



WORLD
RESOURCES
INSTITUTE

THE ROLE OF RESEARCH FOR EFFECTIVE SDG IMPLEMENTATION

RIISING TO THE CHALLENGE

Kitty van der Heijden,
Director Europe, Director Africa
World Resources Institute



A BIG RESEARCH GAP

Data and knowledge is unavailable



Drowning in Data



RESOURCEWATCH

A BIG RESEARCH GAP



Data and knowledge is unavailable

Data and knowledge is unused



**1. MORE RESEARCH ON INTERCONNECTION BETWEEN 3
PILLARS OF SUSTAINABLE DEVELOPMENT**

RESEARCH CONCLUDES:

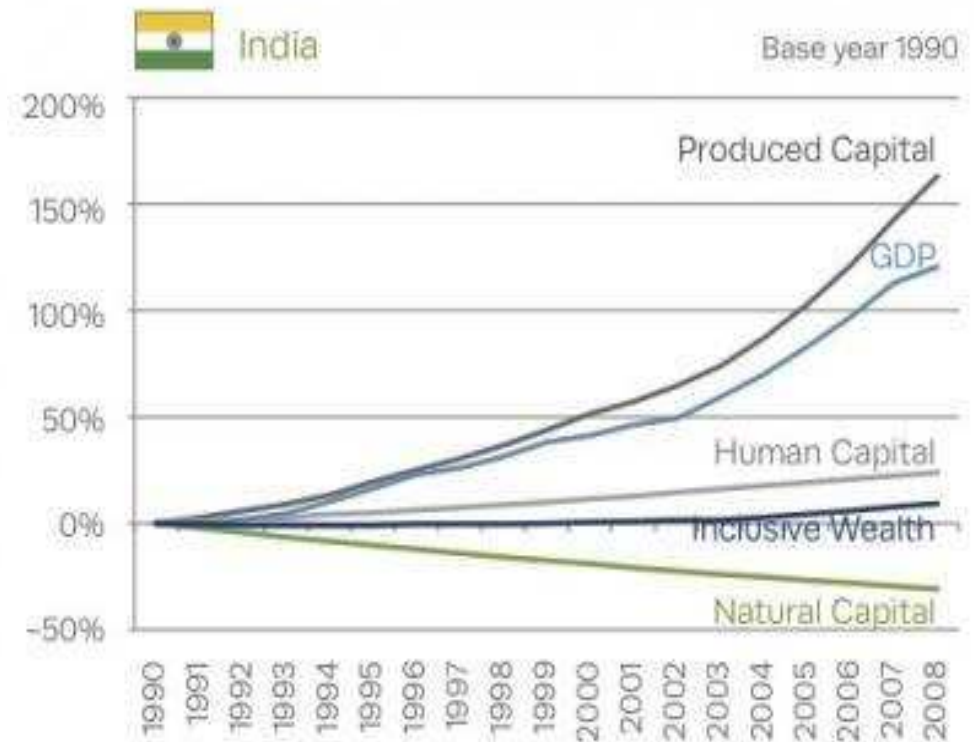
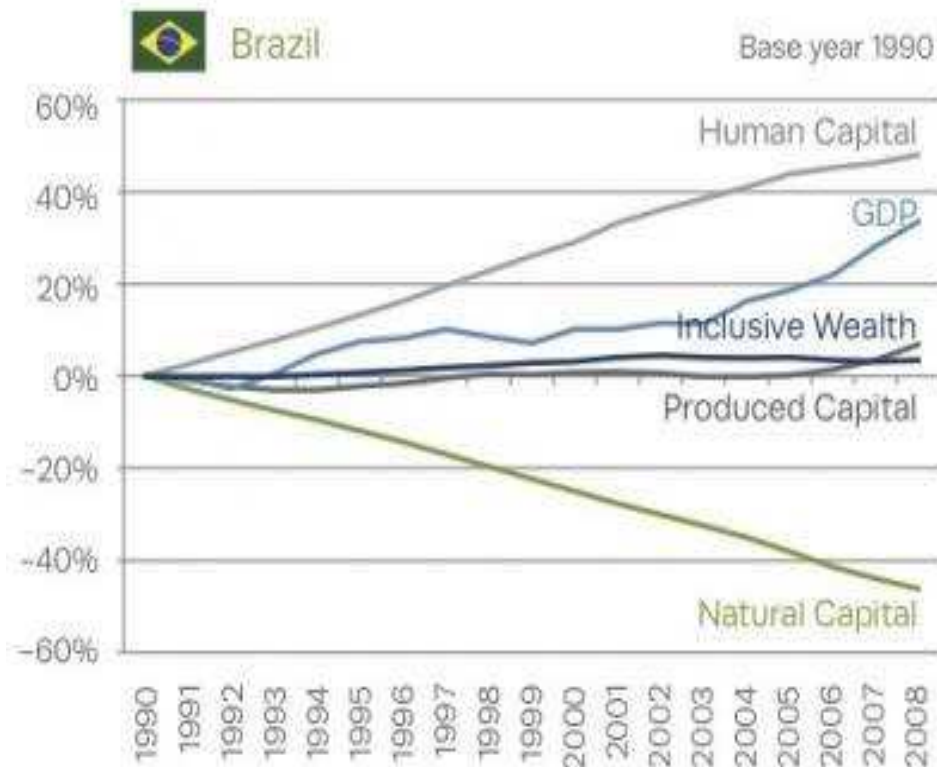
**WE ARE
DESTROYING
EARTH.**

COULD YOU KINDLY
REPHRASE THAT IN
EQUIVOCAL, INACCURATE,
VAGUE, SELF-SERVING AND
ROUNDBOUT TERMS THAT
WE CAN ALL UNDERSTAND?

