

Participatory and Innovative Ways of Linking Science, Policy and Practice





International Federation
of Red Cross and Red Crescent Societies

International Conference 2007 – ‘Together for Humanity’

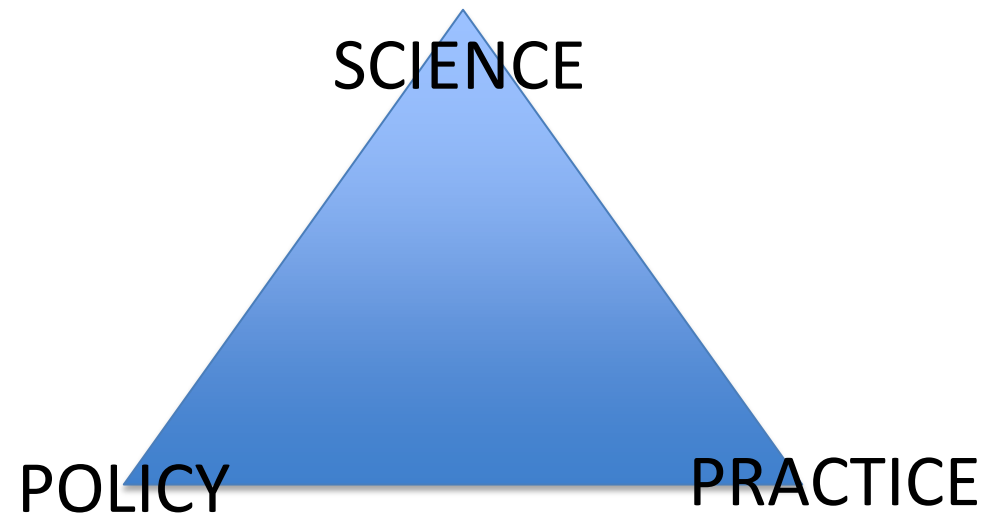


*Geneva,
November 2007
RCRC International
Conference*

Photo: IERC

The Climate Centre supports the Red Cross and Red Crescent Movement and its partners in reducing the impacts of climate change and extreme weather events on vulnerable people.

**MAKE THE BEST GLOBAL SCIENTIFIC INSIGHTS OPERABLE
AT THE LOCAL LEVEL**



Early Warning, Early Action

Extreme events have implications for health, livelihoods, water, food security, and others.



Climate and weather information can help anticipate and prepare for changing risks.



Which forecasts are useful for humanitarian decisions?

What kind of early actions should be taken in the...

short term?

medium term?

long term?



Different actions are appropriate at different timescales

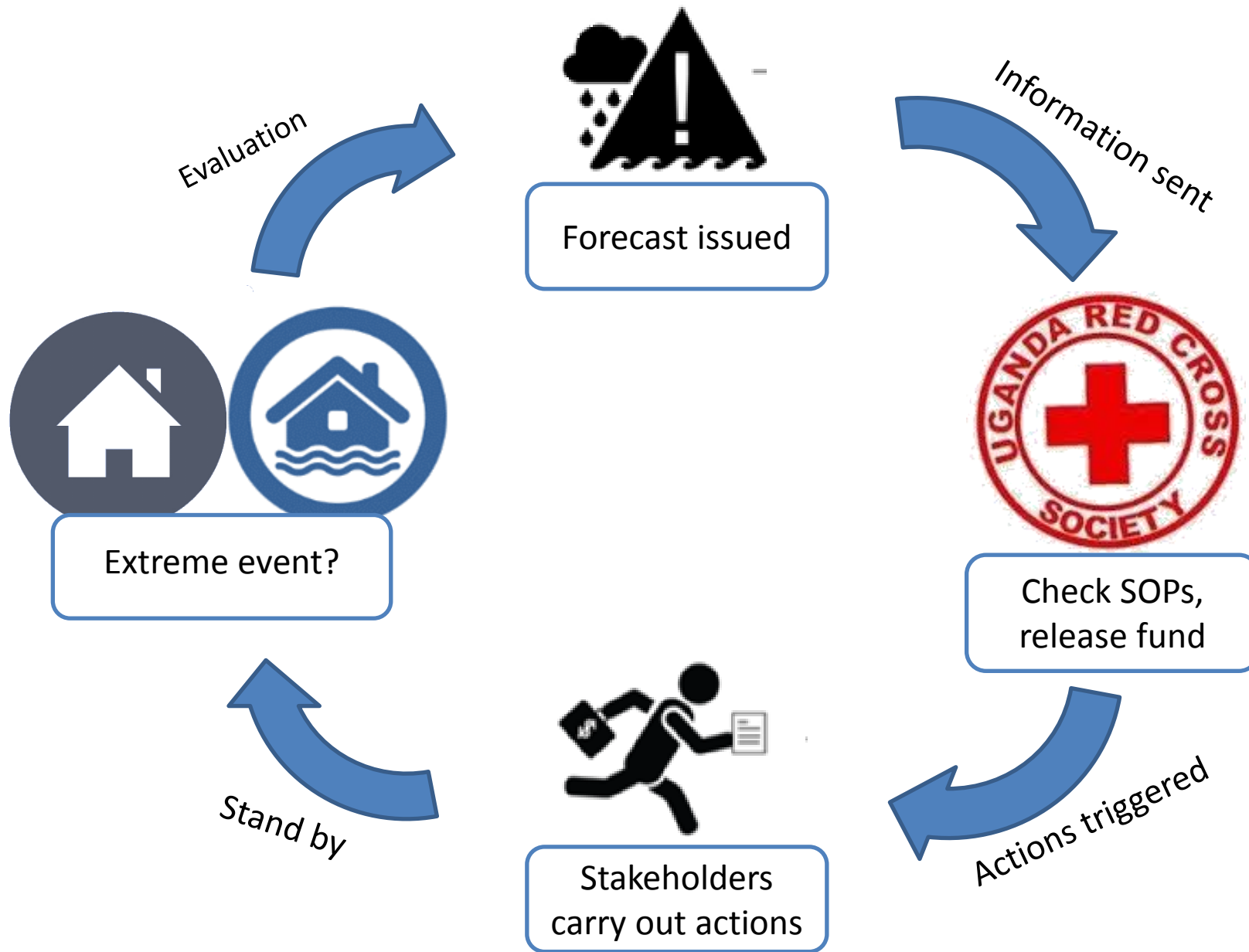
Flash flood	Example of early warning	Example of early action
Years	Increasing risk of extreme rainfall events due to climate change Deforestation on hillsides increasing risk of flash floods Increasing population in slums in areas at high flood risk	Continually update risk maps and identify changing vulnerable groups, community-level activities to reduce risk through concrete actions like reforestation, reinforcement of houses, etc.
Months (seasonal)	Forecast of strongly above-average rainfall for the coming season	Revisit contingency plans, replenish stocks, inform communities about enhanced risk and what to do if the risk materializes, e.g., clear drains
Weeks	High ground saturation leading to high probability of flash floods during next high rainfall event	Alert volunteers and communities, meet with other response agencies to enable better coordination, closely monitor rainfall forecasts
Days	Forecast of heavy rainfall that may result in flash flood	Prepare evacuation, mobilize volunteers, get warnings and instructions out to communities at risk
Hours	Very heavy rainfall almost surely leading to flood	Evacuate

