

AGRIBIZ PROGRAMME



SITUATIONAL ANALYSIS REPORT Bungoma County

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MINISTRY OF FOREIGN AFFAIRS
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Danida



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ABBREVIATION

ADS	-	Anglican Development Services
AIDS	-	Acquired Immunodeficiency Syndrome
AgriBiz	-	Agribusiness Programme
AGF	-	Africa Guarantee Fund
AGPO	-	Access to Government Procurement Opportunities
AgGDP	-	Agricultural Gross Domestic Product
A.I	-	Artificial Insemination
ASDS	-	Agricultural Sector Development Strategy
ASTGS	-	Agricultural Sector Development Support Programme
ATC	-	Agricultural Training centers
AU	-	African Union
BIH	-	Business Incubation Hubs
BOG	-	Board of Governors
CAADP	-	Comprehensive Africa Agriculture Development Programme
CDF	-	Constituency Development Fund
CFTA	-	Continental Free Trade Area
CIDP	-	County Integrated Development Plan
CREADIS	-	Community Research in Environment & Development initiative
DANIDA	-	Danish International Development Agency
DHIS	-	District Health Information Systems
ECD	-	Early Child Development
EU	-	European Union
EUR	-	Euro
FAO	-	Food and Agriculture Organization
FGD	-	Focus Group Discussions
FICCF	-	Finance Innovation for Climate Change
GDP	-	Gross Domestic Product
GOK	-	Government of Kenya
HIV	-	Human Immunodeficiency Virus
Ha	-	Hectare
HDI	-	Human Development Index
ICT	-	Information and Communications Technology
IFAD	-	International Fund for Agricultural Development
ILO	-	International Labour O
KCDMS	-	Kenya Crops and Dairy Market Systems
KCIC	-	Kenya Climate Innovation Center
KDCU	-	Kitinda Dairy Cooperative Union
KDB	-	Kenya Dairy Board
KDHS	-	Kenya Demographic and Health Survey

KEBS	-	Kenya Bureau of Standards
KES	-	Kenya Shillings
KGS	-	Kilo grams
KHCP	-	Kenya Horticultural Crops Program
KIHBS	-	Kenya Integrated Household Budget Survey
KIPPRA	-	Kenya Institute of Public Policy Research and Analysis
KMT	-	Kenya Markets Trust
KNBS	-	Kenya National Bureau of Statistics
M&E	-	Monitoring and Evaluation
MESPT	-	Micro Enterprises Support Programme
MOA	-	Ministry of Agriculture
MT	-	Metric Tonnes
MTEF	-	Medium Term Expenditure Framework
MTPIII	-	Medium Term Plan
NARIGP	-	National Agricultural and Rural Inclusive Growth Project
NGO	-	Non – Governmental Organizations
PO	-	Producer Organization
PPP	-	Public Private Partnership
PWDS	-	Persons With Disabilities
SDG	-	Sustainable Development Goals
SHoMAP	-	Smallholder Horticulture & Marketing Project
SIST	-	Sing'alo Institute of Science and Technology
SMEs	-	Small and Medium Enterprises
SPSS	-	Statistical Package for Social Sciences
TVET	-	Technical and Vocational Education and Training
TVETA	-	Technical and Vocational Education and Training Authority
UKAID	-	United Kingdom AID
UNDP	-	United Nations Development Programme
UNDO	-	United Nations Industrial Development Organization
USD	-	United States Dollars
USAID	-	United States Agency for International Development
VC	-	Value Chain
VCC	-	Value Chain Commodities
VCM	-	Value Chain Mapping

1.0 INTRODUCTION

1.1 Agribusiness in Kenya

Agriculture remains the backbone of Kenya's economy, contributing 26 per cent of the GDP directly and another 25 per cent indirectly. The sector also accounts for 65 per cent of Kenya's total exports and provides more than 18 per cent of formal employment. More than 70 per cent of informal employment is in the rural areas (ASDS, 2010 - 2020). Food production plays an important part in maintaining the country's food security, while the industrial and horticultural crops subsectors are important foreign exchange earners. However, the country's agricultural potential is still unrealised and growth targets are not being met. Opportunities to add value to agricultural produce as proposed in Kenya's vision 2030 have largely remained unexploited which lowers the overall value of agricultural produce and competitiveness.

While economic update shows that the proportion of Kenyans living on less than the international poverty line (US\$1.90 per day in 2011 PPP) has declined from 46.8 % in 2005/06 to 36.1 % in 2015/16, lack of equity in economic development remains a big challenge in Kenya with most of the poor households being in the rural areas (World Bank, 2018). High annual urbanization rate of four percent, poverty and food insecurity have increasingly become a major problem in Kenya (KIPPRA, 2018).

The agriculture sector employs the largest share of the population in Kenya (around 62%), and accounts for 60% of exports (source: Kenya Agriculture Sector Transformation and Growth Strategy - ASTGS). Furthermore, the sector has strong connections with the rest of the economy: 1% of growth in agriculture is estimated to drive 1.6% overall Gross Domestic Product (GDP) growth. However, the sector has underperformed compared to its huge potential, both in terms of wealth creation and decent job creation: agricultural labour productivity has remained stagnant at a value addition of USD 1 500 to USD 2 000 per worker from the year 2000 to date.¹ Households engage in different income generating activities in the formal and informal sectors, including businesses, agriculture, and petty trade (Omondi et al., 2017). Agribusiness, that is, engagement of households in agriculture based businesses, either in rural or urban areas, is therefore an important livelihood strategy for many households in Kenya.

About 2.5 million young people (18 to 35 years old) are unemployed, and only five percent enter the formal labor market each year with majority seeking for employment opportunities in fast growing non-agricultural sectors in urban areas. The challenge of youth unemployment is compounded by the fact that 90 percent of all unemployed young people have limited or lack vocational and soft skills required by the market

¹ Source: draft report "Status of Youth in Kenya's Agribusiness: A

formative assessment", 2018³ OJ C 210 of 30.6.2017.

(USAID, 2015). The average age of the farming population is 60 years (source: MoAI, ASTGS 2018): youth are not attracted to farming because of the perceived low returns, and are constrained by limited access to land and other factors of production (including capital).

On the other hand women still lag behind men in various sectors of the economy and are only one third of formal wage jobs. Security of land tenure, particularly for youth and women, is a key limitation to both willingness to invest in land improvements and access to financial services (as more traditional loan systems require land as collateral). Traditional systems bestow land ownership to family heads, invariably the senior male of a household. This restricts ability of women and youth to have access to land on which they can invest. Kenyan land tenure reform acts, which have resulted in land privatisation, have also created unequal access to land deeds based on gender – only 2% of land titles are registered to women. This has several consequences, including the low drive to adopt innovations and invest,

resulting in low productivity and incapacity to successfully exploit profitable market opportunities.

Lastly, women face specific challenges in intra-household allocation and control of assets (including finance): consequently, they have low possibility to access high value production inputs and equipment, being therefore often stuck in low yield production methods. Young women, also, are often unaware of potential entrepreneurial opportunities due to cultural norms, and need specific awareness raising activities. This limits land available for the two target groups (youth and women), already marginalised in their access to land by traditional norms and by lack of finance and assets that can be used as collateral. Youth and women in rural areas where poverty is more prevalent therefore face special challenges in accessing business opportunities in agriculture which the Agribiz program seeks to address.

1.2 The AgriBiz Programme

Kenya Vision 2030 identifies agriculture as a key sector through which annual economic growth rates of 10 percent can be achieved. Under the Vision, smallholder agriculture will be transformed from subsistence activities, marked by low productivity and value addition, to 'an innovative, commercially-oriented, internationally competitive and modern agricultural sector'. One of the key drivers for this transformation is agribusiness, which is defined as including all businesses involved in agricultural production, comprising farming and input supply, mechanization, wholesale and distribution, processing, marketing and retail sales. The country needs to 'scale-up' activities such as processing, branding, quality certification and accreditation, as well as farm level quality improvements that increase the market value of primary products. Agribusiness needs to become the driver improving the agricultural sector's productivity and contribution to economic growth. Food security is one of the 4 key pillars under the presidential Big 4 Agenda. To achieve its objectives, the government plans to increase smallholder productivity and value addition while also targeting 1000 SMEs for production using performance based model amongst other initiatives while creating the much needed jobs for the youth.

For many of Kenya's unemployed youth, agriculture presents a viable business opportunity to create a long-lasting livelihood. The Agriculture sector presents a huge opportunity for the creation of employment to absorb the youth and ensure achievement of food security for future generations. Youths offer a dynamic work force that is innovative; have a high uptake of technological know-how and the ability to take on significant levels of risk. The agriculture sector, however, remains largely unattractive to the youth and their participation is hindered mostly by lack of access to land, finance, and markets. The situation is exacerbated by perception of agriculture as a career of last resort, one of drudgery and low monetary benefits. Information on access to markets, factors of production including land and financing remain extremely limited hindering adequate engagement of the youth in agriculture.

On the other hand, women face difficulties to start and develop their own agricultural businesses as their capacity for entrepreneurship is limited by a series of structural barriers. Women working in agri-businesses often have limited access to resources and business assets and face barriers due to gendered differences in behaviour and roles. For example, in most agricultural communities, gendered division of labour determines women's role in and outside the household, which subsequently affects their opportunities in and benefits from productive activities in agricultural value chains.

The primary targets of this programme are the rural and peri-urban youth and women who are underemployed and lack the financial resources and know-how to create viable sustainable businesses. While women and youth make essential contribution to the agricultural sector with their role varying from food production for domestic consumption, animal husbandry and provision of labour in farms, numerous business opportunities within many agricultural value chains exist and remain untapped. These potentially provide great opportunities for highly profitable agribusiness enterprises capable of generating incomes and profits while at the same time providing employment opportunities for other women and youth in Kenya. The programme will support entrepreneurship and innovation by youth and women and also promote mainstream entrepreneurship (already established small business with job creation potential) along agricultural value chains: it will create jobs along all links of the value chains in the rural and urban areas.

Four of the main hurdles blocking youth and women entrepreneurship in agribusinesses have been identified as: negative perception of the sector (i.e. employer of last resort); lack of capacity to design and implement a business; lack of access to land and other natural resources at acceptable terms, and knowledge of their uses; and lack of access to finance, which will be the main focus of the program. The programme will support the establishment of 8 Business Incubation Hubs (BIH) in different Counties or Regional Economic Blocks, based where possible at existing centres such as the Agricultural Training Centres (ATCs).

The AgriBiz approach is centred on three programme areas and a set of enablers. The BIH will provide support, tailored to the business ideas and the gap analysis, in the form of:

- Advisory services: i.e. mentorship, technical and business trainings, value chain advisory, business model optimisation, group governance, climate smart agribusiness models, etc.
- Access to facilities: prototyping, support to obtain certifications, intellectual property, etc.
- Market access: market linkages, information/intelligence, networking, branding, direct sales support, etc.
- Grant finance at different levels: - Proof of Concept (EUR 2 000 – EUR 10 000) to prove the concept in the market, refine the business model and progress towards commercialisation
- Results based financing (EUR 5 000 – EUR 15 000), targeting incubatees who passed the Proof of Concept stage, to grow the business
- Scale financing: linkages with financial institutions, in particular with the ones benefiting from the guarantee facility under result 3 but also aiming to attract additional external funding, such as impact investors.

1.2.1 Programme Key Areas

- **Result 1:** Sustainable business and employment opportunities in agribusiness for youth and women are identified, promoted and supported.
- **Result 2:** Access to natural resources critical to the successful creation of sustainable jobs opportunities for youth and women is facilitated.
- **Result 3:** A blending mechanism facilitating youth and women's access to finance at appropriate conditions is established.

1.2.2 Target Groups

- Youth (male and female) and women entrepreneurs or business starters in rural and peri-urban locations are the main target group.
- Common Interest Groups and Common Working Groups (including Cooperatives)
- "Step-up" or "Next-step" projects.
- Eight County Governments

1.3 AgriBiz Programme Implementing Partners- KCIC, DANIDA, EU

1.3.1 The Kenya Climate Innovation Center

The Kenya Climate Innovation Center (KCIC) was established in 2012 to provide incubation, capacity building and financing to start-up and small-scale enterprises that are developing innovative solutions in agribusiness, energy and water to sustainably address climate change challenges. KCIC provides holistic, country-driven support to accelerate the development, deployment and transfer of locally relevant climate and clean adaptive and mitigation technologies. In doing this, KCIC has adopted the principle of non-discrimination, with the participation of both men, women and in more particular the youth. It has since already provided incubation, capacity building services and access to possible financing to 138 Kenyan entrepreneurs and new ventures developing innovative solutions in renewable energy (60%), agribusiness (30%) and water (10%). Implementation of innovative models has resulted in supporting sixty-one (61) agribusinesses and leading to job creation.

1.3.2 The European Union

The EU "Jobs and Growth Compact" for Kenya envisages among its priorities "Building a viable future for Kenya's youth by supporting job creation. The programme contributes to Sustainable Development Goals (SDGs) 8, 2, 5, 13 and 15, and is fully in line with the New European Consensus on Development which promotes concrete actions to meet the specific needs of youth, particularly young women and girls, by increasing quality employment and entrepreneurship opportunities". The programme integrates the guidelines from EU Communications on nutrition, on resilience and on working with the private sector particularly in: a) facilitating the development of a competitive local private sector, b) building management capacity, c) promoting small and medium-sized enterprises (SMEs) and cooperatives, d) integrating youth in employment, and e) supporting a broad-based farmers' outreach model.

1.3.3 DANIDA

The Micro-Enterprise Support Programme Trust (MESPT) (with DANIDA funding) has explored, with its Green Growth programme, the use of business incubators, complementing physical and virtual/online mentoring.

1.4 About the AgriBiz Situational Analysis

The situational analysis comprised of two major activities as detailed below.

1.4.1 Assessment of potential agribusiness opportunities for women and youth

A situational analysis was conducted with the following objectives;

- i) To determine the current state of agribusiness activities in the selected counties,
- ii) To understand the current circumstances within which the programme is to be implemented, and
- iii) To develop a general analysis of the programme's context. The situational analysis research served as a useful tool for determining potential challenges and opportunities that the programme can leverage on.

The results were eye-opening to what was going on within the selected counties in terms of Agribusiness activities and may help to inform the programme implementation strategy in many ways.

1.4.2 Identification of Host Facilities for the proposed BIHs

To identify the suitable premises to host the proposed BIHs, the following processes were undertaken;

- i) Mapping existing key agribusiness value chains (maximum of 5 per county) and elaborating how the AgriBiz programme can tap into each of them.

The situational analysis research sought to assess the potentials, opportunities for growth, barriers and possible strategies for exploitation for each of the identified key value chains in each county. The findings would enhance understanding of the current state of

DANIDA has also worked since 2012 with the business incubation and acceleration centre KCIC (Kenya Climate Change Innovation Center). This programme foresees DANIDA to work again with KCIC on the Business Incubation Hub (BIH) component.

value-chain activities and provide the AgriBiz Programme with recommendations about the types of value chains to be supported and the nodes in which the Programme could possibly be involved. Mapping of agribusiness value chains of the selected counties was necessary to enable a flow understanding regarding agribusiness value aggregation of each county by visualizing the existing processes in a systematic and integrated manner. With the identification of processes that add value to products and services in the value chains, barriers, and the value chain utilisation strategies, the resulting value chain map would help the AgriBiz programme in prioritizing the improvement of these processes and achieving an increase in efficiency at county level.

- ii) Conducting physical assessment of the state of Agricultural Training Centers (ATCs,) and Existing Technical and Vocational Education and Training centers, TVET's

This involved assessing and reporting on the physical state of the potential hosting facilities for the proposed BIHs such as county ATCs and TVETs. Among the key factors which guided the assessment included: i) accessibility of the host from other parts of the county including its proximity to neighboring counties; iii) the level of structural upgrading required as well as the availability of office space, training space, meeting rooms and demonstration fields; iv) establishing the structural fidelity, cleanliness, and security of the potential hosting facilities; and giving recommendations on the most suitable centers and sites for rolling out the programme based on the findings of the assessment.

- iii) Establishing the commitment of the County Governments

Engaging the county governments in the AgriBiz program as key partners in the implementation of the programme is considered key to the programme's success and sustainability. Accordingly, assessment of the county government's commitment towards the programme was informed by:

- a) identification of the existing legislation that may favor the programme;
- b) Identification of policy and regulatory gaps and recommendations on laws that may need to be adopted in the future to enhance the success of the AgriBiz Programme in the selected county;
- c) Assessment of the budgeting structure of the counties and the allocations favoring the implementation of the AgriBiz;

Establishing the level of autonomy of the ATC from the county government, especially with regards to budget and financial management;

- d) Establishing the existing and related initiatives by the County Governments;
- e) Establishing how to engage and forge partnerships with the different county governments for the posterity of the programme.

- iv) Assessing the state of Human Development based on selected indicators

This step involved assessment of the baseline narratives for the different human development indicators for each county which have a direct effect or influence on the implementation of the programme.

2.0 BUNGOMA COUNTY

2.1 County overview



The County lies between latitude 00 28' and latitude 10 30' North of the Equator, and longitude 34 20' East and 35 15' East of the Greenwich Meridian. It borders the republic of Uganda to the North west, Trans-Nzoia County to the North-East, Kakamega County to the East and South East, and Busia County to the West and South West. Map 1 shows the location of Bungoma County in Kenya.

Figure 1: Map of Bungoma County

The County lies within an altitude range of 1200 metres to 4321 meters above sea level. It has a

population of 1,670,570 of which 812,146 are males 858,389 females as per the 2019 census and an area of 2,069 km². The county experiences two rainy seasons: the long rains- March to July and short rains – August to October. The annual rainfall is estimated at 400 mm (lowest) to 1800 mm (highest) with temperatures ranging from 00 c and 320c due to different altitudes. Mt. Elgon Forest Reserve is the key National resource in the County.

2.1.1 Climatic Conditions

Climatic conditions The County experiences two rainy seasons, the long rains of March to July and short rains

- August to October. The annual rainfall in the County ranges from 400mm (lowest) to 1,800mm (highest). The annual temperature in the County vary between 0°C and 32°C due to different levels of altitude, with the

highest peak of Mt. Elgon recording slightly less than 0°C. The average wind speed is 6.1 km/hr. In the last decade, the County experienced increasing variability in rainfall and temperature patterns that have influenced changes in agricultural seasons.

2.1.2 Population and demographics

The capital is Bungoma Town. It has a population of 1,670,570 of which 812,146 are males 858,389 females as per the 2019 census. Urban population in the County stands at 10.31% and is projected to grow to above 15% in the medium term, with sustained rural-urban migration. The main urban towns include; Bungoma, Webuye and Kimilili Towns leading in density. The search for urban jobs and opportunities as well as the declining participation of youths in agriculture are key factors influencing the trend.

Cohorts 15-34 represent 33.16% of the County population thus raising the need to plan for their needs including nutrition, health services, educational services, sports and recreation and employment opportunities. This segment of the population can better utilize opportunities provided by the ICT sector and specifically e-enabled services. The County historically is inhabited by the Bukusu, Tachoni, Batura, Sabaot, Iteso and other Kenyan communities who reside side by side in peace. The County is generally cosmopolitan and has good representation of both local and foreign expatriates.

2.1.3 Administrative and Political Units

This section presents information on the administrative and political units in the county disaggregated by constituent sub-units. It gives the distribution of administrative units by sub-county, divisions and locations by political units in terms of constituencies and wards.

Notes and Definitions

- i) County: It is an area that is demarcated as a devolved unit as stated under Article 6(1) of the Kenya's Constitution and specified in the First Schedule of the Constitution;
- ii) Sub County: Refers to both Administrative Units of National Government and County Government. In most areas it coincide with the Constituency area.
- iii) County Assembly: means an assembly constituted in the county in accordance with Article 177 of the Constitution; Constituency: Is an area demarcated as stated under Article 89 of the Kenya's Constitution for the purpose electing a member of the
- iv) National Assembly. There are 290 constituencies in Kenya
- v) Ward: Is an electoral area within a county delimited in accordance with Article 89 of the Kenya's Constitution for the purpose of the electing a the member of the County Assembly. There are 1450 wards in Kenya

Bungoma County is divided into 9 sub-counties: namely Bumula, Kanduyi, Sirisia, Kabuchai, Kimilili Tongaren, Webuye West, Webuye East and Mt Elgon (CIDP, 2018) which are further divided into 45 Wards and 236 Village Units.