GOVERNMENT

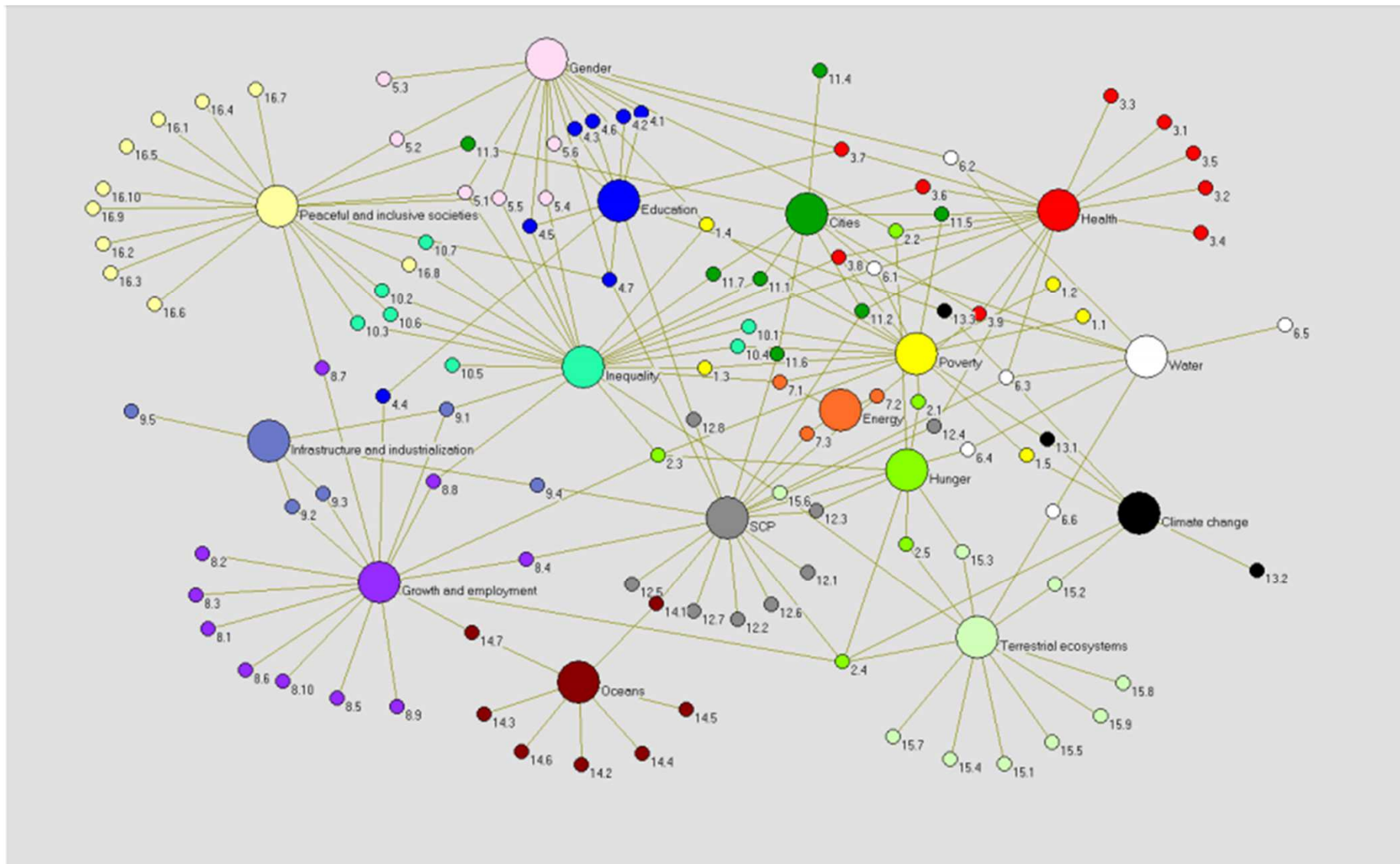


UNECONOMIC GROWTH



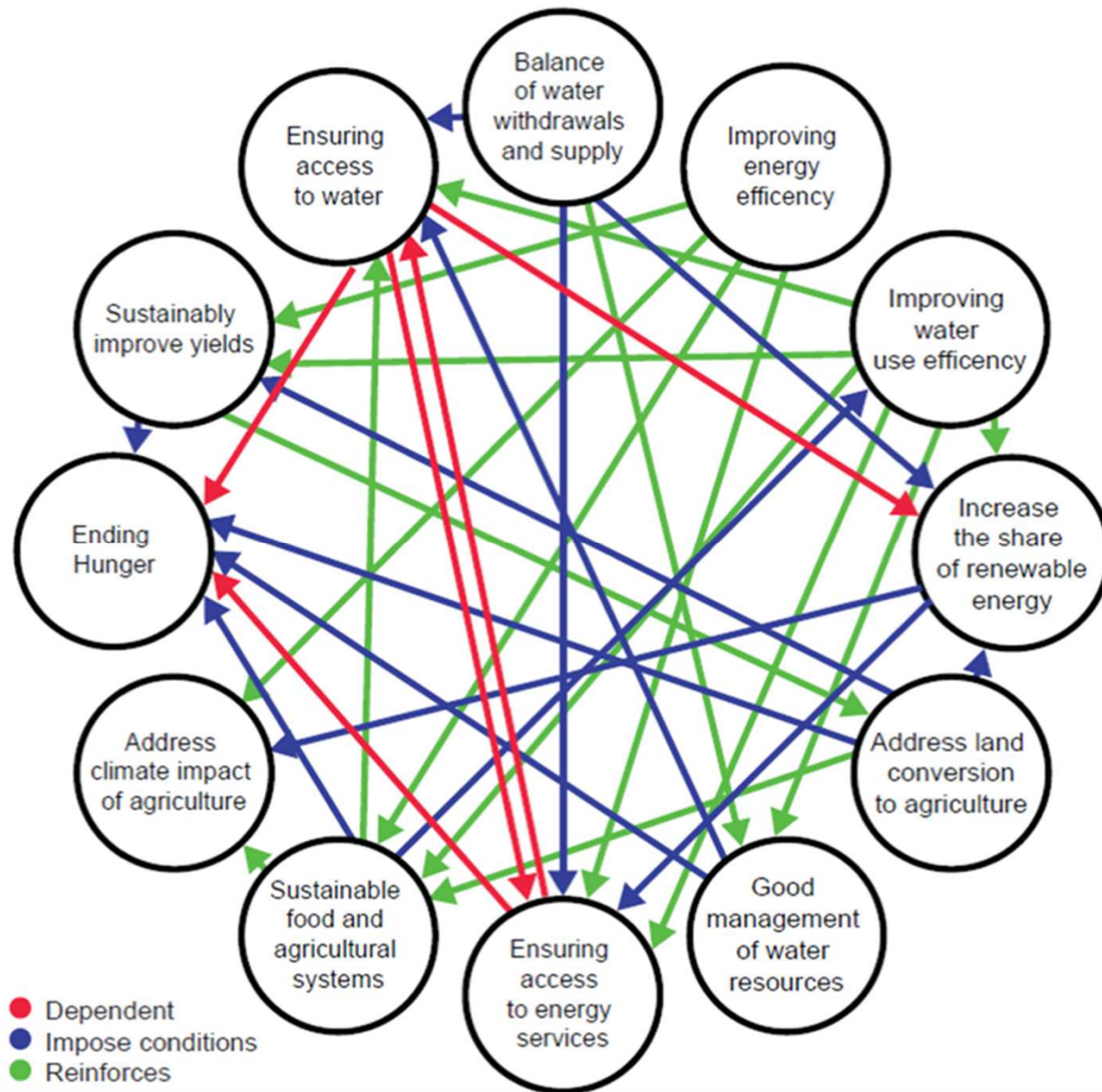
Source: UNU-IHDP, 2012

SDGS AS ARE AN INTEGRATED ECOSYSTEM



Source: David Le Blanc, Rio+20 Working Paper 4,
"Towards Integration at Last? The SDGs as a Network of Targets"

INTERDEPENDENCIES IMPLY NEW RESPONSIBILITIES



Source: SEI, Weitz *et al.* (2014).



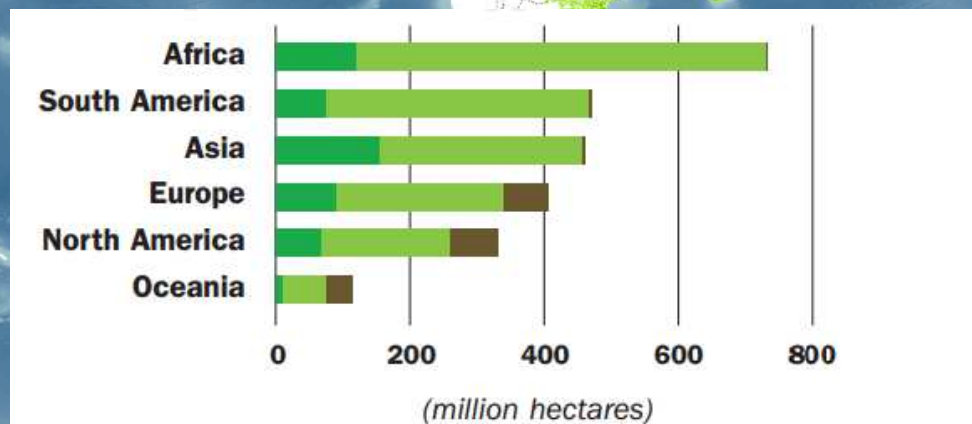
WORLD RESOURCES INSTITUTE

Accelerate multi-disciplinary research that break down traditional academic silos and the corresponding governance silos



Example: restoration

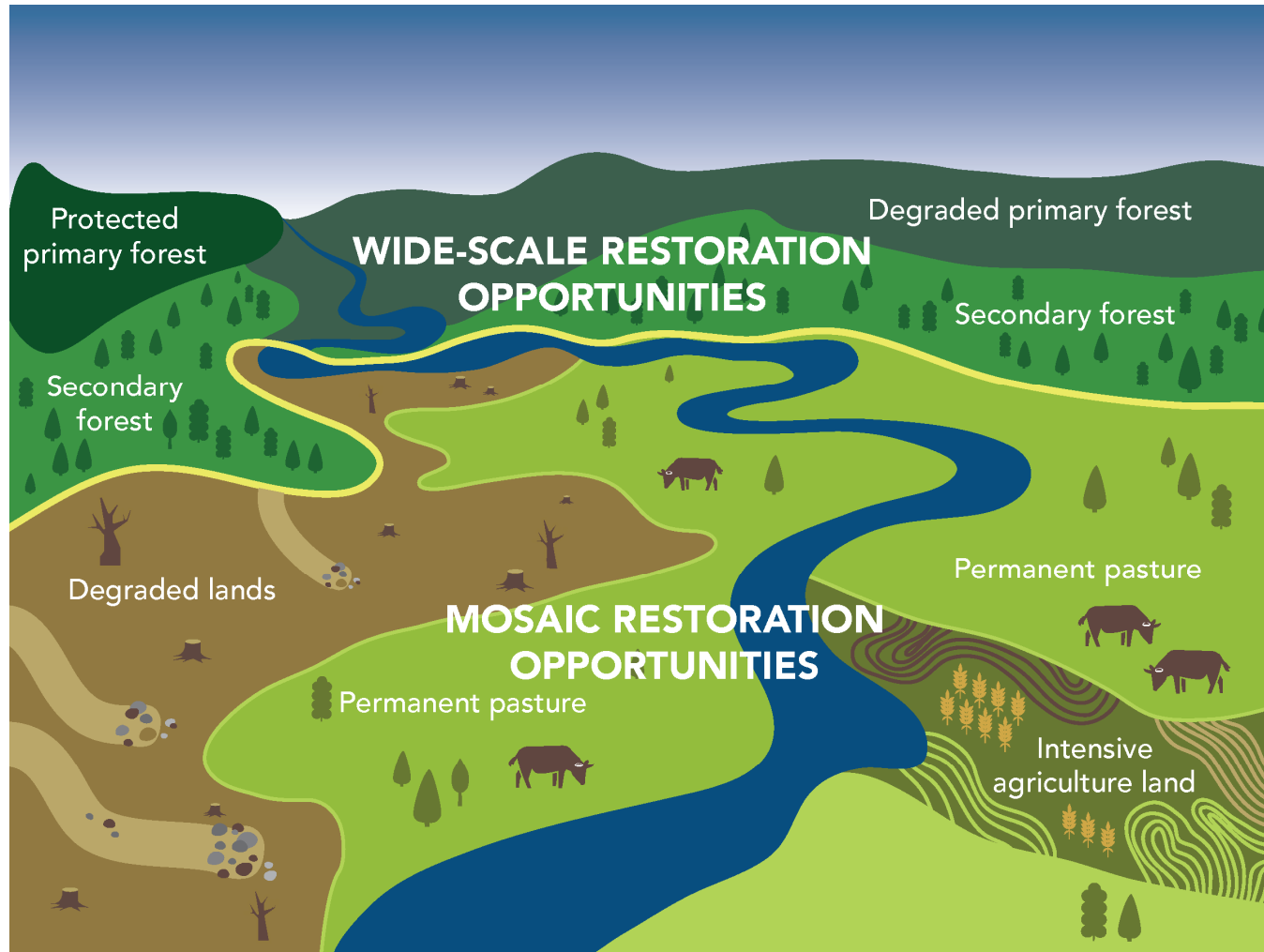
More than 2 billion hectares have opportunity for restoration globally



