**SDG PROBLEM DEFINITION DOCUMENT**

**SDG 6 : CLEAN WATER AND SANITATION**

**SDG 6** aims to ensure the availability and sustainable management of water and sanitation for all. A specific problem within this SDG is ensuring **safe drinking water quality** in regions where access is limited, or water contamination is prevalent.

**Problem**: Monitoring and improving water quality in rural areas that lack infrastructure to detect contamination.

The problem of **clean water and sanitation** revolves around the lack of access to safe and affordable drinking water, inadequate sanitation facilities, and poor water quality management. Globally, millions of people, particularly in developing and rural areas, face challenges such as:

1. **Contaminated Water**: Many communities rely on polluted water sources, leading to waterborne diseases such as cholera, dysentery, and typhoid.
2. **Inadequate Sanitation**: Lack of proper sanitation facilities, such as toilets and sewage systems, exacerbates health risks, especially in densely populated areas.
3. **Water Scarcity**: Increasing demand, pollution, and climate change are depleting fresh water sources, making access to clean water more difficult.
4. **Inequality**: Marginalized communities, particularly in low-income countries, suffer the most from insufficient water infrastructure and resources.

Ensuring universal access to clean water and sanitation is essential for improving health, reducing poverty, and promoting sustainable development.