#### COUNTY GOVERNMENT OF KITUI



#### **COUNTY ASSEMBLY OF KITUI**

THIRD ASSEMBLY – (SECOND SESSION)

THE DELEGATION OF THE COMMITTEE ON AGRICULTURE, WATER AND IRRIGATION

REPORT ON TRAINING WORKSHOP ON STRATEGIC FOOD SECURITY FOR KITUI COUNTY HELD FROM 6<sup>TH</sup> - 10<sup>TH</sup> MARCH, 2023 IN MALAYSIA.



The Clerks Chambers

P.O Box 694 -90200

Kitui.

County Assembly of Kitui.

MAY, 2023

#### TABLE OF CONTENT

ABBRIVIATIONS & ACRONYMS	4
CHAPTER ONE	5
1.0 PREFACE	5
1.1 Committee Responsibility and Function	5
1.2 Composition of Delegation	6
1.3 Justification for the Visit to Malaysia.	7
1.4. Objectives of the Study visit	9
1.5. Acknowledgement	9
CHAPTER TWO	11
2.0. HISTORICAL BACKGROUND OF MALAYSIA	11
2.1. AGRICULTURAL BACK GROUND AND DEVELOPMENT IN MALAYSIA.	13
2.2. AGRICULTURE IN KITUI COUNTY.	18
2.2.1. Economic Relevance of Agriculture	19
CHAPTER THREE	21
3.0. HIGHLIGHTS OF THE PRESENTATIONS DURING THE TRAINING WORKSHOP.	21
3.1 NATIONAL FOOD SECURITY.	21
3.2. NUTRITION AND HEALTH OUTCOMES IN FOOD SECURITY PLANNING.	23
3.2.1 Benefits of Good Nutrition.	23
3.2.1. Emerging Challenges in Nutrition and Health Outcomes.	23
3.2.2. Mitigation plans.	24
3.3. EFFECTS OF CLIMATE CHANGE ON FOOD SECURITY.	25
3.3.1 Net Impacts of Climate Change on Food Security.	26
3.3.2. Build resilience of agricultural systems	26
3.3.3. Risks and Responses	28
3.4. FOOD SUSTAINABILITY AND BIOTECHNOLOGY	29
3.5. FOOD MARKET ASSESSMENT.	31
3.6. AGRICULTURE VALUE CHAIN AND INTERNATIONAL TRADE.	32
3.6.1. ICT Innovation and Incubation.	33
3.6.2. Agriculture and Trade Partnership and Linkages.	33
3.6.3. Importance of Linkage Office Under Agriculture Committee.	34
3.6.4. Impact on Social and Economic.	35
3.6.4. Role of Cooperatives in Social and Economic Development.	35

CHAPTER FOUR	36
4.0 LESSONS LEARNT.	36
CHAPTER FIVE	39
5.0 COMMITTEE'S RECOMMENDATIONS	39
6.0 CONCLUSION	42
ANNEXTURES	43
ANNEX I: PHOTO GALLERY	43
ANNEX 2: REPORT ADOPTION	43
ANNEX 3: TRAINING PROGRAM	43
ANNEX 4: PASSPORTS & BOARDING PASS COPIES	43

### ABBRIVIATIONS & ACRONYMS

ASDSP Agriculture Sector Development Support Programme.

AMIS Agricultural Market Information Systems.

ESAMI East & Southern African Management Institute

GDP Gross Domestic Product

IT Information Technology

ICT Information & Communication Technology

KNBS Kenya National Bureau of Statistics

MCA Member of County Assembly

MT Metric Tonnes

NAP National Agro-food Policy

UMNO United Malays National Organization

USD United States Dollar

#### CHAPTER ONE

#### 1.0 PREFACE

#### Mr. Speaker Sir,

On behalf of the Members of the Committee on Agriculture, Water and Irrigation and pursuant to provision of Standing Order 179(6) and 190(5) (g), it's my privilege to present to this honourable House, the committee's report on a workshop on Strategic Food Security for Kitui County Government by ESAMI in Malaysia.

The workshop was undertaken from 6<sup>th</sup> to 10<sup>th</sup> March, 2023 and focused on Strategic Food Security for Kitui County and was spearheaded by The Eastern and Southern African Management Institute (ESAMI).

ESAMI is a Pan African Regional Management Development Centre owned by ten Member Governments from the Eastern and Southern African regions. The Governments include Kenya, Malawi, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

The Institution is a service and market-oriented institution offering high level specialized management training, consultancy, education programmes and action- oriented management research services.

#### 1.1 Committee Responsibility and Function

Standing Order 190(1) establishes for every County Assembly, Sectoral Committees with specific mandates. Under Standing Order

190 (5), the Sectoral Committees are charged with the distinct responsibilities which include, to;

i) Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned departments;

- ii) Study the program and policy objectives of departments and the effectiveness of the implementation;
- iii) Study and review all county legislations referred to it;
- iv) Study, access and analyze the relative success of the departments as measured by the results obtained as compared with their stated objectives;
- v) Investigate and inquire into all matters relating to the assigned departments as they may deem necessary, and as may be referred to them by the County Assembly;
- vi) To vet and report on all appointments where the Constitution or any law requires the County Assembly to approve, except those under Standing Order 185 (Committee on Appointments); and
- vii) Make reports and recommendations to the County Assembly as often as possible, including recommendation of proposed legislation.

# 1.2 Composition of Delegation Mr. Speaker Sir,

The delegation comprised of the following Members who had a successful visit to learn, explore and benchmark on the sector responsibilities: -

- 1. Hon. Anthony Musyimi Musyoka Team Leader.
- 2. Hon. Joseph Musyoka Mbite Member.
- 3. Hon. Boniface Mukwate Katula Member.
- 4. Hon. Immaculate Wanza John Member.
- 5. Hon. Cornelius Ngumbau Muthami Member.
- 6. Hon. Joseph Kasungi Kavula Member.

The Team was also accompanied by a Clerk assistant M/s Winfred Musyoki to document the Committee findings and recommendation.

# 1.3 Justification for the Visit to Malaysia. Mr. Speaker Sir,

The concept of devolution which means taking services closer to citizens has gained momentum since the promulgation of the current constitution of Kenya in the year 2010. The Constitution of Kenya 2010 upon promulgation and enactment changed the Governance structure from a centralized unit to devolved subunits known as the County Governments. It was expected that the onset of these devolved governments after the 2013 Elections and enactment of subsidiary laws would address these development challenges of the centralized governance that Kenya had faced since independence.

