

The Togo Red Cross Experience

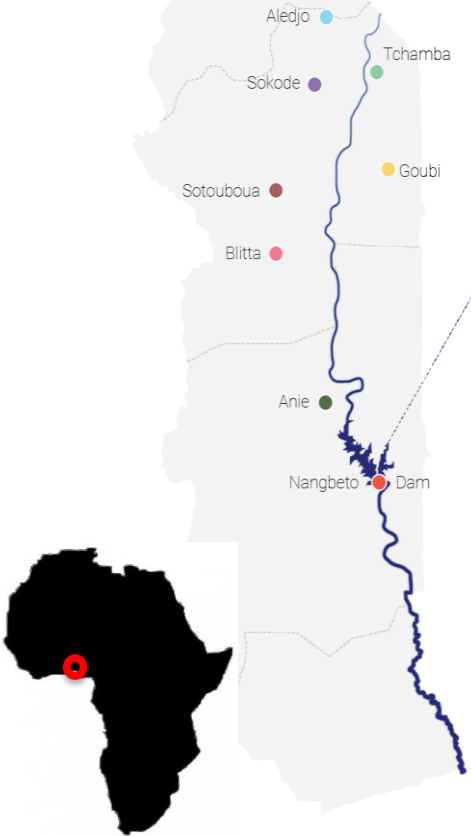
Machine Learning & Forecast-based Financing



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TOGO



DREF operation



International Federation
of Red Cross and Red Crescent Societies

Togo: Floods

DREF operation n° MDRTG003
GLIDE n° FL-2010-000215-TGO
28 October, 2010

28 Oct, 2010

The International Federation of Red Cross and Red Crescent (IFRC) Disaster Relief Emergency Fund (DREF) is a source of un-earmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross and Red Crescent emergency response. The DREF is a vital part of the International Federation's disaster response system and increases the ability of National Societies to respond to disasters.

USD 250,000

CHF 244,001 (USD 251,392 or EUR 179,386) has been allocated from the Federation's Disaster Relief Emergency Fund (DREF) to support the Togolese Red Cross in delivering immediate assistance to some 1,500 families and replenish the National Society's relief stock. Unearmarked funds to repay DREF are encouraged.

11-17 Oct: rains worsened flood

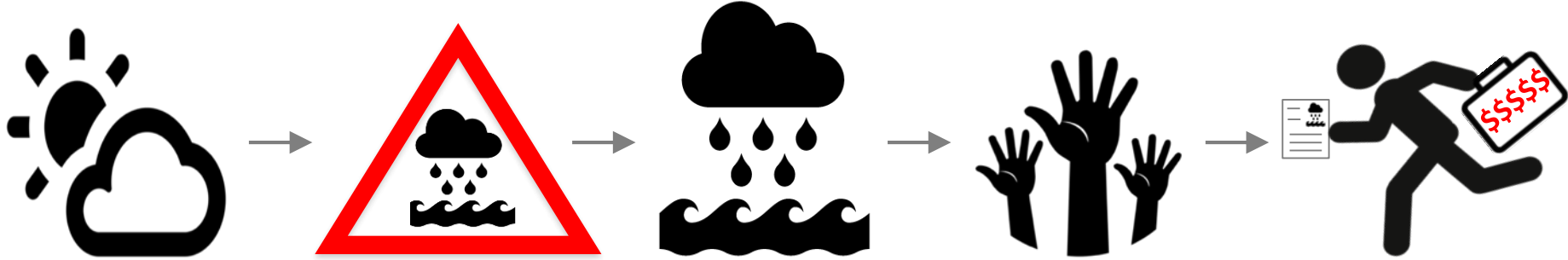
Summary: The heavy downpour during the week of 11 to 17 October, 2010 has worsened the flooding situation that Togo has been experiencing since the beginning of the rainy season in June especially in the Maritime Region. This has been compounded with the overflowing of River Mono because of the excessive water flow from the bigger River Niger. The flooding has led to extensive damages to property including means of livelihood and houses with thousands of persons rendered homeless and sheltered temporarily in camps and with friends and relatives. The Red Cross through its emergency first-aid team members have been providing first-aid support to the affected people and in some cases assisting them in evacuation. After a preliminary assessment