If you **only** monitor the **long term**,
you risk **missing** critical information
in the **short term**.

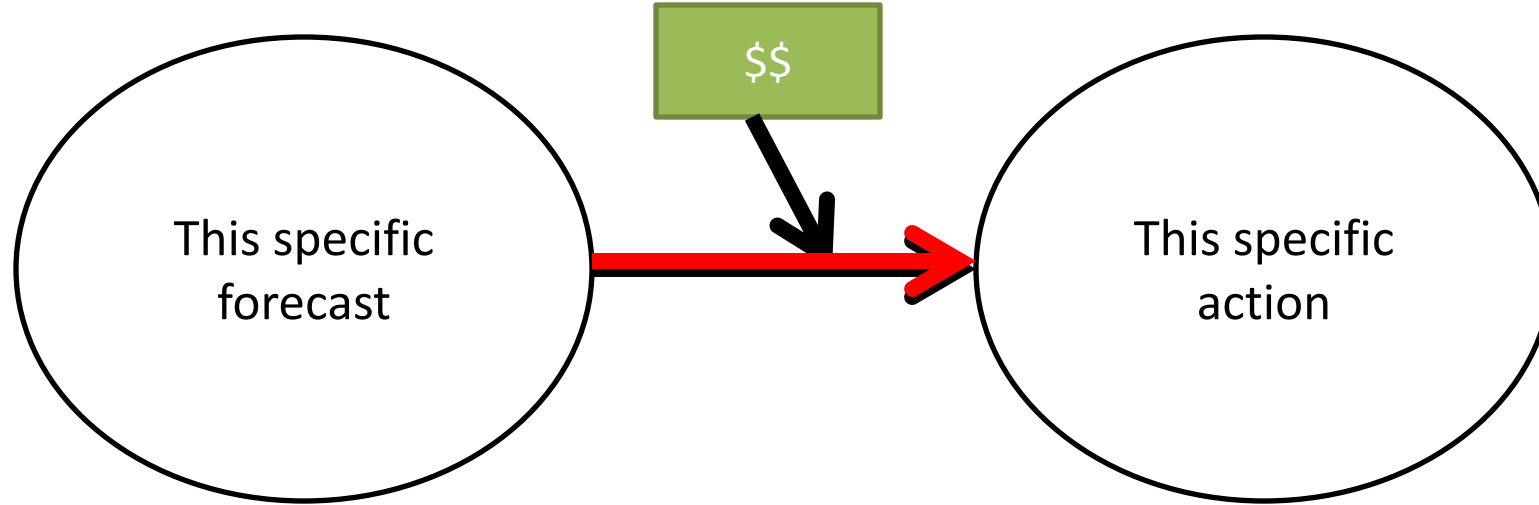


And, if you **only** monitor the **short term**...