#### Mr. Speaker Sir,

Devolution in Kenya is based on the supremacy of the Constitution, sovereignty of the people and the principle of public participation. The characteristic of devolution in the Kenyan context is reflected in the principles and objectives of devolution as stated in the Constitution. Key among these includes the presence of local units that have autonomy and independence from the Centre, with clear and legally recognized geographical boundaries over which to exercise authority and perform public functions.

#### Mr. Speaker Sir,

Article 6 (1) of the Constitution provides that the territory of Kenya is divided into the forty-seven (47) counties. The Constitution in Article 6(2) recognizes that these National and County governments are distinct and inter-dependent and requires them to conduct their mutual relations on the basis of consultation and cooperation.

The World Bank (2012) Survey further argued that management of the state through the central and local authorities in Kenya over the past fifty years of independence had experienced a series of challenges. Kenyans have witnessed dismal performance by successive governments due to weak governance. Consequently, the County Governments continue to lack effective governance systems necessary for strategic and independent management.

#### Mr. Speaker Sir,

The Committee believes that for maximum service provision to the citizens, there is a need to continuously engage, interact, exchange and co-opt best skills and practices locally, nationally and internationally.

It is on this basis that the Committee on Agriculture, Water and Irrigation organized a training workshop in the Country to expose and enable honorable members to get acquainted with knowledge and skills pertaining to Food Security.

This country is believed to be amongst the ASALS that need application of modern Agricultural practices to enable provision of adequate food to the ever-growing population and ensure that there is food security coupled with the right nutrition all through the year.

#### Mr. Speaker Sir,

Kenya is believed to have been in the same level of development thirty years ago with Malaysia. However due to good governance, proper planning and commitment to technological advancement, the Country is already in the developed countries category.

Malaysia is also believed to have a lot in common with many African countries in particular South of Sahara where Kenya lies in terms of cultural and environmental zoning.

The devolved systems in Kenya are designed and programmed specifically to address the key development factors particularly in sustainable Infrastructure.

## 1.4. Objectives of the Study visit Mr. Speaker Sir,

The study visit was in furtherance of the committee's mandate and its work plan. The visit was tailored to achieve the following objectives; -

- 1. General understanding of Malaysia's food security programmes.
- 2. Gain an in-depth knowledge of the criteria, the baseline standard for sustainability in Agricultural Production.
- 3. Make informed decisions on how to implement sustainable practices in one's area of duty.
- 4. Readiness in developing viable and actionable sustainable practices in Agricultural policies.
- 5. Local people empowerment projects and sustainability strategies.

# 1.5. Acknowledgement Mr. Speaker Sir,

The committee is obliged to various institutions and individuals for the support and cooperation they provided which made the training workshop successful. They include the Ministries of devolution and Immigration for approving the training workshop and timely processing of travel documents respectively.

The Committee is grateful to the Offices of the Speaker and Clerk to the County Assembly for support and facilitating the training.

Oratefully acknowledged is ESAMI for organizing the training and dispatching Dr, Moses Ng'ong'a to facilitate the study sessions The delegation will be indebted if it forgets the warm welcome accorded to them by the Kenyan ambassador to Malaysia Amb. Francis N. Muhoro, as well as representatives of the various places visited by the delegation for the warm reception accorded.

It is now my pleasant duty and privilege, on behalf of the delegation, to table this report and recommend it to the house for adoption.

Thank you

Sign: Date: 09/05 2023

HON. ANTHONY MUSYIMI MUSYOKA (MCA)

CHAIRPERSON, COMMITTEE ON AGRICULTURE, WATER AND IRRIGATION.

COUNTY ASSEMBLY OF KITUI.

Report Compiled by Winfred Musyoki- Clerk Assistant II

#### CHAPTER TWO

#### 2.0. HISTORICAL BACKGROUND OF MALAYSIA

#### Mr. Speaker Sir,

Malaysia is located on a strategic sea lane that exposes it to global trade and various cultures. The name "Malaysia" is a modern concept, created in the second half of the 20th century. However, contemporary Malaysia regards the entire history of Malaya and Borneo, spanning thousands of years back to prehistoric times, as its own history.

#### Mr. Speaker Sir,

When it was established on September 16, 1963, Malaysia comprised the territories of Malaya (now Peninsular Malaysia), the island of Singapore, and the colonies of Sarawak and Sabah in northern Borneo. In August 1965 Singapore seceded from the federation and became an independent republic.

At the time of independence, Malaya had great economic advantages. It was among the world's leading producers of three valuable commodities; rubber, tin, and palm oil, and was also a significant iron ore producer. These export industries gave the Malayan government a healthy surplus to invest in industrial development and infrastructure projects. Like other developing nations in the 1950s and 1960s, Malaya (and later Malaysia) placed great stress on state planning, although UMNO was never a socialist party. The First and Second Malayan Plans (1956–1960 and 1961–1965 respectively) stimulated economic growth through state investment in industry and repairing infrastructure such as roads and ports, which had been damaged and neglected during the war and the Emergency.

Malaysia is a federal constitutional monarchy in Southeast Asia consisting of thirteen (13) states and three (3) federal territories. It is the only federation in Southeast Asia with notable blending of cultures and multiracial population practicing various religions such as Islam, Buddhism, Taoism, Hinduism and Christianity. All this culture shave has influenced each other in one way or the other, creating a truly Malaysian culture. The Malaysian constitution grants freedom of religion but recognizes Islam as the established religion of the state. The capital city is Kuala Lumpur, while the new administrative center is in Putrajaya, which has its origin in the Malay kingdoms since 18th century subject to the British Empire, when the Straits Settlement became British protectorates. It achieved independence on 31st August 1957 thus marking 61 years of independence so far.

#### Mr. Speaker Sir,

The Malaysian government system is closely modelled on the Westminster parliamentary system and the legal system is based on common law. The head of state is the king; known as the *Yang di-Pertuan Agong*, an elected monarch chosen from the hereditary rulers(sultans) of the nine (9) Malay states every five years.

