	7,646,618	11,196,359	-	26,489,594	29,487,856
Nyamira	53,125,179	-	7,218,777	12,531,295	10,625,861	-	30,375,933	22,749,246
Nyandarua	49,957,864	-	6,743,680	11,739,466	9,992,349	-	28,475,495	21,482,369
Nyeri	47,292,861	-	6,343,929	11,073,215	9,459,306	-	26,876,450	20,416,411
Samburu	59,981,064	-	8,247,160	8,247,160	12,051,516	-	28,545,836	31,435,229
Siaya	51,872,798	-	7,030,920	12,218,200	10,375,365	-	29,624,485	22,248,313
TaitaTaveta	53,534,620	-	7,280,193	12,633,655	10,707,755	-	30,621,603	22,913,017
Tanariver	64,529,555	-	-	17,858,867	12,965,394	-	30,824,261	33,705,294
Tharaka Nithi	48,393,632	-	6,509,045	11,348,408	9,679,478	-	27,536,930	20,856,702
TransNzoia	52,562,712	-	7,134,407	12,390,678	10,513,357	-	30,038,441	22,524,271
Turkana	81,155,884	-	-	22,846,766	16,306,003	-	39,152,769	42,003,115
Uasingishu	51,104,293	-	6,915,644	12,026,074	10,221,652	-	29,163,370	21,940,923
Vihiga	49,080,877	-	6,612,131	11,520,219	9,816,937	-	27,949,287	21,131,590
Wajir	75,161,643	-	-	21,048,494	15,101,628	-	36,150,122	39,011,521

West Pokot	58,621,025	-	8,043,154	8,043,154	11,725,115	-	27,811,423	30,809,602
Total	2,675,420,800	-	335,186,055	575,607,675	535,548,637	-	1,446,342,367	1,229,078,433

## Annex 7 SUMMARY COUNTY CONTRIBUTIONS TO DATE

		Α	В	С	D	E	F	G=B to F	H=A-G
Srno.	Counties	Approved 5	Fy	Fy	Fy	Fy	Fy	Total	Balances
		Yrs	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Contributions(	
								5 Years)	
1	Baringo	27,500,000	-	5,500,000	11,000,000	-	-	16,500,000	11,000,000
2	Bomet	27,500,000	-	6,800,000	9,700,000	-	-	16,500,000	11,000,000
3	Bungoma	27,500,000	-	5,500,000	5,500,000	5,500,000	-	16,500,000	11,000,000
4	Busia	27,500,000	-	7,413,198	9,206,600	-	-	16,619,798	10,880,202
5	Elgeyo-Marakwet	27,500,000	-	5,500,000	3,595,000	5,825,000	-	14,920,000	12,580,000
6	Embu	27,500,000	-	5,500,000	9,306,427	5,500,000	-	20,306,427	7,193,573
7	Garissa	27,500,000	-	5,500,000	-	5,500,000	-	11,000,000	16,500,000
8	Homabay	27,500,000	-	5,500,000	5,500,000	-	-	11,000,000	16,500,000
9	Isiolo	27,500,000	-	5,557,080	5,557,080	-	-	11,114,160	16,385,840
10	Kajiado	27,500,000	-	9,000,000	5,500,000	5,500,000	-	20,000,000	7,500,000
11	Kakamega	27,500,000	-	11,000,000	5,500,000	5,500,000	-	22,000,000	5,500,000
12	Kericho	27,500,000	-	9,495,875	-	5,500,000	-	14,995,875	12,504,125
13	Kiambu	27,500,000	-	5,500,000	5,500,000	-	-	11,000,000	16,500,000
14	Kilifi	27,500,000	-	5,000,000	11,500,000	5,500,000	-	22,000,000	5,500,000
15	Kirinyaga	27,500,000	-	11,000,000	5,500,000	5,500,000	-	22,000,000	5,500,000
16	KISII	27,500,000	-	11,000,000	5,500,000	5,500,000	-	22,000,000	5,500,000
1/	Kisumu	27,500,000	-	5,500,000	-	5,500,000	16,500,000	27,500,000	-
10	Kitui	27,500,000	-	5,500,000 8 500 000	5 500 000	5,500,000	-	22,000,000	5,500,000
20	Laikinia	27,300,000	2,300,000	5 500,000	5,500,000	-	-	11 000 000	-
20	Lamu	27,500,000	_	5,500,000	5,500,000	5 500 000	_	16 500 000	11,000,000
22	Machakos	27,500,000	-	5,500,000	5,500,000	5,500,000	-	16,500,000	11.000.000
23	Makueni	27.500.000	-	11.000.000	5,500,000	5,500,000	-	22.000.000	5.500.000
24	Mandera	27 500 000	-	5 500 000	5 500 000	5 500 000	-	16 500 000	11 000 000
25	Marsabit	27,500,000	-	11.000.000	5,500,000	5,500,000	-	22.000.000	5.500.000
26	Moru	27 500 000		5 500 000	11,000,000	5 500 000	_	22,000,000	5 500 000
20	wieru	27,300,000	-	5,500,000	11,000,000	5,500,000	-	22,000,000	3,300,000
27	Migori	27,500,000	-	5,500,000	-	5,500,000	11,000,000	22,000,000	5,500,000
28	Nuranga	27,500,000	-	11,000,000 E E00,000	5,500,000	3,500,000	-	22,000,000	5,500,000
29	wuranga	27,500,000	-	5,500,000	5,000,000	3,000,000	-	13,500,000	14,000,000
30	Nairobi	27,500,000	-	11,000,000	-	-	-	11,000,000	16,500,000
31	Nakuru	27,500,000	-	10,000,000	6,500,000	5,500,000	-	22,000,000	5,500,000
32	Nandi	27,500,000	-	11,000,000	5,500,000	5,500,000	-	22,000,000	5,500,000
33	Narok	27,500,000	-	5,500,000	5,500,000	11,000,000	-	22,000,000	5,500,000
34	Nyamira	27,500,000	-	5,500,000	11,000,000	-	11,000,000	27,500,000	-
35	Nyandarua	27,500,000	-	5,500,000	5,500,000	5,500,000	11,000,000	27,500,000	-
36	Nyeri	27,500,000	-	5,500,000	5,500,000	5,500,000	-	16,500,000	11,000,000
37	Samburu	27,500,000	-	5,500,000	-	5,500,000	-	11,000,000	16,500,000
38	Siaya	27,500,000	-	5,000,000	7,749,753	5,000,000	2,750,000	20,499,753	7,000,247
39	TaitaTaveta	27,500,000	-	5,500,000	5,500,000	-	-	11,000,000	16,500,000
40	Therefore Mithin	27,500,000	-	-	5,500,000	16,500,000	-	22,000,000	5,500,000
41		27,500,000	-	5,500,000	5,500,000	-	-	11,000,000	16,500,000
42	Turkana	27,500,000	-	5,500,000	10,300,000	6,029,990	-	22,429,990	5,070,010
45		27,500,000	-	-	5,000,000	5,000,000	-	16 500 000	11 000 000
44	Vihiga	27,500,000	-	5,500,000		5,500,000	-	27 500,000	-
	• ////////////////////////////////////	27,500,000		3,300,000	F F00 000	10,000	3,300,000	27,500,000	F F00 000
46	Wajir	27,500,000	-	-	5,500,000	16,500,000	-	22,000,000	5,500,000
4/	West Pokot	27,500,000	5,500,000	-	5,500,000	5,500,000	-	16,500,000	11,000,000

