Title: REPORTS GENERATION SYSTEM WITH DROUGHT AND FLOOD MAPPING USING GDACS AND OPEN WEATHER API FOR THE NATIONAL IRRIGATION ADMINISTRATION DAVAO CITY, REG XI

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EXECUTIVE SUMMARY

This system can provide a centralized and accurate data from different regions. The web-based application with a mobile application implemented internally for the company use can help in providing reports for different municipality of every region. It will also help in detecting flood and drought based on a near-real-time update from GDACS where in the API is the trigger for the email updates as well as help other people in looking at the current situation of the area.

The researchers have conducted data gathering and interviews within the office of the National Irrigation Administration Reg. XI. to look at different problems that the researchers have solve. One of the main problems is disseminating information from the provincial offices to the regional office and vice versa. The said system can help the engineers in providing reports on the situation in the field as well as help other departments and other irrigation management offices within region XI.

The researchers have seen that the system is faster in providing information on different departments within the office. The API is also open to other institution and offices to provide data to them in a more efficient way.