Through an informal agreement, the position is systematically rotated among the nine sultans, and has been held by Muhammad V, of Kelantan since December 2016. It is important to note that, the current king is a bachelor hence presently there is no queen. The King's role has largely been ceremonial since changes to the constitution were introduced in 1994, limiting his powers thereof, to nominating ministers and members of the upper house as his only official role in the government.

Malaysia's legislative power is divided between the federal and state legislatures. The bicameral federal parliament consists of the lower house which is the House of Representatives and the upper house, the Senate. There are 222-members elected to the House of Representative for a maximum term of five years from single-member constituencies, while in the upper house, there are seventy (70) senators whose term limit is three (3) years. Only twenty-six (26) senators out of the seventy (70), are elected by the 13 state assemblies. The other forty-four (44) senators are appointed by the King, upon the Prime Minister's recommendation. The head of government is the Prime Minister.

## Mr. Speaker Sir,

About half of the population is ethnically Malay, with large minorities of Malaysian Chinese (the second largest community of Overseas Chinese in the world), Malaysian Indians, and indigenous peoples. The country's official language is *Bahasa Melayu*; commonly known as the Malay language although English remains an active second

language. In 2017, English proficiency in Malaysia was ranked the second best in Asia after Singapore and 13th best in the world.

# 2.1. AGRICULTURAL BACK GROUND AND DEVELOPMENT IN MALAYSIA. Mr. Speaker Sir,

Malaysian agriculture is characterized by dualism, viz. smallholder's sector with an average farm size of 1 - 2 ha, and the plantation-based estate sector with farm sizes in excess of 500 ha. This dichotomy in agricultural industry placed great economic emphasis on cash crops, namely oil palm, rubber, and cocoa although sizeable acreages of the arable lands are planted with food

crops like rice, pepper, fruit orchards, vegetables, and herbs. The industry has evolved from a stereotypic Third World peasantry economic entity to the vibrant third engine of economic growth contributing no less than US\$5.63, 6.34, 7.75, and 8.48 billion to the national GDP in 2003, 2005, 2007 and 2008, respectively.

## Mr. Speaker Sir,

Agriculture remains an important part of the national economy in the new millennium for the increasingly burgeoning populace with the challenge to provide both food security and safety, and sustainable development and wealth creation.

The primary issues besieging Malaysian agriculture in the new millennium include ensuring food security and food safety for the populace with parallel and determined effort to sustain, and where possible, increase exports of agricultural produce. Albeit the apparent decline of agricultural sector to the Malaysian national economy, agricultural development in Malaysia, faces three major challenges in new millennium,

- (i) Persistence of poverty among the rural farming community;
- (ii) Food insecurity for the traditional agricultural systems;
- (iii) Continuing and perennial pressure on the deterioration of the natural resource base;
- (iv) Labor-intensive plantation agriculture which faces the vagary of foreign labor;
- (v) Low returns from agricultural investment; (vi) Stagnating prices of commodities;
- (vi) High costs of land, and
- (vii) Often volatile market forces.

The Malaysian government re-emphasis and renewed interest in agriculture especially for food production principally to off-set the unhealthy trend of steady increase in food imports augurs well in promoting agricultural development in the country. This coupled with the opening of new economic zones in Peninsular Malaysia, Sabah and Sarawak supported by the fledging government-based administrative, research, technical and extension services, and augmented by those in the private sector call for new strategize plans from the view point of natural resources sustainability and environmental safety.

#### Mr. Speaker Sir,

The already-in-place New Agricultural Policies serve as the framework for agricultural development in the country in the new millennium. These NAPs were promulgated with the principal thrusts' areas:

- a) Meeting national food requirements through large food production by the private sector;
- b) Enhancing competitiveness and profitability in agriculture and forestry promoting globally competitive industries in agriculture and forestry, developing world competitive outlook and an export culture;
- c) Capitalizing on the product value-chain by reorientation from commodity-based to product-based production and marketing, capital and technology intensive agricultural production system and less labor-intensive enterprises as well as cultivation of high-value crops and forest species;
- d) Enhancing the integrated development of the food and industrial crop;

- e) Strengthening requisite economic foundation, upgrading quality of human resources, development of indigenous R&D capabilities and technology, namely modern infrastructure, business support services, financing and incentives and an enabling institutional framework; and
- f) Adopting and emphasizing sustainable development rules and regulations, and strengthening incentives.

Malaysian agriculture, like those in many countries is shaped by several factors which include among others;

- i. Status of the natural resource base,
- ii. Climate change,
- iii. Extent of land degradation,
- iv. Advances in science and technology,
- v. Urbanization,
- vi. Trade liberalization and commercialization, and
- vii. Strategic alliances and international agreements and conventions.

These factors would influence agricultural development in the country in a holistic manner, although the effect and intensity of influence of each factor may vary accordingly. Invariably, agricultural development faces three major global challenges in the new millennium:

- (i) Persistence of poverty and food insecurity;
- (ii) Globalization and its impact on the eventual transformation of traditional agricultural systems, and
- (iii) Continuing and perennial pressure on the deterioration of the natural resource base.

The agricultural production capacity in Malaysia, in effect, will be tapping three principal sources of growth;

- (i) Expanding the arable land area;
- (ii) Increasing cropping intensity (mostly through irrigation); and
- (iii) Boosting yields. This is made possible as Malaysian agricultural landscapes are yet to approach the ceiling for all the three sources at the local scale.

#### Mr. Speaker Sir,

However, the intrinsic geopolitical unevenly distribution of available land in Sabah, Sarawak and Peninsular Malaysia coupled with the equally unequal population concentrations in these regions, and locally-mediated consumer demands for agricultural produce and inputs reflect the present state of agricultural development in the country. This present state is echoed by Anon (2003) where enough unused potential farmland at the regional scale, of which only 11% (5.78 million ha) of all land is used in crop production. Out of this, 36% of the arable land to some degrees are suitable for crop production and 18.92 million ha of arable land remains with crop production potential.

Reflections of the regional- or population-mediated pressure needing the arable land may not have it. This is especially true in the Klang Valley of Selangor and Federal Territories. In several situations, much of the land also suffers from;

- a) Ecological fragility and in hilly areas of steep terrain of Sarawak and Sabah;
- b) Low fertility in acid sulphate, peat and heavy clay soils;
- c) Coastal areas prone to flooding and seepage of saline water;

- d) Toxicity in ex-tin mining land, acid sulphate soils;
- e) High incidence of disease as exemplified by ex-pepper land prone to root disease and nematodes;
- f) Inadequate infrastructure in the rural areas of Sabah, Sarawak, Pahang, and Kelantan.