Table 1: Population by Sub-county

Sub County/Ward	Total Population(2019)
Bumula	215,892
Bungoma Central	177,748
Bungoma East	114,548
Bungoma North	121,317
Bungoma South	287,765
Cheptais.	136,035
Kimilili-Bungoma	162,038
Mt. Elgon..	78,873
Bungoma West.	119,875
Tongaren	100,343
Webuye West	152,515
Mt. Elgon Forest*	3,621
Total (Bungoma)	1,670,570

According to the County Integrated Development plan (2018 – 2022), The County plans to deliver the development agenda through sustained and coordinated investment in Productive sectors. These sectors are identified as Agriculture, Environment and Natural Resources, Industry, Micro, Small & Medium scale enterprises development, Tourism, and Investment promotion and private sector development. Consequently, the strategies for developing the productive sectors are aimed at creating the requisite opportunities for enhancing the welfare of the people in Bungoma County.

2.1.4 Infrastructure and Access

In today's global economy, modern and efficient infrastructure and services are a necessary precondition for successful and sustainable economic growth. The Mombasa –Nairobi – Eldoret – Webuye – Malaba highway (A104) traverses through the County. It is a major link road for trade and commerce. Road linkage to major town in the county and out of the county is also well developed. There are also ongoing plans to develop some of the intra-county roads in collaboration with the including. The County has two underutilized airstrips in Webuye and Bungoma Towns.

The County has a fully-fledged university - Kibabii which was chartered in 2015 and 97 TVET institutions. In terms of basic education, there are 1292 ECD centres, 961 primary schools and 306 secondary schools. The County has an increasing number of financial institutions, comprising 9 of the main commercial banks in Kenya, 3. Micro-Finance Institutions and Insurance services are offered by the leading providers in the Country. Mobile and agency banking have enhanced access to financial services.

The County is served by a network of post offices and sub-post offices in all the major urban areas and licensed Private couriers. There are several mobile phone and internet service providers including Safaricom, Airtel-Kenya, Telkom-Kenya, Jamni Telkoms and Liquid Telkoms. In 2016, the country had 2,325.8 MW. This was composed of; hydro (818.2 MW), thermol oil (803.5 MW), geothermal (652 MW), wind (26.1 MW) and cogeneration (26 MW).

There are four urban and six rural water supply schemes in the County. Urban schemes are mainly piped and are operated by Lake Victoria North Water Services Board through the water service provider - Nzoia Water and Sanitation Company. Rural water schemes are operated by the County Water Department through its field water officers. The water service provider relies on expensive pumping systems to distribute water to customers. The overhead costs of these systems reduce the efficiency and effectiveness in water service provision.

2.1.5 Land ownership and Holding Size

Land in the County is either privately owned (freehold), leasehold (for predetermined period of time) or held in trust by the government for the community. The average holding size for small scale farm sizes is 1.5 acres, while for large scale farms is 10 acres. This implies that land sizes are declining due to fragmentation of land into uneconomical units/parcels. This calls for a change of value system and attitudes towards land use. There is need to control fragmentation of land and also enforce the regulations on agrarian zones within the framework of National Land Policy.

2.1.6 Employment

In Bungoma County, 14% of the residents are with no formal education, 10% of those with primary education and 19% of those with secondary or above level of education are working for pay. The County is dominated by micro and small business enterprises and has over 350 market centres of different sizes spread all over. As is the case in most other parts of the country, gender biasness in distribution and control of resources remains persistent. Women are mostly involved in agriculture and other domestic roles in feeding for their families. Full women's participation in economic development activities at the grassroots level has been a mirage owing to low literacy levels amongst womenfolk, retrogressive beliefs, and perceived drudgery.

2.2 County Governance Structure for Agribusiness related activities

2.2.1 Structure of the County Government

The current Constitution was promulgated on 27th August 2010 providing for a two tier government structure with one National Government and forty seven devolved County Governments. County Governments consist of two arms, namely the County Assembly and the County Executive. The functions of County Governments as contained in the Fourth Schedule (Constitution 2010) include: - Finance and Economic planning; Roads, Public Works and Transport; Health and Sanitation; Education and ICT; Agriculture and Irrigation; Livestock, Fisheries and Veterinary Services; Trade, Industry and Cooperative Development; Land, Housing, Physical planning and Urban Development; Water Development, Environment and Natural Resources and Tourism, Culture, Sports and Social Development.

2.2.2 The County Assembly

Bungoma County Assembly is the legislative arm of the County. The Assembly consists of the Speaker who is

an ex officio member, 45 elected members representing 45 Wards and 18 nominated members of which 16 of the members are female thereby observing article 177 of the CoK 2010 on Membership of the County Assembly. The membership also includes members of marginalized groups, including persons with disabilities and the youth.

2.2.3 The County Executive

The Executive arm of the County Governments comprise of The Governor, The Deputy Governor, The County Executive Committee and the County Secretary. The County Executive Committee is appointed by the Governor with the approval of the County Assembly. The Governor and Deputy Governor are elected by registered voters in the county in a general election, for not more than two terms of five years each. The Governor and Deputy Governor are the head and deputy head of the County Executive, respectively.

The county is run by an executive committee, consisting of:

- One Governor, elected directly by the people
- One Deputy Governor, elected as running mate of the successful candidate for Gubernatorial
- 10 Committee members nominated by the governor and approved by the county assembly
- 1 County Secretary nominated by the governor and approved by the county assembly, who double up as head of the county public service, and secretary to the county executive committee.

i) **Department of Agriculture, Livestock, Irrigation, Fisheries and Cooperative Development**

Mandate

- To promote and facilitate improved productivity of crops for food security and agricultural raw materials, value addition and access to efficient market.
- To promote the development of sustainable farmer-owned and managed irrigation and drainage projects, through participatory approach and coordination of stakeholders.
- The mandate of Livestock sub-sector is to promote commercialization and industrialization of livestock production through facilitation and offering of regulatory services.
- The veterinary department is tasked with various roles which aim to prevent and control diseases and pests to safeguard human health, improve animal welfare, increase livestock productivity and ensure high quality animals and their products to facilitate domestic and export trade.
- To facilitate the exploitation, utilization, management, development and conservation of fisheries resources as well as Aquaculture and undertake research in fresh water fisheries.
- The cooperative sector will provide a vehicle for sustained development of all other subsectors through provision of access to agricultural credit, promote value addition and commercialize marketing of agricultural produce through competitive pricing.

ii) **Department of Gender, Youth, Culture and Sports**

The Education, Gender, Youth, Children, Sports, Culture ministry is tasked with considering, reviewing and monitoring matters relating to education, gender, youth, sports and culture and making relevant recommendations. Also, the committee monitors the implementation and adherence of international standards and national policy and legislation at the county level and makes appropriate recommendations.

The Department of Gender, Culture and Sports was established vide Executive No. 3/2013 with a mandate to develop policies and implement programs for sustained and balanced social, culture sporting activities as well as economic development of the county with the emphasis on empowerment of vulnerable and marginalized groups. It is further mandated to support research interests particularly in gender and culture as

well as to ensure access, equity and equality in every aspect of development. The functions of the Department, in the context of its mission, are on policy development, regulatory and legal matters in terms of gender and culture.

The Department has a duty of promoting and developing youth and sports for a vibrant sporting industry and empowered youth. The department's vision is to lead in creative and innovative youth empowerment, achieving sporting excellence and embracing top of the range effective and efficient communication models. The ministry inspires the community using platforms that empower the youth, enhance sporting excellence and provision of relevant information. The ministry believes that our diversity and breadth, allows us to explore opportunities and address challenges at the county, national and global scale and

enables gender and culture to contribute heavily to the County's economic growth. More importantly, we believe that our customers/ clients are essential to our success.

Vision: To create sustainable and equitable social and economic empowerment to all

Mission: To formulate, mainstream and implement responsive policies through coordinated strategies for sustained and balanced social cultural and economic development of the county and empowerment of the county and empowerment of vulnerable and marginalized groups and areas

Services: The Ministry is responsible for the provision of policy guidance and direction through several services, these services include:

- Gender mainstreaming and Social Economic Empowerment of Women and PWDS,
- Child development affairs. This entails importantly Coordination of Primary Child Protection Services
- Social support Protection Services
- Community Development through community mobilization and community capacity building
- Social welfare; Family and Child welfare, Generic Social Work, NGO Coordination
- Culture Preservation and Promotion; Establish cultural centers, preserve traditional artifacts, secure cultural and historical sites.
- Alcoholic drinks and Licensing and Control; Regulation of liquor licensing and consumption, Enforcing the laws of cultural and regulations and alcoholic drinks
- Administrative services; Human resource Services, Accounts Services. Procurement Services, General Administration Services, HIV Work place interventions

Noted that the county does not have a department on trade and industrialization. This is in agreement with the observations of the Council of governors who established that County Governments have not prioritized the issue of Trade, Industrialization and Investment as such they have not been allocating the sector enough resources.

2.3 County Performance in Agribusiness related activities

In order to establish the performance of the County Government in Agribusiness related activities in the past few years, the status of implementation of Agribusiness related activities in the county was tracked alongside the outcomes of the first two years of the 2018 - 2022 CIDP. Understanding the county's performance in Agribusiness related activity is important for two reasons. First, it helps in establishing the county government's commitment to agribusiness and secondly, it helps in identifying gaps that may need to be addressed or given priority in the AgriBiz Programme. In the section that follows, a summary of sector progress related to agribusiness activities, highlighting key achievements versus planned targets for the implementation period is highlighted. The sectors analyzed include: Agriculture, Livestock and Fisheries Sub Sector; Trade, Industrialization, Cooperatives & Enterprise Development; and Youth Affairs and Gender Sub Sector.

Table 2: CIDP 2018 - 2022 Target Key Performance Indicators

Planned Targets

Programme / Sub Programme Key outputs Key performance indicators

Programme 2: Land and Crop Development and Management

Objective: To enhance crop production and productivity

Outcome: Improved food security, incomes and livelihoods

Crop product value chain development/Food security initiatives		Number of annual events observed	2018	2019	Medium term 2020
	Trainings	No. of trainings on production and management techniques	200	200	600
	Land under crop production	No. of ha under crop production	200,000	210,000	
	Crops exported	Number of crops exported	1	2	
	Horticulture Crop Development	Number of fruit crop nursery sites established	-	45	
		Number of tissue culture banana screen houses established	-	1	
		Number of tissue culture banana seedlings produced	100,000	100,000	
		Number of crops exported	-	1	
		Number of greenhouses installed	-	18	
		Number of shed nets installed	-	18	
		Number of collection centres established	2	2	
	Roots and tubers developed	Number of potato and cassava seed production (bulking) sites established	3	3	
		Number of storage facilities established	-	1	
	Rice Production promoted	Ha of rice established	50	50	
		MT of rice produced	5	5	
		Number of rice milling plants established	1	1	
	Other cereal crops promoted	Tonnes of sorghum and finger millet seed provided	10	10	
	Tea production promoted	Ha of tea established	150	200	
		Number of tea nurseries sites established	2	3	3
	Coffee development	Number of coffee nurseries sites established	2	3	1.5 M coffee seedlings
		Number of processing plants established	1	1	
		Number of brands developed and marketed	-	1	
	Farm Input Support	Number of fertilizer beneficiaries (50kg)	90,000	90,000	40000
		Number of tea cuttings distributed	1000000	1000000	
		Bags of sweet potato vines distributed	10000	10000	

	Bags of potato seed distributed	10000	10000	
	Number of tissue culture banana seedlings distributed	10000	10000	
	Tonnes of maize seed distributed	500	500	220MT
Sustainable Land Use	Number of soil samples tested and analysed	10000	10000	3 soil testing lad
	Proportion of soils protected	60	70	
	Number of conservation agriculture model farms established	1000	1000	
	Number of composting demonstration model farms established	125	125	
	Number of agriculture inspectors trained	-	45	
Enforcement of regulations	Number of agro dealers/stockists trained	200	200	
	Number of dealers registered and licensed	100	100	
	Number of inspections undertaken	4	4	
	Proportion of farmers registered	30	50	
Crop Insurance Scheme	Number of crop yield estimates established	45000	45000	
	Number of extension officers trained on crop insurance	100	100	
	Proportion of farmers trained	30	50	
Post-harvest management	Proportion of farmers accessing storage facilities	30	50	
	Proportion of households with kitchen gardens for traditional/high value vegetables	30	50	
Nutrition-sensitive agriculture promoted	MT of amaranth seed produced	0.5	0.5	
	Proportion of farmers producing and utilizing traditional/high value crops	30	50	
	Proportion of farmers accessing storage facilities	30	50	
Farmer support services	Number of beneficiaries - 90,000 bags fertilizer(Basal and Top dressing) /year for cereals distributed	90,000	90,000	40000
	Number of beneficiaries - 900MT of certified maize seed procured and other seeds	90,000	90,000	220 MT
	Number of beneficiaries - 10,000 bags fertilizer(Basal and Top dressing) /year for Tea and coffee procured and distributed	10,000	10,000	
	Number of farmer beneficiaries of integrated support	45,000	45,000	
	Number of Early Warning and Crop pest surveillance units established and operationalized	10	10	
	Number of plant clinics established	45	45	
	Number of soil samples tested and analyzed	10000	10000	
	Number of farms/ha protected	10000	10000	

Agricultural extension services/Agricultural advisory services

Agricultural extension services/Agricultural advisory services		Number of bags of fertilizer distributed	100,000	100,000	
		Quantity(kg) of seed distributed	900,000	900,000	
		Proportion of farmers covered with insurance	50	60	
		Proportion of farmers using modern technology in production	70	80	
		Number of model farms established	1000	1000	
		No of farmers accessing agricultural credit facilities	4,500	4500	
		Funds allocation	-	-	
	Increased number of technologies disseminated	No. of farmers adopting appropriate technologies	100,000	100,000	
		Number of field days held	180	180	
		Number of exhibitions/conferences conducted	1	4	
		Number of demonstrations held	450	450	
		Number of agricultural shows held/attended	5	5	
		Number of farmers reached	100,000	100,000	
	E-extension system established	Number of e-xtension systems established	-	1	
	Extension baseline survey conducted	Number of baseline surveys conducted	=	1	
	Research-Extension Linkages	Number of varietal trials conducted	2	4	
		Number of workshops conducted	20	20	
		Number of innovation contests conducted	1	1	
		Number of technology innovation exhibitions held	1	1	
	Weather information provided	Number of Automatic Weather stations maintained	4	4	
		Number of weather real time information packages provided(weekly)	52	52	
		Number of Automatic Weather stations procured and operationalized	-	-	
Quality assurance and monitoring of outreach services Agribusiness and information management	M&E	No. of monitoring visits undertaken	4	4	
		Number of M/E reports generated and shared	4	4	
	Farmers in Agribusiness	No. of farmer groups engaged in agribusiness	45	45	
	Information packages	Number of brochures produced (Quarterly)	4	4	
		Number of newsletters produced (Quarterly)	4	4	
		Number of posters produced (Quarterly)	4	4	
		Number of banners produced (Quarterly)	4	4	

		Number of flyers produced (Quarterly)	4	4	
Conservation Agriculture	Information Management system	Number of integrated information management systems developed	-	1	
	Conservation Agriculture adoption	Proportion(%) of farmers practicing conservation agriculture	60	70	
Agricultural Value Addition and Agro Processing	Value Addition	Number of processing plants established	3	8	
		Number of crop types benefitting from value addition	4	5	
Promotion and Development of Irrigation Technologies	Adopted Irrigation technologies	Number of stakeholder sensitization for a held	4	4	
		Number of irrigation technologies promoted	2	2	
		Number of sets of irrigation equipment distributed	90	90	
Development of Irrigation Infrastructure	Feasibility Studies undertaken	Number of feasibility studies undertaken	1	-	
	Irrigation schemes/projects	Number of irrigation schemes/projects developed	1	2	
Agricultural Water Storage and Management	Water storage capacity	Number of dams rehabilitated	3	3	
		Number of dams constructed	1	-	
	Irrigation	Number of Irrigation technologies adopted	2	2	
		Number of irrigation projects/schemes implemented	2	2	
		Number of hectares under irrigation	200,000	200,000	
Large scale productivity services	Large scale production	% increase in acres of land under cultivation	5	5	
		Metric tonnes of organic fertilizer utilized	100	100	
		MT of certified seeds distributed	50	50	
		Number of extension officers recruited	50	40	
		% of farmers accessing soil testing services	50	70	
		% of farmers applying lime	30	40	
		Proportion of farmers accessing mechanization services	30	40	
Small holder production services	SMEs supported	Proportion of farmers SMEs supported	100	100	
	Feed systems commercialized	Proportion of commercialized feed systems	30	40	
	Food hubs established	Number of food hubs established	50	60	
	Agro-processing enterprises established	Number of Agro-processing enterprises established	10	-	
Food pricing	Market share secured	Market share secured for agricultural produce			
	Farmers supported	Number of large scale contract farmers supported	100	100	

	Incentives provided	% of farmers provided with incentives for storage and aggregation	100	100	
	Farm inputs provided	% of farmers accessing subsidized farm inputs	100	100	
	Energy access	% of Agro-processors accessing affordable energy	100	100	
Programme 3: Livestock Resources Development and Management					
Objective: To improve livestock production and productivity					
Outcome: Improved Food Security, incomes and livelihoods					
Livestock Extension service	Extension service delivery	Number of farmers trained on new technologies	5000	5000	
		Number of motor vehicles procured and maintained	-	3	
		Number of motor cycles procured and maintained	-	20	
		Number of exhibitions conducted	4	4	
		Number of agricultural shows held	1	1	
		Number of e-extension systems established	-	1	
		Number of dairy cooperative societies established and supported	45	45	
		Number of Annual World Days/Conferences observed	5	5	
		Number of field days held	36	36	
		Number of demonstrations held	180	180	
		Number of farmers reached	10,000	10,000	
Livestock Value Chain Development/Value addition and marketing	Livestock production and value addition	Number of dairy stakeholders trained			
		Number of apiaries established	20	20	
		Number of beehives distributed	1000	1000	
		Number of dairy cows distributed	1000	1000	
		Number of chicken distributed	10000	10000	
		Number of pulverizers distributed	90	90	
		Number of apiaries established	90	90	
		Number of milk coolers installed	9	9	4
		Number of pasture seeds distributed	2000	2000	
		Number of feed mills operationalized	5	5	
		Number of dairy goats distributed(per ward)	45	45	
		Number of milk collection trucks procured		2	
		Number of poultry collection centers established	45	45	
		Number of poultry cooperative societies formed	-	1	
		Number of incubators distributed	30	30	
		Number of piggeries established	45	45	
		Number of pigs distributed	900	900	
		Number of large scale poultry farms established	2	2	
		Value of Livestock products sold			

		Number of milk collection centers established	90	90	
		Number of operational economic dairy farm units	2	2	
		Number of farmer/farmer groups supported with improved livestock breeds and other farm inputs	10,000	10,000	
		Number of value addition processing plants established	3	3	
		Number of small holder dairy commercialization units established	45	45	
		Number of dairy/co-operative societies established	10	10	
		Number of product brands developed	3	3	
		Number of breeding centres established	1	1	
Data Management Services	Data base establishment	Number of livestock censuses conducted/	-	1	
		Number of data management systems developed	-	1	
Disease and Vector control	Reduced disease incidences	% reduction of incidences of vector diseases	25	25	
		Number of cattle dips and crush pens renovated	36	36	
		Number of trapping nets procured	70	70	
		Number of vaccinations conducted(quarterly)	4	4	
		Number of disease surveillance activities conducted	4	4	
Animal Breeding	Artificial Insemination (AI) service	Proportion of farmer beneficiaries of A1 services	30	40	
	Stakeholder for a	Number of stakeholder fora on breeding held	4	4	
	Animal breeding centres	Number of breeding centres established	1	-	
		Proportion of breeding farmer beneficiaries	30	40	
Food safety and quality control	Animal health	Number of inspections conducted	50	50	
		Number of animals improved	1000	1000	
		Number of slaughter houses operationalized	9	9	
		Number of poultry slaughter houses operationalized	-	1	
		Number of diagnostic labs constructed and operationalized	-	1	
Leather development	Value addition in hides and skin	Number of tanneries established	-	1	
		Number of stakeholders trained	240	240	
		Number of leather cottage industries established	9	9	

2.3.1 Crop and livestock value chain development: Achievements 2018 - 2019

The above key indicators of performance as stipulated in CIDP 2018 - 2020, the county had planned to conduct 616 trainings, demonstrations and field days for both crops and livestock sector in 2018 and 2019. According to the 2020 mid-term review, a total of 600 trainings were conducted thus surpassing the target. In addition while the county had planned to establish 3 coffee nurseries during the period, instead 1.5 million seedlings of coffee were distributed. On farm input support, the county planned to distribute 50kgs fertiliser to 180,000 beneficiaries, however, 40,000 beneficiaries received fertiliser according to the review report. On maize seed, the county targeted to distribute 1000 MT of seed, however 220 MT of seed was distributed.

