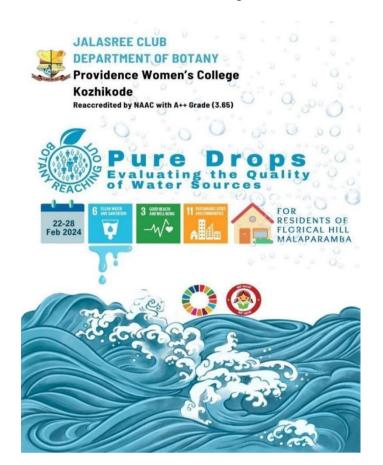
DEPARTMENT OF BOTANY EXTENSION ACTIVITY- 5

Water quality analysis and distribution of water cards for 35 houses (February 2024) Florical Hill, Malaparamba







Report: Water quality analysis and distribution of water cards for 35 houses (February 2024) -Florical Hill, Malaparamba

Organized by: 39 III BSc Botany students

Location: 35 houses in the Florican Hill, , Kozhikode

Date: 22-28 February 2024

Third year BSc Botany students conducted a survey on the physico-chemical analysis of water to assess the ecological health of local water bodies, identify potential contaminants, and raise awareness about water conservation and environmental sustainability in the Florican Hill, Malapparamba.

Objectives of the analysis were

- To analyze the physicochemical properties of water in the reservoirs of Florican Hill, Malapparamba.
- To assess the basic parameters like water color, odor, and turbidity and presence of pollutants and their potential impact on the ecosystem.

The collected samples underwent a series of tests in the laboratory, including:

- pH Measurement: To determine the acidity or alkalinity of the water.
- Dissolved Oxygen (DO): To assess the oxygen availability for aquatic life.
- Biological Oxygen Demand (BOD): To evaluate organic pollution levels in the water reservoirs.

Chemical Analysis: Testing for nitrates, phosphates, and heavy metals likelead and mercury.

• Microbial Analysis: Identification of coliform bacteria to assess contamination.

Conclusion:

The results were given as water cards to the residents after evaluation. The water quality evaluation at Florican Hill revealed the water reservoirs were good ecological health with localized concerns. The findings underscore the importance of continuous monitoring to prevent environmental degradation.

Recommendations: Also the students were given the following instructions to the residents.

- Regular Monitoring: Establishing periodic assessments to detect early signs of pollution.
- Community Awareness Programs: Educating locals on reducing pollutant-runoff.
- Conservation Initiatives: Implementing strategies for protecting water sources, including reforestation and controlled land use practices.