In Malaysia and elsewhere, the general trend in agriculture production is usually towards sustainable intensification, as opposed to dependence on land expansion.

## 2.2. AGRICULTURE IN KITUI COUNTY.

## Mr. Speaker Sir,

Kitui County is in the eastern part of Kenya, bordering Tharaka-Nithi and Meru Counties to the north, Embu to the northwest, Machakos and Makueni to the west, Tana River to the east and southeast, and Taita Taveta to the south.

The county has an altitude that ranges between 400-1800 meters above sea level (County Government of Kitui, 2018). Due to its semi-arid climate, the county is among the most drought-vulnerable regions in Kenya. The average annual precipitation range is 400-1000 mm, with an annual average annual of 750 mm.

## Mr. Speaker Sir,

The eastern part of the County is the driest, receiving less than 500 mm of rainfall, on average, every year. Precipitation in the long rainy season, from March to May, is erratic and unreliable; precipitation in the short rainy season, October to December, is more reliable in terms of its amount and distribution. Most farmers in Kitui County depend on the short rainy season for agricultural

productivity: it contributes 60% of the county's crop production, compared to 40% during the long rainy season. The annual average temperature for Kitui is 21-31°C. The western part of the county is nearly 10°C cooler than the eastern part. The county has eight sub-counties: Mwingi Central, Mwingi North, Mwingi West, Kitui South, Kitui East, Kitui Rural, Kitui West, and Kitui Central.

## 2.2.1. Economic Relevance of Agriculture

Agriculture is the main economic activity in Kitui County contributing to food security and about 87% of the income earned by the rural population and directly employs 355,825 persons, or more than 35% of the population (ASDSP, 2014).

Out of the 262,942 households in the county, 82% are engaged in farming activities (KNBS, 2019d). At 93%, most of the households involved in agricultural activities are engaged in the production of crop such as cereals, industrial, and horticultural crops (KNBS, 2019d). The total annual average of cereal production in the county is 80,680 metric tonnes (Mt), valued at Kshs 4.24 billion;1 industrial crops (cotton, sisal, and sunflowers) are valued at Kshs 29.04 million for an average production of 771 Mt; and the average production of horticultural crops stands at 36,950 Mt, valued at Kshs 990 million (County Government of Kitui, 2018). Livestock production is also a main economic activity in the county, with 82% of the county households involved in farming producing livestock (KNBS, 2019d). Households depend on livestock as a food source and for income generation.

The main types of livestock in the county are indigenous cattle, goats, local chicken, and donkeys. County farmers prefer these animals, as they are resilient to the hot and dry climatic conditions and can cushion them against

adverse conditions such as drought. Of the total farming households, 41% rear indigenous cattle, 69% raise goats, and 68% keep local chickens (KNBS, 2019d). The county's annual average production levels for various livestock enterprise products are as follows: 3,077 tonnes of beef, 1466.6 tonnes of goat meat, 70 million eggs, and 4.2 million liters of milk.

### Mr. Speaker Sir,

Donkeys are primarily used as a means of transport; for this they are kept by 48% of households. They come in handy to help families fetch water across long distances during dry spells. They are sometimes included in dowry negotiations. Also, indigenous chickens are a fundamental source of income for immediate household needs (County Government of Kitui, 2018).

The county's annual production of honey is 960 tonnes (County Government of Kitui, 2018), with 14% of households engaged in the enterprise (KNBS, 2019d). There is huge growth potential for this sector, although it requires concerned stakeholders (including the government, international organizations, the private sector, and farmers) to ensure that the value chain is managed appropriately. Expanding beekeeping would help to increase the GDP of the county, provide food security, and conserve the environment.

#### CHAPTER THREE

# 3.0. HIGHLIGHTS OF THE PRESENTATIONS DURING THE TRAINING WORKSHOP.

### Mr. Speaker,

The facilitator of the workshop **Dr. Moses Ng'ong'a** welcomed the Members to the workshop and offered a brief overview on the role of the County Assembly, objectives of the workshop and what the members expectations at the end of the training.

Topics on **Strategic Food Security for Kitui County government** were dealt with in addition to the visits to some of the sites to enable comparison of notes with our County are: -

## 3.1 NATIONAL FOOD SECURITY.

The facilitator began the workshop by introducing the topic where he narrated that the basic concept of food security globally is to ensure that all people, at all times, should get access to the basic food for their active and healthy life and this is characterized by availability, access, utilization and stability of food.

He went ahead to explain each of the concept on national food security independently as follows: -

## 1. Physical Availability of food.

Food availability is defined as sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food assistance). This could be affected by a number of factors including and not limited to failed harvest, economic disruptions, lack of markets, among others.

Food availability addresses the "supply side" of food security and is determined by the level of food production, stock levels and net trade.

- 2. Economic and physical Access to food. This means an adequate supply of food at the national or international level. This does not in itself guarantee household level food security. Concerns about insufficient food access have resulted in a greater policy focus on incomes, expenditure, markets and prices in achieving food security objectives.
- 3. Food Utilization. Utilization is commonly understood as the way the body makes the most of various nutrients in the food. Sufficient energy and nutrient intake by individuals are the result of good care and feeding practices, food preparation, diversity of the diet and intrahousehold distribution of food. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals. A further component in the definition of food security concerns the actual quality and type of food supplied and a requirement that it should not merely satisfy protein-energy needs but provide the nutritional balance necessary for a healthy and active life.
  - 4. Stability. This means access of all people at all times to enough food for an active healthy life. It should be understood that even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status. This makes food insecurity to be categorised in to either chronic or transitory with the former representing a situation where the lack of food is a permanent feature and the latter describing a temporary shortage. Adverse weather conditions, political instability, or economic factors (unemployment, rising food prices) may have an impact on your food security status. 22

# 3.2. NUTRITION AND HEALTH OUTCOMES IN FOOD SECURITY PLANNING.

#### Mr. Speaker Sir,

Nutrition is a critical part of health and development. Better nutrition is related to improved infant, child and maternal health, stronger immune systems, safer pregnancy and childbirth, lower risk of non-communicable diseases (such as diabetes and cardiovascular disease), and longevity.