Is it about restoring the benefits that trees provide in the landscape

or also ...

Food
Forests
Water
Energy
Climate change mitigation

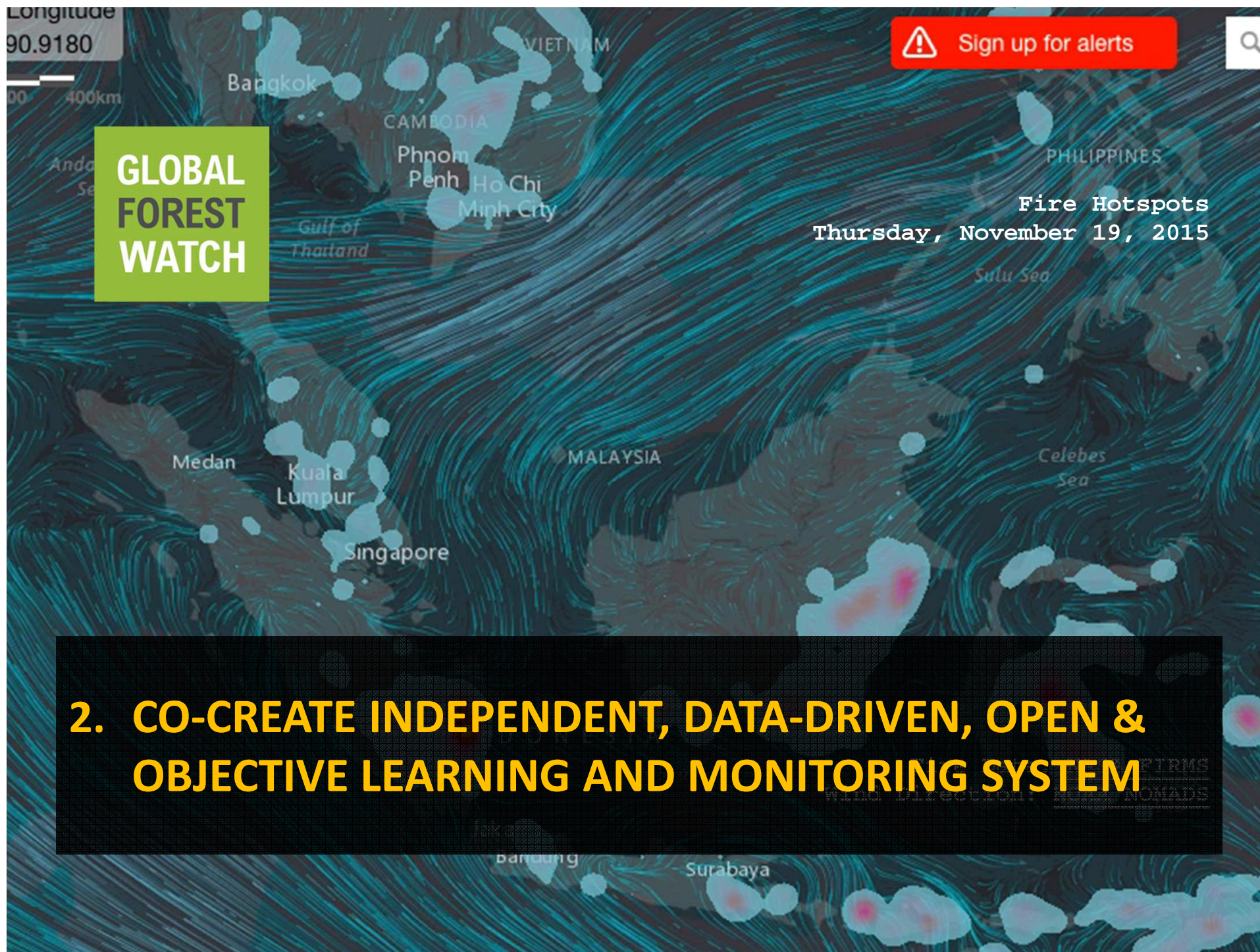


Livelihoods
Gender
Economic growth & jobs
Sustainable business
Climate adaptation
Resilience


Benefits of restoring 150 mln hectares:

- \$84 billion in economic benefits annually
- 47 gigatons of CO₂e captured (up to 15% reduction in emissions gap)
- Cultural benefits