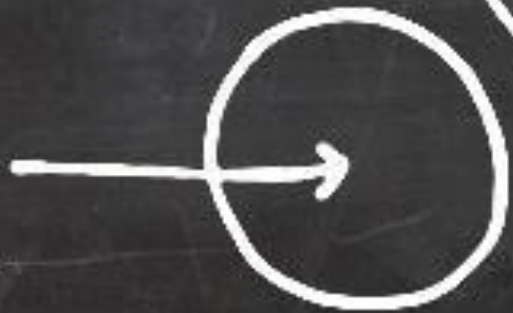
...you risk **missing** critical information
in the **long term**.



Standard Operating Procedures



Your
Comfort
Zone



Where the
magic happens

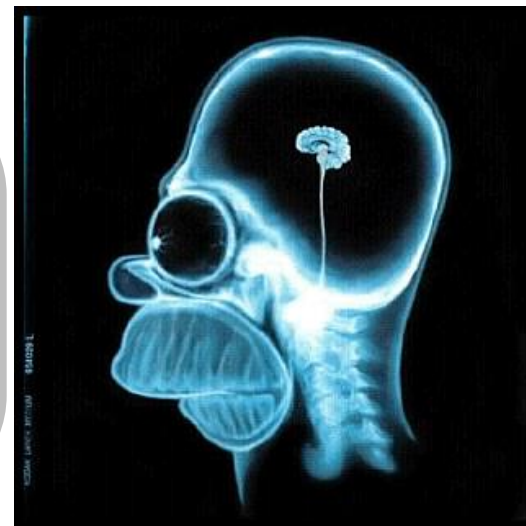
by Pablo Suarez, Ph.D.

A Model of the Powerpoint Experience

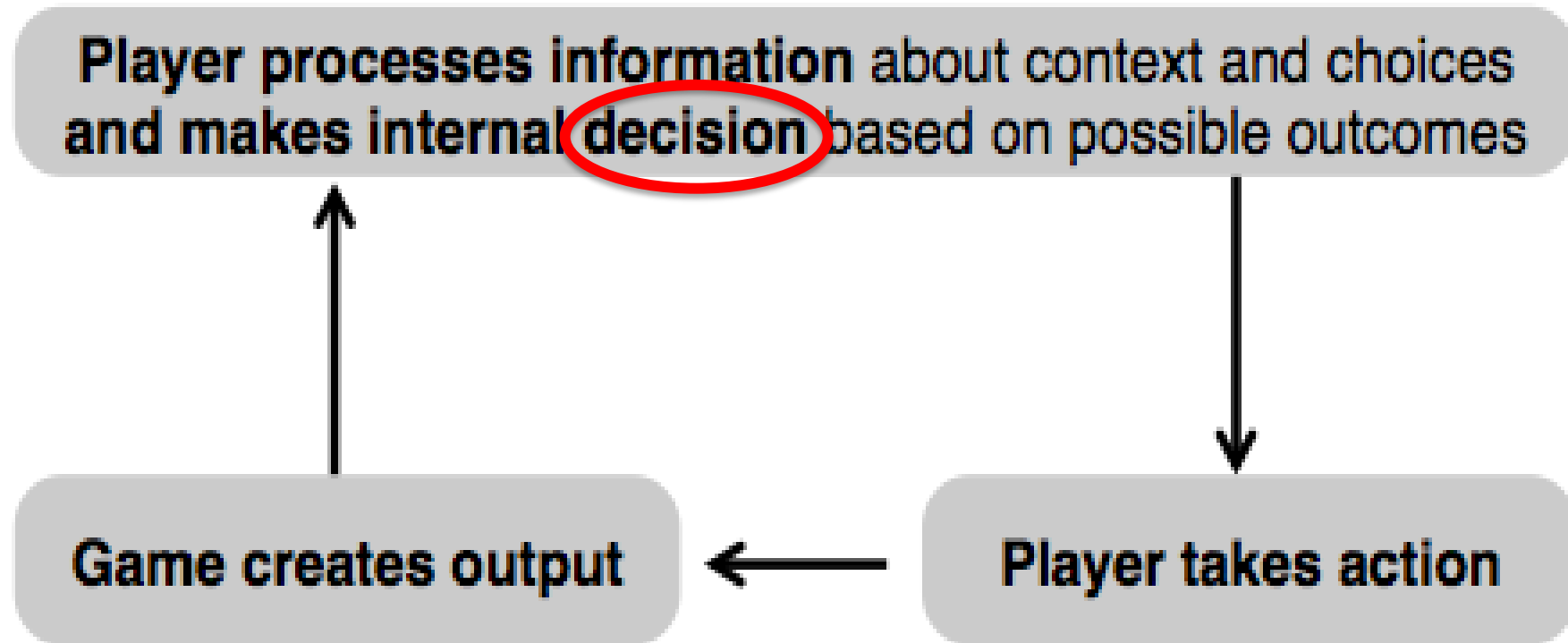
PPT sends information about context and choices
and assumes possible outcomes

Audience **passively**
listens

?