## 3.2.1 Benefits of Good Nutrition.

These include the following: -

- a) Better quality life and living long healthy life.
- b) Keeps skin, teeth, and eyes healthy.
- c) Supports muscles.
- d) Boosts immunity.
- e) Strengthens bones.
- f) Lowers risk of heart disease, type 2 diabetes, and some cancers.
- g) Supports healthy pregnancies and breastfeeding.
- h) Helps the digestive system function.

## 3.2.1. Emerging Challenges in Nutrition and Health Outcomes.

Looking ahead, a number of emerging challenges in food security and nutrition will need to be addressed. These include, in particular:

- Meeting the food and nutritional needs of growing urban and rural populations.
- ii. Changing dietary preferences.
- iii. Increasing sustainable agricultural production and productivity
- iv. Enhancing resilience to climate change.
- v. Finding sustainable solutions to the increasing competition for natural resources.

## 3.2.2. Mitigation plans.

In order to ensure that there is food security that is observing nutrition the County government should: -

- (a) Ensure that public investment, services, and policies for agriculture give due priority to enabling, supporting and complementing smallholders' own investment, with particular
- (b)Attention to women food producers who face specific difficulties and need specific policies and support
- (c) Ensure that agricultural policies and public investment give priority to food production and improving levels of nutrition, especially of the most vulnerable populations, and increase the resilience of local and traditional food systems and biodiversity. There needs to be a focus on strengthening sustainable smallholder food production, reducing post-harvest losses and increasing post-harvest value addition, and on fostering smallholder-inclusive local, national and regional food markets, including transportation, storage and processing.
- (d)Ensure that public policies and investment play a catalytic role in the formation of partnerships among agricultural investors, including private-public, farmer cooperative-private and private-private partnerships, to ensure that the interests of smallholders are being served and preserved by those partnerships.
- (e) Promote and implement policies that facilitate access of smallholders to credit, resources, technical and extension services, insurance, and markets;
- (f) Give due attention to new market and environmental risks facing smallholder agriculture and design investment services and policies to mitigate these risks and strengthen the ability of both women and men

smallholders to manage them (e.g., by providing smallholder access to financial and risk management instruments, such as innovative crop insurance, weather risk management, price insurance, and innovative credit products);

- (g) Actively involve organizations representing women and men smallholders and agricultural workers in the formulation, implementation and evaluation of policies for investment in agriculture and in the design of investment programmes in agriculture and food value chains to meet the food and nutritional needs of growing urban and rural populations changing dietary preferences.
- (h) Increasing sustainable agricultural production and productivity.
- (i) Enhancing resilience to climate change;
- (j) Finding sustainable solutions to the increasing competition for natural resources.

## 3.3. EFFECTS OF CLIMATE CHANGE ON FOOD SECURITY.

## Mr. Speaker Sir,

Climate change refers to the long-term shifts in temperatures and weather patterns. The shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels which produce heat trapping gases.

The phenomenon will have a negative impact on agriculture and threatens food security. For instance, the maize and millet production in lower Eastern Kenya will be reduced. High temperatures also have a negative impact on the physiology of plant and animal health. High Mortality in livestocks and

increase in desert locusts during harvesting period, low production of Milk in parts of the Country, fires outbreak in the forests.

## 3.3.1 Net Impacts of Climate Change on Food Security.

## Mr. Speaker Sir,

The net impacts of climate change on food security and nutrition depend on the magnitude of the climate change effects themselves, and on the underlying vulnerabilities of food systems.

At each stage of the "cascade of impacts", vulnerabilities exacerbate net time over increase addition, vulnerability can impacts. In systems/households face repeated shocks that steadily erode their asset base and capacity to respond.

The populations at greatest risk are those that are dependent on agriculture and natural resources, with livelihoods that are highly exposed to climate change impacts, and who have very limited capacity to respond.

## Mr. Speaker Sir,

In regions with high levels of food insecurity and inequality, increased frequency of droughts will particularly affect poorer households and may disproportionately affect women, given their vulnerability and restricted access to resources. Gender and social differences discriminate people's access to adaptation options or even information, such as weather and climate data. Local rural peoples, who depend on the environment and its biodiversity for their food security and nutrition, are at high risk-especially those living in areas where significant impacts are expected such as the the dry parts of Eastern part of Kenya.

#### Build resilience of agricultural systems 3.3.2.

## Mr. Speaker Sir,

Agricultural systems can be made more resilient, by implementing measures that are very system- and local-specific. Individual farmers, forest dwellers, bees keeping farmers and those along the supply chain will need to adopt a suite of measures, the details of which will be contingent on individual circumstances.

#### Mr. Speaker Sir,

Broad adaptation strategies can be identified. Increasing the efficiency of scarce resource use in productive systems, particularly water, is an important aspect of building resilient livelihoods. Climate change is altering rainfall and water availability patterns, making capacity to deal with water scarcity (or overabundance)

Essential to maintaining productivity levels. Adaptation measures can include water harvesting and storage, access to irrigation, improved irrigation technologies, as well as agronomic practices that enhance soil water retention such as minimum tillage, and increase in soil carbon and organic matter, among others.

#### Mr. Speaker Sir,

Adaptation measures for crops can include the use of adapted varieties or breeds, with different environmental optima and/or broader environmental tolerances, including currently neglected crops, also considering that increased diversification of varieties or crops is a way to hedge against risk of individual crop failure.

Adaptive changes in crop management – especially planting dates, cultivar choice and sometimes increased irrigation have been studied to varying extents and are generally estimated to have the potential to increase yields by about 7–15 percent on average, though these results depend strongly on the region and crop being considered. Changes in post-harvest practices, for

example the extent to which grain may require drying and how products are stored after harvest.

# 3.3.3. Risks and Responses Mr. Speaker Sir,

A range of adaptation options is available for livestock production at different scales: animals, feeding/housing system, production system and institutions. They differ between small-scale livestock production with low market integration and large-scale production with high market integration. In particular, breeding livestock but also feed crops and forages is a major component of building resilience to climate change. integration.

In particular, breeding livestock but also feed crops and forages is a major component of building resilience to climate change. Many livestock breeds are already well adapted to high temperatures and harsh environments, but their wider diffusion is restricted by the limited extent to which they have been characterized and improved in structured breeding programmes and by trade constraints.