GLOBAL
FOREST
WATCH

 Sign up for alerts

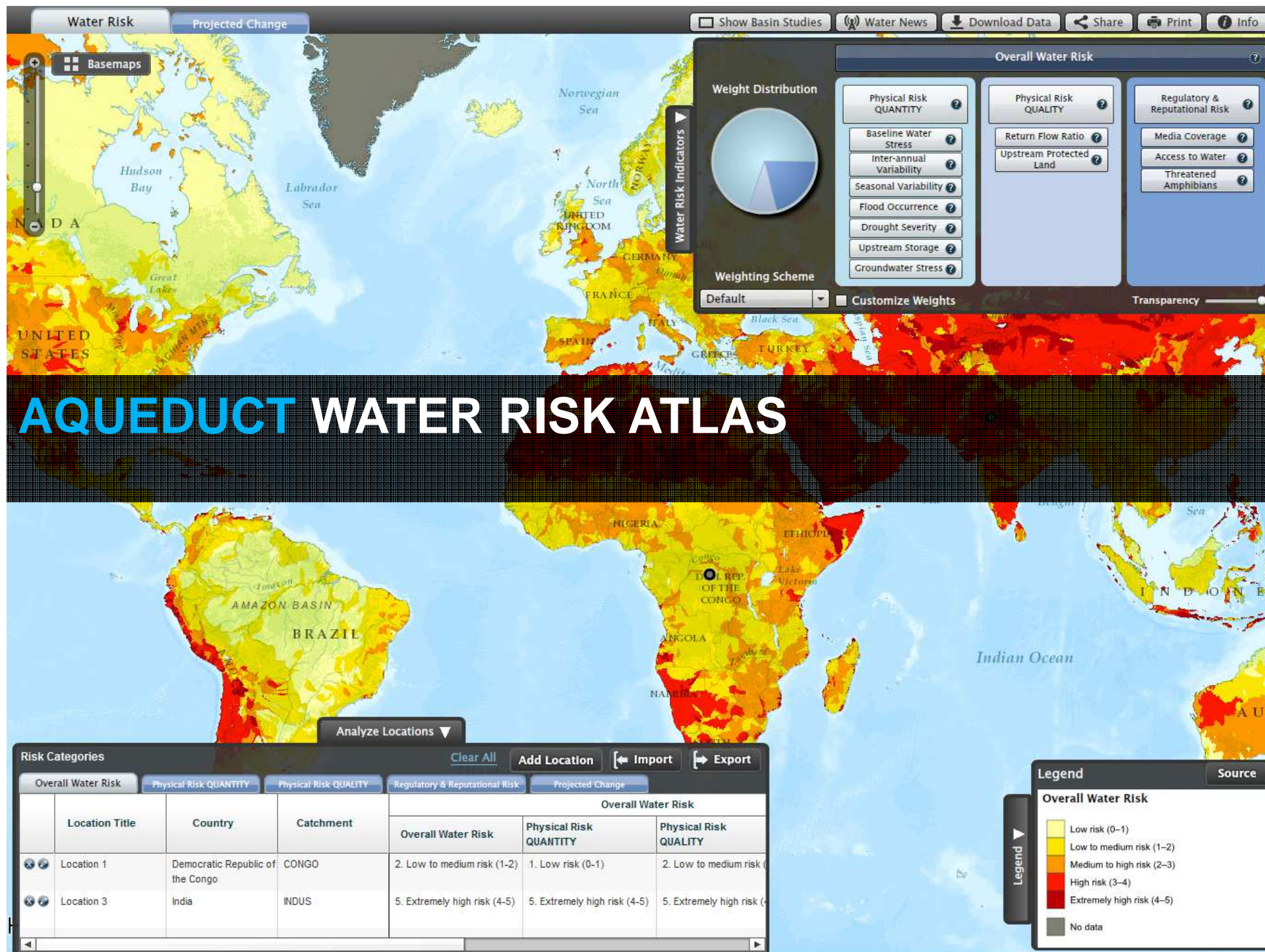


Fire Hotspots
Thursday, November 19, 2015

2. CO-CREATE INDEPENDENT, DATA-DRIVEN, OPEN & OBJECTIVE LEARNING AND MONITORING SYSTEM

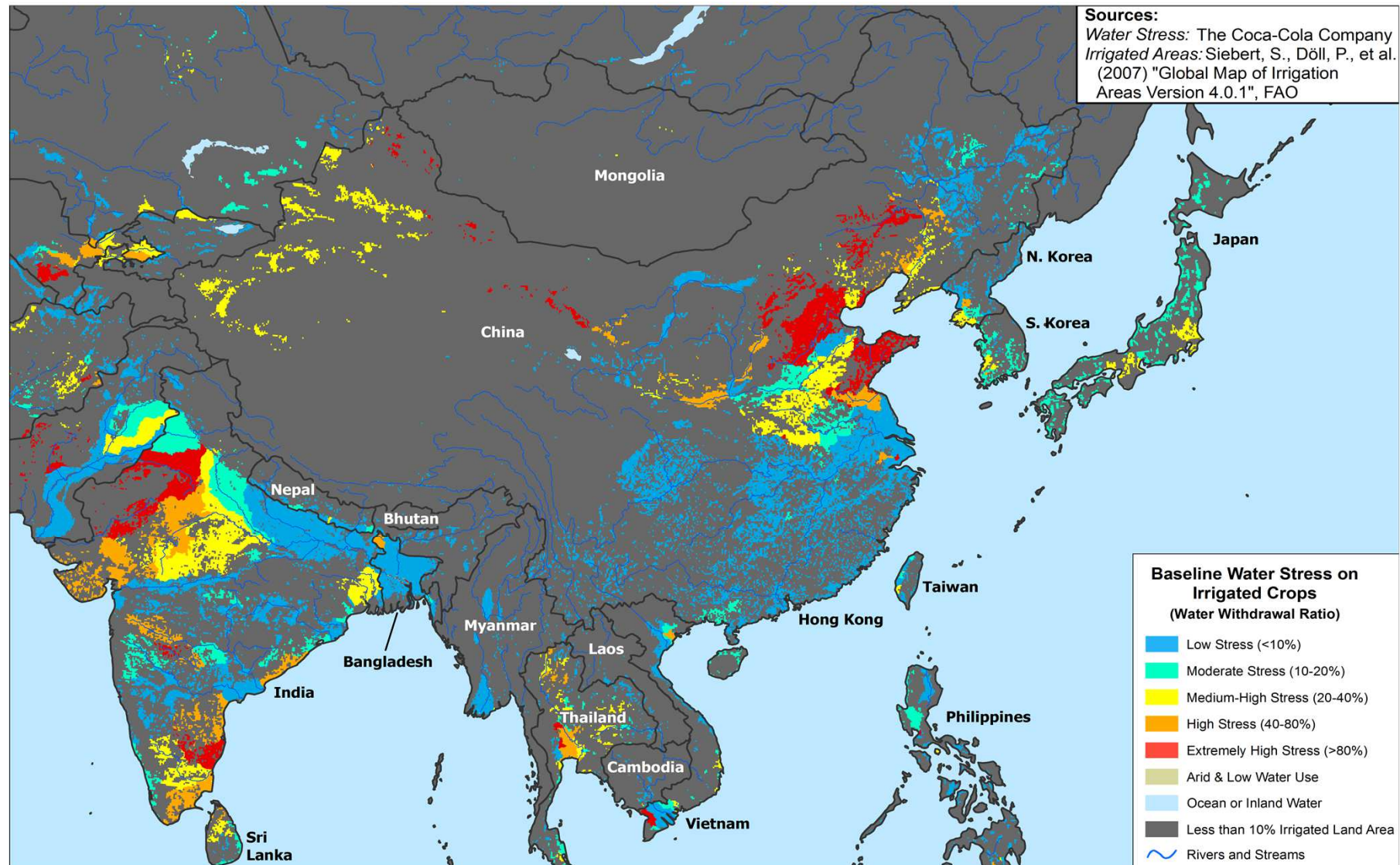
Data drives impact





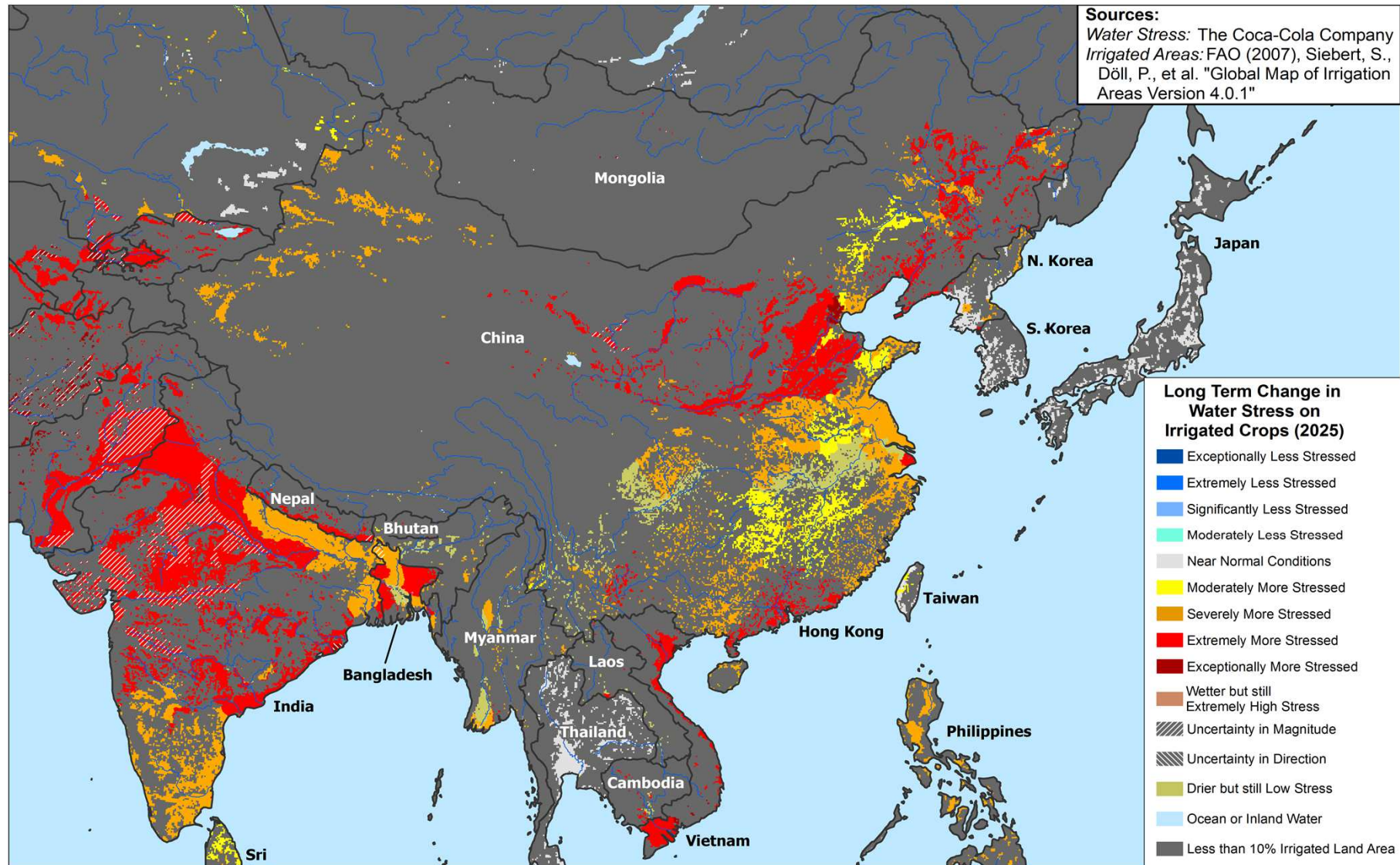
39% of irrigated cropland in this region is
located in areas of water stress concern

