

MURANG'A

Murang'a County Assembly Buildings,

Clerk's Chambers,

May 2023

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31/5/23

THE SECTORAL COMMITTEE ON AGRICULTURE, LIVESTOCK AND FISHERIES
REPORT ON THE STATUS OF THE FISHERIES SECTOR IN MURANG'A COUNTY

THIRD ASSEMBLY

MURANG'A COUNTY ASSEMBLY



REPUBLIC OF KENYA

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2.0 CHAIRPERSON'S FORWARD

Hon. Speaker, Fish farming is the practice of commercially raising fish in a captive environment to be killed and sold for human consumption. Farmed fish are typically mass-reared in overcrowded, unnatural conditions, and their wellbeing is largely ignored. Fish farming is different from capture fishing, which is the practice of catching fish directly from the wild.

Kenya is a net exporter of fish, mainly Nile perch and its by-products from Lake Victoria to Netherlands, Israel, Portugal, UAE, Australia and China. Most of fish and fish products consumed locally in Kenya are Omena, Nile Perch, Tilapia and Catfish either from wild capture fisheries, mainly from Lake Victoria or farmed fish (Aquaculture) however, majority of customers in the markets always believe that farmed fish is not as tasty as wild fish, they prefer wild fish to farmed fish.

There is a demand for freshwater fish, which is increasingly recognized as a source of safe, healthy 'white' protein that contributes to nearly one-fifth of global animal protein intake. Many fish species are also a critical source of micronutrients and omega-3 fatty acids that are important in promoting normal nerve cells development and visual functions in infants and help reduce the risk of heart diseases. Fish farming is practiced mostly in the Central, Nyanza, Western, parts of Rift Valley and Coastal regions and this has made a significant contribution to rural development as a food and nutrition security, income generation and employment opportunities.

Hon. Speaker, The Committee for Agriculture, Livestock and Fisheries decided to find out the status of fishery sector in Murang'a County because it is one area that has been neglected for a long time.

3.0 ACKNOWLEDGEMENT

Hon. Speaker, May I take this opportunity to express my gratitude to the Committee Members for their resilience and devotion to duty which made the exercise successful. May I also appreciate the Office of the Hon. Speaker and the Clerk of the County Assembly for always providing guidance and direction to the Committees in the discharge of their mandate. Further I commend the Secretariat for exemplary performance in providing technical and logistical support to the Committee.

Finally, Hon. Speaker, on behalf of the Committee, I wish to extend my sincere gratitude to all the stakeholders who participated in this process for their contribution and support. The input of Director of Fisheries acknowledged.

On behalf of the Sectoral Committee on Agriculture, livestock and fisheries it is my pleasant duty to present to the House the report of the Committee on Report on the status of the fisheries sector in Murang'a County.

SIGN..... DATE.....
HON. CAROLINE WAIRIMU NJOROGE
MCA-CHAIRPERSON-AGRICULTURE, LIVESTOCK AND FISHERIES
COMMITTEE.

4.0 PREFACE

Committee Mandate

The Committee on Agriculture, livestock and fisheries was established under Standing

Order No.204 is responsible for all matters related to county Agriculture, Livestock and

Fisheries.

The Committee is mandated to do the following: -

- i. Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the department of Agriculture, Livestock and Fisheries
- ii. Study the programme and policy objectives of department of Agriculture and the effectiveness of their implementation;
- iii. Study and review all legislation referred to it;
- iv. Study, assess and analyze the relative success of the department as measured by the results obtained as compared with their stated objectives;
- v. Investigate and inquire into all matters relating to the department Agriculture as they may deem necessary, and as may be referred to them by the House;
- 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 198 (Committee on Appointments) and
- vii. Make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

Hon. Speaker, Fish production is achieved through Wild catch (from Lakes, Rivers and Ocean) and Farmed fish (in earthen and lined Ponds, fish farming in Dams, Tank fish farming, Cage fish farming & integrated fish farming). The main types of fish being produced from Kenya's inland waters are Omena, Nile perch, Tilapia, Catfish and Common Carp. Tilapia and Nile perch are the top most traded fish in terms of value and are the most popular with customers. The demand for Tilapia and Nile perch is more

Fish production in Kenya.

5.0 BACKGROUND INFORMATION

1. Hon. Caroline Waitimu Njoroge -Chairperson
2. Hon. Gathe wa Njeri -Vice Chairperson
3. Hon. Hilary Muigai Muchoki - Member
4. Hon. Liz Muthoni Mbugua "
5. Hon. Moses Gachui Mungai
6. Hon. Peter Muriigi Nguigi
7. Hon. John Kamwaga
8. Hon. Simon Mwaura Wamwea
9. Hon. Anthony Marubu Chege
10. Hon. Charles Machigo Karina
11. Hon. Francis Kibe Kamau
12. Hon. Elizabeth Wambui
13. Hon. Morris Thuku

Members of the Committee

The Committee as currently constituted, comprises of the following Hon.Members:-

than the current supply and this provides a good opportunity for investment in aquaculture.