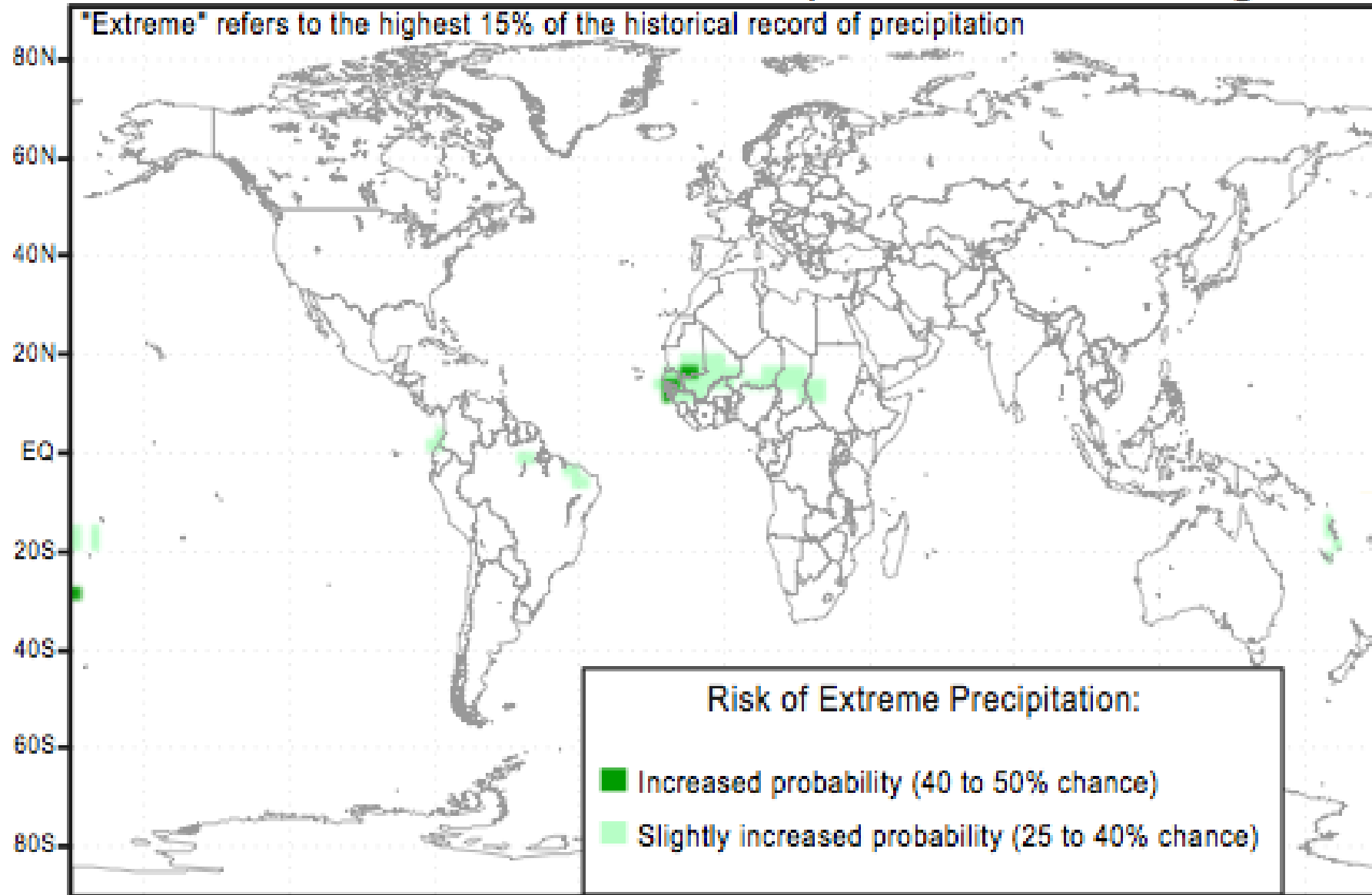


'Playable System Dynamics' Experience



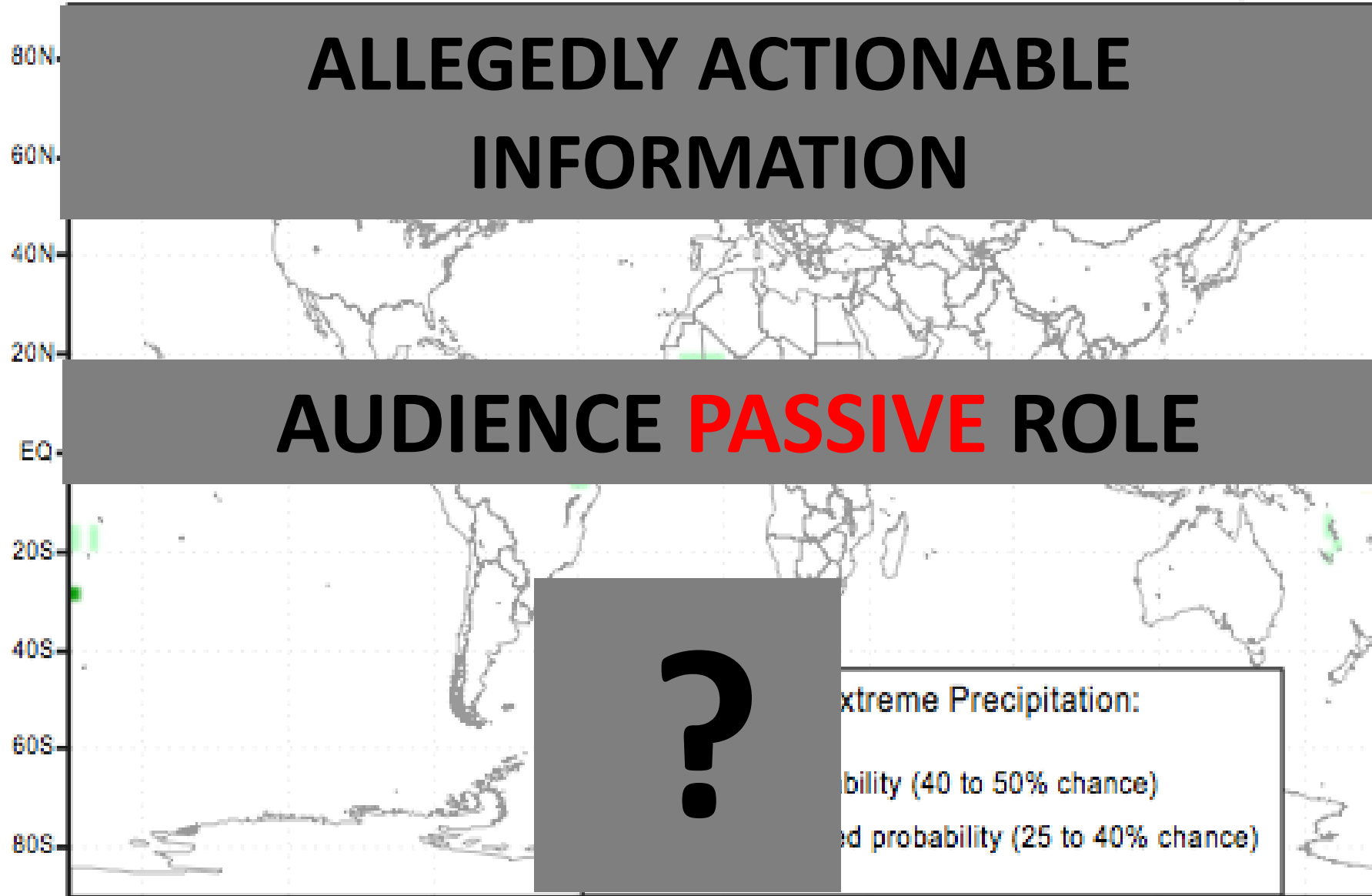
Allegedly Actionable Information...

