

Date : 30/09/2023

Project ID : Proj_223336_Team_1

Project Title : Flood Monitoring & Early Warning

PHASE-1

PROBLEM DEFINITION

The problem addressed by the Flood Monitoring & Early Warning project is the need to mitigate the devastating effects of floods on communities, infrastructure, and the environment.

DESIGN OVERVIEW

To address these challenges, the Flood Monitoring & Early Warning project

• This problem can be broken down into several key challenges :-

Inadequate Flood Prediction: Current flood prediction methods may not provide timely and accurate information, leading to a lack of preparedness and delayed response to flood events.

Limited Data Integration: Disparate sources of data, such as weather information, river levels, and local terrain, are often not effectively integrated into a single system for comprehensive flood risk assessment.

Community Vulnerability: Communities living in flood-prone areas may lack awareness and preparedness, making them highly vulnerable to flood disaster Etc

• The primary objectives include:-

Data Collection and Analysis: Gather data from various sources, including satellite imagery, river gauges, weather stations, and historical flood data. Analyze this data to understand past flood patterns and predict future risks.

Early Warning System: Develop a sophisticated early warning system that can detect potential flood events well in advance. This system will trigger alerts to authorities and the public, allowing for timely evacuations and preparations.

Community Engagement: Educate and engage local communities on flood preparedness and response strategies. Empower residents with the knowledge and tools they need to protect themselves and their property Etc