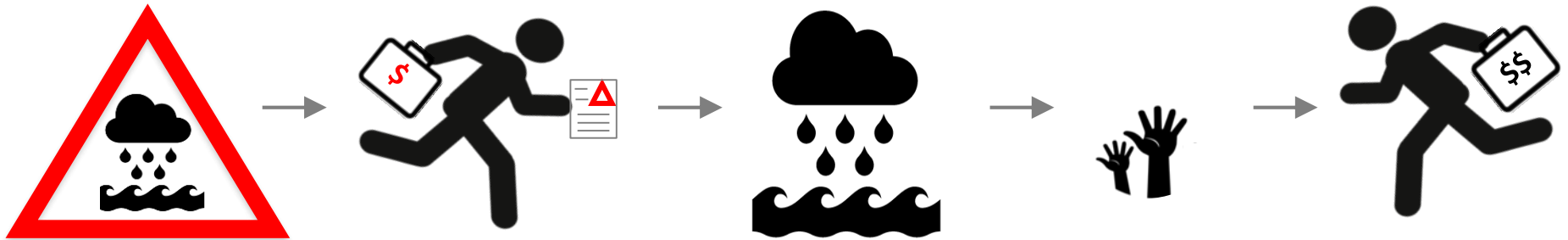
Operations:
Nov to Jan 2011

This operation is expected to be implemented over 3 months, and will therefore be completed by January, 2011; a Final Report will be made available three months after the end of the operation (by April, 2011).