Seasonal Forecast of Extreme Precipitation for June-August 2008



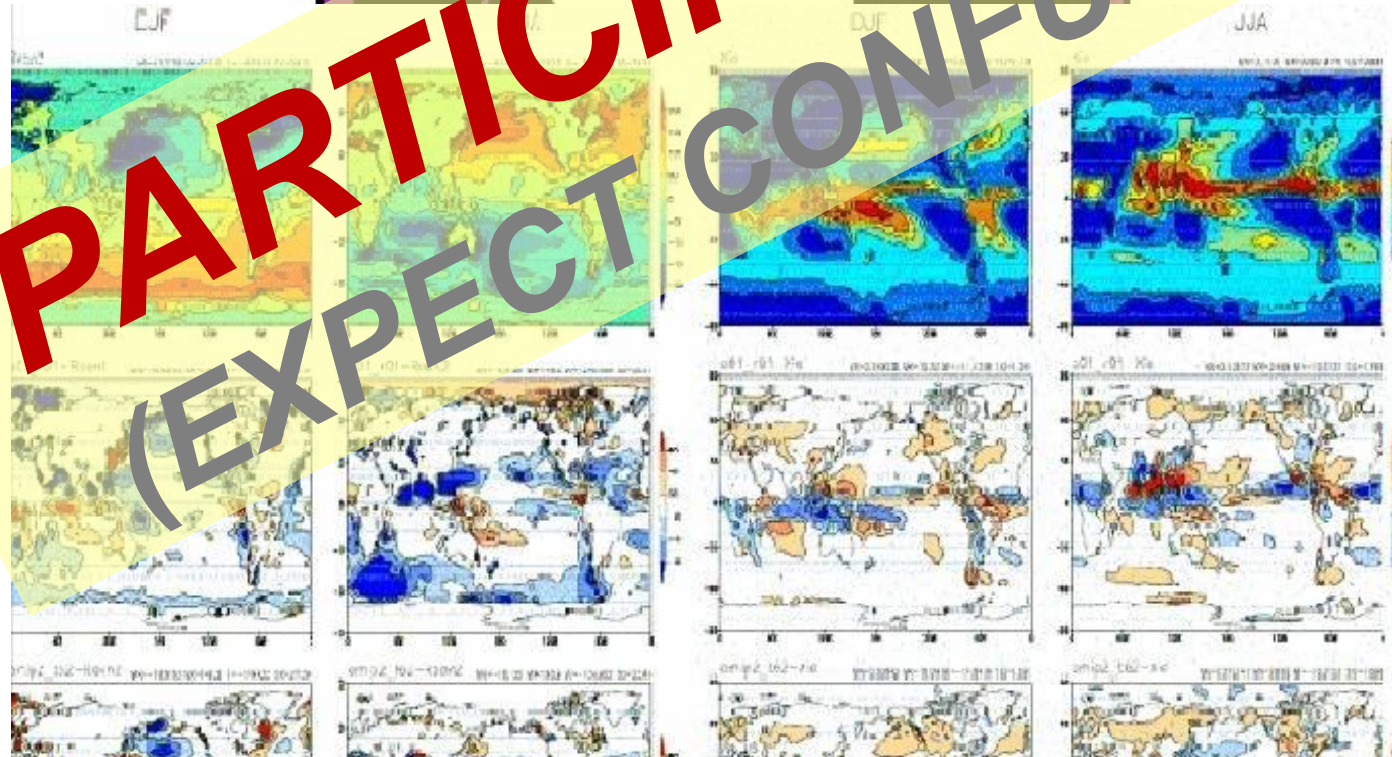
A Model of Usual Experience of Communications

