

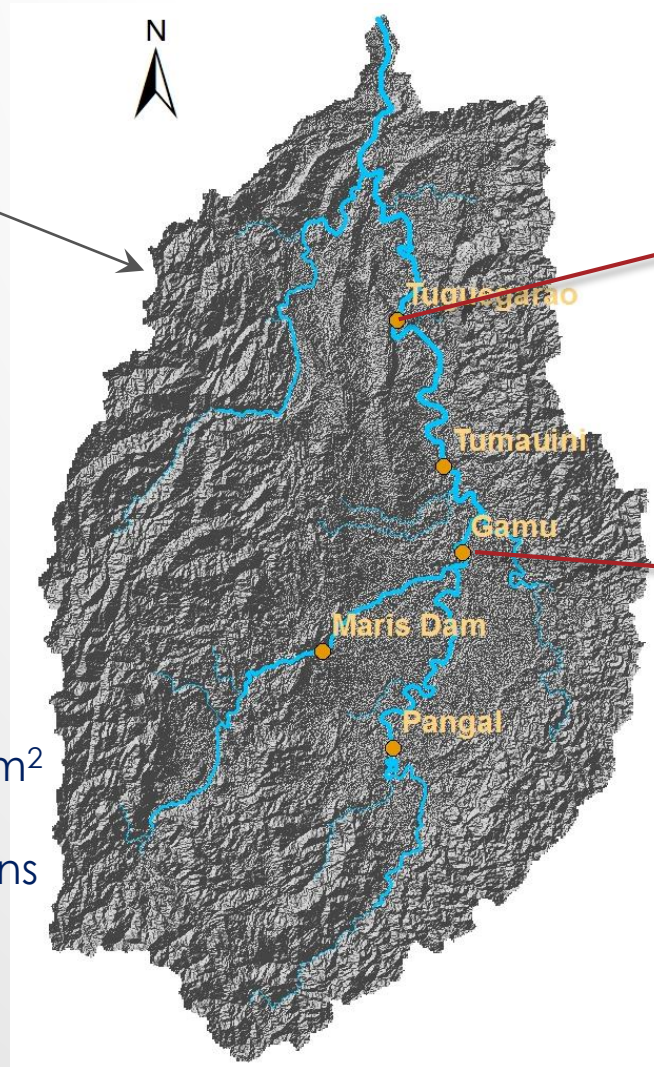


PROPOSAL OF IMPLEMENTATION

# **7-1. FLOOD EARLY WARNING IN THE CAGAYAN RIVER BASIN**

PAGASA

# CAGAYAN RIVER BASIN



**Tuguegarao station**  
(Rainfall and WL monitoring)



**Gamu station**  
(Rainfall and WL monitoring)

## Cagayan River basin

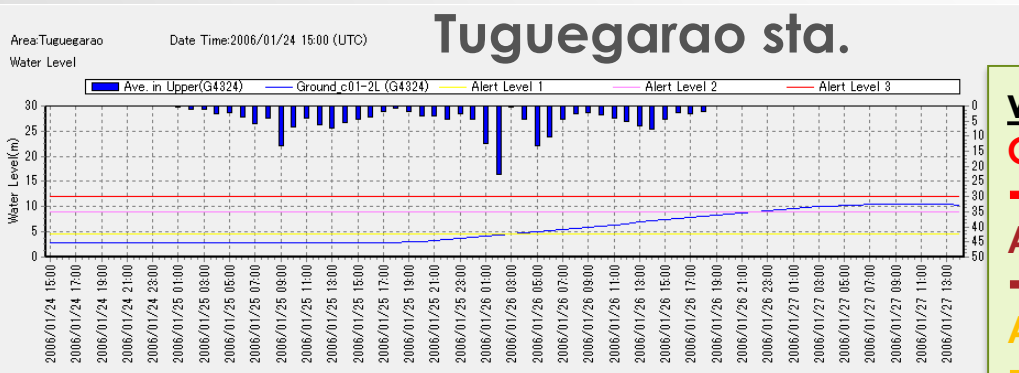
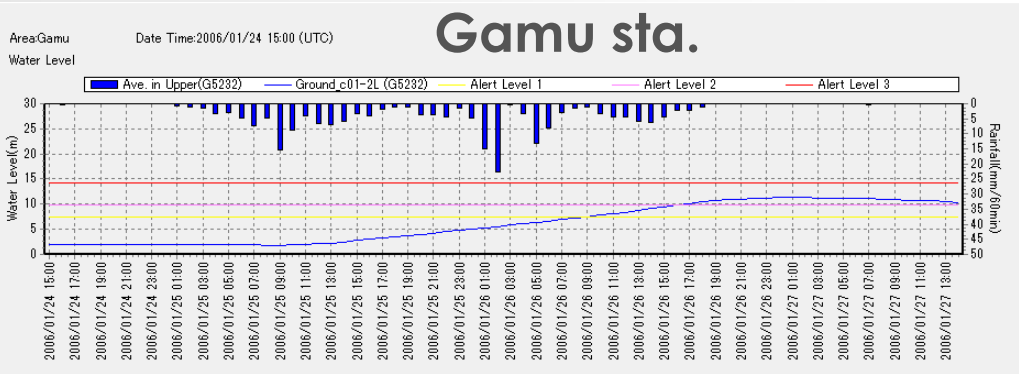
- Catchment area: 27,280km<sup>2</sup>
- River length: 500km
- Real-time gauges: 5 stations (Rainfall and WL)
- Area for one station: 5460km<sup>2</sup>

