

Project Design Phase-I

Proposed Solution :

| S.No. | Parameter | Description |
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| • | Problem Statement (Problem to be solved) | To build a analysis and prediction system which can predict the quality of water. |
| • | Idea / Solution description | On behalf of the water borne disease and certain caused because of water, we have proposed a solution based on the Study of water quality, which tells about present status of useable water for domestic as well as industrial use. Indiscriminate and wasteful water consumption and improper waste disposal practices have led to deterioration in the water quality. Due to the pressure of human activity urbanization ,industrialization, the ground water sources are degraded gradually. Therefore pure, safe, healthy and odorless drinking water is a matter in deep concern. |
| • | Novelty / Uniqueness | Number of water quality parameters are measured to determine water quality. These parameters include physical properties like pH, colour, turbidity, suspended solids, temperature, conductivity, odour etc. Chemical properties like COD, BOD, total nitrogen, total phosphorus, total pesticides etc. Biological properties include total coliform bacteria, fecal coliform counts, faecal streptococci counts, salmonella counts etc. |
| • | Social Impact / Customer Satisfaction | It aimed to gather and make available good wastewater treatment technologies, support policies and financial instruments, and showcase how these can be incorporated within an integrated wastewater management approach by analysing case study lessons. Water quality is also an essential factor for certain tourism activities and sewage treatment leads to enhanced tourist attraction. In most countries, non-compliance with certain norms for bathing water leads to the closure of beaches and lakes for recreational purposes and therefore influences strongly the local tourism economy. |
| • | Business Model (Revenue Model) | The provision of water supply, sanitation and wastewater services generates substantial |

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| | | <p>benefits for public health, the economy and the environment. Benefits from the provision of basic water supply and sanitation services such as those implied by the Millennium Development Goals are massive and far outstrip costs. Benefit-to-cost ratios have been reported to be as high as 7 to 1 for basic water and sanitation services in developing countries.</p> |
| <ul style="list-style-type: none"> • | Scalability of the Solution | <p>Access to safe drinking water and sanitation remains a significant challenge, whilst other sectors including ecosystems, industry, energy and agriculture are also experiencing increasing pressure. Thus, it is increasingly important to use available resources more intelligently, make the most of the massive potential for wastewater reuse, and balance the water quality requirements between different uses. Our current state of knowledge regarding global water quality remains poor. Existing water quality data is urgently lacking, but is essential for the global water community to better identify specific problems as well as potential solutions.</p> |