Seasonal Forecast of Extreme Precipitation for June-August 2008





PARTICIPATORY!
(EXPECT CONFUSION)



LET'S
PLAY!

**Winning Team:
Most standing by end**



**Your
Decision:**

WRONG?

**GAME
OVER!**





YOU
Row = Team

Rains
OK



Act in Vain →

Out !

Flood



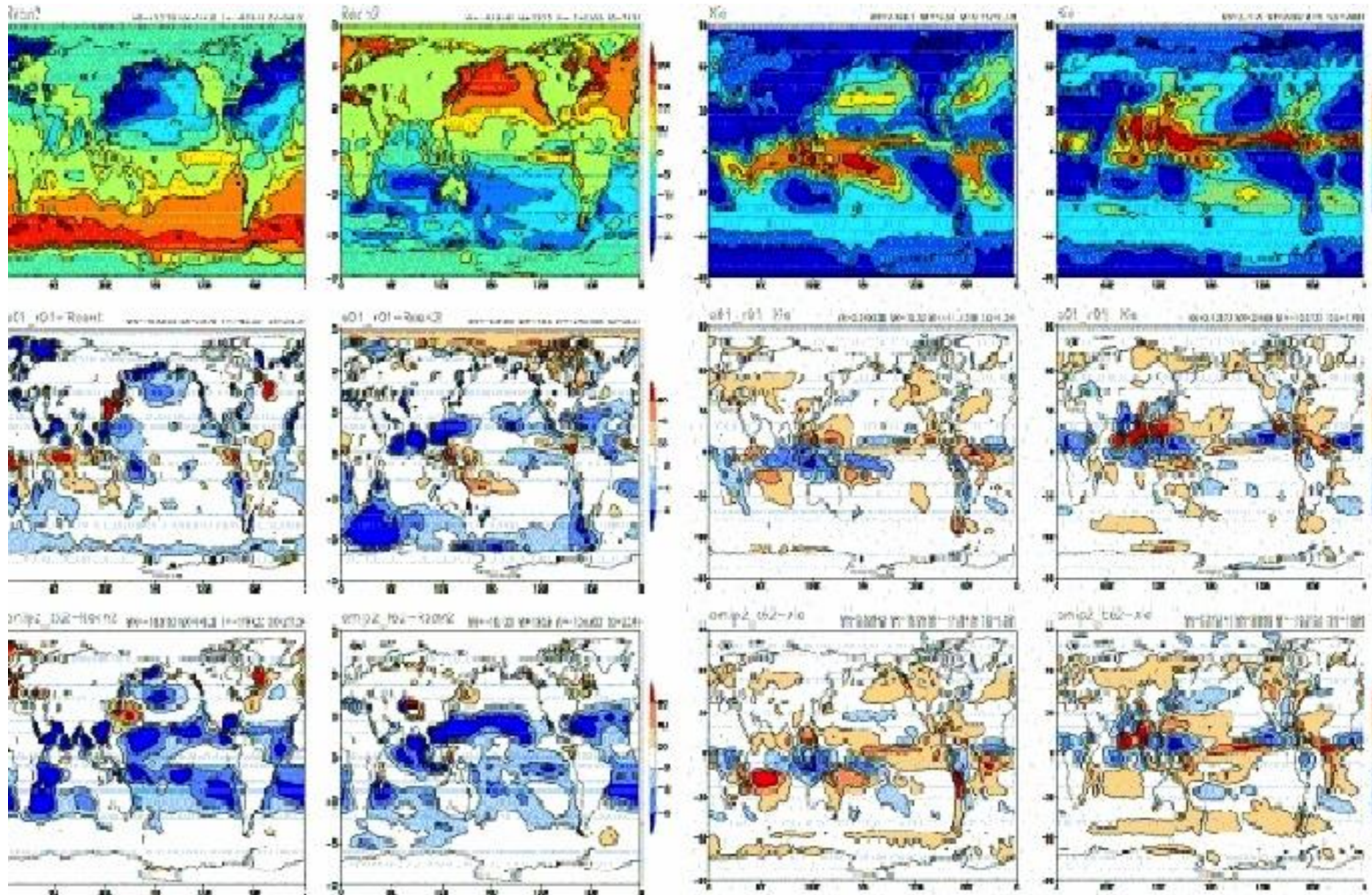
Fail to Act →

Disaster !!