CHALLENGE: The Usual Surprise



INNOVATION: Forecast-based Financing



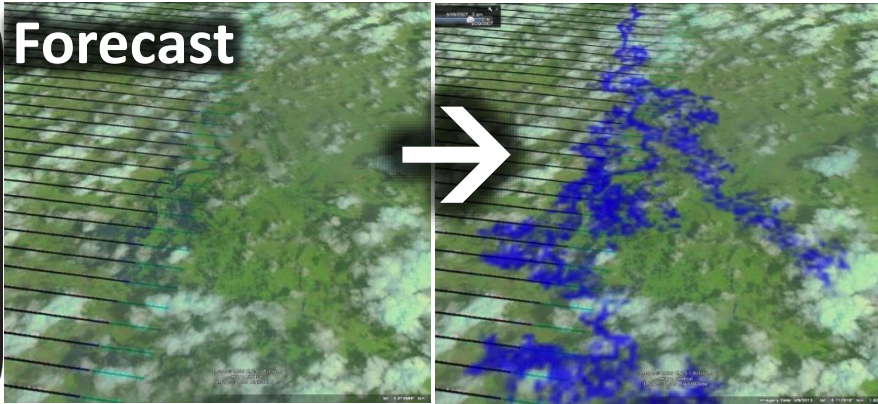
1. Observation



2. Data Integration



3. Forecast



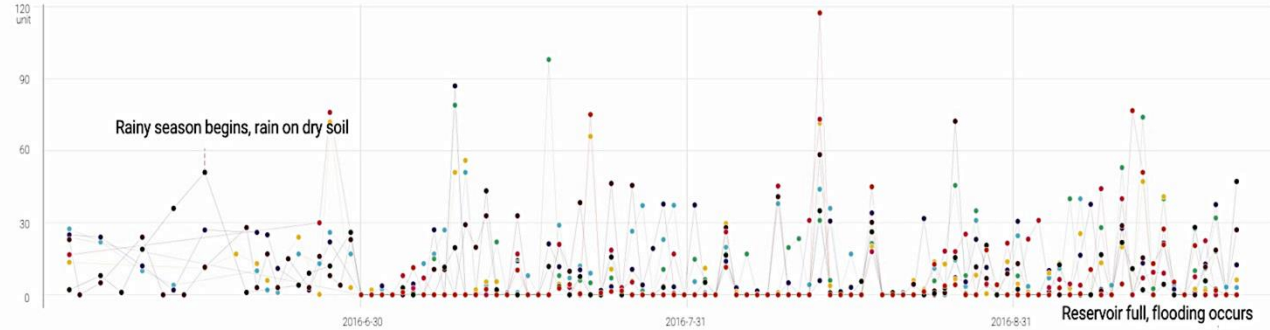
4. Early Action

FUNES—FLOOD PREDICTION

TOGO

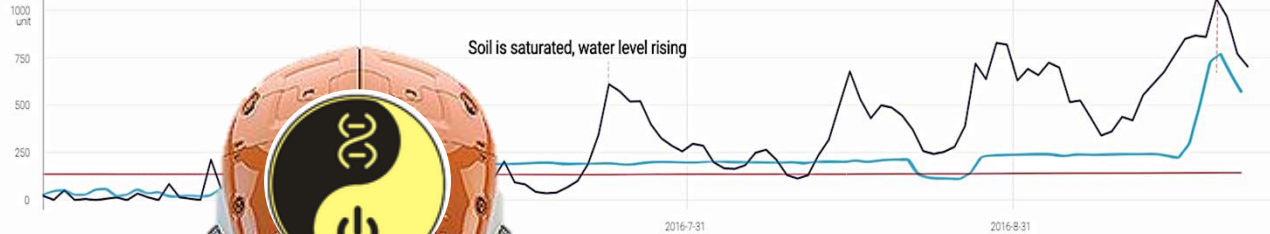
RAINFALL

- Alédjo
- Tchamba
- Sokode
- Goubi
- Sotouboua
- Blitta
- Anie
- Nangbeto



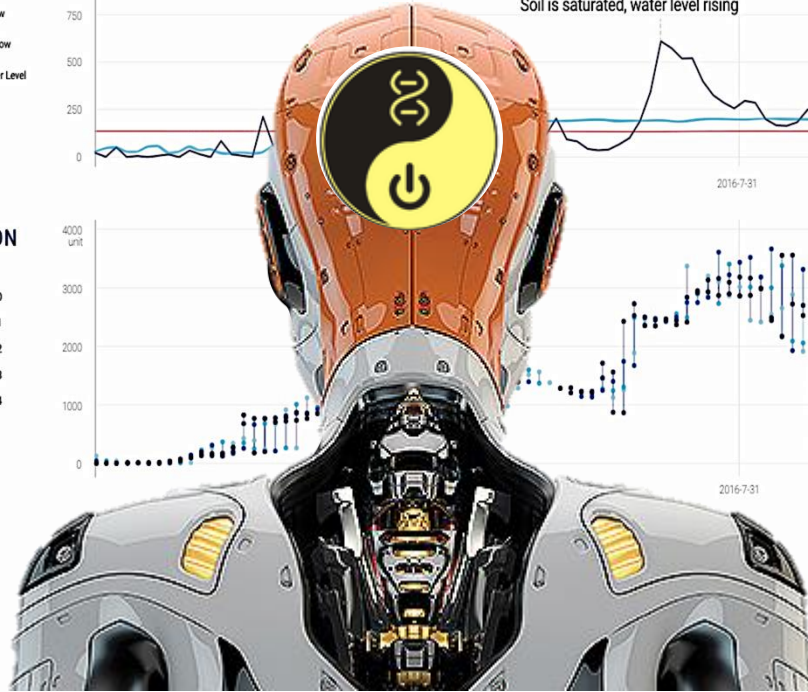
DAM INFLOW

- Inflow
- Outflow
- Water Level



PREDICTION

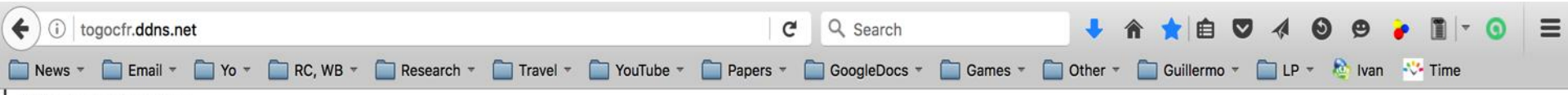
- Day 0
- Day 1
- Day 2
- Day 3
- Day 4



Visualized by Xingyue Li

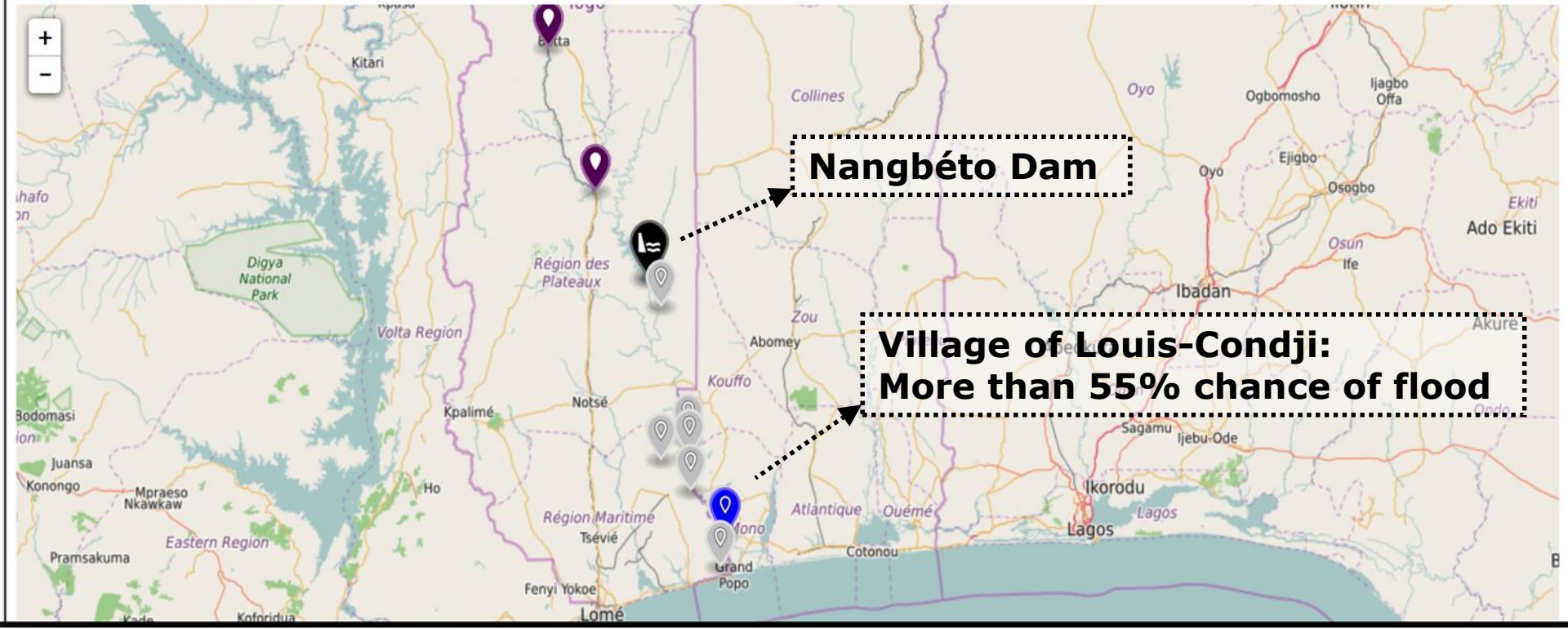
FUNES helps anticipate flood risk, supporting Hydro-Met Services & Early Warning Systems

FUNES Anticipates Flood & Sends Message for Action



Automated Text:

- Time & Location of Likely Flood
- Pre-agreed SOP
Shelter & Water
Community Awareness, etc.



Early Action: Awareness



Audio



Early Action: Communities



Early Action: Shelter



Early Action: Distribution



Actions taken right before flood!



Video

Global Innovation Award

World Government Summit 2017



A.I. and Social Protection ?

1. Understanding Risks

- *Hazards*
- *Exposure*
- *Vulnerability*

2. Anticipating Need for Action

- *Capacities*
- *Magnitudes*

3. Triggering Finances

- *Digital Banking*
- *Smart Contracts & Blockchain, etc.*

4. Learning & Reimagining

