

## ENVIRONMENTAL MONITORING

### TEAM MEMBERS:

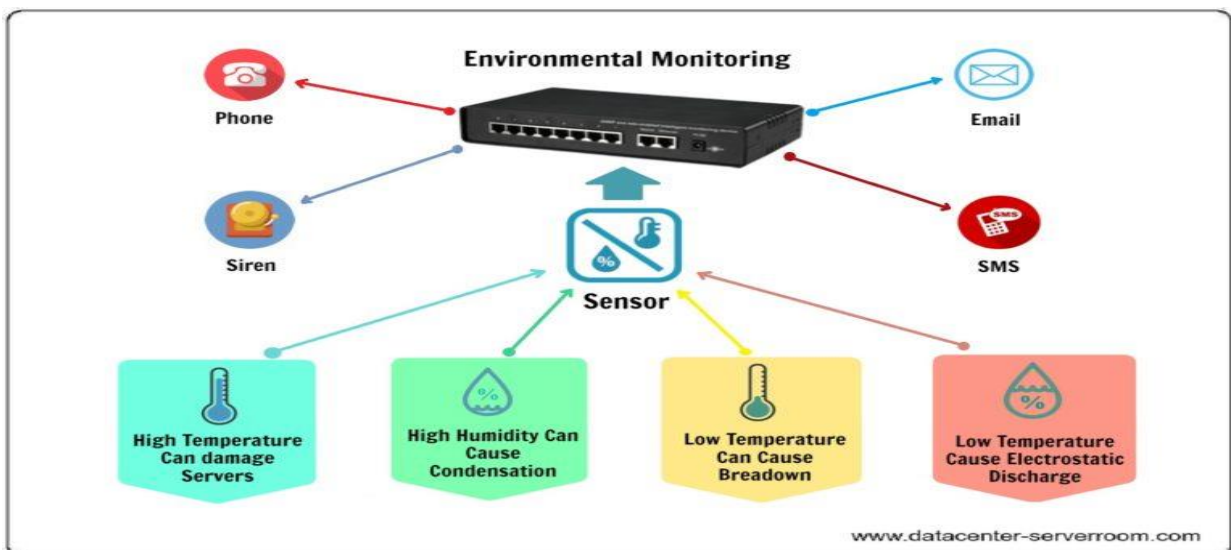
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### PROJECT DEFINITION:



**Environmental monitoring** describes the processes and activities that need to take place to characterize and monitor the quality of the environment. Environmental monitoring is used in the preparation of [environmental impact assessments](#), as well as in many circumstances in which human activities carry a risk of harmful effects on the [natural environment](#). All monitoring strategies and programs have reasons and justifications which are often designed to establish the current status of an environment or to establish trends in environmental parameters. In all cases, the results of monitoring will be reviewed, analyzed [statistically](#), and published. The design of a monitoring program must therefore have regard to the final use of the data before monitoring starts.

## OBJECTIVE:

To co-relate with a suspected source of contamination

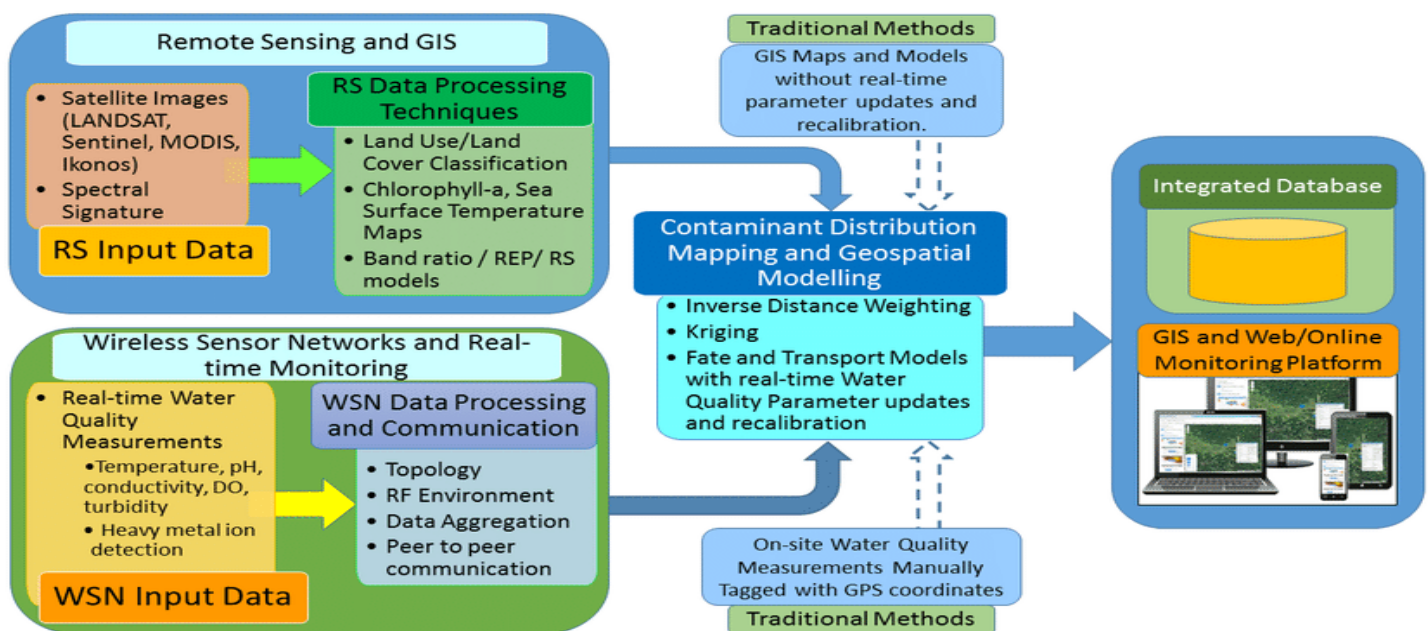
To estimate the changes in level of the pollutants in the environment