Hon. Speaker, there is a huge potential of farmed fish in Kenya because of the several inland natural water resources including Lakes Victoria, Turkana, Baringo, Naivasha, Chala, Kanyaboli, and Jipe, among others. Major rivers include the Tana, Athi, Nyando, Nzoia, Gucha, Migori, Yala, and Mara. Kenya also has a highly developed fish processing sector and quality assurance laboratories that is focused on the export of Nile perch products to Europe. The Kenyan aquaculture sector is broadly categorized into freshwater aquaculture and mariculture (Ocean). The freshwater aquaculture has recorded significant progress over the last decade but the mariculture sector has yet to be fully exploited.

6.0 AQUACULTURE SYSTEMS IN KENYA

Earthen and Lined Ponds-Fish farming in earthen ponds has been advocated for the development of cheap food resources in developing nations.

Dams fish farming-The construction of dams is encouraged to provide water and also to encourage communal fish farming activities. Dams have also been used to house cages.

Tank fish farming-Tank farming is a good alternative to ponds or cages. Tests have shown that fish can be grown at high densities in the confinement of tanks under quality management.

Cage fish farming-The fish are enclosed in a cage that allows free water exchange which is done in existing water bodies (ponds, rivers, lakes, dams, and oceans).

Integrated fish farming-The approach involves the connection of agricultural systems to fish farming in a design that allows waste from one system to be used as input in another system. Farmers use mainly chicken and cow manure for pond fertilization, and this has recorded impressive performance in some areas.

Term of Reference

The Committee came up with three terms of reference which included:

1. To establish the major constraints of the fisheries sector on both farmers and the county government.
2. To identify potential and opportunity in the fisheries sector.
3. To report on the observations, findings and recommendation of the committee inquiry.

7.0 STATUS OF MURANGA COUNTY DEPARTMENT OF FISHERIES

Hon. Speaker, fishing is a fully devolved function; some of the functions of the department are as follows:

1. Fisheries extension services
2. Up scaling seaweed, fin fish and crustacean culture
3. County fish seed bulking units
4. On farm trials
5. Fish health certification
6. Development and maintenance of fish landing stations and jetties, fish auction centres and fish landing fees
7. Demarcation of all fish breeding areas and fencing of fish landing stations
8. Fish trade licensing and fish movement permits
9. Collection of fish production statistics
10. Enforcement of fisheries regulations and compliance with management measures
11. Implementation of fisheries policy

- 12. Management measures and regulation and limiting access to fishing
- 13. Fisheries monitoring, control and surveillance.
- 14. Zonation for aquaculture-county specific diseases

Hon. Speaker, the main objective of the department is to facilitate utilization and conservation of fisheries resources through the following functions:

- 1. Provision of extension services.
- 2. Co-ordination of fisheries development activities.
- 3. Capacity building among stakeholders.
- 4. Production of quality fish seeds from the departmental fish farm.
- 5. Collection of statistical data for fisheries management and collection of revenue.
- 6. Restocking of Trout Rivers and improvement of fishing camps.
- 7. Facilitate fish trade and enforce quality assurance measures on fish traders and their premises in the county

Hon. Speaker, Fisheries activities in Murang'a county is administratively carried out through eight sub counties of Murang'a East, Kangema, Murang'a South, Mathioya, Kahuro, Kandara, Gatanga and Kigumo. Aquatic ecological diversity in the Murang'a County is derived from a variety of fisheries ecosystems that include dams, rivers, streams and swamps. The main cultivable fish species in county are: Nile Tilapia, *Oreochromis niloticus*; African catfish, *Clarias gariepinus*; Gold fish, *Carassius auratus*; and the rainbow trout, *Oncorhynchus mykiss*.

