DEPARTMENT OF AQUACULTURE

STUDY TOUR TO:

AQUACULTURE EXTENSION AND TRAINING CENTRE, POOKKODE FISHERIES STATION, DEPT. OF FISHERIES, GOVT. OF KERALA

A REPORT

From 2nd to 6th February 2024, students of sixth semester B.Sc. Aquaculture of M.E.S. Asmabi College P.Vemballur, went for a study tour as a part of their curriculum, to the Aquaculture Extension and Training Centre, ownded by Department of Fisheries, Govt. of Kerala, located at Thalippuzha near the Pookode Lake in Wayanad District. They were accompanied by Mohammed Areej E.M., Head of the Biochemistry Department, Mrs. Liji T, Asst. Professor in Malayalam and, Susheel Assistant Professor of the Zoology Department.

The team arrived there at 10.00 AM and were welcomed by the officials. They had a brief lecture on the history and facilities of the farm, which also gave them a detailed view of sectors of people engaged in various sectors of fisheries-related activities. As compared to coastal regions of the state Wayanad District was a bit different in their fishery-related activities due to its geographical reasons, most of the people are engaged in freshwater aquaculture. The institution is mainly focused on seed production and rearing of carp, and freshwater ornamental fishes. They adopt the water from a natural lake. The average size of the tank used for fish rearing and stocking is 12x4m with a depth of 2m. Then we were guided by the officer to the field and she took a class on the packaging of fish for transporting followed by a demonstration, we were also given a chance to practice the same.

The packing system involves, the packing of fish in sealed polyethylene bags filled with water and oxygen in a ratio of 1:3. The bottom of the bag either has a seam or a rectangular base. Then we had a walk throughout the field and winded up with a general interaction section and photo section with the officials.







Their next destinations were Pookode Lake, Meenmutty Waterfalls, and Banasura Sagar Dam in the same District. Pookode Lake is a scenic natural freshwater lake in Wayanad district, Kerala. Pookode is a freshwater lake nestling amidst evergreen forests and mountain slopes at an altitude of 770 meters above sea level and is 15 km away from Kalpetta. The officials of the Fisheries Station also accompanied us while were walking around the lake. They gave us a vivid account on the ecological and biological significance of the lake as a unique water body. The interesting facts are given below:

The famous Pookode Lake, the only lake of its kind of the district is situated in Kunnathidavaka village, half way between Lakkidi and Vythiri on a loop road. This perennial lake has an extension of 5.23 hectares.

Pookode lake is also the second-largest freshwater Lake (the first being Sasthamkotta Lake) in the Kerala state. Also, this is a part of the strictly conservating ecological zone with endangered trees.

Ecological Significance:

Biodiversity Hotspot: Pookode Lake and its surrounding areas are rich in biodiversity, hosting a variety of flora and fauna. The lake serves as a habitat for numerous species of aquatic plants, fishes, and birds, contributing to the overall biodiversity of the region.

Water Resource: As a freshwater lake, Pookode Lake serves as a vital water resource for both wildlife and local communities in the region. It helps in maintaining the hydrological balance of the area and supports the surrounding ecosystem.

Watershed Protection: The lake and its catchment area play a crucial role in watershed protection. They help in regulating the flow of water, preventing soil erosion, and maintaining the stability of the surrounding landscape.

Biological Significance:

Avian Diversity: Pookode Lake attracts a diverse range of bird species, making it an important site for birdwatching and avian studies. The lake provides nesting and foraging grounds for both resident and migratory bird species.

Fish Diversity: The lake supports various species of fish, contributing to the local fish biodiversity. It serves as a breeding ground for several fish species, thus playing a role in their conservation. *Pethia pookodensis* is a species of cyprinid fish found in Kerala, India where it is only known to occur in Pookode Lake in the Western Ghats. This species can reach a length of 4.3 centimetres (1.7 in) SL. This fish and another one, scientifically called *Horalabiosa arunachalami*, have been categorised as critically endangered by the IUCN Red List on freshwater biodiversity The lake is an abode of other endemic species including Miss Kerala, *Sahyadria denisoni*. This species too is included in IUCN red list.

Plant Diversity: The aquatic vegetation in and around Pookode Lake adds to the biological significance of the area. It supports a variety of plant species, including submerged, floating, and emergent plants, which contribute to the overall ecosystem health.

Overall, Pookode Lake in Wayanad, Kerala, stands as a significant ecological and biological hotspot, contributing to biodiversity conservation, water resource management, and providing habitat for various species of flora and fauna. Efforts to preserve and sustainably manage this ecosystem are crucial for its continued ecological and biological significance.

Then we had our lunch at a restaurant as per our schedule, then we headed to Meenmutty Waterfalls, which is a perfect destination that every nature tourist longs to visit. The foamy water that cascades through the giant rocks grants a magical ambience to the iconic Meenmutty waterfalls. Then

followed by a visit to Banasura Sagar Dam, Banasura Sagar Dam consisting of a dam and a canal began operating as part of the Indian Banasura Sagar Project. It aims at supporting the Kakkayam Hydro electric power project and also contributes to the irrigation and drinking water requirements of the people during summer if there is a water shortage. Then we reached our rooms and had our dinner.



On the 2nd day morning we started our journey to Coorg. By 10:00 AM we had our breakfast and reached The Namdroling or Golden Temple, Periyapattna, Coorg. The Namdroling Monastery, also known as the Golden Temple, is a spiritual hub located in the Indian state of Karnataka. It is one of the largest teaching centers of the Nyingma tradition of Tibetan Buddhism and attracts visitors from all over the world. The Golden Temple is a magnificent, three-story building covered in gold leaf and decorated with intricate carvings and paintings. Visitors can enter the temple to admire the stunning architecture and sacred artwork, and to receive blessings from the resident lamas.

After that we had our lunch and went to Bamboo Forest,a park in Baichanalli Coorg, Karnataka. Nisargadhama Forest in Coorg, Karnataka, is a

beautiful and enchanting island formed by the river Kaveri. Spanning 64 acres, it is an ideal place for nature lovers looking to escape the hustle of city life. Accessible through a hanging rope bridge, Nisargadhama is a biodiversity hotspot filled with lush bamboo groves, teak, and sandalwood trees. Visitors can indulge in a variety of activities such as elephant rides, boating, and exploring the deer park. On the 3rd day morning, we reached Yagachi Water Adventure Sports Centre, Belur in Hassan District of Karnataka. The Yagachi Water Adventure Sports Centre is a tourist spot set up in the backwaters of this dam and offers water sports activities, namely Jet Ski, Speed Boat, Banana Boat, Bumper Ride, Kayaking and Cruise Boat. After the water activities, the team started return journey and reached the college the next morning.

The tour was a delightful experience for all. The tour was also a platform for them to get a taste of local food, understand the culture appreciate the beauty of these three cities, and develop a strong bonding with each other.