Baseline Water Stress in areas with Irrigated Agriculture



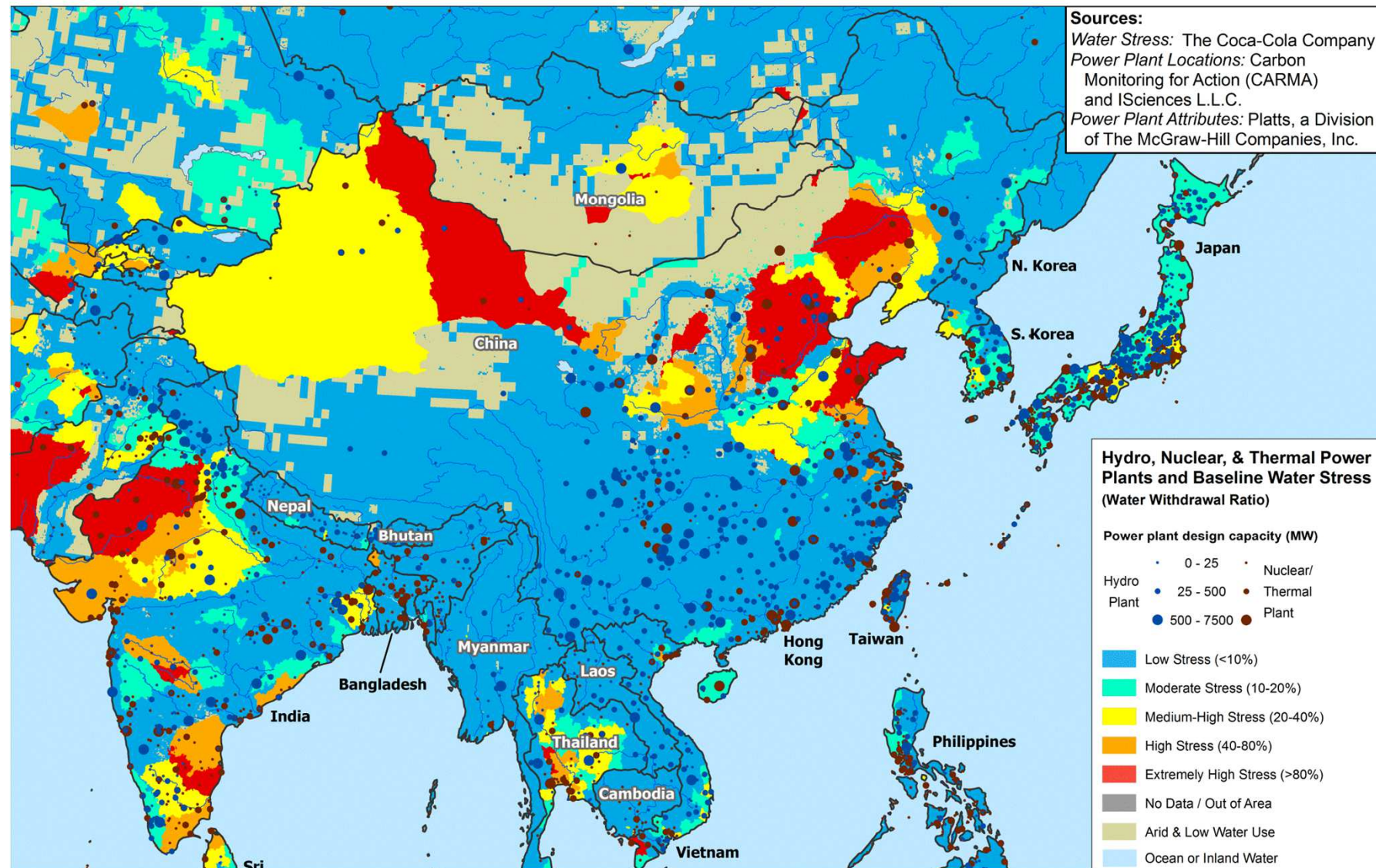
75% of current irrigated cropland in this region would see water stress grow 2 to 8 times worse by 2025

Change in Water Stress by 2025 in areas with Irrigated Agriculture (IPCC Scenario A1B)



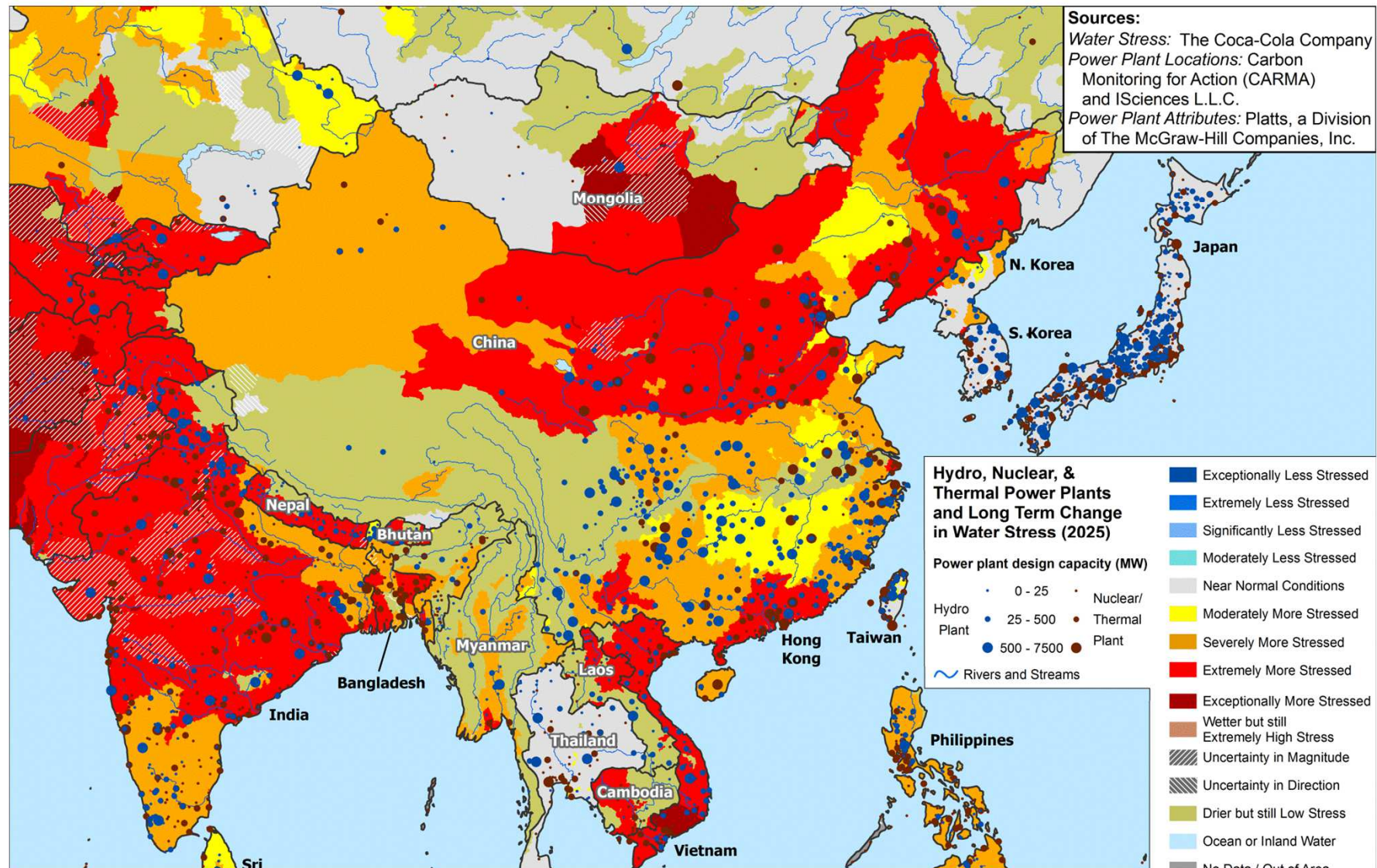
19% of power plant design capacity in this region
is located in areas of water stress concern