Confirming and reconfirming the success of the pollution control measures

Collection of meaningful and relevant information

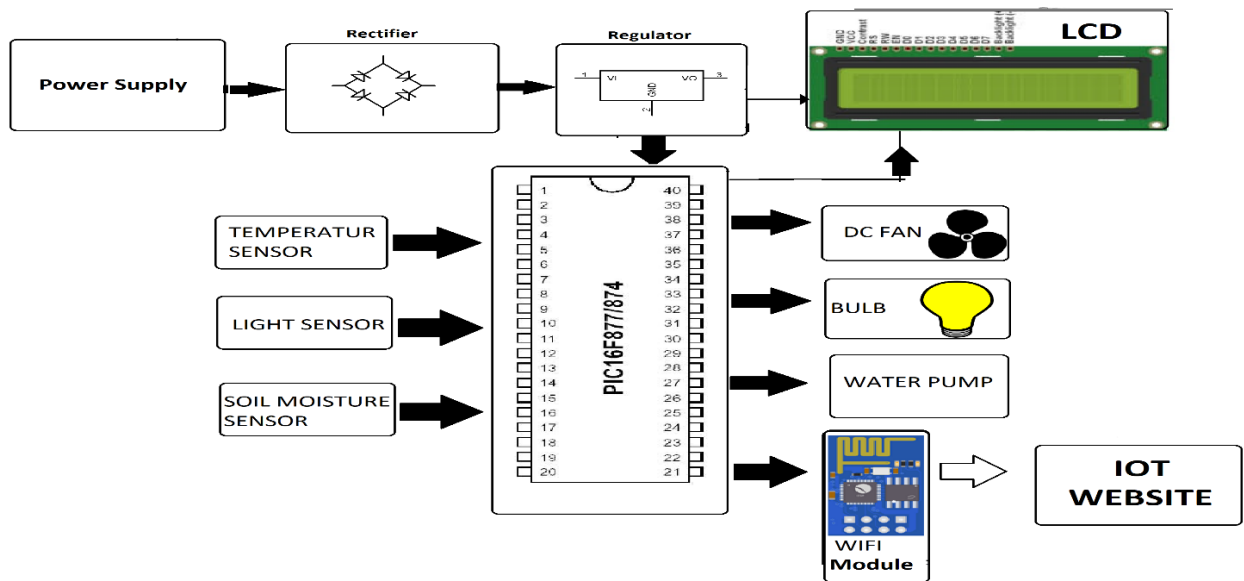
Know the nature and degree of pollution from various sources