On livestock value addition, the county planned to establish 18 raw milk coolers. From the review report, 4 milk coolers were established.

The key achievements realized by the department include;

- Training of 600 farmer groups in 45 wards per year on disease control/ animal husbandry techniques
- 40,000 bags of fertilizers distributed to vulnerable farmers
- 220 MT of maize seeds distributed to vulnerable farmers
- 600 litres assorted crop pest protection chemicals distributed to vulnerable farmers
- 3 tea nurseries established
- 1.5 million coffee seedlings distributed to farmers
- 3 soil testing lad procured
- 4 milk coolers procured
- 30,000 fruit seedlings and agroforestry trees raised

2.3.2 Trade, Energy and Industrialization: Achievements

The department is focused on providing a conducive trading environment by ensuring consumer protection,

extended trading hours through market/street lighting, implementing structured taxes, providing accessible e-platform services and automating revenue system.

The key achievements are:

- Development of market infrastructure
- Installation of solar powered lights at market centres and rural house holds
- Renovation and Operationalization of CDCs in all the sub counties

2.3.3 Gender, Culture, Youths and Sports. Achievements

The department set out to create sustainable and equitable social cultural and economic empowerment to all. It committed to achieve this by formulating, mainstreaming and implementing policies that respond to gender and cultural issues through coordinated strategies that engender a sustained and balanced social, cultural and economic development of the County as well as empowering the vulnerable and marginalized groups and areas.

The key achievements are;

- 9 cultural sites Developed and maintained
- 1 multipurpose centre constructed and equipped

Inadequate implementation and monitoring of the agribusiness support programs: From the above table, it is clear that there are a number of other performance indicators whose progress was not reported in the review report. The same applies of other departments such as the Trade, Industrialization, Cooperatives & Enterprise Development; and Youth Affairs and Gender Sub Sector. This was attributed to weak monitoring systems to track implementation as well as weakness in program implementation

2.4 Major Agricultural Value Chains

Agriculture is the backbone of Bungoma County and most families rely on crop production and animal rearing. Main crops produced include maize, beans, finger millet, sweet potatoes, bananas, sorghum, Irish potatoes and assorted vegetables. Sugar cane, cotton, palm oil, coffee, tea, sun flower and tobacco are grown as cash crops in the County. Main livestock in the County include; cattle, sheep, goats, donkeys, pigs, rabbits, poultry and bees. Of these commodities, various value chains have been prioritized as being strategic for the county as indicated in the County Integrated Development Plan (CIDP) and the Agriculture Sector Development Support Programme (ASDSP). Four major value chain commodities (VCC) were selected for in-depth analysis based on: prioritization in County Frameworks and Programmes; economic value (KES/bag or KES/livestock or KES/ unit livestock product) resilience to current weather variability and future climate change and number of economically active people engaged in the commodity's value chain (including vulnerable groups, women, youth and the poor). These include;

2.4.1 Maize Value Chain

Bungoma County is one of the four counties which together produce 45% of the maize produced in Kenya. The other three counties are Narok, Uasin Gishu and Trans Nzoia. Maize crop covers 95% of the land under food crop production and 80% of the value of food crops produced annually in Bungoma County, especially, in Tongaren, Kimilili, Mt. Elgon and Sirisia sub counties. This is the crop that determines not only the food security of the county and the Kenyan nation by extension, but also the earnings in the agricultural sector on which three quarters of the country's population is dependent on for their livelihood. Therefore, focusing on food security in Bungoma County is synonymous with focusing on maize. However, although maize production in the county has been on an upward trend over the last years increasing at an annual average rate of about 9.7% in the County, it is still not sufficient as per capita consumption is

around 1.5 bags of 90kgs making the annual consumption requirement to be 3,737,690 bags, while production is at 2, 962,830bags (98,761 Ha). Due to this deficit, the county has to rely on imports from neighbouring counties like Trans Nzoia, Uasin Gishu and countries like Uganda worsening the food accessibility issues. This has led to chronic and sometimes severe food insecurity (70%) and high level of well spread poverty (53%), exhibiting a poverty index of 3.79% being the fourth contributor of poverty in the Kenya.

2.4.2 Dairy value chain

Bungoma County has a herd size of 35,764 improved cattle and 57,835 indigenous cattle producing an estimated 114.3 million litres. Per capita consumption is 138 for milk producing households and 63 litres for non-milk producing households. Milk demand is therefore 228.7 million litres thus leaving a milk deficit of 50%. Productivity per cow is however low at 2760 lts (FAO, 2017). The County is Part of the medium potential regions in dairy production in Kenya. It also represents one of the areas earmarked and targeted by dairy development programmes to stimulate commercialization of milk production and marketing. It is home to the third oldest milk processing plant in Kenya, Kitinda Dairy Cooperative Union (KDCU) dairy processing plant. The plant was set up with support from the Finnish Government under a programme to demonstrate the role of international aid in technology transfer. However, the plant collapsed in 1995 partially due to the inability to source an adequate supply of milk within the catchment.

A formal value chain runs alongside a dominating unpasteurized (informal) value chain with over 70 percent of total marketed milk. Direct sale to individuals and institutional consumers was the most preferred marketing channel by milk producers (but presented limited opportunities), followed by well-paying traders. Direct sales offer relatively higher prices and more flexible payment conditions based on continuous renegotiations. They offer limited opportunities to producers, however, because there are

few such clients, especially for producers operating far from shopping centres in largely milk surplus communities. Farmers far from shopping centres and towns are limited to relying on milk transporters/traders, generally young men, who link them to markets via collective bulking and/or chilling centres managed by POs or run as private enterprises. Most collection centres do not bulk evening milk, which is mostly designated for household use and is managed by women, who sell the surplus to traders or consumers (KCDMS, 2018). The dairy value chain in the county is also being supported by the National Agricultural Rural Inclusiveness Project (NARIGP).

2.4.3 Poultry Value chain

In Kenya out of 31.8 million chickens kept, local chicken account for 81% (25.7 million) and 20% (6.1 million) are exotic chicken (Kenya National Bureau of Statistics, 2010). Most rural families in Kenya (an estimated 75%) keep chicken. Indigenous chickens contribute 71% of the total egg and poultry meat produced in Kenya and therefore impact significantly on the rural trade, welfare and food security of smallholder farmers.

Chickens serve several functions in smallholder households: they act as a living bank account that can be sold when extra income is needed, can be slaughtered to celebrate important social events, or can generally serve as a high-quality source of protein. However, poultry production can be limited by disease, and local flocks may or may not have robust genetic resilience. According to FAO (2007), Bungoma is one of the leading regions in poultry. The indigenous chicken sector has the potential of contributing to family income considering the existing popularity, suitability to the local conditions, low cost investment, quick returns on investment and their potential for growth in business and business development services. Indigenous poultry is a suitable enterprise where land is limiting. Indigenous chicken are kept for various reasons, including cultural ceremonies which vary from one culture to another. Virtually every household keeps some indigenous chicken

There's an increasing demand for white meat in the urban areas, this demand is not in tandem with the supply from the rural areas where most of the local

chicken are reared (Ministry of Agriculture, 2008). Consumption is shifting from basic food stuffs to fruits, vegetables, and white meats especially in urban areas. Food markets have changed over time from supply chains to value chains. Food value chains in the developed world are very advanced, consumers demand for high quality products as well as traceability requirements. Bungoma County is in the process of constructing a chicken slaughter house in Chwele market. The poultry value chain in the county is also being supported by NARIGP.

2.4.4 Horticulture

Main horticulture value chains include Bananas, Tomatoes and Passion fruits. Other horticulture crops in the county include Irish potatoes, local vegetables, and macadamia. Development projects in horticulture include a national project funded by IFAD, Smallholder horticultural and marketing project (SHoMaP) who constructed seven horticultural collection centers in the county. These were handed over to Ministry of Trade after devolution and are located in Webuye west, Kimilili, Kanduyi and Sirisia. The Constituency Development Fund (CDF) together with SHoMaP co-fund the establishment of tomatoes processing factory at Kimilili. A Japanese donor funded Project SHEP-PLUS did capacity building to 10 registered farmer groups growing horticultural crops. Agriculture sector development support programme (ASDSP) is supporting tomatoes value chain and pushing for registration of tomato value chain groups to a cooperative society. A World Bank funded programme-Community Driven Development and flood mitigation which was implemented for 8 years since 2006, constructed market centres in Western region including Bungoma. Community Farmer Field Schools partnered with FAO on capacity building on Irish potatoes to empower farmers exploit production and marketing potential in the county. Collaboration/partnership exist between most organizations and some institutions such as ADS, Government departments, CDF and VI Agro forestry. The Banana value chain in the county is also being supported by NARIGP.

3. APPROACH AND METHODOLOGY

3.1 Key Aspects of the Situation Analysis Research

The Situational analysis research for Bungoma County was necessary to enable a flow of understanding regarding agribusiness activities in the county, the existing processes, the key stakeholders, and value chains in a systematic and integrated manner. With the identification of processes that add value to products and services in the value chains, barriers, and the value chain utilization strategies, the research findings will help the AgriBiz programme in prioritizing the improvement of these processes to meet programme objectives.

3.1.1 Value Chain Mapping

The five key agribusiness value chains in the county were mapped and assessed for potential entry nodes. The findings from this process was anticipated to enable deeper understanding of the current state of value chain activities and provide the AgriBiz Programme with recommendations about the types of value chains to be supported and the nodes in which the Programme could possibly be involved. The step-by-step approach to our VC analysis mapping (VCM) was selected after contextualizing the AgriBiz programme with the aim of achieving a qualitative aspect to the mapping exercise. For many Agribusiness VCs across Kenya, there is already a great deal of published information from projects and the government. This information was first analyzed and augmented by primary research and fieldwork on areas where there were gaps or required updated information. Value chain mapping was guided by two major steps: 1) Value Chain Selection and 2) Value Chain Analysis.

- **Step 1:** Identify value chain potentials
- **Step 2:** Assess value chain opportunities for growth
- **Step 3:** Determine barriers faced in the selected value chain
- **Step 4:** Identify possible strategies to exploiting the value chains through the AgriBiz Programme.

3.1.2 Mapping and Physical Assessments of the Hosting Institutions

Mapping and conducting physical assessment of the state of existing Agricultural Training Centres (ATCs) and Technical and Vocational Education and Training Centres (TVETs) was required to identify the most suitable hosting institution for the Business Incubation

Hub (BIH). The process was guided by a step-by-step approach. First, the number and locations of ATCs and TVETs in the counties was assessed. Desk research was employed to assess the distance between each of the centres as well as their individual distances to their neighboring towns or counties. During the field visits the functionality and quality of the roads around the centres were also assessed.

Second, the appraisal of the selected ATCs or TVETs was conducted. The appraisal was guided by factors such as the structural integrity of the host buildings, availability of demonstration farms, and security of the premises, health and safety issues, availability of space, commitment from the host to support the programme sustainability, among other factors. The researcher visited the premises with a set of questionnaires to be filled by the institution's head or deputy. Finally, the data collected was analyzed and presented to draw conclusions and recommendations on the most ideal host based on the set standards. The recommendations are presented in the section 4.2 of the situation analysis report.

3.1.3 County Government's Commitment to the AgriBiz Programme

The researcher visited the relevant county government officials whose departments could be engaged in the AgriBiz Programme directly or indirectly. A set of questions were prepared in advance to guide the interview process. The visit to the county government offices was to introduce the AgriBiz Programme to the County government officials, and to solicit feedback on how the programme might be best suited to align with the county government's development priorities.

Desk research was used to ascertain the level of financial input the county government offers to agribusiness projects within the county in the past five years and in the next five years. With this knowledge the researcher was able to see how supportive Bungoma County was towards agribusiness development and how willing the county was to support the implementation and sustainability of such

programmes. Desk research was also employed to search for existing legislation that favour programs similar to AgriBiz. The existing legislation will be useful in garnering the support of the county government especially as they will like to be shown supporting county level initiatives.

3.1.4 Baseline surveys on key Human Development Indicators

The researcher employed a combination of methodologies to assess the baseline narratives for the different human development indicators for Bungoma County which have a direct effect or influence on the implementation of the AgriBiz programme. To properly capture the human development indicators, the researcher assessed the aspirations of various women and youth in agribusiness. Desk research was employed to identify key Human Development Indicators (HDIs) and associated data for pre and post programme analysis. The identified HDIs included Poverty levels, Employment rates, Health, and Nutritional status.

3.2 Research Methodology

This study was done in Bungoma County, Kenya in March, 2020. Using the extensive literature relating to the Agribusiness value chains in the County as a starting point, the researcher carried out a preliminary analysis in conjunction with local county government officials, Agribusiness experts and KCIC research lead to determine existing gaps in knowledge and identify areas where further data collection and analysis would be necessary to guide the Situational Analysis research. Relevant studies and data were reviewed and are discussed in this report, in some cases, with alternative analyses and interpretations carried out. Based on this process, focus group discussions (FGDs) and key informant interviews were carried out to update key agricultural and livestock activities being undertaken in the county, validate secondary sources, and provide primary information specific to the AgriBiz Programme target areas. The observations were undertaken during the field visits and any other contact with the target respondents.

3.2.1 Sampling and Target groups

The selection of respondents to participate in the study was done using purposive sampling technique. Purposive sampling was applied to ensure selection of only those individuals who are perceived to be the most active and or informed with regards to each County's potential value chains.

First, Bungoma County was purposively selected as per the recommendations of the AgriBiz Programme Suitability assessment. Within Bungoma County, five sub-counties (Sirisia, Bumula, Kanduyi, West Pokot and Mt. Elgon) were purposively selected because of the high-intensity of women and youth-driven agribusiness initiatives in the areas. Five women and four youths involved in agribusiness activities were randomly selected to participate in the key informant interviews. In addition, a total of 15 participants (women, youth and men in agribusiness) were randomly selected to participate in the Focus Group Discussions. Each of the selected respondents had to be active participants in the various value chains to be included in the analysis. Other participants who were interviewed in the study included the County Director of Agriculture, Livestock Officer and ATC officers.

3.2.2 Data Collection, and Analysis

In the data collection phase, the researcher team operationalized interviews and the FGDs together with the collaborators identified in the section above. The researcher presented the objectives of the AgriBiz Programme to the participants and mobilized them to participate in the study. Various data collection techniques were employed including key informant interviews, focus group discussions, observations, and desk research.

Having completed the data collection exercise, the researcher analyzed the raw data using various techniques. Quantitative data was analyzed through descriptive and inferential statistics through use of Statistical Package for Social Sciences - SPSS. Descriptive statistics was used to show the frequencies of various variables. Visual representation of the findings was accomplished by using graphs, tables and pie charts. Qualitative data collected was analyzed through thematic analysis by grouping related statements and thereafter presented in prose form. Upon completing data analysis, the researcher used the resulting information from the primary data analysis in addition to the prior collected secondary information from desk research, to prepare a draft situational analysis report.

4. FINDINGS AND INTERPRETATIONS

4.1 Value Chain Mapping and Analysis

The development of agriculture is also important in Bungoma County for poverty reduction since most of the vulnerable groups depend on agriculture as their main source of livelihoods. Growth in the sector is therefore expected to have a greater impact on a larger section of the population than any other sector including employment creation where the sector is projected to provide up to 70 percent of jobs (CIDP 2013 -2017)

Findings from the field revealed that Bungoma County, is engaged in a number of agricultural value chains in crop and livestock subsector, key among being Maize, Dairy, poultry, beans, banana, vegetables (including indigenous), fruits, Root tubers, sweet potatoes, cassava, among others.

Below is a graph showing the most important value chains according to the respondents

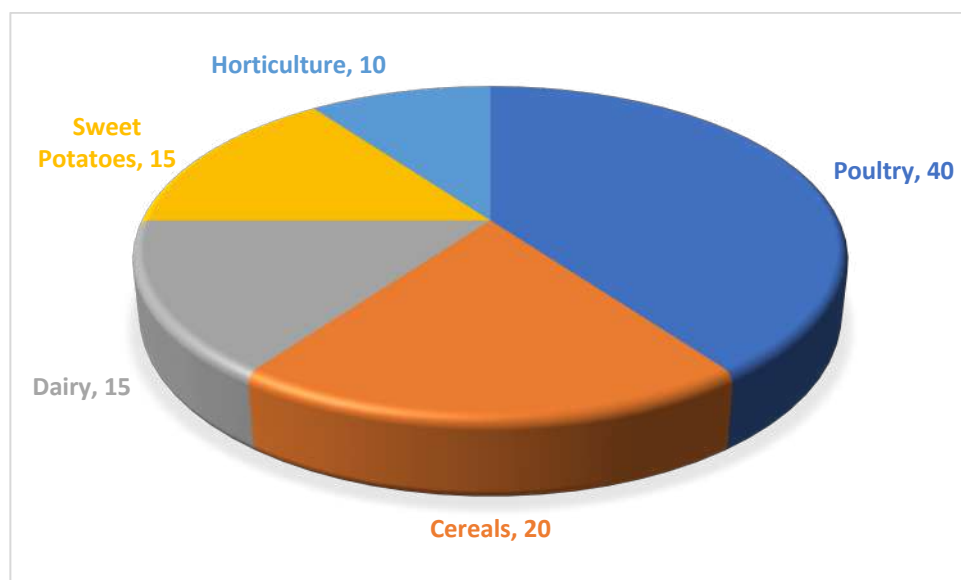


Figure 2: The Top Five Most Important Value Chains in the County

The main challenges to agricultural production in the county include: inability of farmers to afford the optimum use of inputs, technology, agricultural information, financial services, and insurance. Other challenges are: low crop productivity due to declining soil fertility; small, uneconomical sizes of land; poor gender equity in land tenure system; poor farming methods; over-dependence on one cash crop; lack of storage facilities; inadequacy of capital to invest in high-yielding areas; high prevalence of HIV and AIDs; poor road infrastructure and livestock diseases

Below is a typical value chain map for agricultural products.

Figure 3

The typical agricultural value chain



Source: A.T. Kearney analysis

Figure 3: Typical Agricultural Value Chain

Our analysis shows that both women and youth were involved in the various phases of the agricultural value chains. These includes input supply, production, processing and packaging and marketing. As shown in the graph below, most of the respondents were involved in the production phase of the various agricultural value chains, while a significant proportion was also involved in extension.

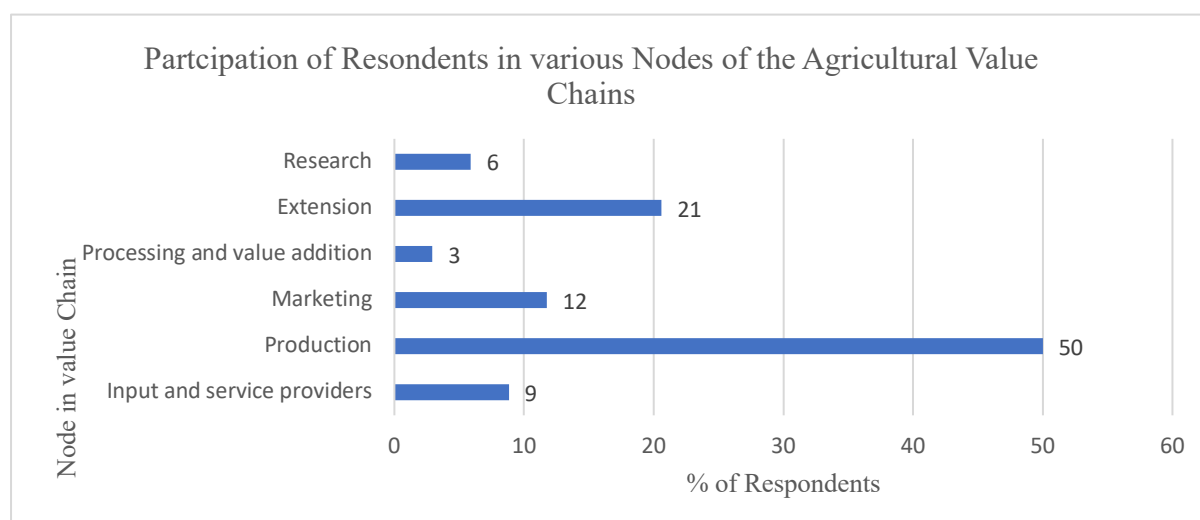


Figure 4: Respondents participation in Agricultural Value Chains

In this section, the report will present in depth findings on the major agribusiness activities going on in Bungoma County, the prioritized value chains, assessment of the selected value chains (potential, opportunities for growth, barriers, and strategies for engagement), a selected value chain map (fruits).