Baseline Water Stress and Power Plants

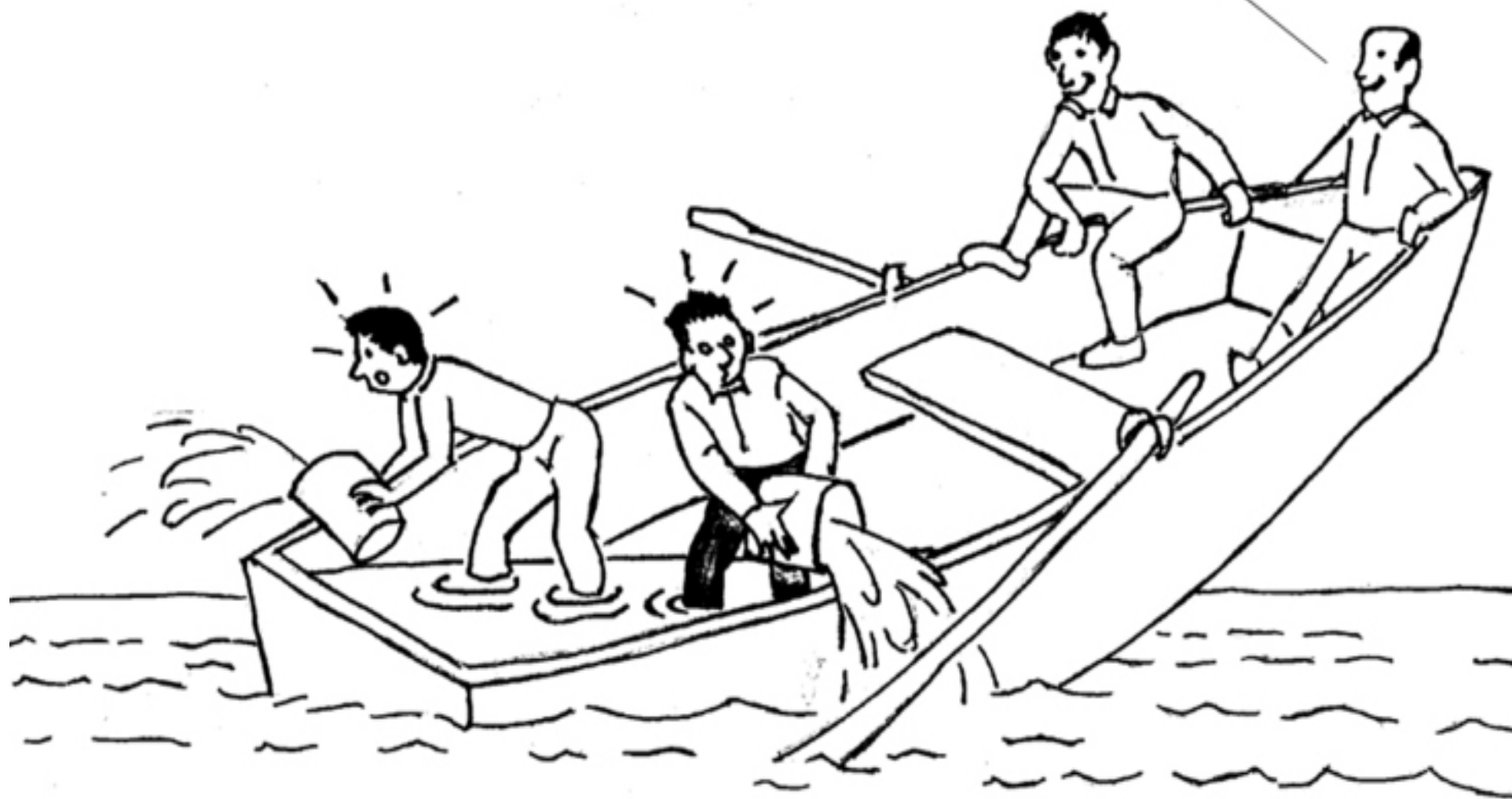


55% of current power plant design capacity in this region
would see water stress grow 2 to 8 times worse by 2025

Change in Water Stress by 2025 and Power Plants (IPCC Scenario A1B)



Sure glad the hole isn't at our end.





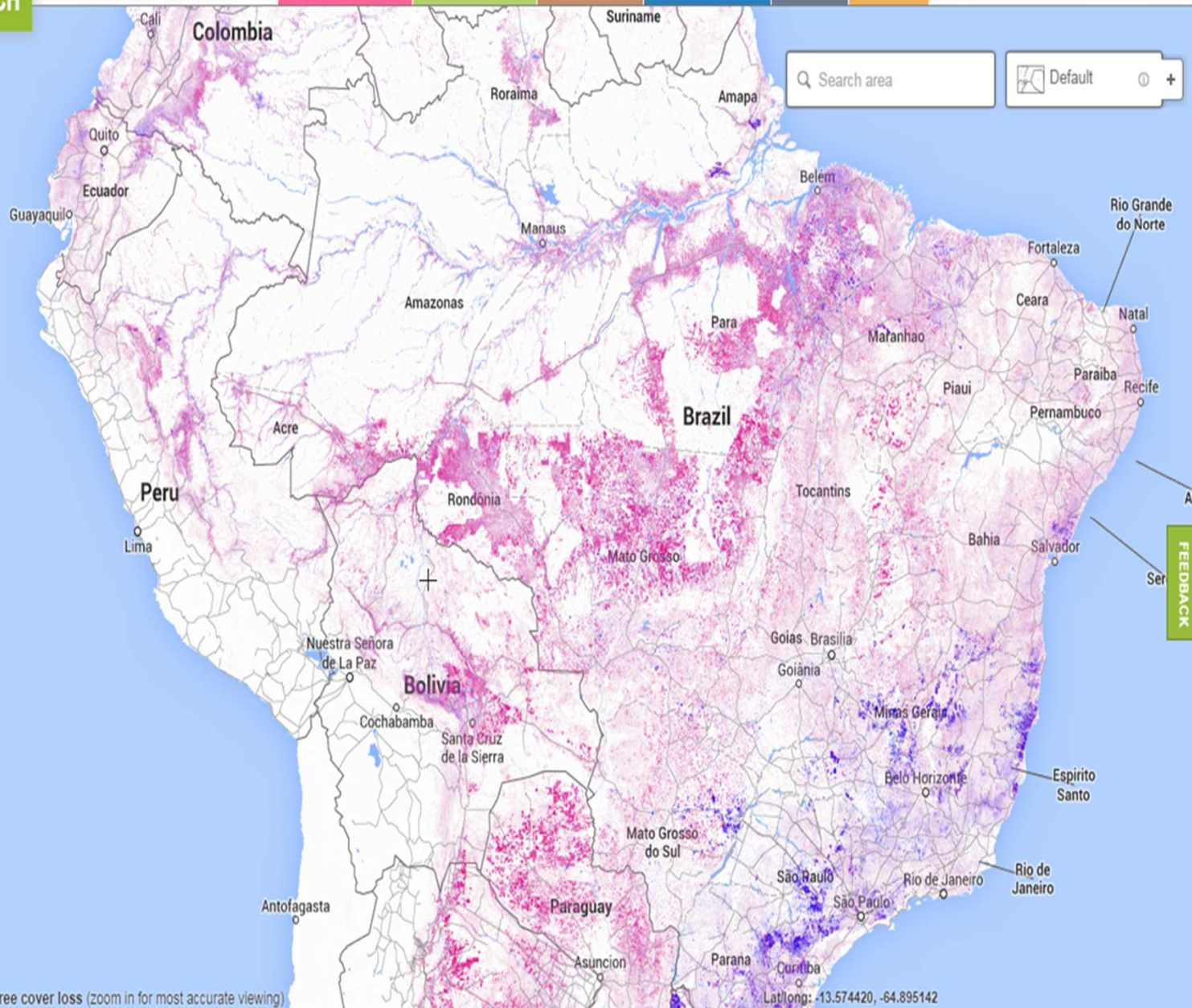
FOREST CHANGE

- UMD/Google tree cover gain ⓘ
- UMD/Google tree cover loss ⓘ

Displaying loss with > 10% canopy density.

Search area

Default ⓘ +



UMD/Google tree cover loss (zoom in for most accurate viewing)