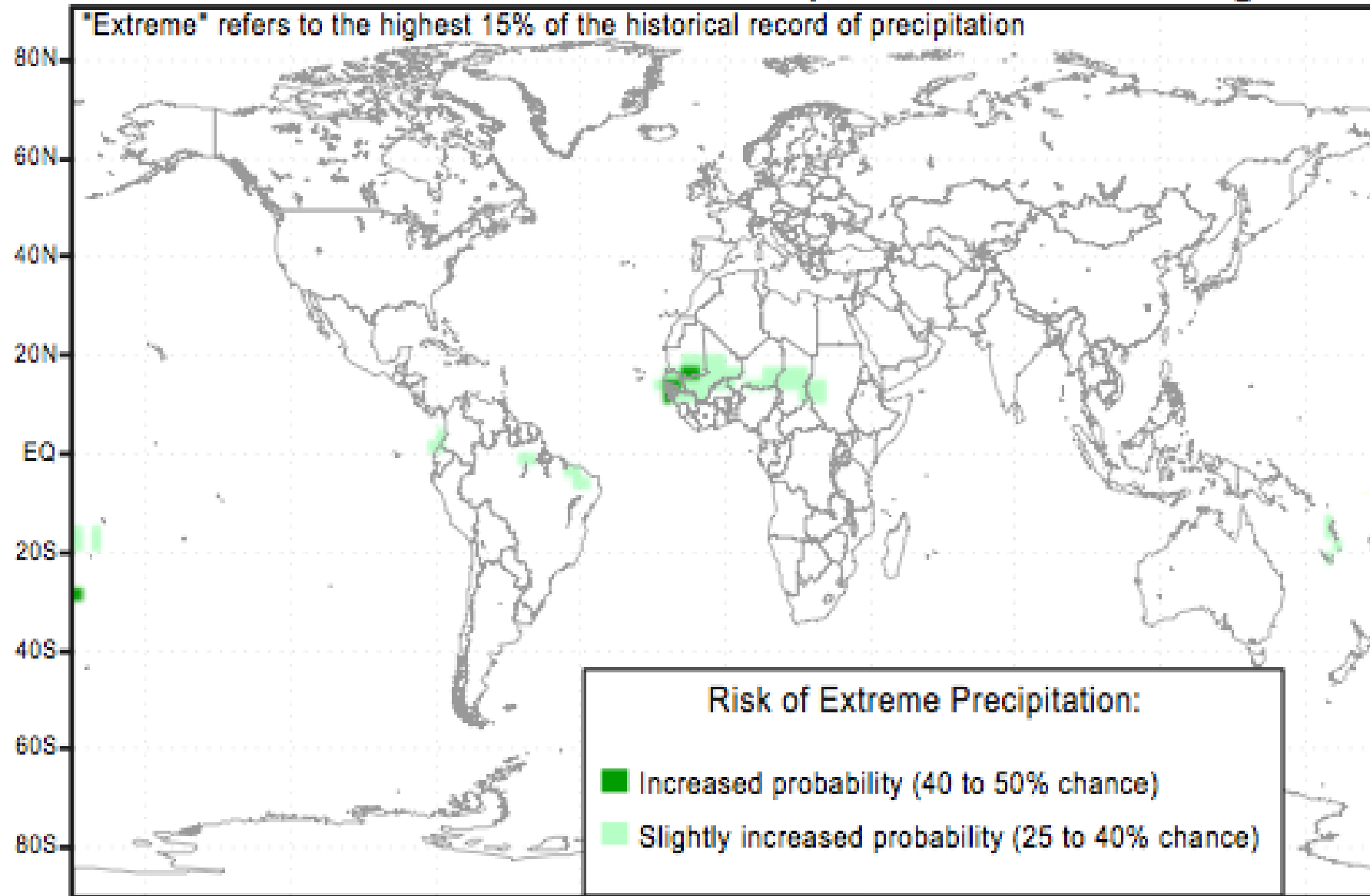
**Nobody standing?
Crisis in your row!**