4.1.1 Proposed agribusiness activities for women and Youth in Bungoma County

While the AgriBiz Programme is a national strategy, its implementation will be carried out by the counties in line with the Programme goals and aspirations. After the promulgation of Kenya's constitution in 2010, agriculture became a devolved function. Accordingly, it is crucial that the strategy is domesticated by the county governments, and that the planning phase is cognizant of the agribusiness activities in Bungoma county. To properly inform the situational analysis exercise, this section of the report outlines specific women and youth driven agribusiness activities across various value chains in the county.

4.1.1.1 Supply of Inputs

From our findings women and youth in Bungoma county were actively participating in the businesses related to the supply of inputs. Notwithstanding, the quality cost and availability of inputs had adverse effects on their crop or livestock production businesses. For instance according to respondents, animal feed supply was a major challenge due to among others the poor quality, high cost and unavailability. This was associated to importation of most of the ingredients from neighbouring countries which led to high cost and occasional unavailability due to seasonality. Soya beans

production which was mentioned by some of the respondents as an emerging viable value chain which would be very relevant in addressing the challenges of animal feeds. This would however need to be coupled with small industries which convert the raw materials into ingredients that can be utilised by feed milling plants. The challenge of animal feeds ingredients is not limited to Bungoma county. The output of these small industries would therefore find a market beyond the county.

In addition respondents also mentioned unavailability of soya bean seeds. While the climatic conditions for seed establishment are favourable, this would only be viable if the farmers are engaged by seed companies on contract basis for seed production. This would include production of seed for food crops, fodder and pasture and cash crops.

4.1.1.2 Pre-production and Production

According to the county integrated Development plan (2018 -2022), Agriculture is the mainstay of Bungoma county contributing to about 64% of household income and food security. This was further confirmed during the survey in which over 50% of the respondents interviewed were involved in production of the various crops and livestock products

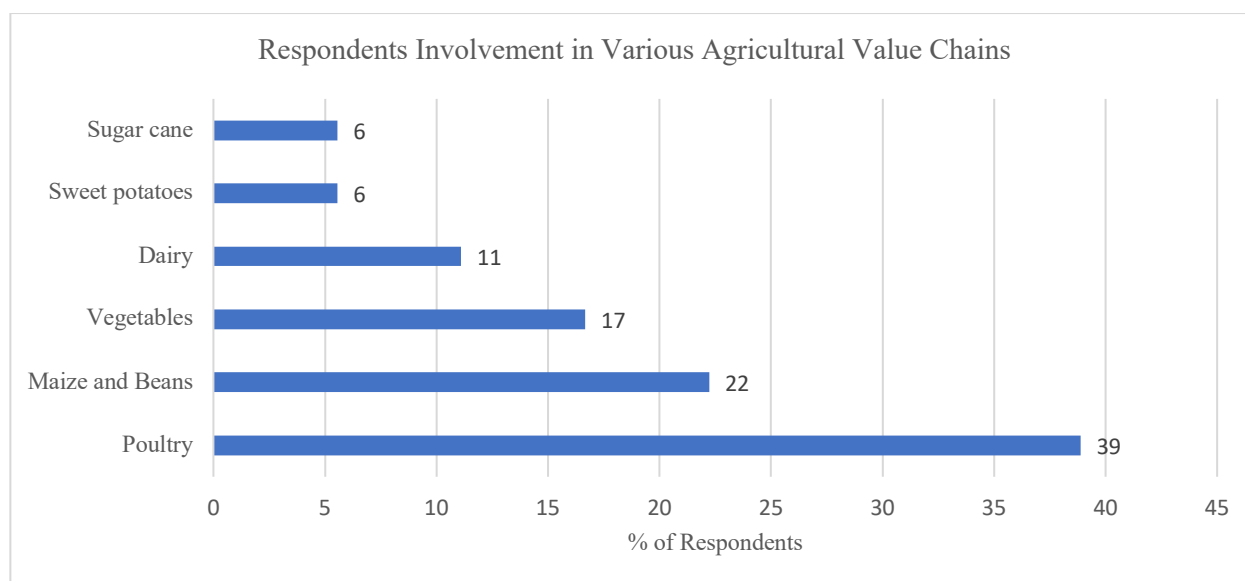


Figure 5: Value Chains in which Respondents were involved

As seen from the graph, about 39 per cent were involved in the poultry value chain, 22 per cent in maize and beans value chain, 17 per cent on vegetables and 11 per cent on dairy. These are the value chains in which youth and women interviewed were predominant engaging in production. The respondents were in these value chains because they had a ready market, required less labour and capital to establish. The agricultural commodities produced provide food for the households as well as income. Not meeting the needs of women and youths in agribusiness can negatively impact food security in the country as well as limit job opportunities that might be created from the sector. A youth respondent stated that long distances between input suppliers and the farmers limits effectiveness of goods and services offered while adding substantial cost. "Gender inequities still exist in Bungoma County. Challenges such as inadequate access to information, markets, energy and finance, were holding majority of women agripreneurs in the county back from achieving their full agricultural potential." female respondents explained.

Production constraints mentioned include lack of capital, limited access to land, poor quality of produce, cost and limited access to inputs, limited access to technical skills and knowledge. Others were reliance on rain fed production which is affected by climatic

changes, disease outbreaks, limited youth sensitization on viability of agri-enterprises and time management especially for women.

4.1.1.3 Marketing of agricultural produce

From the field findings, marketing of agricultural produce emerged as the biggest challenge that farmers faced. While the dairy value chain had established milk marketing groups for formal milk marketing and milk traders for informal milk marketing, the rest of the value chains lacked organised marketing structures which limited access to markets. Besides organization of marketing of agricultural produce, other challenges cited included poor and fluctuating prices and exploitation by middle men. To address the marketing challenges, respondents requested the agribiz hub to undertake the following;

- Empower youths and women on agribusiness skills
- Serve as information centres covering the entire value chain
- Provide a forum in which women and youths involved in agribusiness would share experiences, challenges and learn from one another.

- Establish self-help groups to facilitate in marketing
- Facilitate and strengthen marketing linkage
- Strengthen leadership and governance structures for agricultural produce marketing groups
- Establish marketing and aggregation centres
- Forum for networking and facilitating access to markets
- Centre for research, value addition and marketing.

4.1.1.4 Processing and Value addition

Currently there is a growing concern that priority should be given to the agro-processing industry in Bungoma County. This would help to save on losses arising from the perishability of agricultural produce, price fluctuations for raw products, as well as secure better markets. Agricultural products proposed for value addition include milk (for cattle and goats), sweet potatoes, soya beans, and poultry.

Table 3: Challenges facing value addition for agricultural produce among women and youth

1. Lack of start-up capital
2. Lack of a premise for operations. Rented premise not affordable for start ups
3. Lack of skills in value addition and quality control to comply to standards
4. Lack of equipment necessary for value addition
5. Limited quantities produced hence need to support production and aggregation
6. Packaging material
7. Market linkage

Market was particularly identified as a critical component to the sustainability of these project. For instance, Susan Wanyela gave an example of training and investments to value addition for sweet potatoes. However, lack of stable markets on the same limits its adoption. Youths were particularly found to be more interested in taking up value addition and present a good chance for success because, most are educated and would be easy to grasp the concepts of value addition and quality control. They are also more outgoing and have access to internet which can help in establishing and growing markets. Youths were also more inclined to taking up value addition because it created job opportunities, boosted profitability, provided for innovation and not as laborious as the farm level activities hence more preferable.

4.1.1.5 Transporters

The respondents (majority youth) indicated active participation as transporters in dairy value chain as compared to other value chains. Youth participate in three main types of milk transport ventures. Firstly, as formal licensed transporters with specially build trucks for milk transportation. Secondly, as licensed transporters who use open trucks but carry milk in authorized aluminum cans. Finally, as informal transporters who transport milk using bicycles and motorcycles but using unapproved containers. Informal traders who transport milk using banned

plastic Jerri cans are prone to arrest, prosecution and/or confiscation of their milk by Kenya Dairy Board (KDB).

Milk transportation takes place at two levels: transportation from the farmer to bulking/cooling centers and transportation from bulking/cooling centers to the processing plants. Either the farmer or a formal/informal trader who bulks the milk undertakes the first level of transport. The challenges at this level of the chain include poor/inappropriate transport systems, such as open trucks and use of plastic Jeri cans and poor road infrastructure. Poor handling including lack of cooling and use of inappropriate containers at

this level could lead to heavy losses, due bacterial growth. Formal transporters and large processing firms undertake the second level of transportation, and this requires specially built trucks with refrigerated tanks to maintain the temperature of the milk at acceptable levels.

4.1.2 Selection Agricultural Value Chain for Women and Youth

In this section of the report, the Bungoma County's priority agribusiness value chains are presented based on the strategic priorities identified in the county Sector Plan and CIDPs, the AgriBiz Programme goals and objectives, and opinions of the women and youth agripreneurs on value chains that are of top strategic importance for them. As part of the stakeholder consultation process in AgriBiz Programme development, the county-level priorities were identified by county representatives in agriculture and other sub-sectors. The identified value chain is shown table 3 below. Should additional value chains be required in the course of program implementation, it is advised to consider the value chain prioritization factors shared below, which provides criteria against which value chains can be evaluated and prioritized. While these criteria have been used specifically in the AgriBiz Programme value chain prioritization, they have a high degree of overlap with those used by different international organizations, e.g., USAID, World Bank and UNIDO in their own value chain prioritization exercises. The criteria for selecting promising VCs for analysis considered:

- Value Chain growth potential – current and potential demand for the product or services, taking into account competition from similar products or product substitutes, both domestic and imported
- Inclusiveness – potential for the youth and women to increase their household incomes and reduce risk by producing the product or supplying inputs or services to the VC in ways that meet their aspirations.
- Complementarity/ competition with existing or potential alternative VCs/livelihood activities – other agricultural activities or non-agricultural activities
- Environment, natural resources, climate resilience – the levels of natural resource endowments (land and water) that are currently and potentially available; climate risk factors in the value chain; and the possibility of making value chains more climate resilient
- Regulatory, policy and business environment – the environment for pro- youth and women participation in the Agribusiness VC and the potential for policy dialogue for pro-women and pro-youth change
- Job creation potential – the contribution that the Agribusiness VC can make to increase the volumes of jobs created for women and youth involved in various segments of the VC.

The AgriBiz Programme is strategically aligned to support various nodes of both the agricultural and animal production value chains as indicated in the table 6 below.

Table 4: Value Chains Supported by the Agribiz Program

Agricultural Value Chains	Animal Production
Markets: Wholesale, retail, own brands	Feeds and veterinary – production of feeds, medication for animals
Inputs: seeds, fertilizer, and pesticides	Animal breeding and rearing- Keeping of animals and birds, AI
Aggregation: Farmer groups, centers, grading	Animal Products- production and processing of animal products e.g. eggs, milk, meat, etc.
Pre-production: Land preparation, irrigation	Transport- Transport of products or animals to market, inputs as well to the farms
Production: Planting and nurturing	Packaging and Branding- including making of won products
Harvest and post-harvest: cleaning, storage, transport, value addition etc.	Processing and Value addition- of animal products

Ranking of the priority agribusiness value chains in the county was done to establish an order of priority. As discussed above, the VCs were ranked based on their potential ability to deliver impact in the county's priority areas among other factors. Leveraging on this ranking exercise, Bungoma county is strongly encouraged to collaborate with other counties in their regional economic blocs to identify opportunities for joint interventions, for instance, in the proposed agro-processing which has the potential to source inputs from several counties in the region. Again, working together through the proposed Business Incubation Hub can also help the AgriBiz Programme become more cost-effective through economies of scale, and improve feasibility of implementation by aggregating capabilities and resources from multiple counties. The table below presents the priority Agribusiness VCs within Bungoma County as identified by the various categories of the respondents (youth, women, and county government)

Table 5: Priority Agribusiness VCs in Bungoma County

Priority Agricultural Activities	Youth (12)	Women (12)	County Government (4)
	Ranked according to Priority		
	1. Poultry	1. Poultry	1. Poultry
	2. Dairy	2. Vegetables	2. Dairy
	3. Sweet potato	3. Sweet potatoes	3. Horticulture
	4. Soya beans	4. Dairy	4. Apiculture
	5. Fodder and pasture	5. soya beans	5. Mushroom
Priority Value Chains	1. Processing- Value addition	1. Inputs- fodder	1. Inputs
	2. Markets	2. Production	2. production
	3. Production	3. Aggregation and marketing	3. Aggregation and marketing
		4. Processing and value addition	4. Processing and value addition
		5. Packaging and Branding	5. Inputs- subsidized fertilizers etc.

The findings from the table above were further analyzed to present the five most promising Agribusiness VCs within Bungoma County with the potential to create significant positive impact for the targeted beneficiaries (youth and women) after factoring the Programme goals and identified priority VCs.

1. **Production**
2. **Processing and marketing**
3. **Aggregation**
4. **Inputs**
5. **Branding and promotion**

4.1.3 Assessment of proposed Agricultural Value chains

Having identified the five most significant Agribusiness value chains in the county, an in- depth analysis of the selected VCs was conducted guided by four assessment criteria: i) the value chain potential; ii) opportunities for growth; iii) barriers; and iv) strategies for engagement in the value chains. The purpose of the VC analysis was to identify the main opportunities and their bottlenecks, and identify the most promising nodes for engagement. The identified value chains in Bungoma County include:

1. **Poultry**
2. **Sweet potato**
3. **Dairy**
4. **Soya beans**

In the sections that follow, the analysis of the value chains is presented as guided by the four pillars to identify the major points of leverage within the VCs where the AgriBiz Programme can have the maximum positive impact.

4.1.3.1 Potential of the Agricultural value Chains for Women and Youth in the County

Poultry value chain was identified as the most potential. This is because it requires less capital to start up, its less laborious, has a ready market, there is existing experiences, leverages well with county support because it is a value chain that is prioritised by the county government as well as other programs existing in the county such as the National Agricultural Rural Inclusiveness Growth Project, (NARIGP) which is a world bank funded project. It was also considered a priority value chain by both women and youths.

Indigenous chicken is the most predominant type of poultry in Kenya, comprising 75-98% of the estimated population of 25-30 million birds. Most households in rural communities keep small flocks of up to 30 birds,

mostly under free range conditions. In Kenya poultry contributes 6.1% of livestock GDP, 2.3% Ag GDP and 0.7% of total GDP (UKAID, 2017).

Kenya's market for indigenous chicken is growing with the increasing demand for animal protein, preference for the taste & texture of the indigenous bird, the environmental, economic and health benefits of substituting red meat with chicken, and the perception that indigenous chickens & eggs have far less use of drugs and hormones. Marketing approaches that are being applied to the indigenous chicken value chain include branding, targeting the bottom of the pyramid market and differentiating products into several market segments, even within the low end market. An aspect that will need to be addressed is changing the attitude of consumers to increase the willingness to buy dressed versus live indigenous chicken.



Picture 1: Indigenous Chicken

The indigenous chicken value chain is not yet well-structured but there are interesting developments with a number of farmers producing indigenous backyard chicken in their own facilities and also working with other small holder farmers to also produce chicken. Currently demand surpasses supply for indigenous chicken products, and some small and medium scale entrepreneurs (SMEs) have come in to do aggregation for this increasing demand. Each aggregator is working to identify their own markets and to secure the best price for the chicken. Farmers need to have a continuous line of production for the months of April, August and December when chicken is in more demand and prices are highest. Farmers will need training to produce birds in staggered batches for high season and off-season sales and greater efforts are required to ensure that the farmers have adequate market linkages. The aggregation of farmers ensures scale and guarantees supply to identified markets, which guarantees markets for the small scale farmers.

Dairy value chain was also considered highly potential going by the climatic conditions, ready market for milk and existing milk marketing groups. Dairy also leverages well with county support because it is a value chain that is prioritised by the county government as well as other programs existing in the county such as the National Agricultural Rural Inclusiveness Growth Project, which is a World Bank funded project. It was also considered a priority value chain by both women and youths. Dairying should however be undertaken alongside pasture and fodder development.

Sweet Potato Value Chains were also considered a priority value chain by both women and youth. Sweet potatoes are widely grown in Bungoma again due to the climatic conditions. The orange fleshed sweet potato are particularly nutritious hence contributing to improved nutrition at the household level. Training on value addition is available with support from GIZ and CREADIS.

Kenya's potential to produce sweet potato for the export market is high due to favourable soil and vine quality plus water availability in production areas. The soil types and texture, (sandy at the Coast to silt with a lot of organic matter in the Nyanza region) with a pH range of 6-7, are suitable for sweet potato production. In addition efforts towards farmer awareness on clean vine multiplication coupled with the need for good storage have been well adapted. There have been releases of new varieties with diverse characteristics for virus tolerance. Despite the presence of virus, vectors like white flies these varieties assures increased production. The greatest challenge remains availability of reliable water throughout the season as most production is rain-fed. Other constraints include pest and diseases management, fertilization, and overall crop management. The Sweet potato tuber production plays a three prong role of nutrition, income and food security at household level.

Owing to health concerns by the customers and the consequent enhancement of its nutritive d importance

in some varieties, its utilization as food and breakfast is on the rise in the city. The orange fleshed varieties contain Vitamin C and beta- carotene (Vitamin A) which helps build immunity in children, prevents blindness and prevention against cancer-causing free radicals (GoK, 2010).

Soya bean value Chain is also another value chain to be considered. Soya beans will feed into the animal feeds processing industry. Animal feeds constitutes the largest portion of the costs of milk production in market-oriented dairy farming. One of the respondents who is active in the dairy value chain confirmed that dairy animals in Bungoma County are underfed, resulting in low milk yields, with a majority of smallholders feeding dairy cattle on natural forage, cultivated fodder, and crop by-products. The dairy feed input value chain has a great potential for both women and youth to supply. Soya Beans is one of the ingredients for processing of feed supplements. Currently the same is imported into the country resulting to fluctuation in availability and high cost.

Besides being a source of animal feed, Soya is very rich in protein and is a globally recognized pre-packaged meal for humans around the world. Soya is the main component of some processed foods and supplements such as soy meat, soy flour, soymilk, soy oil and confectioneries. Its products are also considered rich in Omega-3 fatty acids and they contain flavones, considered by dieticians and physicians to be useful in prevention of cancer. Besides these nutrients and health features, soya products have no cholesterol. Similarly, they are also relatively cheaper with higher protein content and they contain a lot of fibre rich in calcium and magnesium. Western Kenya and particularly Bungoma County is one of the leading producers of soya beans in Kenya hence has immense wealth of experience on the same that can be utilised to the benefit of the program.

4.1.3.2 Opportunities for Growth for the proposed Value Chains

The poultry value chain in Bungoma County has a lot of opportunities for the participation of women and youth agripreneurs in various nodes of the chain. From the

focus group discussions, it was apparent that investment in hatcheries where both the indigenous and improved breed chicks are sold is worth considering. Indigenous chicken production is recognized as an avenue to improve livelihoods of women and youth. Backyard chicken production is particularly important to duo with high potential for employment and empowerment. About 76% of indigenous backyard chicken producers are women (UKAID, 2017).

It is estimated that poultry meat consumption in developing countries is increasing by 3.5% per annum due to rising incomes, diversification of diets and expanding market. This growing demand is not being met due to several constraints. Only a few farmers (24.2%) have access to extension services and are adopting relevant management interventions. Baseline studies for FICCF indicated that indigenous chicken assured food security for 18.2% of the rural population in western Kenya Region (UKAID, 2017).

Opportunities for commercializing indigenous chicken lie in the increased demand created by a growing urban middle class, growing incomes, population and a growing retail sector. Indigenous backyard chicken is less weather dependent than other agricultural production systems. Chicken production only requires small parcels of land, small quantities of water and has a lower energy footprint compared to landbased agro-enterprises. It is therefore seen as a good income diversification and food security option, especially for women. The Government of Kenya has identified the chicken sub-sector as a promising investment opportunity for the private sector as it has a high replication potential, plus ability to enhance food security and nutrition while reducing the carbon footprint of agriculture.

Producers can also adopt a semi-intensive production system utilizing improved breeds. For women and youth agripreneurs interested in the markets segment, opportunities exist for medium to large traders to sell inputs, with focus in lower income areas. There is however need to link the poultry producers to traders in the poultry value chain who supply to the markets in

the cities and urban centres. Slaughter house establishment presents another opportunity in which value addition can take place in compliance to the food safety requirements for the target markets and public and veterinary health laws.