2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

FEEDBACK

FOREST CHANGE

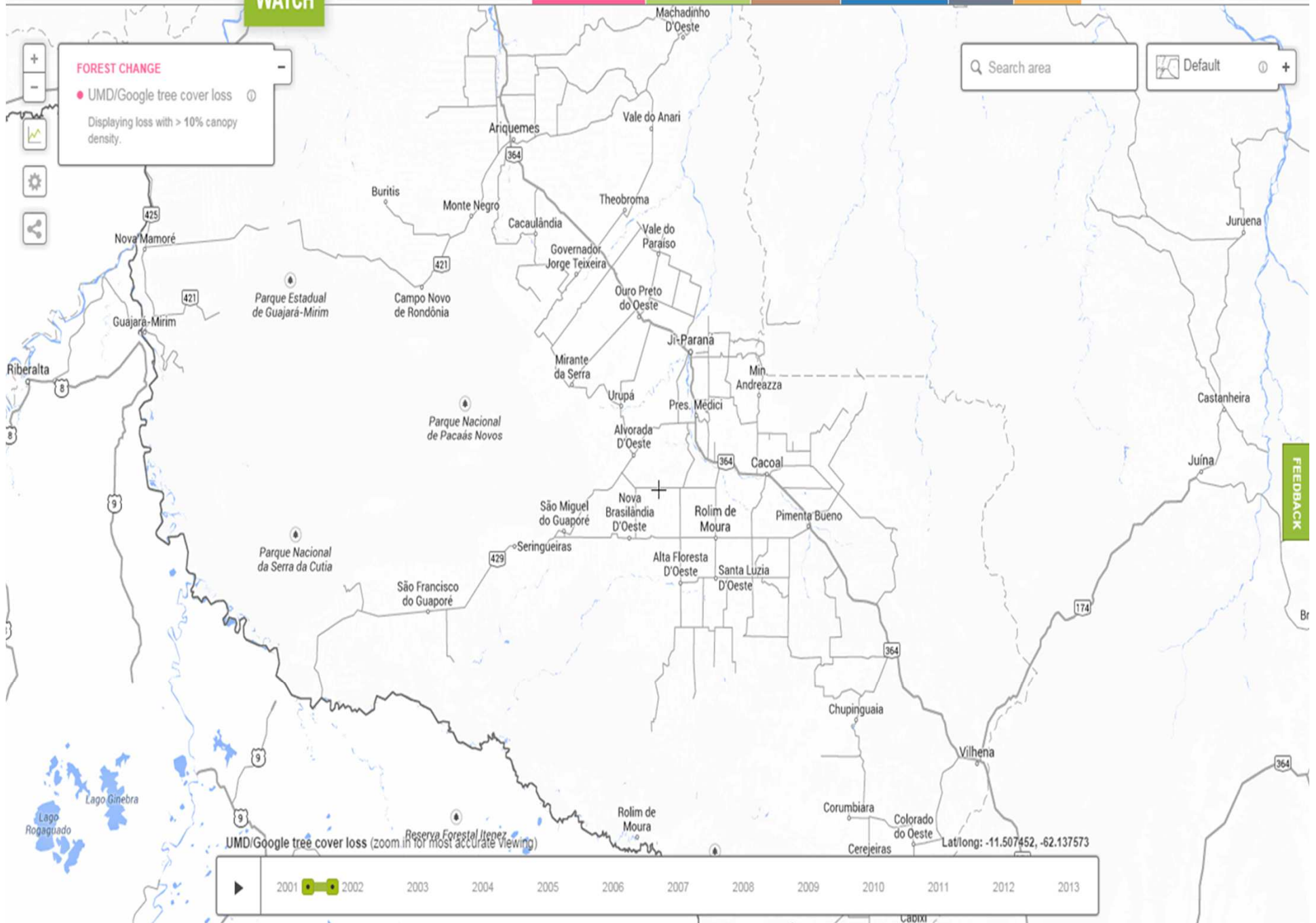
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[FEEDBACK](#)

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2008

2009

2010

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2013

Lat/long: -11.507452, -62.137573

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• UMD/Google tree cover loss

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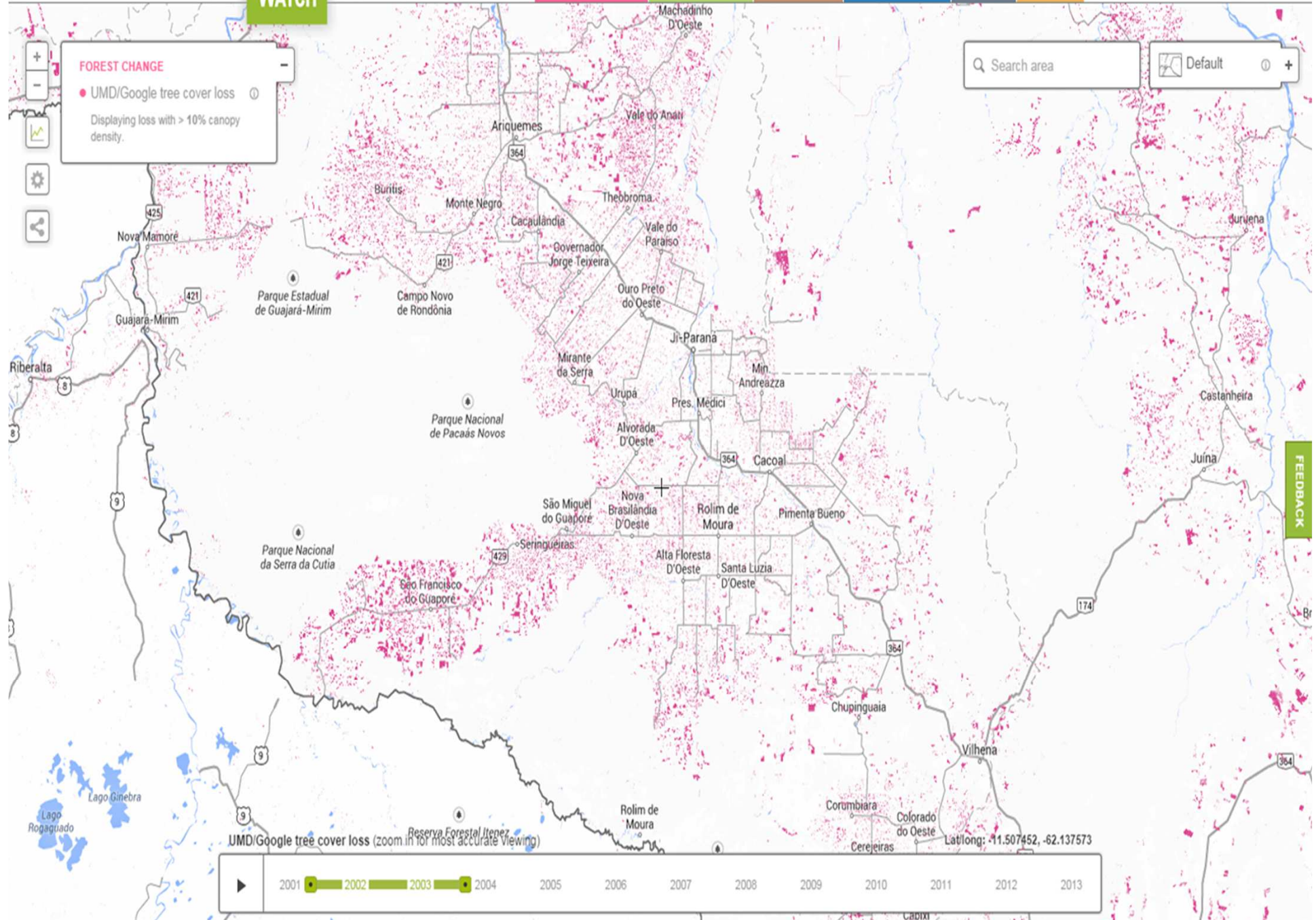
Search area

