River flows at Nangbéto Dam
Mono River, Togo (Sep-Nov 2010)

**Danger Level**

- **Overspill**
- **Emergency Funding**

The fastest response is *always* too late...

34 Days
CHALLENGE: The Usual Surprise

INNOVATION: The Proposed Solution
CHALLENGE: The Usual Surprise

INNOVATION: The Proposed Solution

Forecast-based Financing for Early Action
What if there’s no Early Warning System?
Forecast-based Financing for Early Action
FUNES—FLOOD PREDICTION

TOGO

RAINFALL
- Aklo
- Tchamba
- Sokode
- Goubi
- Sotouboua
- Bitta
- Ané
- Nangbeto

DAM INFLOW
- Inflow
- Outflow
- Water Level

PREDICTION
- Day 0
- Day 1
- Day 2
- Day 3
- Day 4

Rainy season begins, rain on dry soil
Soil is saturated, water level rising
Reservoir full, flooding occurs
FUNES—FLOOD PREDICTION

TOGO

Info → Consequences → Decisions

RAINFALL

DAM INFLOW

PREDICTION

Reservoir full, flooding occurs
Rainy season begins, rain on dry soil
Soil is saturated, water level rising

Visualized by Xingue Li
FUNES Anticipates Flood & Sends Message for Action

Village of Louis-Condji:
More than 55% chance of flood

Automated Text:
- Time & Location of Likely Flood
- Pre-agreed SOP
- Shelter & Water
- Community Awareness, etc.
Early Action: Awareness
Early Action: Communities
Early Action: Shelter
Early Action: Distribution
Actions taken right before flood!
THANK YOU!!

Pablo (Integration): suarez@climatecentre.org

Herman (Machine Learning): hgdolder@gmail.com