Adaptation-related traits are more difficult to study and to record than production traits, have lower heritability, higher levels of non-additive genetic variation and phenotypic variance, and are more susceptible to genotype-by-environment interaction.

Healthy, diversified forest ecosystems are more resilient: they are better able to cope with stress, recover from damage and adapt autonomously to change.

Healthy ecosystems are more resilient to negative biotic and abiotic influences than are ecosystems under stress whose ecological processes are impaired.

The Best practices include;

- i. Integrated pest management, disease control, forest fire management, employment of reduced impact logging in production forests, limitation of gathering of non-wood forest products or livestock grazing in forests at sustainable levels, and forest law enforcement.
- ii. Restoring degraded forests to healthy states, thereby re-establishing ecosystem functions, is a major strategy for increasing resilience.
- iii. Increasing the diversity within production systems will help spread risks. This can take many forms: combining different types of production (crop, forest, fish and livestock) in different ways; increasing the numbers of different species, populations, varieties or breeds; increasing the use of materials that are themselves genetically diverse such as crop multiline.
- iv. Adaptation action can be conducted at landscape level, for instance watershed protection and management, fire management, erosion control, coastal zone management, and pest and disease control. Adopting a landscape approach to management includes taking into consideration the physical and biological features of an area as well as the institutions and people who influence it.
- v. Landscape-level adaptation will require appropriate institutions and policies to improve coping capacities of communities.

## 3.4. FOOD SUSTAINABILITY AND BIOTECHNOLOGY

#### Mr. Speaker Sir,

Managing genetic resources is another key means of adaptation. This requires large collective investments to preserve, characterize and valorize genetic resources, and also to revise the goals of breeding programmes.

Breeding programmes take time to attain their goals and therefore need to start many years in advance. In some places the introduction of new varieties and breeds is likely to be needed. Improvements to in-situ and ex-situ conservation programmes for domesticated species, their wild relatives and other wild genetic resources important for food and agriculture, along with policies that promote their sustainable use, are therefore urgently required.

## Mr. Speaker Sir,

It is likely that climate change will necessitate more international exchanges of genetic resources as countries seek to obtain well-adapted crops, livestock, trees and aquatic organisms.

The prospect of greater interdependence in the use of genetic resources in the future underscores the importance of international cooperation in their management today and to facilitate exchanges of these resources internationally, through fair and equitable – and ecologically appropriate – mechanisms.

Mr. Speaker Sir, for plant genetic resources, the International Treaty on Plant Genetic Resources for Food and Agriculture, provides useful dispositions for the conservation of genetic resources, exchange of information, transfer of technology, capacity building and benefit sharing. These include: -

- Global cooperation to prevent and manage transboundary pests and diseases will be increasingly important.
- 2. The International Plant Protection Convention, provides an example of a useful instrument to be mobilized.
- 3. It promotes action to protect plants and plant products from the spread of pests, and sets out measures to control plant pests while minimizing interference with the international movements of goods and people.

- 4. Actions by different stakeholders are needed in the short term to enable responses in the short, medium and long term.
- 5. Some medium- and long-term responses will need immediate enabling action and planning, and immediate implementation of investments, especially those investments that require longer time frames to be developed and arrive in the field: forestry, livestock breeding, seed multiplication, Research & Development, innovation and knowledge transfer to enable adaptation.

## 3.5. FOOD MARKET ASSESSMENT.

Market development and better linkages of smallholder and family farmers to domestic, national and regional markets are important to support adaptation actions, to enable food producers to get the inputs needed to adapt, and to sell new products from a diversification of activities. Developing these market linkages also requires investment in small- and medium-size food processors, and small-scale traders at the retail and wholesale levels.

Policies will be needed to reduce financial risks, especially those related to price volatility, which is a major disincentive for smallholder and family farmers investment.

## Mr. Speaker Sir,

Policies will also be needed to lower transaction costs, facilitate monetary transactions, enable access to financial services and facilitate long-term investments, such as safe savings deposits (with incentives to save), low-priced credit (such as through joint-liability group lending) and insurance (such as index-based weather insurance).

Smallholder and family farmers' financial needs for both working capital expenditures (fertilizers, seeds) and medium- and long-term investments, have to be addressed and supported, be developed and arrive in the field:

## Mr. Speaker Sir,

Global markets and trade can play a stabilizing role for prices and supplies and provide alternative food options for negatively affected regions. Climate impacts on future food supply suggest an enhanced role for trade given the modification of production patterns, and climate shocks. Attention has focused on three possible measures that could help reduce market volatility, namely limiting trade restrictions, widening and deepening markets, and improving the flow of information.

A lack of reliable and up-to-date information on crop supply, demand, stocks and export availability contributed to recent price volatility on food markets.

An agricultural market information system (AMIS) has been set up to monitor markets especially for honey, millet, sorghum, goat meat, indigenous poultry farming (production, utilization, stocks and trade) in order to detect situations that could require trade policy action and, if necessary, bring together the main stakeholders to identify and implement appropriate solutions.

# AGRICULTURE VALUE CHAIN AND INTERNATIONAL TRADE.

## Mr. Speaker Sir,

Agriculture value chain is defined as the people and activities that bring a basic agricultural product like maize or vegetable from obtaining inputs and production in the field to the consumer through stages such as processing packaging and distribution whereas international trade means economic transactions that are made between countries especially on consumer goods, capital goods and services.

Agriculture value chains can contribute to food security in the dimensions of access, availability and quality of food primarily by the increase of production volumes, farm diversification, generating higher incomes, reducing postharvest losses and upgrading technologies to use more efficiently natural resources.

This can be achieved through: -

- (a) Public Private Partnership Investment through green bond or equity shares from the private sectors.
- (b) Foreign investment in a project.
- (c) National government funding through County funding.
- (d)Funding through international organization promoting climate change, Youth and women projects

# 3.6.1. ICT Innovation and Incubation. Mr. Speaker Sir,

Information technology (IT) innovation in an enterprise involves using technology in new ways to create a more efficient organization and improve alignment between technology initiatives and business goals.

There are four types of innovation which include;

- (i) Sustaining, or incremental innovation.
- (ii) Breakthrough innovation.
- (iii) Disruptive innovation.
- (iv) Basic research.