8.0 FISH STATISTICS

Table1. The status on ponds statistics

County	Sub county	Total No. of all ponds	Total area of pond (m ²)	Total No. of farmers
Murang'a	Kangema	442	115050	442
	Maragua	399	118813	391
	Kandara	341	97500	312
	Kigumo	432	114500	406
	Kiharu	121	32270	114
	Mathioya	368	96650	329
	Kahuro	178	56650	178
	Gatang'a	230	69400	220
	Total	2,511	700,833	2,392

FISH STOCKING STATISTICS: Fish Pond status

County	Sub county	No. of stocked ponds	Total area of stocked ponds(m ²)	No of fingerlings		Source of fingerlings
				Tilapia	Catfish	
Murang'a	Kangema	40	12000	21,000	3000	Makindi fish farm
	Maragua	14	4200	42,000	4200	makindi fish farm
	Kandara	12	3600	9,050	1740	Makindi fish farm
	Kigumo	16	4800	16000	1600	Makindi fish farm
	Kiharu	54	16,200	54,000	180	Makindi fish farm
	Mathioya	28	8,000	28000	280	Makindi fish farm
	Kahuro	16	4,800	16000	600	Makindi fish farm
	Gatang'a	21	6,300	21000	2100	Makindi fish farm
	TOTAL	201	59,900	207,050	13,700	

FISH HARVESTING STATISTICS

SUB-COUNTY	KANGEMA	KIGUMO	KAHURO	KIHARU	GATANGA	MARAGUA	MATHIOYA	KANDARA	TOTAL
Tilapia (<i>Oreochromis niloticus</i>) (Kgs of fish harvested)	4,700	6,500	5,800	5,500	5,600	7,700	4,800	5,500	46,100
Value of fish harvested (Kshs)	1,551,000	2,145,000	1,914,000	1,815,000	1,848,000	2,541,000	1,584,000	1,815,000	15,213,000
African Catfish (<i>Clarias gariepinus</i>) (Kgs of fish harvested)	2,920	3,760	2900	3,200	3,450	3,800	2,800	3,540	26,370
Value of fish harvested (Kshs)	963600	1240800	957000	1056000	1138500	1254000	924000	1168200	8,702,100

1. Atorya's fish farm in Murang'a South : Capability to produce 50,000 fingerlings of catfish and 100,000 of tilapia and a grow out of 400kg per month.
2. Makindi fish farm-Kandara sub-county has been able to produce 100,000 of catfish fingerlings and 150,000 of tilapia fingerlings and has a developed grow out for 3 tonnes of tilapia per month and 2.0 tonnes of catfish per month.
3. Ciumbu fish farm Muranga south has a hatchery capable of producing 20,000 of Catfish and 30,000 of tilapia per month and at the moment they do not have a grow out fish farm
4. Bendor fish farm in kandara is another fish farm with a capacity to produce 100000 fingerlings of tilapia and 160,000 of tilapia and they have developed a grow out for Fish. Currently producing 1 tonne of tilapia and 0.5 tonne of catfish

Hon. Speaker, Muranga County has four private hatcheries namely:

10.0 HATCHERIES IN MURANG'A COUNTY

Mugira dam, Mariki Dam presents very good sites for cage fish farming. can be exploited for cage farming. Some of these dams e.g. Gakigo dam, Mulli dam, resources in these dams. The department has over 11 dams in Murang'a county which (units) or fisheries clusters around these dams could exploit the potential of fisheries water bodies. If interventions and support is given to the community (co-management exploit the enormous potential in aquaculture and capture fisheries presented by these irrigation and very little fisheries activities going on due to lack of good facilities to region. Apparently, most of these dams are utilized to practice subsistence form of crop of dams and ultimately this places it as one of the greatest potential for fisheries in the

Hon. Speaker, Murang'a County which is endowed with the most water masses in terms

9.0 AQUACULTURE DEVELOPMENT IN MURANG'A COUNTY

11.0 AREAS OF FOCUS INTERVENTIONS IN AQUACULTURE SUB SECTOR

Hon. Speaker, to take advantage of available domestic and regional market, the aquaculture sub-sector must improve its competitiveness. This calls for strategies that entail sustainable increase in production and improved efficiency in the production systems.

The constraints hindering aquaculture growth and development are:

- a) **Cost of inputs**-The main issue here is high cost of fish feeds. They are extremely high. The costs are high and it contributes about 60-80 % of the total cost of production. The feed conversion ratio is approximately 1.5kg of fish feed to produce 1kg of fish and currently quality fish feeds retail at Kshs 4200 per 25kg bag.
- b) **Cost of equipment for ponds and hatcheries** the country is costly-Most of soils in the country are volcanic and are permeable to water and hence there is need for lining earthen ponds or development of concrete ponds. These pond liners are expensive for the fish farmers. Fishing equipments are out of reach for most of our fish farmers like seine nets, cover nets and scoop nets etc.
- c) **Lack of value addition and post-harvest handling equipments** such as chest freezers
- d) **Limited knowledge of aquaculture investment.**
- e) **Lack of information on the economic performance of various fish farming systems.**
- f) **Inadequate budgetary provision for aquaculture sector.**
- g) **Inadequate supportive infrastructure** e.g Fish propagation hatcheries, fish feed industries, fish marketing systems especially for rural producers.
- h) **Slow adoption rate of fish farming technologies innovations and management practices.**