The dairy value chain has a great opportunity for growth going by the prevailing and growing demand for milk and milk products. The milk demand is driven by growing population, per capita milk consumption and increasing incomes. Women and youth groups have an opportunity to increase milk production by practicing, zero grazing, aggregation and value addition for milk in terms of pasteurization. Continuous processing units should be considered as opposed to batch pasteurization which is subject to post pasteurization contamination. The introduction of direct milk dispensing machines in most supermarkets and shopping malls in the county is providing larger dairy cooperatives with an opportunity to compete with processors for this segment of the fresh milk market. These processing units should therefore be coupled with milk dispensers.



Picture2: Photo of a dairy cow milking Courtesy USAID-KAVES

Sweet potato value chain commercialization presents a great opportunity for men and women in Bungoma County. This however needs to be coupled with a promotional campaign on the advantages of particularly the orange fleshed sweet potato on the nutritional benefits of the products to stimulate demand and

establish more sustainable markets. The orange-fleshed sweet potato varieties offer regular supplies of Vitamin A, and can be processed into juice or composite flours for baked products and weaning foods. The leaves are used as a vegetable and the vines as animal fodder (GoK, 2010).

Soya Bean value chain Opportunities for growth also exists going by the growing demand for feed supplements driven by growing demand for milk and milk products as well as the human demand for the same soya for human consumption which is currently met by imports. There is opportunity both at production as well as value addition or processing to produce a ready product for the feed mill. Other opportunities that can leveraged include;

- Improving on existing policy
- Increase bean production by focusing on zones with larger holdings
- New improved common bean varieties demanded in large quantities in Kenya
- Improved technologies for bean production
- Support by several agencies in dissemination of new bean technologies and marketing
- Seed companies willing to market new improved bean varieties once they are assured of increased demand for them
- There are structures for formal and informal seed production

4.1.3.3 Barriers Facing the proposed Value Chains

As for the poultry value chain, the major barrier would be sustained supply of the chicken since informal production and marketing systems pose challenges with most of the indigenous chicken production being undertaken at the backyard. There is however a business case for commercial production of indigenous chicken using the backyard production system but as a less established value chain, greater parallel technical assistance investment and lead-in time is required. Due to the disaggregated nature of production, the scope for the indigenous chicken value chain to absorb loan finance is much lower than the other established value chains such as dairy and crops.

Indigenous chicken is still a very informal production system, with a very informal marketing system, which results in a range of challenges for the partners and the farmers involved. Furthermore, changes are occurring in the areas of indigenous chicken nutrition and disease pressure as a result of the changing environment, occasioned by a changing climate (Abolnik, 2017). Higher humidity levels occasioned by temperature rise seem to be increasing respiratory problems and enteric diseases among flocks, and this is posing management challenges. Sustainable market linkage and slaughter house compliant to food safety standards.

For the dairy value chain, the major barriers include the high cost of equipment required for milk value addition, quality testing and a premise within which the plant can be installed compliant to food safety and quality assurance. Some of the respondents stated that reliable quality testing is virtually non-existent for the portion supplied directly to consumers or to milk bars/hotels/shops. Majority of the respondents in the dairy value chain, especially traders, admitted that the equipment they use for handling and transporting milk do not satisfy the minimum food safety standards as required by the industry regulators, including the Kenya Dairy Board (KDB), Kenya Bureau of Standards (KEBS) or the Ministry of Public Health. In addition, where milk is marketed through dispensers installed at the supermarkets, super markets have a payment delay period of up to 90 days. This could constrain the group due to lack of operational capital. A high capital investment would therefore be required hence the need for agribiz support.

For sweet potato, Key barriers at production include pest infestation and mole attack, poor selection of vines, lack of knowledge and skills, price fluctuation and lack of capital, poor market for the products and a lack of transport to market. Other barriers would be the cost of publicity and promotion to create awareness on the nutritional benefits of sweet potato, processing equipment, quality control and operational premise and access to the major retail outlets such as super markets.



Picture 3: Orange Fleshed Sweet Potato

Barriers to the soya bean value chain include; Frequent changes in weather patterns in the dry lowlands and frequent drought lower bean production, Changing rainfall patterns affect bean harvests and lower quality due to rain during harvesting, Pests and diseases, Insufficient use of improved technologies by farmers, Inadequate access to improved market-preferred varieties, Lack of adequate information for farmers and stockists limit access to improved bean varieties and technologies, Ineffective use of dissemination pathways by partners to promote bean technologies, Lack of structured marketing systems for bean grain, Lack of effective farmer production and marketing groups/associations, Increase in population leading to land subdivision and reduced land for bean production.

In addition, gender inequities, including access to information, water, energy and finance, are holding women back from achieving their full agricultural potential. This was revealed during the focus group discussions where the participants (majority women) admitted that they have seen some positive progress after joining women groups and working together to champion women's cause in the county. However, they stated that more needs to be done to diminish the gap between men and women especially in regards to access to resources.

Other productivity constraints that were identified to deter optimal participation by women and youth in various value chains included technology gap. There are significant gaps in feeding, breeding, and animal healthcare, good agricultural practice and farm inputs with most farmers relying on inadequate and poor quality inputs, inefficient technology, and poor management practices resulting to low productivity. This entails additional investment for inputs, production and aggregation to support sustainable production.

Inadequate technical know-how and management gap was also identified as a major barrier whereby poor animal husbandry and agricultural practice, livestock and crop enterprise management, insufficient expertise for self-help group management, poor produce handling, and insufficient marketing practices impose higher unit costs and lower gross margins. In some farmer groups, poor production techniques have led to the deterioration of produce quality and therefore low market opportunities. Program interventions that include extension, education and training should offer low-cost means of raising productivity and reducing commodity losses by applying improved management practices. Inadequate access to finance was identified by majority of the respondents as one of the major constraints to improving agricultural productivity and agribusiness activities in the county.

"Setting up an Agribusiness venture often requires a considerable amount of capital which is often not available for the majority of youth and women. This scenario is exacerbated by the fact that majority of the women and youth do not own resources such as land that can be used as collateral when borrowing." Woman agripreneur from Kanduyi during focussed group discussion forum. Enhancing access to finance through affordable loans and grants was identified as one of the channels for partially overcoming this constraint.

4.1.3.4 Strategies for Developing the Proposed Value Chains.

a) Input provision

Across much of Bungoma agricultural value chains, women and youth input suppliers are limited in their ability to provide appropriate services to local farmers. Additionally, majority of the women and youth input suppliers have inadequate finance and technical knowledge to effectively serve producers. Accordingly, intervention projects, such as the AgriBiz Programme should target working with women and youth-driven agro- dealers to establish mobile services, build the technical capacity of agrovets in providing appropriate drugs, and support producer groups to provide services such as joint fodder production, and reproduction and animal health services.

c) Poultry value chain

A key relationship driver in the process is contract farming as a strategy for market development and increasing access to credit for farmers. This entails providing farmers with contracted input supplies, timely technical advice and credit, and market services while the farmer commits to raise and sell back the chicken to the aggregator at a predetermined price. Aggregation plays an important role and, given their crucial role, aggregators will need to adopt ethical trading practices in their dealings with farmers and partners. Relationships require time, and therefore aggregators who have established relationships with farmers can come on board to the Agribiz program with ease while those who have to start recruiting farmers from scratch need substantial time.

For poultry value chain, there is need to link actors along the value chain to get birds to market through partnership in order to lower production costs and thereby enhance profitability. The aggregators should identify appropriate farmers to work with, source and supply chicks and farm inputs to lead and follower farmers, identify chicken markets for the mature birds and closely monitor farm level activities. Aggregators with which agribiz works should have variable levels of capital, expertise and operational experience though

support still needs to be given to aggregators to help increase capacity of the Value-chain.

Impact enablers include the availability of finance or credit, contract production and market exploration. To achieve wider social impact, Agribiz and private sector needs to work hand in hand with the public sector to support the development objective in the commercial model. Accessing joint input purchase and collective marketing of chicken products may further assist the farmers to increase profit margins. The role of the aggregator is to help put this system in place. The key for success is to ensure that the measures are beneficial to smallholder producers as well as aggregators. Aside from contract farming, other strategies that can facilitate more competitive market links include provision for slaughter and storage facilities including grant-supported technical assistance to achieve higher productivity and to reduce bird mortality to acceptable levels and climate information services and insurance to improve the resilience of the value chain.

Transparency is also crucial. A number of cases that are being solved between aggregators and farmers were about unclear understanding of some transactions, especially on the timeliness of payments upon product delivery. Addressing other urgent financial needs of farmers also helps to build good relationships, however, if not well managed, it can strain the financial resources of aggregators. Clear communications and trust between Agribiz program and aggregator when dealing with farmers is important, to avoid situations where farmers blame the wrong target. Partners need to broaden and facilitate the existing linkages between model partners and include links and feedback with farmers, technical service providers and end-markets.

The model can work better if the following are addressed: set standards for sourcing chicks; seek partnerships with impact investors to help build capacity of farmers; consider modalities for insurance in view of the disease susceptibility; profile farmers to increase visibility and enhance aggregation efficiency;

learn from farmers who drop out; set standards to meet market requirements and public health regulations; continue to address the cost of production, disease control, market challenge, price variation and consumer perception. To scale up, there is need to strengthen the capacity of the aggregators to act as investors and put in place a strong on-going technical assistance to improve farmer knowledge and ensure that the costs of inputs as well as quality (standards for feed) are monitored. Feeds and vaccines may have to come through the aggregators. High production costs partly due to drought/climate change/variability leading to high costs and low quality feeds.

c) Dairy value chain

Majority of dairy farmers in Bungoma County practice zero grazing, semi-zero grazing, and to a limited extent open grazing, with the majority keeping crossbred animals². They sell milk either directly to consumers, through local traders/hawkers, or to dairy cooperatives and producer groups. They face challenges ranging from difficulties in accessing feeds, fodder, and water that lead to poor feeding practices, poor animal reproduction, to fluctuations in milk production. This provides an avenue for interventions to promote proper feeding practices, fodder production and conservation, water harvesting, and support for community-based feed formulation to cut down on feed costs.

While majority of the youth who were interviewed emerged as the single most important marketing actors as informal milk traders in the dairy value chain, regulatory issues around quality and milk safety pose considerable constraints. Reliable quality testing is virtually non-existent for direct sales to consumers or to milk bars/hotels/shops and the equipment used for handling and transportation of milk does not satisfy the minimum food safety standards set by industry regulators. Whereas official policy of the Kenya Dairy Board (KDB) is to formalize the informal market segment to ensure quality milk, more practical interventions should work to organize the youth

² Dairy sector in Kenya 2016 [Sustainable growth of the Kenyan dairy sector - WUR E-depotdepot.wur.nl/...](https://www.wur.nl/en/depotdepot/wur.nl/...)

(informal milk traders), build their capacity in food safety and safe milk handling, and help them scale up their operations to serve dairy farmers better. Youth would for instance be engaged to collect milk from the farmers and deliver to the processing unit so that they do not sell raw milk directly to consumers which against the Kenya laws.

Unstable and low producer prices is another emerging threat to the dairy value chain in Bungoma county resulting to near negative gross margins. This threatens the very sustainability of the dairy value chain. Farmer groups who are however able to add value and sell processed milk to consumers through milk dispensers are able to attract better returns on their investment. It is for this reason that this study recommends a mini dairy processing unit that pasteurises milk and sell through the dispensers.

a) Sweet Potato

To turn sweet potato production in Bungoma county into a viable commercial enterprise, key interventions include establishment of sweet potato seed multiplication sites to enhance access to high quality seeds and disease and pest control. In addition, contract farming when would help farmers to get access to stable markets. To preserve the product, avoid losses and gain stable process, value addition would be a viable intervention. This includes processing of flour, and butternut products. The government should come up with a well-developed strategy for sweet potato value chain production to processing as this will promote high income generation thus make sweet potato production attractive to youth and not just women leading youth to adopt technologies for increasing production. Secondly, farmers should be empowered through regular field trainings and demonstrations on ways of developing value addition for their products that would change farmer attitude towards economic viability of sweet potato production. Thirdly, the program should introduce avenues for easier access to clean planting material in all seasons. The private sector should be involved in developing a marketing system and agro industries for value addition of sweet potatoes produce.

c) Soya Bean Value Chain



Picture 4: Soya Beans Courtesy Amazon.

For soya beans, key interventions include contract farming, pest and disease control, extension service provision, enhance access to quality seeds, disease control, establishment of marketing groups to strengthen aggregation, processing and value addition and consumers.

4.2 Mapping and Physical Assessment of the ATCs and the TVETs

Mapping and conducting physical assessment of the state of existing Agricultural Training Centres (ATCs) and Technical and Vocational Education and Training Centres (TVETs) was required to identify the most suitable hosting institution for the Business Incubation Hub (BIH) in Bungoma County. The researcher visited two potential hosting institutions in the County. The potential hosts included: Agriculture Training Centre in Mabanga and Sangalo Institute of Science and Technology. The sections below give an account of the assessment process.

4.2.1 Number of ATCs and TVETs in the County

Technical and Vocational Education Training, TVET, institutions offer various certificate, diploma and craftsmanship training to students in Kenya. TVETs are registered, accredited and regulated by the Technical and Vocational Education and Training Authority (TVETA); which is a public corporate agency established under the Technical and Vocational Education and Training (TVET) Act No. 29 of 2013 to regulate and

coordinate training in the country through licensing, registration and accreditation of programs, institutions and trainers. Section 7 of the Act, 2013 gives the powers and functions of the Authority to regulate and coordinate training; inspect, license and register and accredit training institutions; accredit and inspect programmes and courses; promote access and

relevance of training programmes; determine the national technical and vocational training objectives; assure quality and relevance in programmes of training among other functions. The table 6 below provides TVET institutions' information in the order: Institution Name, Category, Type, and Registration Number.

Table 6: TVET Institutions in Bungoma County

African Institute of Research and Development Studies-Bungoma Campus	TVC	Private	Bungoma	TVETA/PRIVATE/TVC/0088/2016	Registered and Licensed
Apokor Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0178/2018	Registered and Licensed
Bitobo Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0011/2016	Registered and Licensed
BUKEMBE VOCATIONAL Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0159/2018	Registered and Licensed
Bungoma Institute of Advanced Technology	TVC	Private	Bungoma	TVETA/PRIVATE/TVC/0098/2016	Registered and Licensed
Chebukwabi Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0013/2016	Registered and Licensed
Deeva College of Professional Studies	TVC	Private	Bungoma	TVETA/PRIVATE/TVC/0002/2014	Registered and Licensed
Dominion Training Institute	TVC	Private	Bungoma	TVETA/PRIVATE/TVC/0104/2016	Registered and Licensed
Friends Vocational Training Centre- Mihuu	VTC	Public	Bungoma	–	Registered and Licensed
Kamasielo Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0186/2018	Registered and Licensed
Khasoko Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0181/2018	Registered and Licensed
Khelela Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0140/2016	Registered and Licensed
Kibabii Vocational Training Institute	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0101/2016	Registered and Licensed
Kisiwa Vocational Training Centre	VTC	Public	Bungoma	–	Registered and Licensed
Kisongo Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0103/2016	Registered and Licensed
Lwanda Vocational Center	VTC	Private	Bungoma	TVETA/PRIVATE/VTC/0002/2018	Registered and Licensed
Lwandanyi Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0106/2016	Registered and Licensed
Machakha Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0107/2016	Registered and Licensed
Machwele Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0037/2016	Registered and Licensed
Magemo Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0044/2018	Registered and Licensed
Malakisi Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0073/2017	Registered and Licensed
Matili Technical Training Institute	TVC	Public	Bungoma	TVETA/PUBLIC/TVC/0020/2016	Registered and Licensed
Matulo Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0040/2016	Registered and Licensed
Mufule Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0046/2016	Registered and Licensed
Mungore Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0081/2017	Registered and Licensed
Musakasa Technical Training Institute	TVC	Public	Bungoma	TVETA/PUBLIC/TVC/0003/2014	Registered and Licensed
Muteremuko Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0049/2016	Registered and Licensed
Naitiri Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0182/2018	Registered and Licensed
Namirembe Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0103/2017	Registered and Licensed
Sang'alo Institute of Science & Technology	TVC	Public	Bungoma	TVETA/PUBLIC/TVC/0048/2016	Registered and Licensed
Sinoko Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0085/2017	Registered and Licensed
Sirare Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0090/2016	Registered and Licensed
Sirisia Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0061/2016	Registered and Licensed
Sitabicha Vocational Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0132/2016	Registered and Licensed
Sosio Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0116/2016	Registered and Licensed
St. Teresa Musoli Vocational Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0119/2016	Registered and Licensed
St. Theresa Kabula	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0187/2018	Registered and Licensed
Tongaren Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0121/2016	Registered and Licensed
Wabukhonyi Vocational Training Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0092/2016	Registered and Licensed
Wekeleleha Vocational Center	VTC	Public	Bungoma	TVETA/PUBLIC/VTC/0122/2016	Registered and Licensed

Source: Ministry of Education 2020

4.2.2 Assessment Criteria

To select the suitable facility, the researcher was guided by a set of questions in the assessment process. The identification of the potential hosting institutions from the pool of existing institutions was dependent upon the willingness of the host institutions to participate in the AgriBiz Programme in the long-term as well as the programme guidelines which had a preference for ATCs or TVETs. The assessment criterion was predicated upon assessment questions that generally fell into the following categories: 1) The experience in hosting similar Programs; 2) Distance and accessibility of the premises; 3) The condition of road infrastructure; 5) availability of office space; 6) Health and Safety management; 7) Structural integrity of the premises; 8) Presence of reliable water and energy supply; 9) Presence of critical facilities and infrastructure such as ACs, internet, and mobile network; 10) Willingness of the host to contribute to hub sustainability; 11) Availability of land for demonstration, and ample parking space.

Each facility was assessed against the questions and responses were compiled in the questionnaire sheet (see annex III) for analysis. Each question was assigned 1 point for meeting the set criteria or zero for not meeting the standards. When summed up, the maximum number of points for the most ideal hosting facility was 27. The hosting facilities were then categorized into four categories based on achieved points;

- 24-27 Highly favourable
- 18-24 Favourable
- 10-18 Least favourable

4.2.3 Results ATCs and the TVETs Assessment

4.2.3.1 Mabanga ATC

Bungoma County has one Agricultural Training Center (ATC) based at Mabanaga near Bungoma town. The vision of Mabanga ATC "is a modern centre of excellence for Agri- business incubation and Training." The organization has a title deed, seats on 94.6 acres of land. It is fully devolved to county government of Bungoma with all structures and systems in place.

4.2.3.2 Sing'alo Institute of Science and Technology

Sang'alo Institute of Science & Technology (SIST) is a public institutes of Technology in Kenya. SIST is situated in Bungoma County, Bungoma South Sub County, and Seven (7) Kilometres South East of Bungoma town on the Bungoma-Nambacha-Kakamega road.

The history of SIST dates back to 1924 when the late paramount chief of Bukusu , Mzee Sudi Namachanja donated 610 acres of land to Dr. Cameron , a scotish veterinarian to establish a centre for vaccination and treatment of livestock. In 1927, the farm developed into a livestock improvement centre for upgrading indigenous cattle to enhance milk and meat production. In 1977, the institute admitted its first intake of twenty students to study certificate in general agriculture. SIST became a public institution in 1993. Its governance was put under the management of board of governors (BOG) appointed by the ministry of education science and technology. This facilitated the posting of lecturers by the Teachers service commission.

Vision: To be a Centre of Excellence in Capacity Building, Research, Science & Technology.

Mission: To provide skills and quality Training in Research, Science and Technology to enhance sustainable National Development.