## 3.6.2. Agriculture and Trade Partnership and Linkages.

Mr. Speaker Sir,

A trading partnership is an alternative if at least two natural persons or legal entities wish to start a business together.

There is no requirement to invest capital, although the partners are personally, jointly and severally liable for the company's debts or organization

Trade linkages, the flows of exports among countries. The investment linkages, both in terms of annual flows (i.e., net new investment per time period) and the patterns of international ownership (i.e., aggregate investment stocks).

Market linkages are meant to facilitate flow of produce between different levels of the marketing systems. The input to the process is the agricultural production (the supply) and the output is the consumption of that produce by consumers (the demand).

## 3.6.3. Importance of Linkage Office Under Agriculture Committee.

Linkage office is a structure within the society that connects the people to the government or centralized authority.

#### The office;

- 1. builds up resource centre for trading activities
- 2. Coordinate all the trading activities in the County
- 3. Provides ownership and accountability to the members of county assembly and executives
- 4. Can be task with driving trade and Agriculture in the county and supporting the small-scale farmers and enterprises to grow in the county
- 5. Identify challenges that are unique to the county government
- 6. Provide a link between the county and the rest of the world
- 7. Support contractual engagement between the County and other partners.

# 3.6.4. Impact on Social and Economic. Mr. Speaker Sir,

Agriculture value chain is very important as it;

- a) Creates employment to the youth.
- b) Creates startups in business and support learning of modern farming as investment for the youth and women.
- c) It provides agriculture and trading information and knowledge.
- d) Can be task with driving trade in the county and supporting the agriculture and small enterprises to grow in the county.
- e) Improve per capita income of the County.
- f) Improves circulation of money.
- g) Support imports, export and value addition to the goods and services.

## 3.6.5 Role of Cooperatives in Social and Economic Development.

### Mr. Speaker Sir,

These cooperatives help in the following ways;

- a) They aim to provide goods and services.
- b) They aim to eliminate the unnecessary profits of middlemen in trade and commerce.
- c) They seek to prevent the exploitation of the weaker members of society.
- d) They aim to protect the rights of people both as producers and consumers.
- e) Creates employment to the youth.

#### CHAPTER FOUR

### 4.0 LESSONS LEARNT.

## Mr. Speaker Sir,

The delegation learnt a number of lessons during this interactive training workshop in Malaysia. These include but not limited to the following: -

#### 1. Food security.

Malaysian government has put more emphasis on food production because she has realized that a nation that is not food secure can never be a working nation. Therefore, the delegation learned that for any government to realize sustainable development, then it must take into account the element of food security as a priority.

## 2. Disaster reduction and food security preparedness planning.

Malaysia has developed a four-pillar framework which constitute enabling policies/ strategies, watching to safeguard, strengthening institutions within social systems and preparing to respond to disasters in all sectors of agriculture. All these four pillars are hinged on efficient communication. The Country is doing very well in utilizing their robust ICT where by the information from the ICT is focused both in content, scope and its more inclusive.

## 3. Food Value chain, sustainable intensification and food security.

Malaysian government through the Ministry of Agriculture has tried to ensure that food value chain is achieved by adopting four important dimensions namely accessibility, availability, stability and utilization. The concept is based on agriculture input of which the seed is the fundamental component of the food value chain thus the agriculture sector puts more

emphasis on good quality seeds for realization of good harvest holding other factors constant.

# 4. Policies to support food production and food security.

The delegation learnt that the government of Malaysia, through the legislative organs has put in place policies and regulations that govern how agricultural activities are carried in ensuring that she maximizes her agricultural production potential. These policies are have ensured that the nation remains food secure and nutrition is taken care of through ensuring improved income of farmers in order to reduce poverty among them and ensure that there is sustainable provision of food at all times. They include and not limited to: -

- a) The National Agricultural Policy 1984- 1991(NAP1) aimed at addressing the issue of rural poverty and imbalance of income between the commercial and traditional farmers.
- b) The National Agricultural Policy 1992- 2010(NAP2)
- c) The National Agricultural Policy1998- 2010 (NAP3) which provides for standards of sustainable agriculture in Malaysia.
- d) The National Agrofood Policy 2011- 2020 (NAP4) which has acted as a guide for the implementation of programs and projects for the development of the agricultural sector in Malaysia.
- e) The National Agrofood Policy 2021- 2030 (NAP5) aimed at safeguarding food security through the transformation of the national food system which takes in to consideration the following areas:
  - i. Modernization and development of the agro-food sector to be more sustainable, resilient, and highly technology driven.
  - ii. Improving the well-being of the people through the attention paid to food security and nutrition.

# iii. Ensuring environmental sustainability.

# 5. Availability of water for agriculture.

Malaysia receives abundant rainfall averaging to 3000 mm annually the contributes to an estimated annual water resource of 900 billion cubic meters. This means that 97% of Malaysian raw water supply for agricultural, domestic use and industrial needs are derived from surface water services primarily rivers.

Malaysian vision for water in the 21st century in one of the key notes states that she will provide sufficient water that will ensure national food security and promote rural development in the field of agriculture.

Numerous dams, kilometers of pipelines and canals divert water from rivers to sustain domestic, industrial and agricultural needs. Therefore, the delegation learnt that availability of water and the government involvement in provision of water has enabled Malaysia to sustain food security.

#### Good Governance.

Malaysia puts strong emphasis on building, sustaining and strengthening institutions of good governance in particular the judiciary, which is the custodian of laws and integrity. The Country is known for having strong oversight institutions, including legislatures, law enforcement agencies, independent media and a vibrant civil society. This has ensured that all sectors of development including agriculture have thrived well because of the guidelines provided for by the law.

#### CHAPTER FIVE

## 5.0 COMMITTEE'S RECOMMENDATIONS

#### Mr. Speaker Sir,

Having undergone through this workshop successfully and learnt many lessons from the presentation made, the Committee makes the following recommendations: -

- 1. That Kitui County has been experiencing food shortage in the past and present years that has been occasioned by failure of rains. The Committee recommends that the County government of Kitui to draw a good plan on how to harvest the runoffs from the rains through construction of mega, medium, small size earth dams and water pans so as to avail water for cultivation of crops and ensure that the County becomes food secure. This water collection will raise the water table of many parts in Kitui County; an exercise that will see large tracts of land being put under agriculture.
- 2. The Committee notes with concern that most of the programmes and projects implemented by the County Government of Kitui have no operational policies in place. This has led to misplacement of priorities and funds. Therefore, the Committee recommends that for any project or program to be implemented, the concerned spending entity/ministry should make sure that there are policies and their regulations governing their implementation.