**Winning Row:
Most standing by end**

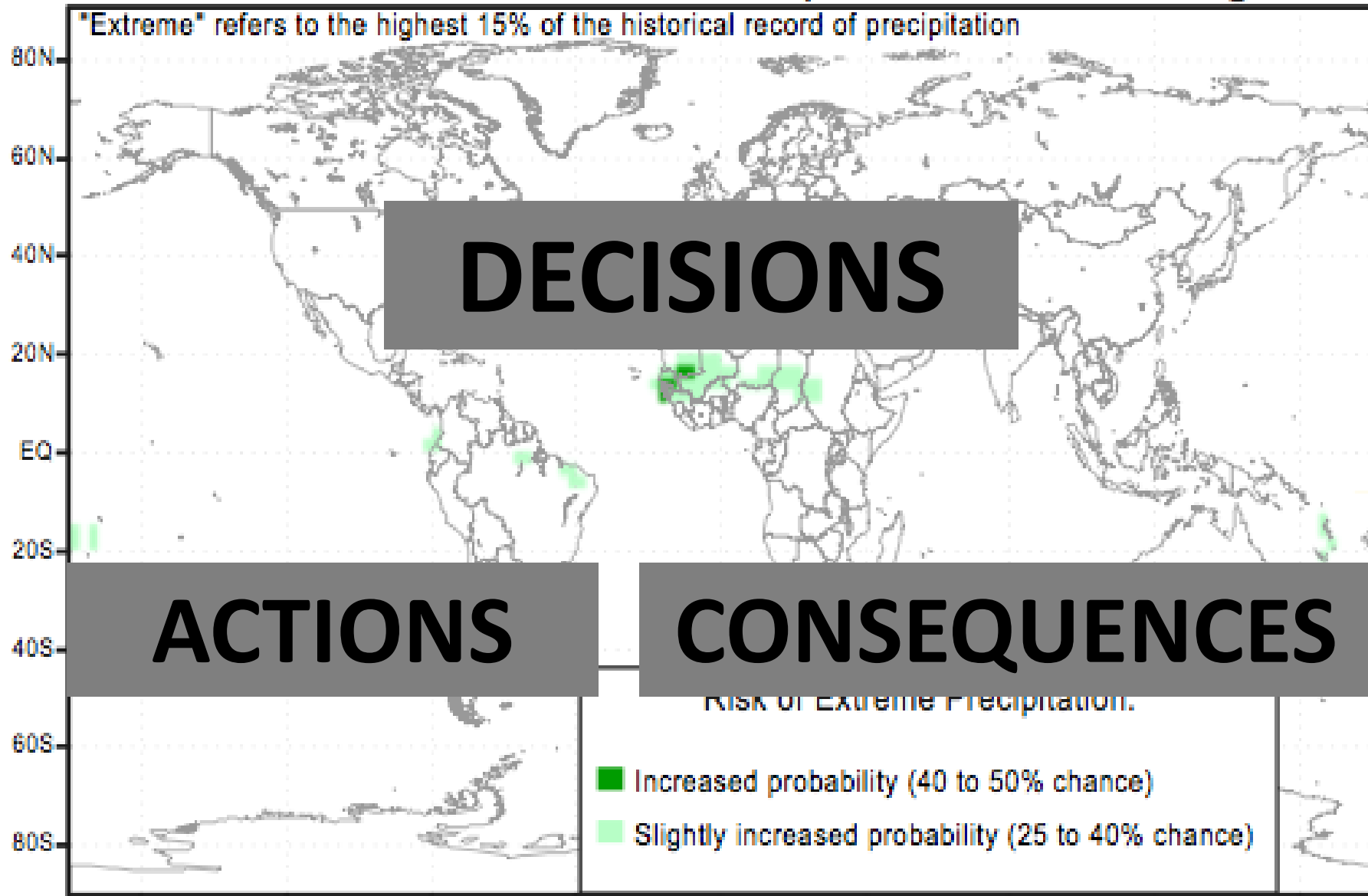
The Climate is Changing...



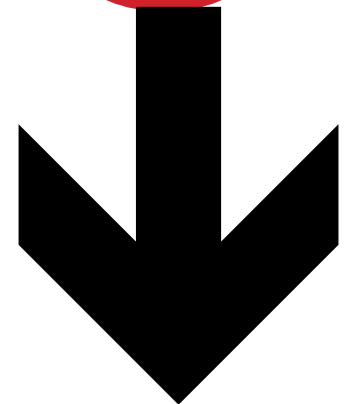
Seasonal Forecast of Extreme Precipitation for June-August 2008



Seasonal Forecast of Extreme Precipitation for June-August 2008



НУН?



АНА!



At Universities



Games for a New Climate: US. Pablo Suarez plays *Dodging the Storm* at the White House in Washington, DC. (Photo: American Red Cross)

At the White House



With Communities

Gameplay *beats* Powerpoint

1. **Decision-centric** (*Not “info-centric”*)
2. **Active learning** (*Peer-to-peer, “Aha!” moments UNFCCC*)
3. **Serious, fun engagement** (*Emotions matter! RockFound*)
4. **Data collection on decisions** (*In real time GEC*)
5. **Optimization platform** (*illiteracy no problem*)



Photo: IFRC

RED CROSS/RED CRESCENT

CLIMATE CENTRE



International Federation
of Red Cross and Red Crescent Societies

The Netherlands  **Red Cross**

<http://www.climatecentre.org>