1. That, the implementation of the new constitution to devolved key functions means that the Fisheries sector now falls entirely under county government. With this view, the county government should enact legislation and policies geared towards revamping the sector.
2. That, farmers' lack access to market information that would help them improve the fisheries activities. One of the things that disturb farmers is market and fish farmers are not an exception that is one area that will need to be improved especially with the help of the county government.
3. That, there are limited funds towards the department of fisheries.
4. Lack of readily available fingerlings
5. Lack of quality and affordable fish feeds,
6. Fish farming is not well commercialized in the County
7. Low public investment in the fishery sector.
8. There are few extension officers with limited mobility, resulting to limited access to fish farmers.
9. There are weak or no linkages of the departments with research institutions, regional or international organizations concerned with fishing activities.

Hon. Speaker, the Committee observed the following:

12.0 COMMITTEE OBSERVATION

- i) Poor Security and safety of fish ponds and cages posed by thieves and predators
- ii) Sub optimal staffing levels especially extension personnel; inadequate facilitation in terms of transport and timely funds towards carrying out of fisheries extension service provision and increasing competition from cheaper imported farmed fish products.
- k) Lack of Policy and legal framework

according to diverse climatic conditions across the county.

4. THAT, the County government should provide readily available fingerlings and

prepare policy guidelines and regulations for the sector.

addition, the county executive department in charge of Fisheries should also

3. THAT, the County Assembly should enact legislations for the fishery sector. In

and challenges for the sector.

enhance access to critical information on new aquaculture technologies, market

government institutions, department of fisheries and other organizations to

2. THAT, the fisheries department should liaise with research institutions, national

activities such as monitoring and inspection.

extension officers and enhance their mobility by providing vehicles for field

1. THAT, the Murang'a County government should hire and deploy more

Hon. Speaker, the Committee made the following recommendations:

13.0 COMMITTEE RECOMMENDATIONS

public investment into the fishery sector

including fishing facilities and other basic aquaculture inputs has discouraged

14. The high investment capital required for procuring fish farming equipment

feeds

13. Most farmers are not able to access quality fish feeds due to the high cost of the

areas.

12. Some fish species are not supported by unfavorable climatic conditions of some

11. The department does not have access even to the limited fund allocated to it.

limited budgetary allocations to the department.

10. Lack of policies and legislations to govern the fisheries sector has resulted to






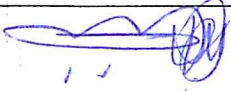
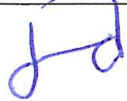


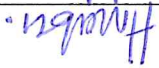

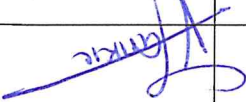
declining.

of fish especially at this time when the natural stocks of fish from capture fisheries are county residents. Indeed, aquaculture (fish farming) is the only viable alternative source in the county can be developed into a viable enterprise, capable of generating wealth to in order to spur production and improve productivity. It is apparent that fish farming Government to promote sustainable fish production and utilization of fishery resources security in the county. In this regard, efforts have been made by the Murang'a County improvement of the fisheries livelihoods economically and improve food and nutritional Fisheries Development seeks to support programmes that shall contribute to the

14.0 CONCLUSION:

- 5. THAT, the County government should provide farmers with subsidized fish farming inputs and feeds.
- 6. THAT, the fisheries department should direct more efforts towards the commercialization of fish farming through capacity building, mobilization and registration of more fisheries co-operatives across the county.
- 7. THAT, the department should put in place sufficient infrastructure and programs for fish farming, post-harvest handling and processing to curb losses, through provision of freezers and vehicles with cooling facilities to transport fish.
- 8. THAT, the County government department of Agriculture/Fisheries should hold seminars and workshops with farmers for sensitization and information sharing and also establish a hatchery to provide farmers with fingerlings.

THE SECTORAL COMMITTEE ON AGRICULTURE, LIVESTOCK AND FISHERIES
 COMMITTEE REPORT ADOPTION SCHEDULE.

NO.	NAME	SIGN
1.	Hon. Caroline Wairimu Njoroge - Chairperson	
2.	Hon. Gathee Wa Njeri - Vice Chairperson	
3.	Hon. Morris Thuku	
4.	Hon. Hilary Muigai Muchoki	
5.	Hon. Liz Muthoni Mbugua	
6.	Hon. Moses Gachui Mungai	
7.	Hon. Peter Muriigi Nguni	
8.	Hon. John Kamwaga	
9.	Hon. Simon Mwaura Wamwea	
10.	Hon. Anthony Marubu Chege	
11.	Hon. Charles Machigo Karina	
12.	Hon. Francis Kibe Kamau	
13.	Hon. Elizabeth Wambui	