UNIVERSITY OF NAIROBI

FACULTY OF VETERINARY MEDICINE DEPARTMENT OF VETERINARY PATHOLOGY, MICROBIOLOGY & PARASITOLOGY

ACADEMIC TRIP FOR MSc. FISH SCIENCE STUDENTS TO CAVARINO FARM, NAROK COUNTY

- a) Summary: Seven MSc. Fish Science students were taken for an academic trip to Cavarino commercial farm, Narok North Sub-county, Narok County on 20th April 2022. Members of staff involved in this trip were:
 - i) Prof. P.N. Nyaga Worldfish Kenya coordinator
 - ii) Prof. P.G. Mbuthia
 - iii) Prof. J.G. Maina AP
 - iv) Dr. R.M. Waruiru Trip coordinator
 - v) Ms. E.A. Keya
 - vi) Mr. E.M. Nyaga

NB: We had a special guest, Dr. Shimaa Ali from Worldfish Egypt.



Fig. 1: The Kabete fish team, Dr. Shimaa Ali, MSc. students and our hosts at Cavarino Farm, Narok County

- **b) Trip objective:** MSc. Fish Science students lack essential knowledge on how to breed, feed, raise fish under different production systems, collect diagnostic/research samples and manage fish diseases. The field trip was organized for the students to receive firsthand information and be able to:-
- Explain how biosafety and biosecurity in aquaculture can be used to manage fish diseases in integrated fish farming
- Take and analyze physico-chemical parameters in a pond ecosystem
- Demonstrate how to brood fish stock efficiently in a warm area
- Outline on-farm production and use of feed and feed ingredients and other value-added

products, and how to minimize pollutants (mycotoxins) and waste products in aquaculture

• Establish research links, gaps and site for MSc. thesis project(s)

c: Trip outcomes

- i: The Kabete fish team, Dr. Shimaa and students were taken round the farm (starting with poultry, piggery, cattle and aquaculture) by the supervisor, Ms. Faridah D. Adhiambo
- ii. In the aquaculture department, we visited various sections including the feed production unit, green house, liner ponds with tilapia and catfish, gutting slab, fish preservation facility and the club to taste the Cavarino tilapia
- iii. The students made brief presentations of their proposed research projects to Dr. Shimaa
- iv. Dr. Shimaa outlined objectives of the worldfish project and urged the students to complete and defend their research proposals in departmental seminars.



Fig. 2: Ms. Adhiambo and visitors discussing water quality parameters in an over fertilized tilapia linear pond at Cavarino Farm, Narok County



Fig. 3: Ms. Adhiambo explaining gutting process in a slab within Cavarino Farm, Narok County



Fig. 4: Dr. Shimaa Ali addressing the Kabete fish team and MSc. students on research matters at Cavarino Farm, Narok County

d: Conclusions

The following was highlighted:-

- That the farm has serious problems (associated with fungal and parasitic infections) with their young catfish stock and should start taking pond water quality parameters on daily basis
- That at least two BVM II students should be attached in this integrated commercial farm in future
- That one student (Finnan Ageng'o) will undertake his MSc. project at Cavarino and surrounding fish farms in Narok County
- That MSc. students will visit Abbassa Worldfish facilities in Egypt for one month in July/August 2022
- That UoN academic/technical staff and field fisheries officers should be included in this trip.

Dr. R.M. Waruiru Academic trip - coordinator