	Total	1,292,500,000	8,000,000	297,766,153	275,914,860	224,454,990	63,250,000	869,386,003	423,113,997
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		Α	В	с	D	Е	F	G=B To F	H=A-G
Srno.	Counties	Approved 5	Fy	Fy	Fy	Fy	Fy	Total (	Balances
		Yrs	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	5Years)	
1	Baringo	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
2	Bomet	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
3	Bungoma	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
4	Busia	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
5	Elgeyo-	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
	Marakwet								
6	Embu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
7	Garissa	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
8	Homabay	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
9	Isiolo	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
10	Kajiado	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
11	Kakamega	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
12	Kericho	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
13	Kiambu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
14	Kilifi	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
15	Kirinyaga	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
16	Kisii	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
17	Kisumu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
18	Kitui	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
19	Kwale	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
20	Laikipia	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
21	Lamu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
22	Machakos	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
23	Makueni	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
24	Mandera	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
25	Marsabit	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
26	Meru	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
27	Migori	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
28	Mombasa	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
29	Muranga	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
30	Nairobi	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
31	Nakuru	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
32	Nandi	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
33	Narok	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
34	Nyamira	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
35	Nyandarua	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
36	Nyeri	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
37	Samburu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
38	Siaya	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
39	TaitaTaveta	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
40	Tanariver	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
41	Tharaka Nithi	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
42	TransNzoia	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500 <u>,</u> 000	4,000,000
43	Turkana	12,500,000	-	-	4,000,000	2,000,000	-	6,000,000	6,500,000
44	Uasingishu	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
45	Vihiga	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
46	Wajir	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
47	West Pokot	12,500,000	-	-	4,000,000	2,000,000	2,500,000	8,500,000	4,000,000
	Total	587,500,000	-	-	188,000,000	94,000,000	115,000,000	397,000,000	190,500,000

#### Annex 8 : SUMMARY GOK NATIONAL CONTRIBUTIONS TO DATE