This will ensure that public funds are not misappropriated as well as ensuring that programs/projects implemented are sustainable and they bring value for the funds used.

- 3. Article 10 of the Constitution identifies public participation as a National Value and principle of governance. Decision-making needs to recognize the rights of communities to representation and engagement in processes that affect them, the community on the values, goals, and aspirations of the community affected. Thus, the committee recommends that the County Government ensure that all programs and project identification, implementation and evaluation are subjected to public Participation. This is because the Constitution of Kenya makes citizen participation a central part of Kenya's governance system. Thus, this will ensure that projects and programs done will be suggested by the public based on their need basis.
- 4. Further, the Committee recommends that the County government of Kitui, through the two ministries; Ministry of Water & Irrigation and Ministry of Agriculture & livestock, to encourage farmers in the County to form cooperative societies or self-help groups through which they can borrow funds. With the availability of funds groups will be able to practice smart farming and also sell their produce through these groups thus improving on their bargaining power.
- 5. That the County government should (through trainings) sensitize and educate farmers in the County on the importance of value addition to their agricultural products. This should be done through organizing seminars at the Ward or Village level to train farmers on how they could transform raw agricultural products into something new through packaging, processing, cooling, drying, extracting or any other type of process that

differentiates the product from the original raw product. The exercise will help in improving agricultural products from the County and thus attracting well-paying markets for the produce and thereby increasing the GDP of Kitui County.

6. That the County government through the agriculture extension officers should encourage farmers in the County to adopt modern methods of farming that involves biotech agriculture or agritech (a technique in agriculture that involves scientific tool & techniques, including genetic engineering, molecular markers, molecular diagnostics, vaccines, and tissue culture to modify a living organism; plants, animals and microorganisms).

This will help farmers in the County to make farming more profitable by increasing crop quality and quantity and thus ensuring food security as well as increasing on the GDP of the County.

7. The Legislative Authority of a County is vested in, and exercised by its County Assembly. This means that a County Assembly may make any laws that are necessary for, or incidental, the effective performance of the functions and exercise of the powers of the County Government under the Fourth Schedule. In view of this, the committee recommends that the County Assembly should strictly oversee the Executive arm of the County Government to ensure prudent use of public funds as advocated for in Article 201 of the Kenyan Constitution which emphasizes on accountability, equitable society, prudent use of public Funds and clear fiscal reporting.

#### 6.0 CONCLUSION

### Mr. Speaker Sir,

It is important to note that the devolved units in Kenya have an enormous duty as provided for in the Constitution of Kenya to make sure that their development goals and objectives marry those in the vision 2030, sustainable development, so as to make sure that they are not left behind by what the other world is doing.

In so doing the County government should involve all stakeholders from all level by contacting public participation on all the development projects and programs before they are implemented. This will go a long way by ensuring that priority of needs of the citizenry are taken in to consideration during preparation of the County Planning documents.

If visible development is to be realized in Kitui County, we must avoid divisive politics as leaders, ensure equitable resource distribution across the forty wards, and encourage transparency, accountability, efficiency, and responsiveness to the needs of Kitui residents.

This assembly should set a clear path in ensuring that before approving budgetary allocations for projects and programs, there should be policies and their regulations. This will ensure that public funds are not misappropriated and that there is value for funds spend in implementing these projects.

# **ANNEXTURES**

ANNEX I: PHOTO GALLERY

ANNEX 2: REPORT ADOPTION

ANNEX 3: TRAINING PROGRAM

ANNEX 4: PASSPORTS & BOARDING PASS COPIES



Members of the delegation attending a workshop session.



Members of the delegation presenting group work during a plenary session.



Members of the delegation visiting sites after a long day of training.



Members of the delegation pose for a curtesy photo upon being received in the Kenyan embassy in Malaysia.

# ADOPTION OF THE REPORT ON TRAINING WORKSHOP ON STRATEGIC FOOD SECURITY FOR KITUI COUNTY HELD IN MALAYSIA.

We Members of the Committee on Agriculture Water and Irrigation Delegation have adopted this report on Training Workshop on Strategic Food Security for Kitui held in Malaysia and hereby affix our signatures to affirm our approval and confirm its accuracy, validity and authenticity; -

S/NO	NAME	DESIGNATION	SIGNATURE	
1.	Hon. Anthony Musyimi Musyoka	Team Leader	Affin	
2.	Hon. Joseph Musyoka Mbite	Member	Fund	
3.	Hon. Bonface Mukwate Katula	Member		
4.	Hon. Immaculate Wanza	Member	9	
5.	Hon. Joseph Kasungi Kavula	Member	Mafle.	
6.	Hon. Cornelius Ngumbau Muthami	Member		



# Strategic Food Security for County Assembly of Kitui; Kenya 06 – 10/03/2023 Malaysia

14.30 TO 15.00	13.00 to 14.30	11.00 to 13.00	10.30 to 11.00	9.00 to 10.30	TITTLE	DATE
NATIONAL FOOD SECURITY		OVERVIEW ON FOOD SECURITY		INTRODUCTION COURSE EXPECTATION	6/03/2023	MONDAY
EFFECTS OF CLIMATE CHANGE ON FOOD SECURITY		EFFECTS OF CLIMATE CHANGE ON FOOD SECURITY		NUTRITION & HEALTH OUTCOMES IN FOOD SECURITY PLANNING	07/03/2023	TUESDAY
DISASTER PREPAREDNESS PLANNING & RESILIENCE	LUNCH BREAK	FOOD MARKETS ASSESSMENT	HEALTH BREAK	FOOD SUSTAINABILITY & BIOTECHNOLOGY	08/03/2023	WEDNESDAY
COURSE EVALUATION & CLOSURE		AGRICULTURE VALUE CHAIN & INTERNATIONAL TRADE		AGRICULTURE VALUE CHAIN & INTERNATIONAL TRADE	09/03/2023	THURSDAY
FIELD TRIP		NETWORKING		NETWORKING	10/03/2023	FRIDAY