# Report on SDG 6 Event: Water Analysis Test

### 1. Introduction

The United Nations' Sustainable Development Goal 6 (SDG 6) aims to ensure the availability and sustainable management of water and sanitation for all by 2030. In alignment with this goal, a water analysis test event was conducted by Dr. Rajaguru A from the Department of Pharmaceutical Biotechnology. The event aimed to assess the quality of drinking water in specific locations and educate students about water quality and safety.

### 2. Event Overview

Event Name: SDG 6 Water Analysis Test Conducted By: Dr. Rajaguru A Department: Pharmaceutical Biotechnology Date: 05/07/2025 Participants: IV Pharm D students Locations: Boys Hostel Drinking Water Girls Hostel Drinking Water College Drinking Water

#### 3. Methodology

The water analysis test involved the following steps:

#### Sample Collection:

Water samples were collected from the boys' hostel, girls' hostel, and college drinking water sources.

Each sample was labeled with details such as the collection point and time.

# **Parameters Tested:**

pH Level: Indicates the acidity or alkalinity of the water.

Turbidity: Measures the clarity of water.

Total Dissolved Solids (TDS): Represents the concentration of dissolved substances.

Biological Contaminants: Presence of harmful bacteria and microorganisms.

Chemical Contaminants: Levels of nitrates, phosphates, and heavy metals.

#### **Testing Procedures:**

Standard laboratory techniques and field test kits were used.

Each parameter was measured using calibrated equipment and following established protocols.

#### 4. Results

# **Summary of Findings:**

pH Levels: The pH levels were within the acceptable range for drinking water.

**Turbidity:** Turbidity levels were low, indicating clear water with minimal suspended particles. **Total Dissolved Solids (TDS):** All samples were within the permissible limits for TDS.

**Biological Contaminants:** No significant biological contaminants were detected in any of the samples.

**Chemical Contaminants:** Chemical contaminants were within safe limits, with no dangerous levels of nitrates or heavy metals detected.

Parameter	Acceptable	Boys	Girls	College Drinking
	Range	Hostel	Hostel	Water
pH Level	6.5 - 8.5	7.2	7.4	7.1
Turbidity (NTU)	< 5	1.0	1.2	0.9
TDS (mg/L)	< 500	320	340	330
E. coli	0	0	0	0
(CFU/100mL)				
Nitrates (mg/L)	< 10	3	4	2

### **Detailed Results:**

#### 5. Discussion

**Water Quality:** The water quality from all three sources was found to be within acceptable limits for all tested parameters. This indicates that the current water treatment and sanitation practices are effective.

**Community Health:** The absence of biological contaminants such as E. coli suggests that there is minimal risk of waterborne diseases from these sources.

**Education and Awareness:** The involvement of IV Pharm D students in the testing process helped raise awareness about water quality issues and the importance of regular monitoring.

#### 6. Recommendations

**Regular Monitoring:** Implement regular water quality monitoring to ensure continued safety and compliance with health standards.

Awareness Programs: Conduct periodic workshops and seminars to educate students and staff about water conservation and hygiene practices.

**Infrastructure Maintenance:** Ensure the maintenance and timely upgrades of water treatment facilities to prevent any future contamination.

#### 7. Conclusion

The SDG 6 Water Analysis Test event, conducted by Dr. Rajaguru A, successfully assessed the drinking water quality at the boys' hostel, girls' hostel, and college. The results were encouraging, showing that the water is safe for consumption. Continued efforts in monitoring and education are essential to maintain high standards of water quality and support the goals set forth by SDG 6.

#### 8. Acknowledgments

We extend our gratitude to Dr. Rajaguru A for organizing this important event. Special thanks to the IV Pharm D students for their active participation and the Department of Pharmaceutical Biotechnology for their support and resources.