Recommendation of improve mitigation measures to be undertaken



## IOT SENSOR DESIGN

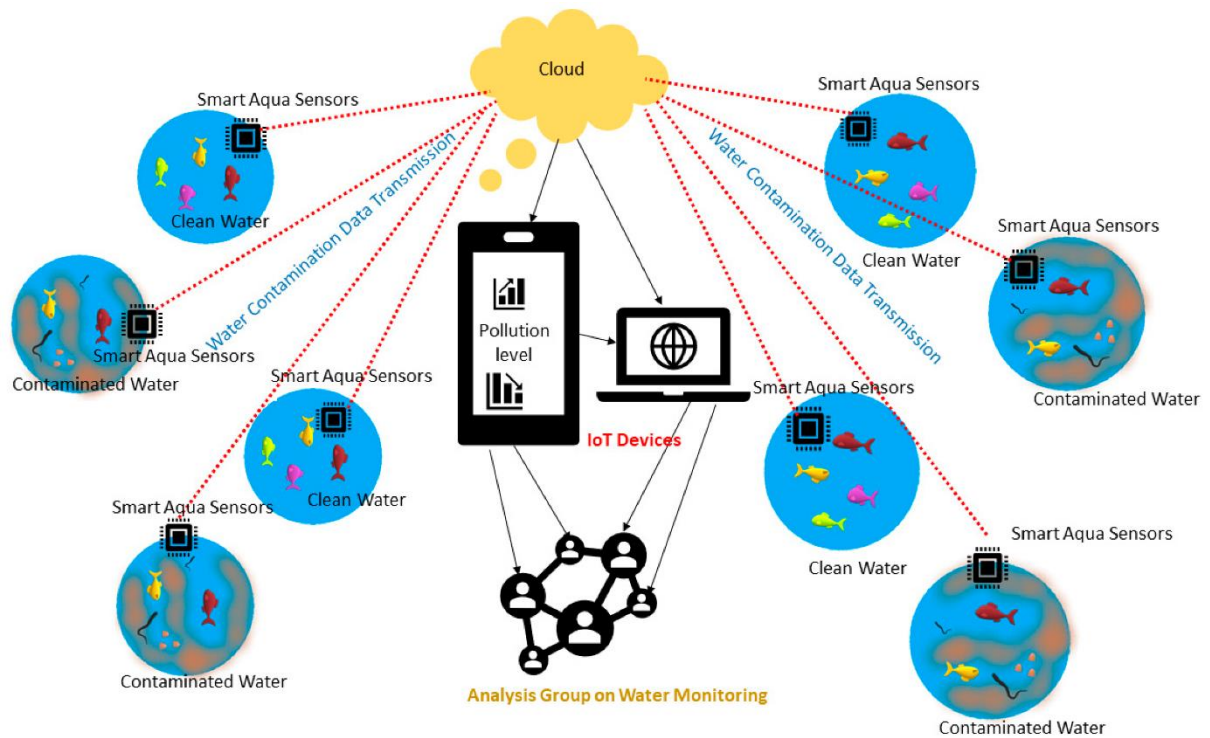
*IoT-based environmental monitoring* is the consistent collection of measurements and data from our physical environment, using sensors and connected devices. Sensors embedded in irrigation systems, pipelines, tanks, weather stations, oceanic applications, and industrial equipment — anywhere on the planet — can detect temperature, moisture, water levels, leaks, and other physical INI



#### APPROACH:

Environmental pollution poses a great threat to society. Sometimes, it becomes difficult to determine the level of pollutants present in the atmosphere in spite of numerous methods available for determining pollutants in the atmosphere. Environmental monitoring helps to determine the presence of pollutants and monitor the quality of the environment. The information collected can help implement control measures for reducing the level of pollutant concentration to an accessible permissible limit. Sometimes, environmental changes are so slow that their determination requires careful monitoring over long periods. However, different analytical and chemical methods available to determine a pollutant do not determine the real effect of the pollutants on the organism that makes up the environment. Bioindicator and biomarker have the advantage, as they measure the changes in the biological systems that respond to exposure of pollutants that lead to biological effects.

This chapter describes the use of plants, organisms, and microorganisms as indicator organisms which can reveal the presence of pollutants in the atmosphere by acquiring certain changes in itself, which may be ecological, behavioral, and physiological, along with the effect of pollutants on the organisms in the environment that can be determined using a wide range of biomarkers.



## CONCLUSION:

The conclusion offers the opportunity to provide the reader with a single section detailing the findings of the EIA in terms of potentially significant environmental effects, appropriate mitigation measures and how these measures can be secured.

The text provided below may be used as a guide to producing more succinct and pertinent conclusions sections.

One area of environmental statements which WYG have identified as requiring improvement is the conclusion section. In my experience this section is often only thought about at the very end of a project and is little more than a rehash of the non-technical summary, rather than a useful conclusion of the environmental impact assessment (EIA).

Thank you!