

# Flood Risk Analysis and Mapping in Northern India

## Gurugram Urban Flooding Story



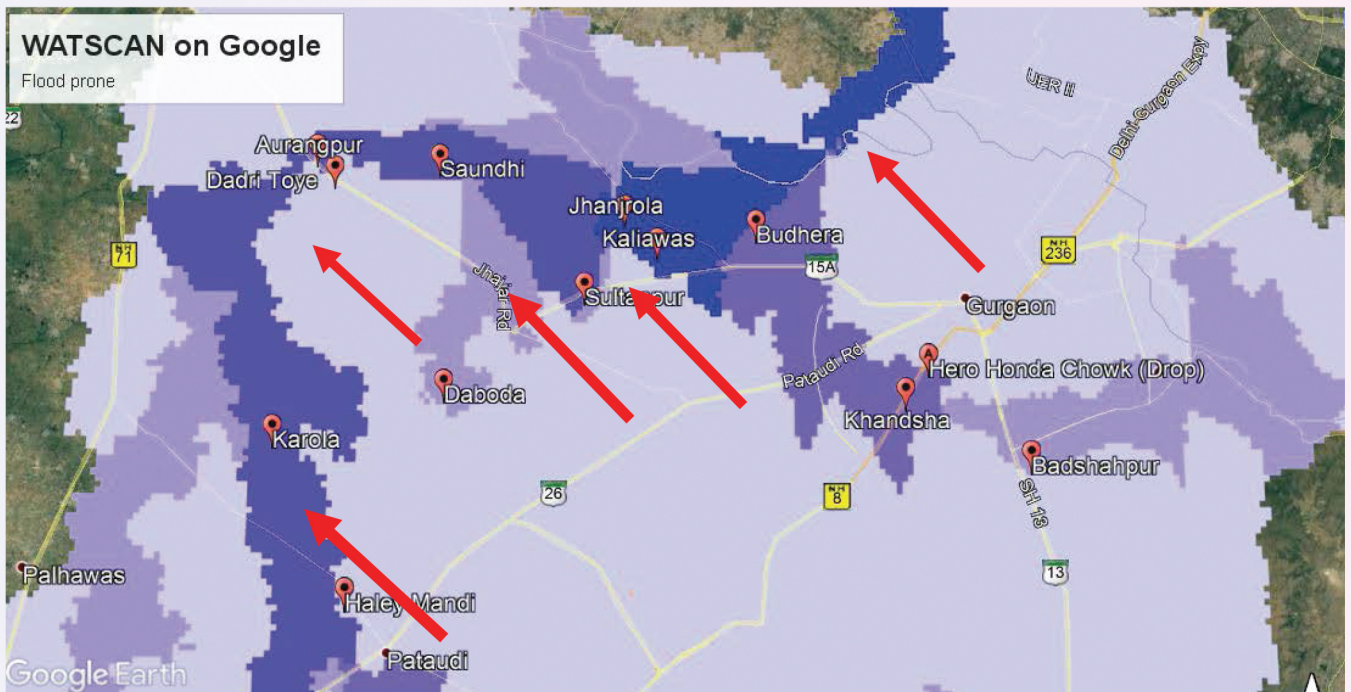
### Context

- District is both physical and economic water scarce, prone to event based urban floods
- Decline in groundwater due to rising demand-supply gap
- A mixed water generation pattern, with moderate to high water in some areas and low generation in others
- Increasing nitrate pollution of ground water
- Inadequacy of water evacuation systems as well as near absence of water attenuation systems make water evacuation from high accumulation zones a challenge

### WATSCAN Strategies to Prevent Urban Flooding

- Strategies identified for making the district water secure
- Potential locations for rain water harvesting to artificially recharge groundwater identified
- Strengthening creation and revival of water bodies as well as construction and maintenance of flood protection structures, permeable pavement, sidewalks and gardens
- Rainwater management through sustainable water attenuation and infiltration to create underground tanks

**Rehabilitation of Village Ponds has begun based on CII recommendations to the Government.**



*WATSCAN Outcome: Dark blue pocket shows high accumulation during episode of heavy rain, which due to lack of evacuation resulted in flooding in the area.*