Table 7: Assessment results of the potential BIH Host Institutions

Assessment Question	RESPONSES/SCORE	
	Mabanga Agricultural Training Center (ATC)	Singalo Institute of Science and Technology
1. Experience in Hosting similar Programs (Yes/No)	Yes 1	Yes 1
2. Accessibility of the premises (Choose) -Highly Accessible -Fairly Accessible -Inaccessible	Highly Accessible 1	Fairly Accessible (Coupled with students learning) 0
3. Distance from the nearest town (Tick) -0-10km -10-20 km -20-40 km -Above 40 km	0-10km Webuye- Malaba Highway 1	8 kms from Bungoma Town 1
4. The condition of road infrastructure • Good • Fair • Bad	Good 1	Fair 0
5. Availability of Space for Leasing (in square ft)?	Two rooms are available for use as offices (Total approx. 150 sq. feet) 1	Office space 1
6. Sanitary waste management -Efficient -Satisfactory -Non-satisfactory	Complete sewerage systems with septic tanks Efficient 1	Has a septic tank, collected by bio digester. Efficient 1
7. Status of the washrooms • Very clean • Slightly Clean • Dirty	Slightly clean 0	Very Clean 1
8. Structural integrity- condition of the exteriors, walls, roofs, windows, doors • Excellent • Good • Bad	Good – (Renovation and painting needed) 0	Excellent 1
9. Structural integrity- Status of interiors-floors, roof, ceilings, walls, pillars, staircases • Excellent • Good • Bad	Excellent (Paint work required) 1	Excellent (minimal renovation needed) 1
10. Safety-Availability of firefighting equipment and fire escape routes (Yes/No)	Yes 1	Yes 1

11. Availability of air conditioning system (Yes/No)	No (Air conditioning system available in conference and Dining halls) 0	No (Available only in administrative block) 0
12. Availability of Power backup system in case of black outs (Yes/No)	Yes (Have portable generators) 1	Yes (Generator serves all buildings) 1
13. Is internet Infrastructure available? (Yes/No)	Yes (Wifi/LAN) 1	Yes 1
14. Availability of strong mobile phone network (Yes/No)	Yes 1	Yes 1
15. The condition of fences or perimeter walls • Excellent • Good • Bad	Good (Part of the wall on construction) 0	Good (Have a chain link) 0
16. Availability of CCTVs on shared spaces? (Yes/No)	No (CCTV Instalment done by April. Quotations received from two suppliers. Survey done) 0	No 0
17. Availability of (non-interrupted) water and electricity in the premises (Yes/No)	Yes 1	Yes 1
18. Cleanliness of the premises • Very Clean • Fairly Clean • Not clean	Fairly Clean 0	Very Clean 1
19. Willingness of the host to contribute to hub sustainability • Very willing • Slightly willing • Not willing	Very willing 1	Very willing 1
20. Availability of office space (Yes/No)	Yes (renovation required) 1	Yes (Minimal renovation) 1
21. Availability of training room (Yes/No)	Yes (428 m2) 1	Yes (lecture halls) 1
22. Are trainings allowed in their premises? (Yes/No)	Yes 1	Yes 1
23. Availability of land for farm demonstration (½ acre and above) (Yes/No)	Yes (60 acres farm land for demonstrations) 1	Yes (550 acres for institute) 1

24. Availability of ample parking space? (Yes/No)	Yes 1	Yes 1
25. Can vehicles be safely parked overnight. (Yes/No)	Yes 1	Yes 1
26. Security of the premises- any reported theft cases? (High/Moderate/Low)	High 1	Moderate 0
TOTAL SCORE PER HOST	20	20

4.2.4 Recommendation on suitable facility for BIH

The results of the assessment shows that Mabanga ATC and Singalo institute of science and Technology had equal scores of (20) which falls under the “favorable” category in the suitability scale shared above. Mabanga ATC was however considered more suitable since its mandate is on training actors in the agricultural value chains unlike the Singalo Institute of science and technology which also has students. During an interview with the Director for agriculture and other county officials, they showed preference for Mabanga ATC as the ideal place to host the proposed Business Incubation Hub.

However, while this study recommends Mabanga ATC, there is need to be alive to the renovation works that will be need to be undertaken to make the premise more suitable.

4.3 Assessing the County Government's Commitment to the AgriBiz Programme

By assessing the county government's development plans and priorities, the existing legislative and policy environment, the budgetary provisions, among others, it is possible to gauge their commitment towards achieving the goals of the AgriBiz Programme. The commitment of the county government to the programme is very critical for the Programme sustainability. Accordingly, this section of the report will look into these key issues into details in order to identify points of leverage for the Programme and where gaps exist.

4.3.1 County Agribusiness Development Priorities and Strategies

The section discusses some of the County's key development priorities, strategies and programmes that may have a direct alignment with the goals of the AgriBiz Programme. These plans are part of the County's CIDP for the year 2018-2022. Generally,

Bungoma County aims at achieving nine objectives namely;

- Provide quality livelihoods and a sense of well-being for all.
- Enhance public involvement in the processes of governance
- Invest in the production of competitive human resources through education, training, experience and exposure.
- Sustain a robust and vibrant County economy.
- Develop an environmentally responsible manner, ensuring minimal or no disruption to natural resources, natural habitats and preventing loss of bio-diversity.
- Optimize the limited land and air spaces by harmonious distribution of social and economic units and installations.
- Consult, co-operate and collaborate with national government and other development partners on matters of common interest and

- ensure cooperative and sound intergovernmental relations. growth, resulting in more and better jobs for the people
- viii. Facilitate the functioning of the County as a trading and logistical hub
- ix. Facilitate entrepreneurship, creativity, innovation and competitive private sector that delivers broad based and inclusive economic
- The Sector objectives that have been discussed in this section are in Agriculture, Trade and cooperatives and Social development.

4.3.1.1 Agriculture Sector Development Program

Table 8: Sector Development Priorities

Sub-Sector Priorities	Interventions
1. Increase agricultural productivity and production	<p>Policy formulation and review.</p> <p>Implement an integrated agricultural resource center and extension system</p> <p>Strengthen quality assurance, regulation and safety standards for agricultural products.</p> <p>Improve physical agricultural infrastructure and Increase market access of the prioritized agricultural commodities.</p> <p>Facilitate early warning systems to prevent and mitigate shocks affecting nutrition and food security.</p> <p>Increase access to agricultural finance services through strengthening Farmer Groups</p> <p>Enhance sustainable land management practices (SLM) by adapting time and labor saving technologies targeting women farmers.</p> <p>Mainstream youth, women and social disadvantaged groups</p>
2. Increase access to critical farm inputs	<p>Improve access to high quality animal breeds, seeds and planting materials.</p> <p>Enhance access to and use of fertilizers by farmers.</p> <p>Increase access to water for agricultural production (Irrigation, livestock, aquaculture-fish ponds/caging).</p> <p>Increase agricultural mechanization (Farm Power).</p>
3. Improve agricultural markets and value addition	<p>Promote private sector investment in value addition.</p> <p>Build capacities of farmers to invest in agro processing and agri-entrepreneurship.</p> <p>Promote investment in storage infrastructures.</p>
4. Strengthen Institutional capacity	<p>Strengthen capacity of Mabanga Agricultural Training College as well as the production departments.</p> <p>Revitalize and strengthen Chwele fish farm.</p>
5. To promote HIV and AIDS prevention, care and treatment	<p>Mainstream HIV/AIDS issues in sector Planning, Budgeting, Implementation, Monitoring, Evaluation and Reporting.</p>

4.3.1.2 Trade, Industry and Cooperatives Sector Priorities

Table 9: Sector Priorities in Trade, Industry and Cooperatives

Sub-Sector Priorities	Interventions
1. Improve Private Sector Competitiveness.	Policy formulation and review. Develop and implement a County trade information system. Support the private sector in technical and entrepreneurial skills development
2. Improve trade infrastructure	Formalize and operationalize border markets Establish and operationalize trade resource centers across the County. Incentivize the private sector to invest in trade infrastructure development through PPP arrangement such as cold storage facilities and Community silos.
3. Promote growth of cooperative movement.	Policy formulation and review. Sensitize, disseminate and implement the County Cooperative Development Policy. Strengthen corporate governance of the cooperative movement and commodity marketing infrastructure. Improve access to financial services for the co-operative institutions and promote collective marketing. Supervise and audit cooperative societies regularly Establish and strengthen the cooperatives information systems
4. Enhance the capacity of cooperatives.	Support co-operative shareholders/members in enterprise selection through provision of advisory services to the different categories. ☐ Revitalize and strengthen dormant co-operatives.
5. Diversify Cooperatives.	Support and strengthen diverse forms of co-operatives
6. To promote HIV and AIDS prevention, care and treatment.	Mainstream HIV/AIDS issues in sector Planning, Budgeting, Implementation, Monitoring, Evaluation and Reporting.

4.3.1.3 Social Development Sector Priorities

Table 10: Sector Priorities in social Development

Sub-Sector Priorities	Interventions
1. Promote labor productivity.	Policy formulation and review. Promote and regulate externalization of Labour Develop and operationalize work ethic skills in the formal and informal sectors Promote compliance with Occupational Safety and Health standards. Promote culture and creative industries Support research, innovation and creativity in both formal and informal sectors

2. Enhance effective participation of communities in the development process	<p>Strengthen the functionality of and accessibility to quality non-formal literacy services</p> <p>Expansion of Library and Information services</p> <p>Strengthen mechanisms for planning, budgeting, implementation and monitoring of services and community level initiatives</p> <p>Promote culture for economic development and social transformation ☐ Strengthen the legal and policy framework for culture and creative industries</p> <p>Strengthen the family as social unit. to serve as a springboard for, wealth creation, social transformation and nation building</p> <p>Mobilize and facilitate communities to appreciate, demand, own and sustain personal and County development programmes</p> <p>Strengthen structures and systems for coordination of all stakeholders.</p>
3. Improve the resilience and productive capacity of the vulnerable persons	<p>Expand the scope and coverage of the social security services.</p> <p>Expand labor intensive public works to poor and vulnerable households. Promote access to social care and support services for vulnerable persons.</p> <p>Promote and protect the rights of vulnerable groups against abuse, exploitation, violence and neglect.</p>
4. Improve the capacity of youth.	<p>Provide life skills and livelihood support to the youth</p> <p>Develop and adopt regulatory frameworks policy for youth affirmative action.</p> <p>Support entrepreneurship through tax rebates to create employment opportunities</p> <p>Establish centres of technical advisory services</p> <p>Enhance mind-set change campaigns</p>
5 Promote gender equality in the development process.	<p>Mainstream gender in policies, plans and programmes in government. ☐ Strengthen capacity of stakeholders in social equity and human rights promotion, protection and reporting. ☐ Promote formulation of gender sensitive regulatory frameworks. ☐ Prevent and respond to Gender Based Violence ☐ Promote women economic empowerment.</p>
Promote equality.	<p>Eliminate discrimination and marginalization. ☐ Strengthening the capacity of state and non-state actors to mainstream equal opportunities and affirmative action in all policies and laws.</p>
To promote HIV and AIDS prevention, care and treatment.	<p>Mainstream HIV/AIDS issues in sector Planning, Budgeting, Implementation, Monitoring, Evaluation and Reporting.</p>

4.3.2 Assessing the County's Policy and Legislative Environment

This section examines the policy, legal, and regulatory frameworks in Bungoma County which supports the goals or ambitions of the AgriBiz Programme. The human right to decent work and economic growth is well outlined in the Sustainable Development Goal Number 8. In Kenya the right to food is provided for in Article 43 of our Constitution, which anchors the policy, legal and regulatory frameworks of the ASTGS: "Every person has the right to be free from hunger, and to have adequate food of acceptable quality." – Article 43, Constitution of Kenya (2010). The Constitution further embraces sustainable exploitation, utilization, management and conservation of the environment and natural resources, and identifies sustainable development as an important value and principle of governance. This strategy supports policies that address food and nutrition security with alignment to county-level CIDPs, the NAIP and MTPIII, while maintaining coherence to overarching development blueprints including the CAADP Malabo declaration, the SDGs, the AU 2063 agenda and various regional and continental trade arrangements that affect agriculture, including the recently signed Africa CFTA. In the past few years, the Agribusiness sector in Kenya has pursued legal and regulatory framework reforms both at national and county level including:

- Climate Change Act No. 11, 2016
- County Governments Act No. 17, 2012
- Crops Act No. 16, 2013
- East African Community Protocol on Environment and Natural Resource Management, 2006 Fisheries Management and Development Act No. 35, 2016
- Forest Conservation and Management Act No. 34, 2016
- Green Economy Strategy and Implementation Plan, 2016-2030
- Irrigation Policy, 2015
- Kenya Agricultural and Livestock Research Act No. 17, 2013
- National Agriculture Policy, Fisheries and Ocean Policy, 2008
- National Environment Policy, 2014
- National Food and Nutrition Security Policy, 2011
- National Food and Nutrition Security Policy Implementation Framework, 2017/2022
- National Livestock Policy Sessional Paper No 2, 2008
- National Agricultural Sector Extension Policy, 2012
- National Agricultural Research Systems Policy, 2012
- Plant and Seed Plant Varieties Amendments Act, 2016
- Public Private Partnership Act, 2013
- Vision 2030; and the Third Medium-Term Plan – MTPIII (2018-2022) for Vision 2030

The County Government of Bungoma needs to review and develop certain existing policy and regulatory frameworks to accelerate the impact of the AgriBiz Programme, and drive broader transformation of agribusiness as job creation channel for youth and women even beyond the county boundaries. The following ongoing policy efforts should be prioritized within the first three years of AgriBiz Programme implementation:

- Green Economy Strategy and Implementation Plan, 2016-2030- to leverage on the components that seek to enhance sustainable employment opportunities for women and youth in Kenya.
- Kenya Agricultural and Livestock Research Act No. 17, 2013- should be domesticated to fulfill research needs in the county.
- Revised National Youth Policy (2019 – 2023)- to capture the government aspirations for the youth and align strategies accordingly.
- Vision 2030; and the Third Medium-Term Plan – MTPIII (2018-2022) for Vision 2030

Any policy changes required at the county level to support the AgriBiz Programme will need to be determined by the County Legislatures, and some recommendations are made in section 4.3.3 on how to approach this. It will be crucial for the strategy to be aligned with the county priorities, as outlined in sector

plans and County Integrated Development Plans (CIDPs). The AgriBiz programme implementors will work closely with the Legal Department in Bungoma

County to initiate policy discussions as an intervention in areas where gaps might exist along the identified value chains.

4.3.3 Policy and Regulatory Recommendations

While these policies and regulatory frameworks provide a guide to implement the proposed Programme within the context of a county government, they must be accompanied by strong governance to ensure successful implementation. A key enabler to this strategy is the training and development of the transformation leaders – from the county-level decision-makers, to the Hub Employees and agripreneurs on the front line. Working closely with the various county government departments and partners, the BIH lead should:

- Map out the County's agricultural sector priorities and value chains from the County strategic plans and CIDP goals to check for alignment with AgriBiz Programme strategic priorities in agriculture. If required, identify any additional priority value chains that may still leverage on the AgriBiz Programme and highlight any policy gaps or regulatory constraints that may exist.
- Create an implementation plan aligned with the County's CIDP. The implementation plan should contain action milestones, milestone timing and milestone owners needs to be drawn. The BIH lead need to coordinate implementation plan with the needs of the regional economic bloc and national-level plans in agribusiness.
- Estimate funding requirements and identify funding sources within the county, in the regional economic bloc, and from the national government. Locate funding sources based on consultation with other stakeholders through the Programme implementors. Identify possible policy and regulatory constraints toward this endeavour.
- Assess the existing policy and regulatory frameworks and how they can support the programme implementation plan and performance management. Liaise with the County Legal Department throughout implementation to ensure on-track update of the policy and regulatory landscape in light of AgriBiz Programme execution.

4.3.4 Assessing the County's Budgetary Provisions for Agribusiness related activities

The county government's commitment to the AgriBiz can be further ascertained through its budgetary commitment to agribusiness related activities. An interview with the County Director for Agriculture revealed that the County government is committed towards supporting the AgriBiz Programme. However, he wanted to know what proportion of the AgriBiz Programme's budget would be required to support and at what period during the Programme implementation. The table 12 below shows the County Government's budgetary allocations for the Planning period 2018-2022 to address the challenges identified in the Agribusiness related areas.

4.3.4.1 Resource Allocation for Agribusiness Related Areas

Table 11: County Governments Budgetary Allocations for 2018-2022 period

Sub-Programmes	Printed Estimates 2019/20	Requirements	Allocation	Projected Estimates	
		2020/21	2020/21	2021/22	2022/23
Agriculture, Livestock, Fisheries, Irrigation and Co-operative Development					
Purchase and delivery of certified fertilizer for Farm Input Support	143,100,000	249,750,000	49,950,000	52,447,500	55,069,875
Purchase and delivery of certified maize seed for Farm Input Support	54,000,000	94,500,000	18,900,000	19,845,000	20,837,250
Renovation of HQ office block	6,000,000	18,000,000	18,000,000	18,900,000	19,845,000
Renovation of buildings at Mabanga ATC (class rooms, office block, ablution blocks, hostels)	6,000,000	98,000,000	6,000,000	6,300,000	6,615,000
Construction of a water tower, equipping of borehole and overhaul of piping system	5,000,000	12,000,000	-	-	-
Procurement of a Trailer for Mabanga ATC	1,000,000	2,000,000	1,000,000	1,050,000	1,102,500

Sub-Programmes	Printed Estimates 2019/20	Requirements	Allocation	Projected Estimates	
		2020/21	2020/21	2021/22	2022/23
Purchase of chicken for chicken meat production	500,000	3,000,000	500,000	525,000	551,250
Procurement of 3 dairy cows	600,000	12,000,000	600,000	630,000	661,500
Construction of Periphery Fence Phase II	6,000,000	54,000,000	12,000,000	12,600,000	13,230,000
Construction of Shade for machineries	1,500,000	7,500,000	3,500,000	3,675,000	3,858,750
Purchase and delivery of tractors and tractor implements(ploughs, disc harrows, row cultivators)	5,000,000	95,000,000.00	6,000,000	6,300,000	6,615,000
Rehabilitation of small dams	6,000,000	57,000,000	10,000,000	10,500,000	11,025,000
CEF PROJECTS	3,805,112	100,000,000	2,870,000	3,013,500	3,164,175
AI Subsidy program	5,000,000	45,000,000	5,000,000	5,250,000	5,512,500
Rehabilitation of cattle dips	5,250,000	125,000,000	5,000,000	5,250,000	5,512,500
Rehabilitation of slaughter houses	7,800,000	150,000,000	4,000,000	4,200,000	4,410,000

Establishment of a dairy processing plant	21,000,000	200,000,000	80,000,000	84,000,000	88,200,000
Establishment of apiaries in Wards	4,470,930	15,000,000	4,000,000	4,200,000	4,410,000
Installation of milk coolers	-	27,000,000	5,000,000	5,250,000	5,512,500
Purchase and delivery of fish feeds (including at chwele fish farm)	2,000,000	24,000,000	4,455,321	4,678,087	4,911,991
Purchase of fingerlings (subsidy for fish farmers)	-	54,000,000	4,000,000	4,200,000	4,410,000
Sub-Programmes	Printed Estimates 2019/20	Requirements	Allocation	Projected Estimates	
		2020/21	2020/21	2021/22	2022/23
Establishment of a Recirculating Aquaculture System at Chwele Fish Farm	3,000,000	8,500,000	5,000,000	5,250,000	5,512,500
Purchase and delivery of Coffee seedlings	5,000,000	54,000,000	5,000,000	5,250,000	5,512,500
Purchase of coffee seeds and seed tubes	5,000,000	10,000,000	5,000,000	5,250,000	5,512,500
Infrastructural Support to Cooperative Societies	8,000,000	45,000,000	8,000,000	8,400,000	8,820,000
NARIGP	350,000,010	350,000,010	350,000,010	367,500,010	385,875,011
ASDSP	24,300,000	24,300,000	24,300,000	25,515,000	26,790,750
Sub Total	679,326,052	1,934,550,010	638,075,331	669,979,097	703,478,052

4.3.6 County Government Agribusiness Related Initiatives

The County government of Bungoma is in the process of rolling out various Agribusiness related projects that the AgriBiz Programme can leverage on. These projects cover activities within various county government departments including the Cooperatives and Enterprise Development, Department of Agriculture, Department of Livestock and Fisheries, Department of Trade and Industrialization, and Department of Youth Affairs. The tables 12 - show the ongoing projects giving details about the project location, objectives, targets, expected outputs, costs, source of funding, time frame, and the implementing agency.