# EXISTING SYSTEM

- Project: ADB TA-8074 REG "Applying Remote Sensing in River Basin Management"
- Duration: April 2012 to March 2015
- Rainfall Input: Calibrated GSMaP
- Simulation Model: IFAS

## Hydrograph

Dynamic Map  
(Animation on Google Earth)



**warning level**

**Critical Level**

➔ **Overflow**

**Alarm Level**

➔ **Evacuation**

**Alert Level**

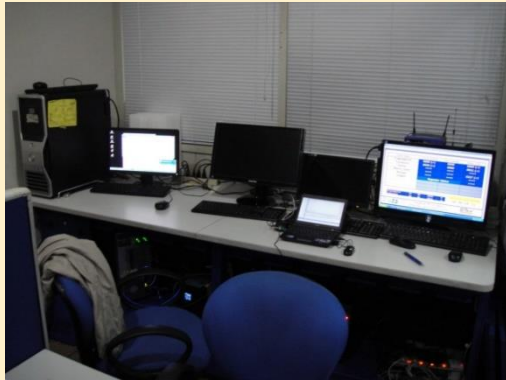
➔ **Preparation**



discharge

# EXISTING SYSTEM

This system has been installed in PAGASA Headquarter, Philippines

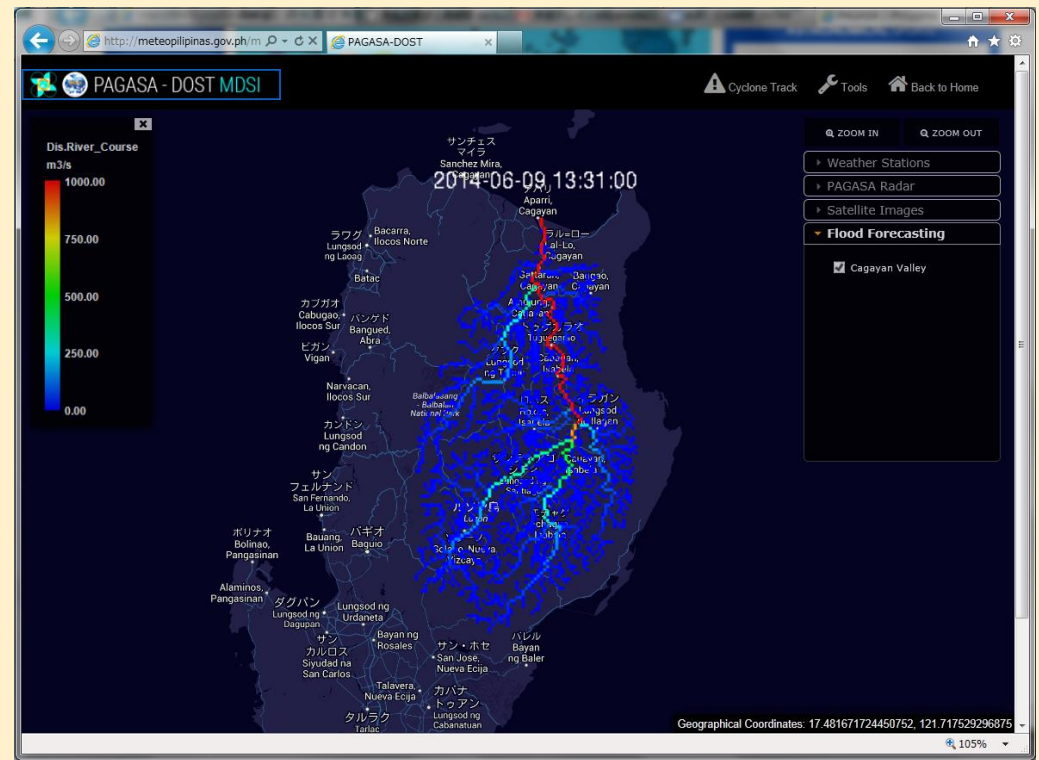


Implemented system



Training

**PAGASA's Website**  
<http://meteopilipinas.gov.ph/map.php#>



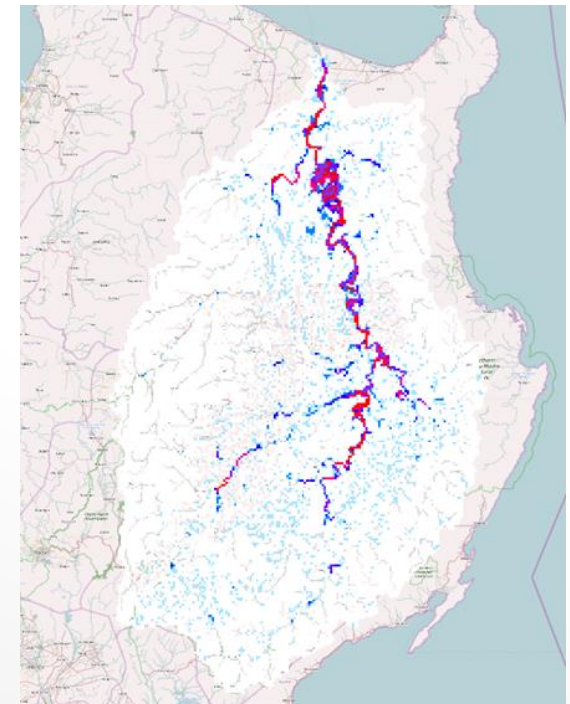
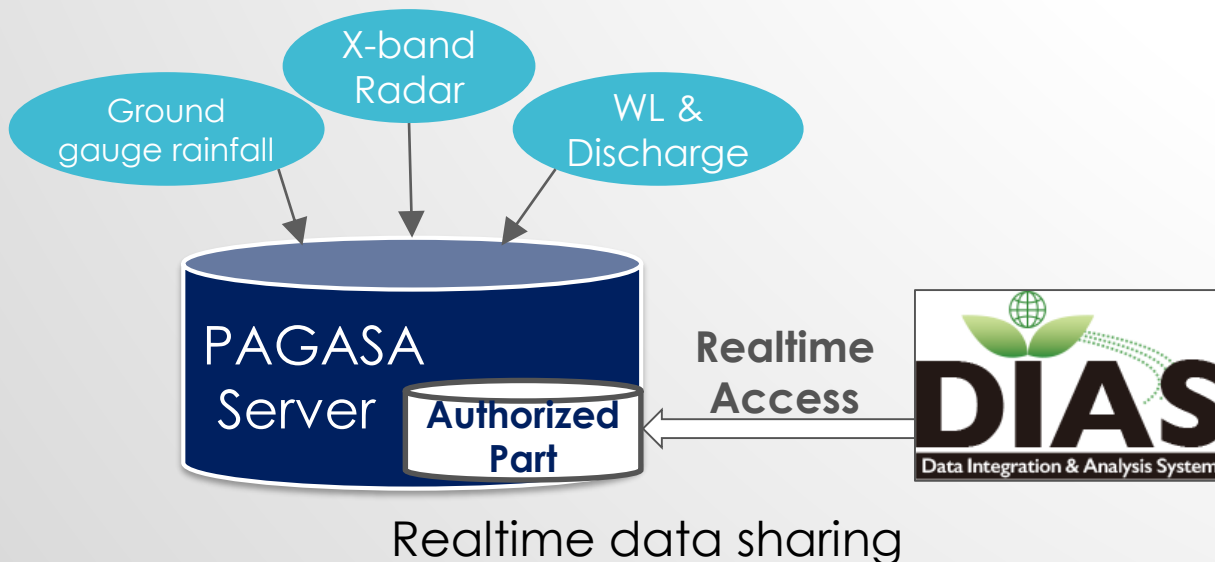
Unfortunately, the system does not work



# PROPOSAL

## Implementation of Realtime Flood Early Warning System for the Cagayan River basin as an activity of Platform

- Rainfall Input: Ground gauge, X-band MP Radar
- Simulation Model: RRI model
- Data System/Interface: DIAS



Inundation forecast