WORKFLOW TO CURATE AND DESSIMATE FLOODING RELATED DATA PRODUCTS TO USERS USING GOOGLE EARTH ENGINE.

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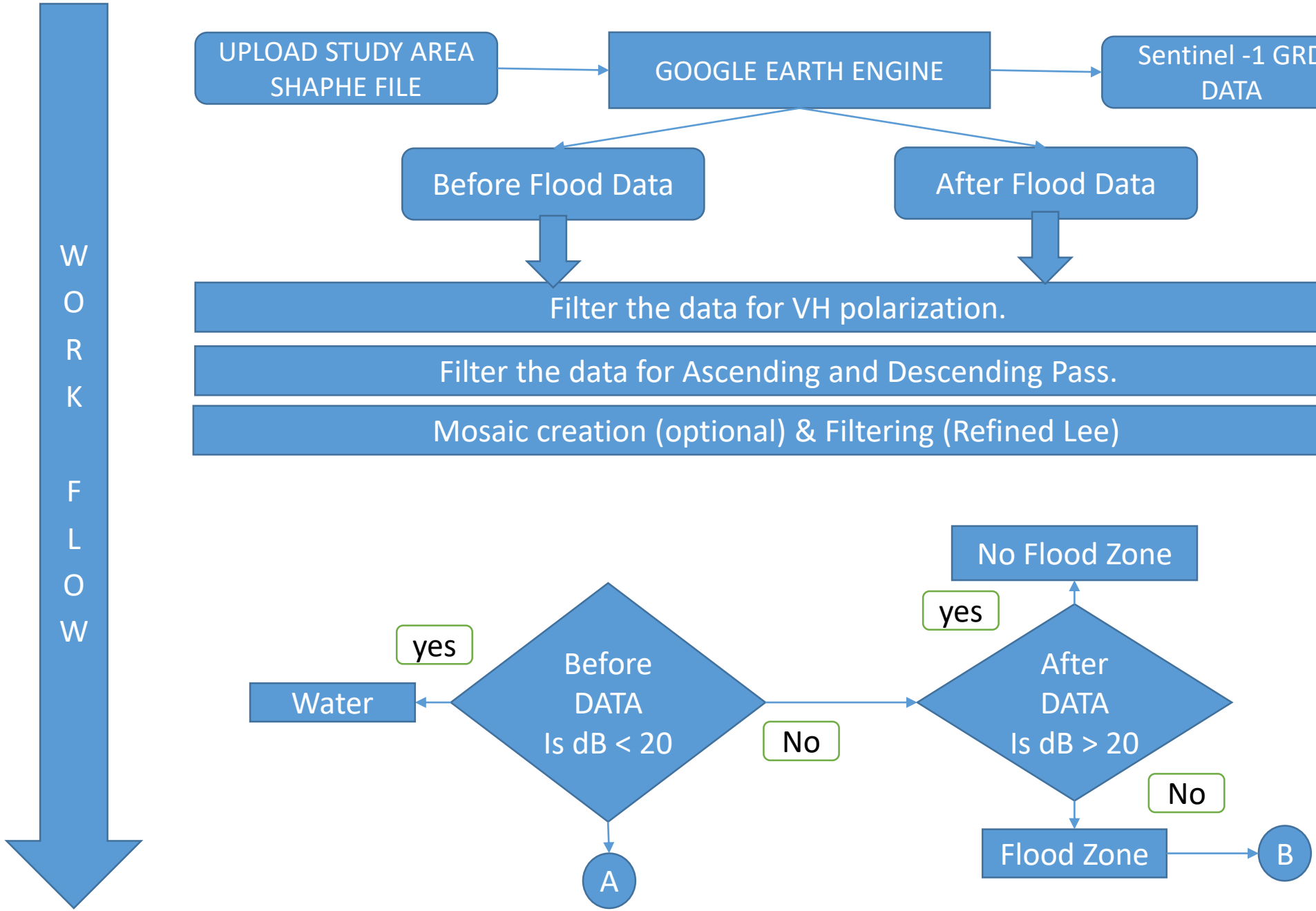
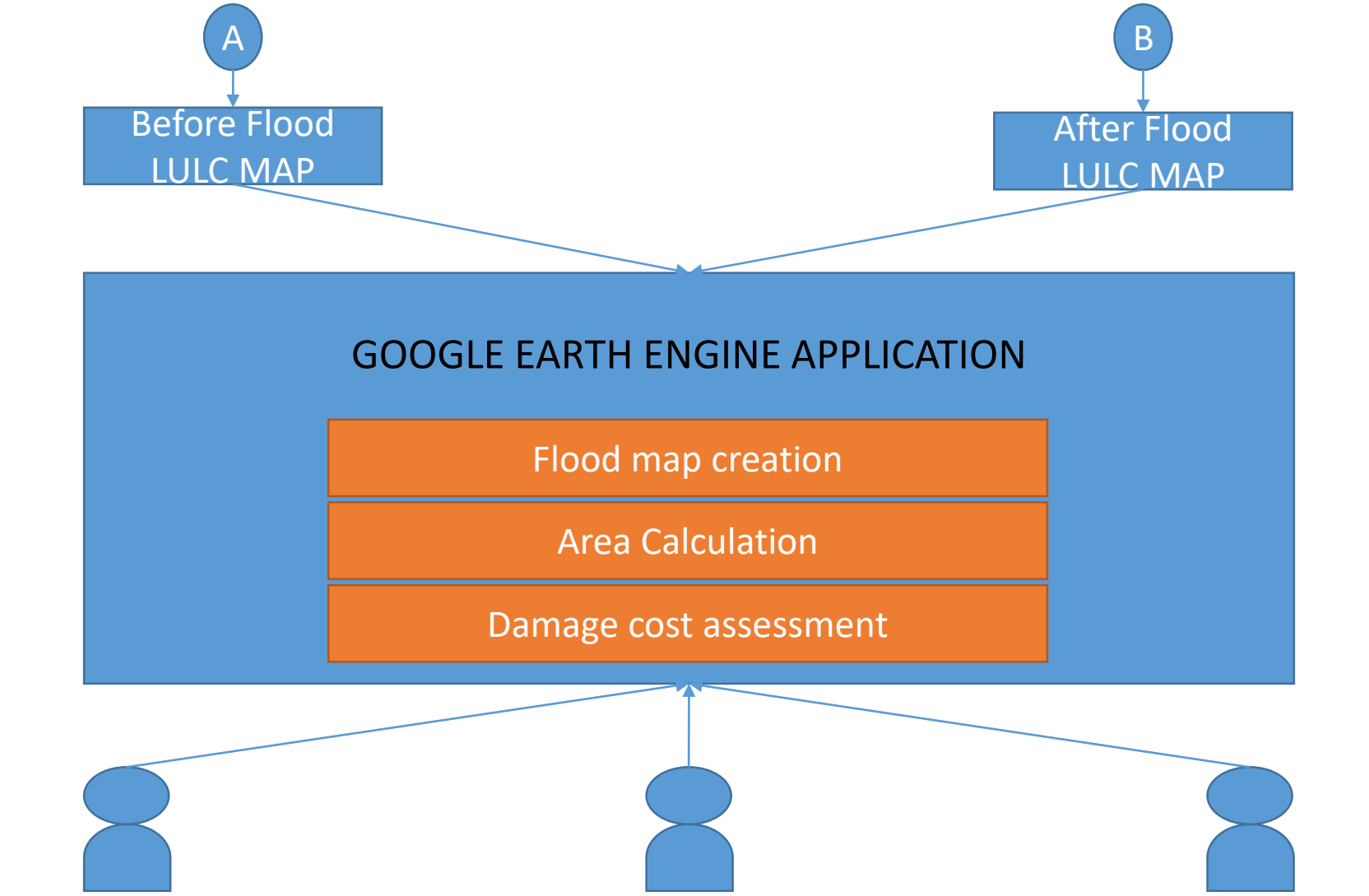
Objective and Expectations

- Every year in the month of June & July, Bihar’s agricultural production is heavily impacted.
- A solution is required, for a proper assessment of the damage to the property and farmlands
- Data can help estimate the losses and better compensate the producers


WORK FLOW
UPLOAD STUDY AREA SHAPHE FILE
GOOGLE EARTH ENGINE
Sentinel -1 GRD DATA
Before Flood Data
After Flood Data
Filter the data for VH polarization.
Filter the data for Ascending and Descending Pass.
Mosaic creation (optional) & Filtering (Refined Lee)
No Flood Zone
yes
yes
Before DATA Is dB < 20
After DATA Is dB > 20
Water
No
No
Flood Zone
A
B


A
B
Before Flood LULC MAP
After Flood LULC MAP
GOOGLE EARTH ENGINE APPLICATION
Flood map creation
Area Calculation
Damage cost assessment
Central & State Government
Insurance Companies
Farmers and Citizens

Derived Products and Beneficiaries

- Flood map creation , area calculation.
- Damage Assessment comparing the before and after LULC.
- A GEE app to share data with stakeholders like.

    - Central & State Government
    - Insurance Companies
    - Farmers