Table 12: County Projects List

S/N O	PROJECT NAME	LOCATIO N	UNIT S	UNIT S	UNIT COST	T.COST	STATUS
	AGRICULTURE AND IRRIGATION						
1	Purchase and delivery of certified fertilizer (planting and top dressing) for Farm Input Support	All 45 Wards	No	17606	5,350.00	94,192,100.00	Ongoing
2	Purchase and delivery of certified maize seed for Farm Input Support	All 45 Wards	No	17606	2,100.00	36,972,600.00	On-going
3	Renovation of HQ and 2 office blocks in Kanduyi Sub County	HQ	No	1	12,000,000.00	12,000,000.00	New
4	Renovation of buildings at Mabanga	Mabanga ATC	No	1	6,000,000.00	6,000,000.00	On-going
S/N O	PROJECT NAME	LOCATIO N	UNIT S	UNIT S	UNIT COST	T.COST	STATUS
	ATC (class rooms, office block, ablution blocks, hostels)						
9	Construction of Periphery Fence Phase II	Mabanga ATC	No	1	6,000,000.00	6,000,000.00	On-going
10	Construction of Shade for machineries	Mabanga ATC	No	1	3,000,000.00	3,000,000.00	New
13	Rehabilitation of 1 small dam			1	6,430,509.00	6,430,509.00	New
	CEF PROJECTS			1	2805112	2,805,112.00	

14	AI Subsidy program	All 45 Wards	No	1	5,000,000.00	5,000,000.00	On-going
16	Establishment of a dairy processing plant	Webuye	No	1	80,000,000.00	80,000,000.00	On-going
17	Establishment of apiaries in Wards	All 45 Wards	No	45	75,000.00	3,375,000.00	New
18	Establishment of a honey refinery in Mt. Elgon		No	1	4,000,000	4,000,000.00	New
22	Purchase of coffee seeds and seed tubes	FCS	No	1	4,000,000.00	4,000,000.00	On-going
24	NARIGP	20 Wards	No	1	350,000,010.00	350,000,010.00	On-going
25	ASDSP			1	24,300,000.00	24,300,000.00	On-going
	TOTAL					638,075,331.00	

As pointed out in subsections 2.3.1, 2.3.2 and 2.3.3 of this report, most of the targets set by the county in the CIDP for 2018 and 2019 as per table 2 above had not been achieved by 2020 when the medium term review of the county performance was undertaken. This necessitated pushing of the activities and projects to 2020 and 2021. Key activities so far undertaken include conducting 600 farmer trainings, provision of seeds and seedlings, farmer support with pesticides and procurements of 4 milk coolers. With regards to markets, the county extended trading hours through market/street lighting, implementing structured taxes, providing accessible e-platform services and automating revenue system.

4.3.7 The Partnership between County and National Government and AgriBiz Programme

The County Director of Agriculture, the Livestock Director and the principle Mabanga ATC have all indicated their support to the AgriBiz Programme because majority of the AgriBiz Programme goals are aligned with their agribusiness goals as stipulated in the CIDP. The County Director of Agriculture, on the other hand reiterated that the proposed Business Incubation Hubs (BIHs) within the AgriBiz Programme will contribute immensely towards filling the business and technical skills gap in the county. The County is looking forward to welcoming the Programme implementing partners into the county and promised to accord the necessary support as required. Other potential collaborators are Agriculture programs being implemented in the county targeting similar value chains. These include the Agricultural Sector Development Support Program (ASDSP), National Agricultural and Rural Inclusiveness growth Program (NARIGP), Community Research in Environment & Development initiative (CREADIS) and the USAID funded Kenya Crops and Dairy Market systems Program (KCDMS) by RTI. Below is a table showing the contacts

Table 13: County collaborating offices and Partners

v	Department/ Officer	Name	Telephone
1.	Principal Mabanga ATC	Wilfred Soita	0710503896
2.	CEC Agriculture and Livestock	Mathews Makanda	0711914045
3.	CEC Trade	Gregory Naulikha	0724550978
4.	CEC Gender and Youth	Everlyne Kakai	0746040600
5.	County Director Livestock	Samson Kunyu	0722350609
6.	County Director of Agriculture	Onesmus Makhanu	0713419039
7.	Coordinator ASDSP	Vincent Wechabe	0727525542
8.	County program coordinator NARIGP	Rebecca Lusweti	0722629693
9.	Director CREADIS NGO	Gladys Nabiswa	0713939760
10	KDB, Minstry of Water office.		0795207133 bungoma@kdb.go.ke

At the national level, partners will the State Departments for Agriculture and programs working on similar initiatives such as the Empowering Novel Agribusiness-Led Employment (ENABLE) Program, co-funded by the African Development Bank (AfDB) and the Government. It is a Kenya youth Program implemented through eight Youth Agribusiness Incubation Centres (YABICs).

Table 14: National government collaborating departments and other partners

	Department/ Officer	Telephone
1.	PS, State Department for Crop Development	Dr. Richard L. Lesiyampe, C.B.S.
2.	PS, State Department of Livestock	Harry Kimutai
3.	Director of Livestock Production	Joseph Kiptarus
4.	GIZ, Country Director	giz-kenia@giz.de Juergen Koch
5.	KCDMS Technical Director	Seth Yake 0701207740

4.3.7.1 Low Hanging fruits in the BHI Centres Establishment

- The climatic conditions in Bungoma County presents a great enabler in the production of most of the agricultural products including dairy, beans, and orange fleshed sweet potatoes. The county is also a leading producer for chicken.
- There are existing women and youth agribusinesses in the county at different phases of their establishment and facing normal start up challenges which if addressed could quickly see their off-take. These challenges include information, infrastructure, financing, markets access.
- In collaboration with county government offices and other partners on the ground, identify and profile youth and women agribusinesses that are at the formative stages for support. There is room to establish women and youth groups in various agricultural value chains and agribusinesses.
- There are existing market opportunities for these commodities and only market linkage will need to be identified and contracts established between the producers and the market end. KCDMS which is a markets linkage program would assist in facilitating market linkage for most of the targeted agricultural value chains. Workshops that bring the buyers and sellers together for networking and elaboration on quality requirements can be established.
- There is existing capacity in the county including with potential collaborating partners to train on value addition and quality control for most of the targeted agricultural value chains.
- There is political support

4.3.7.2 Possible Challenges in program implementation

- While the county has allocated resources and plans to support SMEs in the agribusiness value chain, there actual availability of the resources may be limited due to actual budget constraints. This is informed by an assessment of planned activities as per CIDP and vs actual implementation in the mid-term reviews. The recent pandemic of COVID 19
- Other than the dairy value chain, most of the other value chains don't have well established aggregation structures to facilitate marketing.
- Lack of presentation skills and general experience necessary to run a business
- There is likely to be lack of managerial and soft skills and deficient team structure especially for newly established groups, track records and financing.
- Limited return on investment at the start of the business may mean those involved may not work full time on their ventures.
- The high risk nature of agricultural business due to climatic changes amongst others and the fact that they are newly established businesses may make them prone to failure.
- There is likely to be a lack of efficient sales and marketing and awareness on intellectual property.

4.4 County Human Development Indicators

According to National Human Development Reports (HDRs) for Kenya 2016, Kenya has been ranked as a country with Medium Human Development with HDI at 0.555 having demonstrated stable growth rates and a general increase in living standards. As shown in Figure 1 the Human Development Index (HDI) increased in Kenya between 1980 and 2014 from 0.453 to 0.548. This is an increase of 21.1% (UNDP, 2015) See figure 6 below.

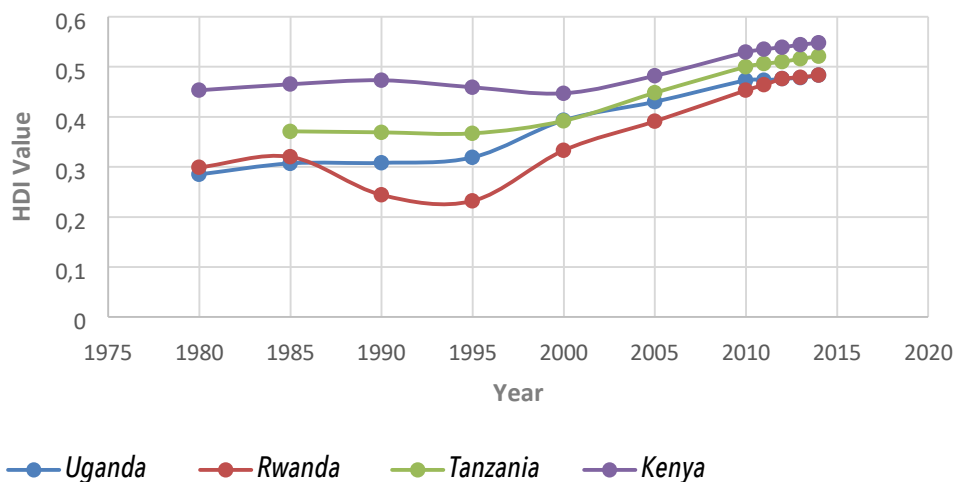


Figure 6: Human Development Index (HDI) (Source: UNDP, 2015)

The strong economic growth in Kenya over the past two decades has been accompanied by the emergence of a sizeable middle class, increased political stability and urbanization (AfDB, 2016). According to the AfDB (2011) the middle class is defined as those with an income of \$4-20 a day in purchasing power parity. In Kenya this already includes 44.9% of the total population. This middle class can raise both supply of and demand for consumer products and services.

In the meantime, youth unemployment is still a major issue in Kenya and much of this labor force is not utilized. Seven out of ten people unemployed are between 15 and 34 (AfDB, 2016). One reason for that is that Kenya's economy is currently dependent on agriculture which mostly takes places in rural areas. However, young people tend to move to urban areas, where jobs are not generated as fast as the population is growing. This lack of job opportunities is compelling young people in Kenya to start their own business since many young people desire to be self-employed. Over 2.3 million small and medium-sized enterprises (SMEs) are active in Kenya and the number is growing.. It is estimated that SMEs in Kenya provide employment for almost 80% of the workforce, though the sector only contributes for 20% of GDP (AfDB, 2016; KNBS, 2015). About 15% of these SMEs are in the agricultural sectors (Source: VC4 Africa, 2015). To increase this contribution to the economy it is necessary develop a SME infrastructure.

Despite this impressive growth, according to the world inequality statistics, Kenya was ranked 103 out of 169 countries making it the 66th most unequal country in the world. Kenya's Inequality is rooted in its history, politics, economics and social organization and manifests itself in the lack of access to services, resources, power, voice and agency. Inequality continues to be driven by various factors such as: social norms, behaviours and practices that fuel discrimination and obstruct access at the local level and/ or at the larger societal level; the fact that services are not reaching those who are most in need of them due to intentional or unintentional barriers; the governance, accountability, policy or legislative issues that do not favor equal opportunities for the disadvantaged; and economic forces i.e. the unequal control of productive assets by the different socio-economic groups.

The human development approach and vision 2030 agenda have three common analytical links which the county government embraces in its human development agenda. Both are anchored in universalism: - emphasizing the enhancement of freedoms for every human being and leaving no one behind; both share the same fundamental areas of

focus:- eradicating extreme poverty, ending hunger, reducing inequality, ensuring gender equity; and both have sustainability as the core principle. Table 13 Shows HDIs for the county

Table 15: Comparison of National and Bugoma County HDI

Country/ County	HDI	Life Expectancy (Yrs)	Literacy (%)	School enrolment (%)	PPP (\$)	LE Index	Education Index	GDP Index
Kenya	0.555	56.6	71.4	70.5	1436	0.5267	0.7111	0.4447
Western Region	0.5509	59.5	71.5	77.5	787	0.5742	0.7345	0.3440

Source: UNDP (2016), Kenya National Human Development Report.

However, variations do exist among and within the counties. In order to progressively improve our Human Development Indices, the County undertakes to invest considerable resources and support the youth among other special interest groups. Although progress on social indicators has been significant, more effort is required to reduce extreme poverty, reduce inequality and achieve shared prosperity. Structural and socio-political obstacles continue to constrain achievement of sustainable and inclusive growth, participatory governance, community-level peace and security, sustainable environment and natural resource management and resilience to shocks and climate change¹³. According to the 2005 report on the World Social Situation, sustained poverty reduction cannot be achieved unless equality of opportunity and access to basic services is ensured. Creating job opportunities has therefore been explicitly incorporated into the AgriBiz Programme with an aim of improving human development (welfare) within the county. This section of the report presents the baseline status of four basic concepts of human development including poverty, employment rates, and Health status in Bungoma County.

4.4.1 Employment/Income

Access to jobs is essential for overcoming inequality and reducing poverty. People who cannot access productive work are unable to generate an income sufficient to cover their basic needs and those of their families, or to accumulate savings to protect their households from the vicissitudes of the economy. The unemployed are therefore among the most vulnerable in society and are prone to poverty. Levels and patterns of employment and wages are also significant in determining degrees of poverty and inequality. According to the ILO estimates,

approximately 62% of Kenya's total employable population of approximately 28 million earn some income from agriculture, including farmers and other off-farm employment related to agriculture (e.g., agri-businesses). Informal employment in agriculture is at least 8x the size of formal employment, with women doing most of the work on the farm. In Bungoma County, 14% of the residents are with no formal education, 10% of those with primary education and 19% of those with secondary or above level of education are working for pay.

Table 16: Employment by Education Level in Bungoma County

Education Level	Work for pay	Family Businesses	Family Agricultural Holding	Intern/ Volunteer	Retired/ Homemaker	Fulltime Student	Incapacitated	No work	Number of Individuals
Total	13.6	12.0	50.3	1.0	4.1	14.9	0.4	3.7	659,073
None	13.9	12.1	56.6	3.0	5.6	0.8	2.4	5.7	34,3463
Primary	10.1	11.3	55.0	0.7	4.2	15.3	0.4	3.1	378,406

Secondary	18.8	12.9	42.3	1.1	3.9	16.3	0.2	4.5	246,321
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Source; KNBS – Exploring Kenya's Inequality, Bugoma County 2013

Analysis of data from Table 13 shows that participation in Agriculture related sector reduced with increment in the level of education. Similarly, work for pay also increased with higher qualifications. The County needs to prioritize investment to modernize agriculture into a viable commercial undertaking whilst also increasing the quality and supply of human resources across all sectors. Kenya's Unemployment Rate increased to 9.31 % in 2019 and 2018 from the previously reported number of 9.29 % in Dec 2017. Kenya's Unemployment Rate is updated yearly, available from Dec 1991 to Dec 2019, with an average rate of 9.68 %. The data reached an all-time high of 10.10 % in Dec 2003 and a record low of 8.90 % in Dec 1991. The data is reported by reported by World Bank. In the latest reports, Kenya's Population reached 47.80 million people in Dec 2018. Monthly Earnings of Kenya stood at 591.84 USD in Jun 2018. The country's Labour Force Participation Rate dropped to 66.29 % in Dec 2019³.

4.4.2 Poverty

The poverty line is a threshold below which people are deemed poor. The new country economic update shows that the proportion of Kenyans living on less than the international poverty line (US\$1.90 per day in 2011 PPP) has declined from 43.6% in 2005/06 to 35.6% in 2015/16⁴. Poverty incidence in Kenya is amongst the lowest in East Africa and is lower than the Sub-Saharan African regional average, according to the update. However, the report notes that poverty rates in Kenya remain relatively high compared to other lower middle-income countries. Poverty is one vulnerability that would logically seem to have an impact on unemployment, in

that it inhibits access to education. This has been identified as the main barrier to youth employment. It also negatively impacts on health and human development, and therefore individuals' ability to work productively. Poverty in a household can also lead to under- or unemployment amongst other household members. According to KNBS in 2015, the proportion of those living below the poverty line in Bungoma County is 47.3 %. High poverty level poses a great challenge to the existing scarce resources, investment and sustainable production.

4.4.3 Health

A country's health status is an important indicator of the level of development. According to District Health Information Systems (DHIS) 2016, the County has a total of 197 health facilities: 1 County referral hospital, 1 County hospital, 8 sub County hospitals, 19 health centres, 89 dispensaries, 60 private clinics and 19 faith based facilities. The top 5 diseases in the County for the financial year 2016/17 as per the DHIS, 2017 are: Malaria, Anaemia, Pneumonia, Diarrhoea and Peptic Ulcers. Poor health in an individual, or their caregivers, has a negative impact on their level of education, productivity and labour force participation⁵. One study found that amongst HIV positive respondents, only 9 per cent were employed (ActionAid International Kenya 2009). Although it suggests the impact of stigma attached to the illness, there is little information available detailing to what extent poor health influences an individual's ability to participate in the labour force, which focuses on youth in Kenya. Globally, employment participation in amongst those with a disability is very low with some estimates placing it in the Kenyan context at below 1 per cent⁶. This could be due to physical barriers in the workplace as well as

³ Kenya's Monthly Minimum Wages: Agriculture: Average data remains active status in CEIC and is reported by Kenya National Bureau of Statistics.

⁴ World bank 2019
[https://blogs.worldbank.org/african/more-than-just-growth-accelerating-poverty-](https://blogs.worldbank.org/african/more-than-just-growth-accelerating-poverty-reduction-in-kenya)

[reduction-in-kenya](https://blogs.worldbank.org/african/more-than-just-growth-accelerating-poverty-reduction-in-kenya) ¹⁷ ILO & ILS 2013 and AfDB 2015.

⁵ Africa Development Bank Annual Report 2015.
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Annual_Report_2015_EN_-_Full.pdf

⁶ Mwaura 2016

discrimination, a lack of social support and low enforcement of legislation and policies⁷.

4.4.4 Nutritional status

The Kenyan Constitution stipulates that every Kenyan has the right to basic nutrition, right to adequate amounts of food of acceptable quality as well as clean and safe water in adequate quantities. Nutrition is the intake of food, measured in relation to dietary needs. The nutritional status of a population is one of the most useful indicators of a population's overall welfare. Therefore, child growth is recognized as an important indicator of nutritional status and health. Sustainable Development Goals (SDGs) number two seeks to end hunger, achieve food security and improve nutrition. In the national framework

for monitoring and reporting SDGs, the Government has committed to monitor and report on three indicators on nutrition. These are prevalence of undernourishment; stunting; wasting and underweight. The 2015/16 KIHBS provides data for monitoring nutritional status of children and progress made towards realization of SDGs targets. According to KDHS 2014, Children under 5 years who are stunted (moderate or severe) stand at 24% against the national 26%. Children under 5 years who are wasted (moderate or severe) (%) take up 2% against the national 4%, Children under 5 years who are underweight (%) stand at 9% against 11% at the national level. Children under 5 years who are overweight or obese (%) 3% while those at the national stand at 4%. The baseline data on the various components of the AgriBiz Programme which will contribute towards the socio-economic development of Bungoma County is presented below:

Table 17: Baseline data for selected AgriBiz Program Components

Indicator	Indicator Definition	Baseline Data info
Number of youth and women agripreneurs admitted into the BIH	Agripreneurs affiliated to credible entities within Bungoma County or Surrounding Counties	No data
% increase in the number of women and youth participants in various nodes of the County agribusiness value chains	Number of women and youth agripreneurs in production and pre-production VCs	No data
	Number of women and youth agripreneurs in market VCs	No data
	Number of women and youth agripreneurs in the input VCs	No data
	Number of women and youth agripreneurs in Processing VCs	No data
% increase in productivity of the farmers in the Dairy and Horticulture value chains	Dairy: average milk production /cow/day	6.5 Litres
	Horticulture-French beans: Kg of produce per acre (average)	8,700 kg/acre
Number of jobs created from the selected agripreneur ventures.	Formal and informal employment opportunities resulting from the agribusiness ventures associated with the AgriBiz Programme	None

⁷ Kenya's Health Sector-Handicap International 2016

Increase in access to finance by women and youth agripreneurs.	VC actors (farmers, Transports, input suppliers, aggregators, processors SMEs etc.) accessing the AgriBiz finance products and services	%
Enhanced business development skills among the BIH incubatees.	Incubatees have basic knowledge and understanding of business development issues and topics.	%
The number of agripreneurs, County officials, and farmers trained	Agripreneurs, County government officials and farmers offered various forms of training within the AgriBiz Programme.	No

5. SUMMARY OF FINDINGS AND CONCLUSIONS

5.1 Summary of Findings

- There is wide spread poverty in Kenya with 36.1% of the Kenyan population living below the international poverty line. A vast majority of these poor households live in rural areas even though a significant proportion is also found in urban areas particularly in the slums.
- Agriculture still remains the backbone of Kenya economy contributing over 50% to the GDP both directly and indirectly. The sector employs the largest share of the population in Kenya (around 62%), and accounts for 60% of exports. However, the sector has underperformed compared to its huge potential, both in terms of wealth creation and decent job creation.
- While youth between the ages of 18-35 make up more than 35% of Kenya's population, less than 10% of the youth labour force is directly engaged in agriculture. A vast majority of over 2.5 million youths remain unemployed looking out for job opportunities in the non- agricultural sectors based in urban areas even though lacking in vocational and soft skills required by the market. Entry of the youth into the agricultural sector however remains constrained by limited access to land and other agricultural factors of production, and market access.
- On the other hand while agriculture employs ~75% of Kenya's women (compared to 51% of Kenyan men), only half of these women own the farms. This lower level of farm ownership limits the ability of these women make decisions on land use, limits investment and growth, ability to join cooperatives and other farmer-based organizations that have collateral that can help facilitate access to more affordable and higher-quality inputs, as well as access to markets. It also limits their ability to access financing with their land as collateral, and this in part drives yield gaps of up to 20- 30% between male- and female managed agricultural enterprises. These constraints are more acutely experienced by women in rural communities where poverty is more prevalent.
- The primary target of the Agribiz programme implemented by DANIDA and KCIC are the rural and peri-urban youth and women who are underemployed and lack the financial resources and know-how to create viable sustainable businesses. The programme will support entrepreneurship and innovation by youth and women along agricultural value chains focusing on Agribusiness enterprises capable of generating incomes, profits and employment for women and youth.
- Four of the main hurdles blocking youth and women entrepreneurship in agribusinesses which include: negative perception of the sector; lack of capacity to design and implement a business; lack of access to land and other natural resources at acceptable terms, and knowledge of their uses; and lack of access to finance, which will be the main focus of the program.

- To achieve this objective, 8 Business Incubation Hubs (BIH) in different Counties or Regional Economic Blocks, based where possible at existing centres such as the Agricultural Training Centres (ATCs) will be established in collaboration with the county governments.
- With Bungoma County being one of the target counties for the establishment of the BIH, Programme implementation partners conducted a situation analysis research to; determine the current state of agribusiness activities in the selected counties, understand the current circumstances within which the Programme is to be implemented, and to develop a general analysis of the programme's context.
- In Bungoma County 14% of the residents have no formal education, 10% primary education while 19% have secondary and above level of education and are employed. The County is dominated by micro and small business enterprises and has over 350 market centres of different sizes spread all over. Youths aged 15-34 represent 33.16% of the County population thus raising the need to plan for their employment. Gender biasness in distribution and control of resources remains a challenge with women being mostly disadvantaged. Women are mostly involved in agriculture and domestic roles with full women's participation in economic development activities being inhibited by low literacy levels, retrogressive beliefs, and perceived drudgery.
- County government departments who will work in close collaboration with Agribiz program in establishing the Business Incubation Hubs in the county include; Department of Agriculture, Livestock Development and Fisheries, Department of Youth Affairs and Gender, and Co-operatives and Enterprise Development.
- The development of agriculture is also important in Bungoma County for poverty reduction since most of the vulnerable groups depend on agriculture as their main source of livelihoods. Growth in the sector is therefore expected to have a greater impact on a larger section of the population than any other sector including employment creation where the sector is projected to provide up to 70 percent of jobs. While involved in production of other agricultural commodities, the most important agricultural value chains in the county are Cereals (maize and beans), Poultry – mainly local chicken, Dairy and vegetables – mostly local vegetables.
- Findings from the field revealed that the main challenges to agricultural production in the county include: inability of farmers to afford the optimum use of inputs, technology, agricultural information, financial services, and insurance; low crop productivity due to declining soil fertility; small, uneconomical sizes of land; poor gender equity in land tenure system; poor farming methods; aged farmers, over-dependence on one cash crop; lack of storage facilities; inadequacy of capital to invest in high- yielding areas; high prevalence of HIV and AIDs; poor road infrastructure and livestock diseases.
- The five most promising Agribusiness VCs within Bungoma county with the potential to create significant positive impact for the targeted beneficiaries (youth and women) after factoring the Programme goals and identified priority VCs as; poultry, sweet potato, dairy and soya beans production and value addition. These value chains were preferred because they required less land, less capital, were perceived less laborious, and had a ready market. Nodes in the value chain where priority interventions were required include; 1) Production; 2) Aggregation; 3) Processing and value addition; 4) Inputs
- Youths were interested were more inclined to intervening on processing and value addition while women preferred to intervene on production, aggregation and supply of inputs.
- Poultry value chain was identified as the most potential as a women and youth agribusiness activity because culturally local poultry are generally owned and managed by women and children, leverages well with county support being a priority value chain for the county government and as well as other projects such as the National Agricultural Rural Inclusiveness Growth Project. Consumption of poultry meat is increasing by 3.5% per annum due to rising incomes, diversification of diets and expanding market, and a demand that is not being met due to production challenges. From the focus group discussions, it was apparent, the poultry value chain in Bungoma

County has a lot of opportunities for the participation of women and youth agripreneurs in various nodes of the chain. This includes; feeding, cleaning, vaccination, deworming, slaughtering, processing, collection, transportation and selling. Simple value addition to chicken includes de-feathering, differentiation of parts and packaging. Value addition to eggs is achieved by boiling, fertilisation, and packaging. This would however need to be linked with the main retail market outlets.

- The dairy value chain has a great opportunity for growth going by the prevailing and growing demand for milk and milk products. The milk demand is driven by growing population, per capita milk consumption and increasing incomes. Women and youth groups have an opportunity to do zero grazing, milk transport and establish bulking centres. Value addition for milk in terms of pasteurization should be considered where Plate Heat Exchangers (PHE) processing units are established. Batch pasteurization technology is less preferred due to post pasteurization contamination. The introduction of milk dispensing machines in supermarkets and shopping malls provides for SMES to be established to compete with milk processors for this segment of the fresh milk market. The milk processing centres should be fitted with quality testing facilities to ensure milk safety.
- Sweet Potatoes were also considered a priority value chain by both women and youth. Sweet potatoes are widely grown in the area again due to the climatic conditions. The orange fleshed sweet potato are particularly nutritious hence contributing to improved nutrition at the household level. To turn sweet potato production in Bungoma county into a viable commercial enterprise, key interventions include establishment of sweet potato seed multiplication sites to enhance access to high quality seeds and disease and pest control. In addition, contract farming when would help farmers to get access to stable markets. To preserve the product, avoid losses and gain stable process, value addition would be a viable intervention. This includes processing of flour, and butternut products among other potential products.
- Soya beans production was also considered a priority value chain. Driven by the growing demand for feed supplements arising from growing demand for milk and milk products as well as the human demand for the same which also currently met by imports. There is opportunity both at production as well as value addition or processing to produce a ready product for the feed mill. Animal feeds constitutes the largest portion of the costs of milk production in market oriented dairy farming. Respondents from the dairy value chain confirmed that dairy animals in Bungoma County are underfed, resulting in low milk yields, with a majority of smallholders feeding dairy cattle on natural forage, cultivated fodder, and crop by-products. The dairy feed input value chain has a great potential for both women and youth to engage in commercial hay production and soya bean which would go into animal feed supplement formulation.
- The proposed Business Incubation Hub will provide a critical interface with the youth and women agripreneurs and is expected to translate to small, yet incremental, on-farm shifts, amounting to large-scale behaviour changes that underpin a successful agribusiness transformation in the county. Through the proposed hub services, the BIH has the opportunity to help the women and youth farmers in the county to aggregate their produce and do value addition thus making a transition, from subsistence farming to more commercially oriented agribusinesses. Markets have the potential to generate jobs especially for the youths who are very active in the value chain.
- An interview with the Chief Agricultural officer confirmed that Bungoma County has the potential to produce significant quantities of agricultural produce including poultry, dairy, horticultural products and maize, amongst others. However, the only fear at the moment is that farmers may venture into some high-yield value chains but insufficient market for the produce may lead to extreme losses. Accordingly, expanding markets for processed

agricultural products both domestically and for export is critical to increasing the utilization rate of the proposed processing infrastructure.

- A review of all the 40 TVETs in the county were evaluated together with county ATC. Because of the proximity to Bungoma town, the survey team focussed on Mabanga ATC and Singalo Institute of science and technology. A visit was made to the two institutions and applied the selection criteria too. The results of the assessment shows that Both Mabanga ATC and Singalo Institute of science and technology achieved the same number of score (20) which falls under the "favorable" category in the suitability scale. However, there was preference for Mabanga ATC by the county government because of favourable working relations with the county and the fact that there are no in-house students.
- There is significant county budgets for supporting agri-businesses in the county under the CIDP which the agribiz program can leverage with. The study however established that the county was lagging behind in achieving the set goals on its performance indicators.
- According to National Human Development Reports (HDRs) for Kenya 2016, Kenya has been ranked as a country with Medium Human Development with HDI at 0.555. However, variations do exist among and within the counties. In order to progressively improve our Human Development Indices, the County undertakes to invest considerable resources and support the youth among other special interest groups:

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ANNEX 1: IMAGES OF PROPOSES BIH HOST FACILITIES



Mabanga ATC Gate



Proposed facility for BIH Occupation at Mabanga ATC. Rehabilitation required



Mabanga ATC Classrooms





Mabanga ATC Accommodation Hostels



Mabanga ATC Conference Hall



Sing'alo Institute of Science and Technology



Sing'alo Institute of Science and Technology Facilities

ANNEX II: LIST OF RESPONDENTS IN FGDS

YOUTH ONLY

FOCUS GROUP DISCUSSION PARTICIPANTS

COUNTY: BUNGOMA
MEETING POINT: AGRICULTURAL BOARD ROOM
CATEGORY (Women only/ Youth only/ Combined):
DATE: 20/03/2020

	NAME	Age	Gender	Telephone	Sub-County	Occupation	Signature
1.	OPICHO ALLAN	33	M	0917091945	KANDUTI	Community / Social Devt Officer I	
2.	TOM SIMITU	33	M	0756350580	KANDUTI	Farmer	
3.	GRACE OGWEL	38	F	0716151503	KANDUTI	Roadside Vendors	
4.	Noella Njaramwe	34	F	0721366865	Kanduti	Farmer	
5.	Mark Ngetwa	34	M	0728819745	MT. ELgon	FARMER	
6.	DAVID BOSUA	29	M	0713620498	KANDUTI	MARKETER (MUL)	
7.	NIGHTINGALE Simitu	35	F	0725321843	KANDUTI	Research assistant	
8.	ESCAR OGATA	28	M	0704573275	BUMULA	ENTREPRENEUR	

WOMEN ONLY

FOCUS GROUP DISCUSSION PARTICIPANTS

COUNTY: BUNGOMA
 MEETING POINT: ✓ AGRICULTURAL BOARD ROOM.
 CATEGORY (Women only/ Youth only/ Combined):
 DATE: 20/03/2020

NAME	Age	Gender	Telephone	Sub-County	Occupation	Signature
1. Jane Nasaka	54	F	0721865511	KANDUYI	Agrovet business	<i>[Signature]</i>
2. DORCAS WAKIMUCHA	44	F	070576455	BUMULA	MOTEL B/FARMER	<i>[Signature]</i>
3. SUSAN WANYENGA	59	F	0725958724	KANDUYI	FOOD PROCESSING	<i>[Signature]</i>
4. BEATRICE KOLILI	53	F	0711836732	KANDUYI	HATCHERY FARMER/POULTRY	<i>[Signature]</i>
5. Gladys Nabisiwa	56	F	0713939760	KANDUYI	FARMER TRAINER NGD CEO	<i>[Signature]</i>

COMBINED

FOCUS GROUP DISCUSSION PARTICIPANTS

COUNTY: BUNGOMA
 MEETING POINT: AGRICULTURAL BOARD ROOM
 CATEGORY (Women only/ Youth only/ Combined):
 DATE: 20/03/2020

NAME	Age	Gender	Telephone	Sub-County	Occupation	Signature
1. DOUGLAS SITUMBA	43	M	0724737014	KANDUYI	CHAIR KANDUYI POSTERSHIP	<i>[Signature]</i>
2. DAVID BOSITA	29	M	0713620498	KANDUYI	MILK MARKETING	<i>[Signature]</i>
3. EDITH KADALI	48	F	0733631772	WEBUYE-WBWT	DAIRY FARMER PRODUCER	<i>[Signature]</i>
4. TOM SIMITU	33	M	0958350380	KANDUYI	CROP PRODUCTION	<i>[Signature]</i>
5. NEOLA NAWOMBE	34	F	0721366855	Kanduyi	COP PRODUCTION	<i>[Signature]</i>
6. ELEMINE WANYENGA	750	P	0726143920	SICUPA	LIVESTOCK PRODUCTION	<i>[Signature]</i>
7. Lukhale Gregory	60	m	0720692080	Bumula	veterinarian	<i>[Signature]</i>

Annex III: QUESTIONNAIRES

Interview Questions- County Government official

Name:

Age:

Gender:

Position:

Years Working with the CG:

1. According to you, which Agribusiness value chains do you consider as the most important in the County and why?
2. From the mentioned value chains, which one is the most supported by the county government?
3. What new value chains are of interest to the community? What have been the results of any ventures into new value chains?
4. According to you, which Agribusiness value chains mostly attracts the participation of women and youth and why?
5. Do the goals of the AgriBiz Programme meet the needs of youth and women agripreneurs in your county?
6. Do agribusiness support services exist in your county? If so, how would you describe their state (efficiency, relevance) in terms of engaging more youth and women in the Agribusiness Value Chain?
7. How do you describe the current status (and future) of youth and women driven agribusiness activities in your county? What gaps exist?
8. Do your county government have support programmes for women and youth in agribusiness? If so, what do they entail?
9. Has your government experienced any challenges in implementing support programmes for women and youth in agribusiness? Explain.
10. According to you, what does the agribusiness support entails and how well can we execute it if we are to realize its benefits?
11. Do you have any strategies on how the AgriBiz Programme can leverage on the County government budget provisions to enhance its activities and sustainability?
12. In your opinion, what other opportunities exist in your county that can be leveraged on by an Agribusiness support hub to create more employment opportunities for women and youth?
13. What are some of the Key factors one needs to consider before establishing an Agribusiness Development Hub in your county so as to realize maximum benefits for youth and women?
14. Are you aware of any existing county legislations or policies that favor women and youth agribusiness activities?
15. Can you suggest some county government interventions that can improve the youth and women participation in the county's agribusiness value chains?

Interview Questions- Woman Agripreneur

Name:

Age:

Occupation:

Sub-county:

Enterprise name:

1. Give me a background of your agribusiness activity. At what node do you participate in your value chain? (Input, Production, Processing, Marketing.)
2. According to you, which Agribusiness value chains do you consider as the most important in the County and why?
3. Which Agribusiness value chains are more conducive for women's participation and how is this achieved?
4. What new value chains are of interest to women in the county?
5. Do the goals of the AgriBiz Programme meet the needs of women agripreneurs in your county? Elaborate.
6. Do you have any ideas on how to mobilize more women agripreneurs to join the AgriBiz Programme?
7. Are there any existing agribusiness support programs in your county for the women Agripreneurs?
8. In your opinion, what opportunities exist in your county that can be leveraged on by an Agribusiness support hub to create more employment opportunities for women?
9. What are some of the Key factors to consider before establishing an Agribusiness Development Hub in your county so as to realize maximum benefits for women agripreneurs?
10. Have you experienced any challenges as you engage in your county's agribusiness value chains? Explain.
11. What steps have you taken to minimize such challenges?
12. Can you recommend some key partners that can be engaged in facilitating a women agribusiness empowerment program in your county?
13. Which factors could contribute to women marginalization in the county's agribusiness value chains? How can they be minimized?
14. What initiatives can be undertaken to build support for a more productive women's participation in the county's agribusiness value chains?
15. How can agripreneurship support centers or hubs at county level better contribute to creating more opportunities for women in the county's agribusiness value chains?
16. Tell me more about the dominant language and culture in your county

Interview Questions- Youth Agripreneur

Name:

Age:

Occupation:

Sub-county:

Enterprise name:

1. Give me a background of your agribusiness activity. At what node do you participate in your value chain? (Input, Production, Processing, Marketing.)
2. According to you, which Agribusiness value chains do you consider as the most important in the County and why?
3. Which Agribusiness value chains are more conducive for youth's participation and how is this achieved?
4. What new value chains are of interest to the youth in the county but are still underdeveloped?

5. Do the goals of the AgriBiz Programme meet the needs of youth agripreneurs in your county? Elaborate.
6. What are some of the strategies that can be employed to encourage more youth in your county to join the AgriBiz Programme?
7. Are there any existing agribusiness support programs in your county for the youth Agripreneurs?
8. In your opinion, what opportunities exist in your county that can be leveraged on by an Agribusiness support hub to create more employment opportunities for youth?
9. What are some of the Key factors one needs to consider before establishing an Agribusiness Development Hub in your county to realize maximum benefits for youth agripreneurs?
10. Have you experienced any challenges during your engagement with activities in the county's agribusiness value chains? Explain.
11. What steps have you taken to minimize the above challenges?
12. Can you recommend some key partners that can be engaged in facilitating a youth agribusiness empowerment programs in your county?
13. Which factors could contribute to youth marginalization in the county's agribusiness value chains? How can they be minimized?
14. What initiatives can be undertaken to build support for a more productive youth participation in the county's agribusiness value chains?
15. How can agripreneurship support centers or hubs at county level better contribute to creating more opportunities for youth in the county's agribusiness value chains?
16. Tell me more about the dominant language and culture in your county

Focus Group Discussion Questions

Target: Youth Groups, Women Groups, Mixed

16. According to you, which Agribusiness value chains do you consider as the most important in the County and why? At what nodes do you actively participate in the County's Agribusiness value chains (e.g. inputs, production, processing, marketing etc?)
17. From the mentioned value chains, what is the scale of production- smallholder, medium-holder, large-holder?
18. What new value chains are of interest to the community? What have been the results of any ventures into new value chains?
19. According to you, which Agribusiness value chains mostly attracts the participation of women and youth and why?
20. Do the goals of the AgriBiz Programme meet the needs of youth and women agripreneurs in your county?
21. How can the AgriBiz Programme attract the interest of youth and women-led agribusiness entities in your county?
22. What communication channels can be employed to reach out to the women and youth agripreneurs to enhance their participation in the proposed BIHs?
23. According to you, which Agribusiness value chains do you consider as the most important to women and youth in the County and why?
24. In your opinion, what opportunities exist in your county that can be leveraged on by a Business Incubation Hub to create more employment opportunities for women and youth?
25. Have you experienced any challenges during your engagement with activities in the county's agribusiness value chains? Explain.
26. Can you recommend some key partners that can be engaged in facilitating a women and youth agribusiness empowerment program in your county? What are their strengths and weaknesses (if any?)

27. Which factors could contribute to women and youth marginalization in the county's agribusiness value chains? How can they be minimized?
28. What initiatives can be undertaken to build support for women and youth participation in the county's agribusiness value chains?
29. How can agripreneurship support centers or hubs at county level better contribute to creating more opportunities of women and youth in the agribusiness value chains?

Assessment of BIH Hosting Facilities

Date:

Category of Host:

- ATC
- TVET
- Other

Name of Interviewee:

Position

Signature:

Notes

1. Experience in Hosting similar Programs (contacts of past hosts)

- Yes
- No

Notes

2. Accessibility of the premises (Tick)

- Highly Accessible
- Fairly Accessible
- Inaccessible

Notes

3. Distance from the nearest town (Tick)

- 0-10 km
- 10-20 km
- 20-40 km
- Above 40 km

Notes

4. The condition of road infrastructure (Tick)

- Good
- Fair
- Bad

Notes

5. How much space is available for lease (in sq ft)?

Notes

6. Approach to sanitary waste management

- Efficient
- Satisfactory
- Non-satisfactory

7. Status of the washrooms (Tick)

- Very clean
- Slightly Clean
- Dirty

Notes

8. Structural integrity- condition of the exteriors, walls, roofs, windows, doors (Tick)

- Excellent
- Good
- Bad

Notes

9. Structural integrity- Status of interiors-floors, roof, ceilings, walls, pillars, staircases (Tick)

- Excellent
- Good
- Bad

Notes

10. Safety-Availability of firefighting equipment and fire escape routes(Tick).

- Yes
- No

11. Availability of air conditioning system (Tick)

- Yes
- No

Notes

12. Availability of Power back-up system in case of black outs (Tick)

- Yes
- No

Notes

13. Is internet Infrastructure available? (Tick)

- Yes
- No

Notes

14. Availability of phone network (Tick)

- Available
- Not available

<i>Notes</i>

15. The condition of fences or perimeter walls (Tick)

- Excellent
- Good
- Bad

Notes

16. Security-is the security service contracted or self-provided? (Tick)

- Contracted
- Self-provided

Notes

17. Availability of CCTVs on shared spaces? (Tick)

- Yes
- No

Notes

18. Availability of (non-interrupted) water and electricity in the premises(Tick)

- Yes
- No

Notes

19. Cleanliness of the premises

- Very Clean
- Fairly Clean
- Not clean

Notes

20. Willingness of the host to contribute to hub sustainability

- Very willing
- Slightly willing
- Not willing

Notes

21. Availability of office space

- Yes
- No

Notes

22. Availability of training room

- Yes
- No

Notes

23. Are trainings allowed in their premises?

- Yes
- No

Notes

24. Availability of land for demonstration (½ acre and above)

- Yes
- No

Notes

25. Availability of ample parking space?

- Yes
- No

Notes

26. Can vehicles be safely parked overnight

- Yes
- No

Notes

27. Security of the premises- any reported theft cases?

- High
- Moderate
- Low

Notes

AgriBiz Business Incubation Hub Facility Outline

- 1 Office Space for:
 - 1 Hub Manager
 - 2 Business Analysts
 - 1 Admin
2. Two meeting rooms (for closed door consultations)
3. One Training Hall
4. ½ Acre land for demonstration purposes