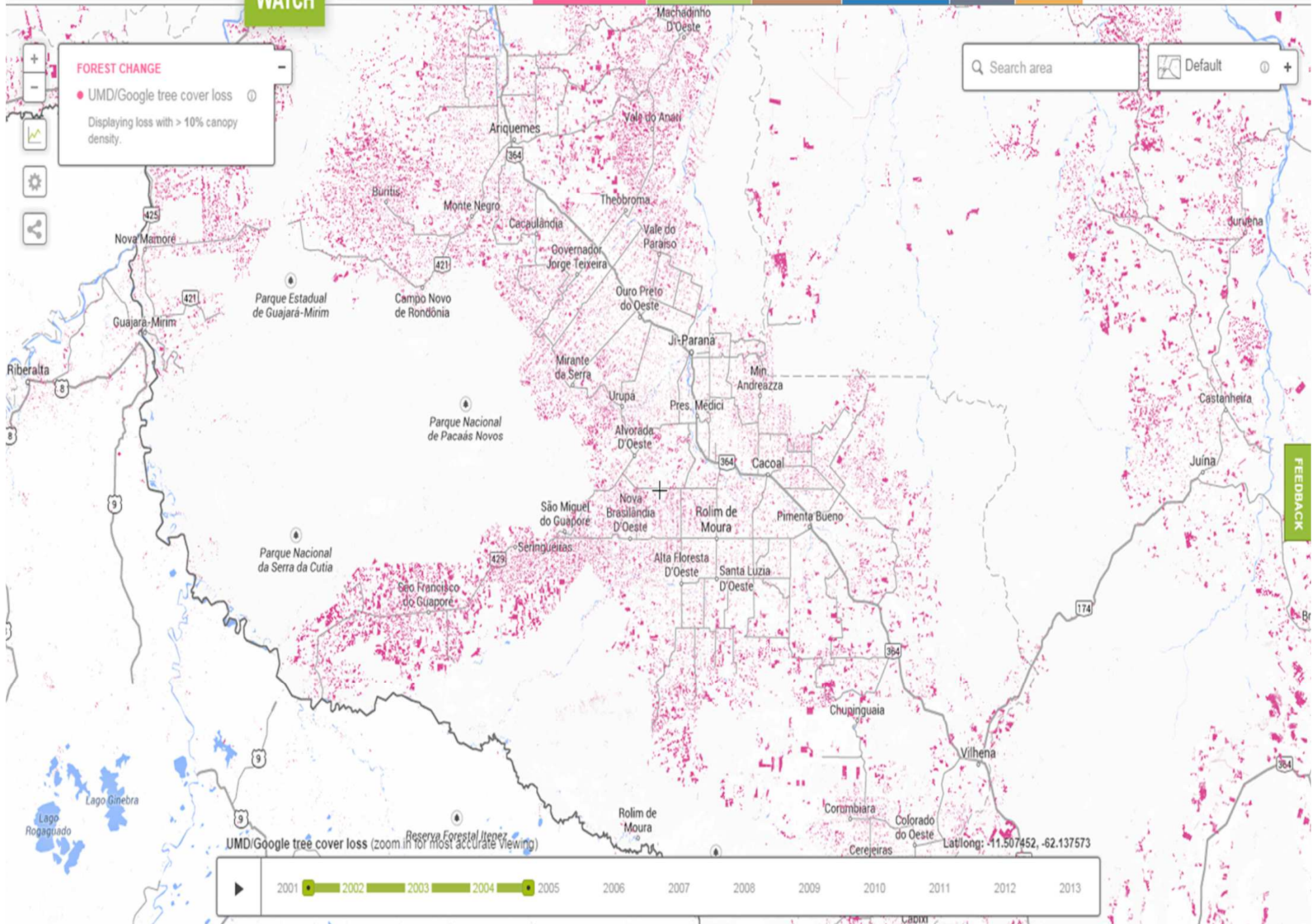
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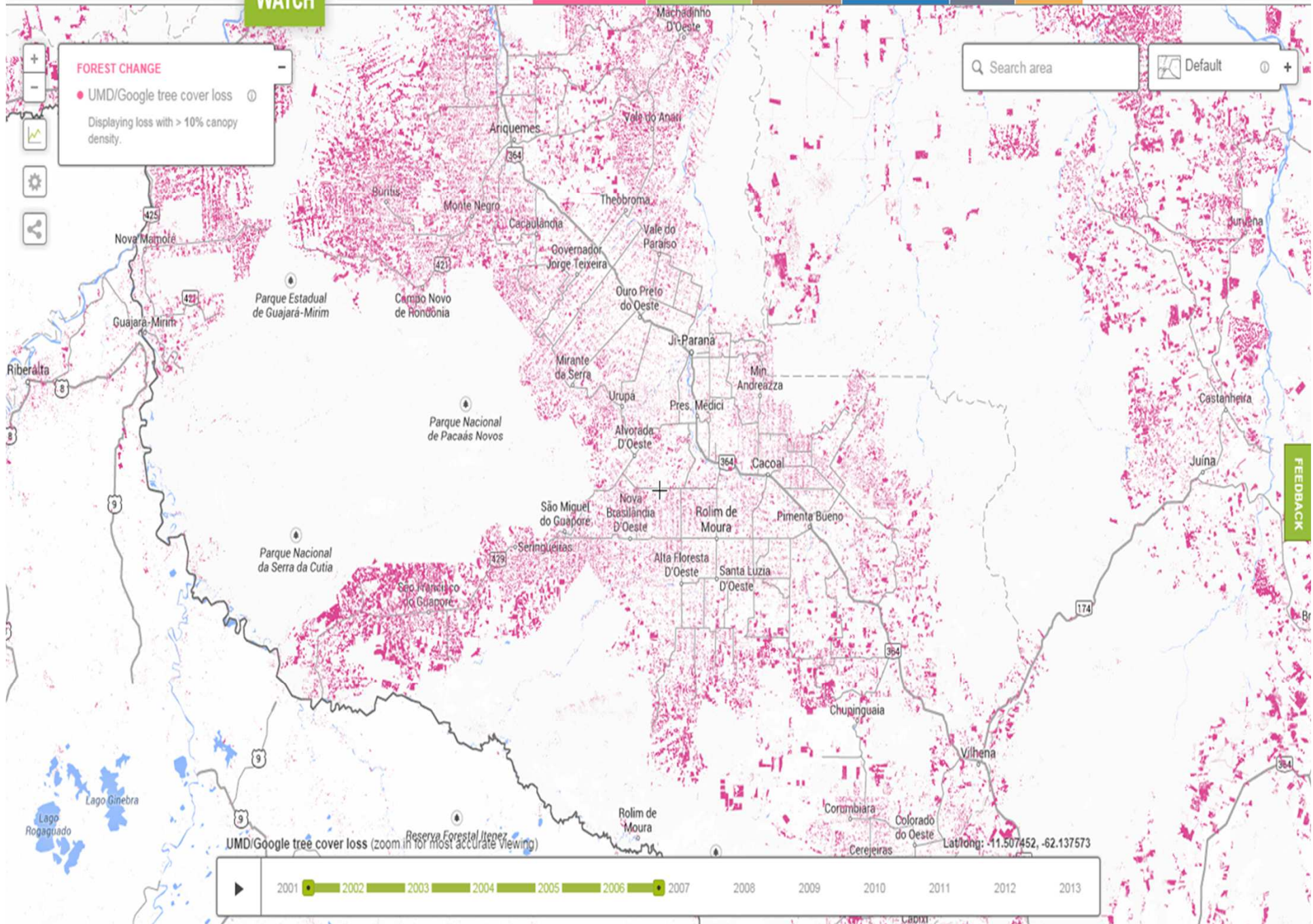
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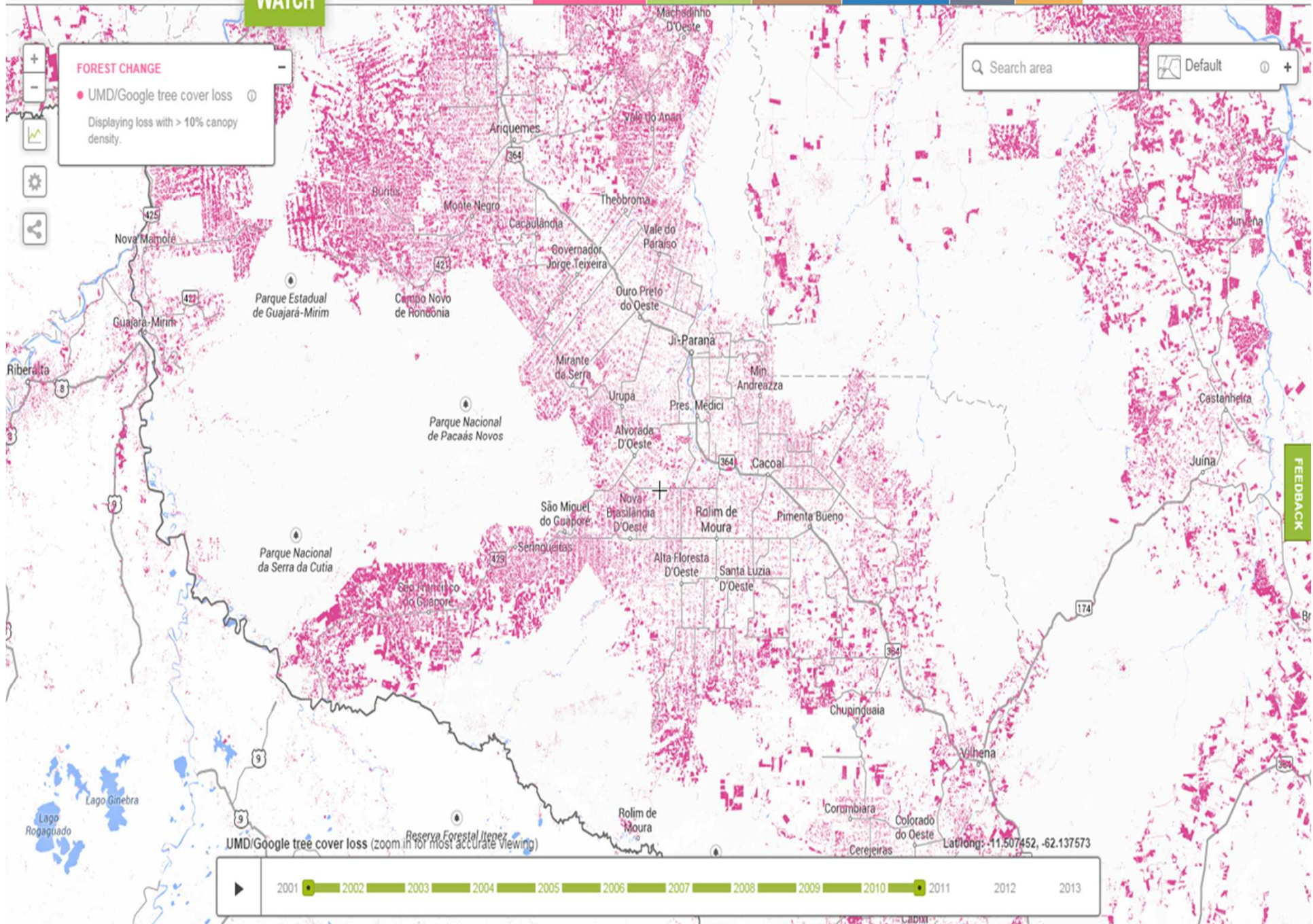
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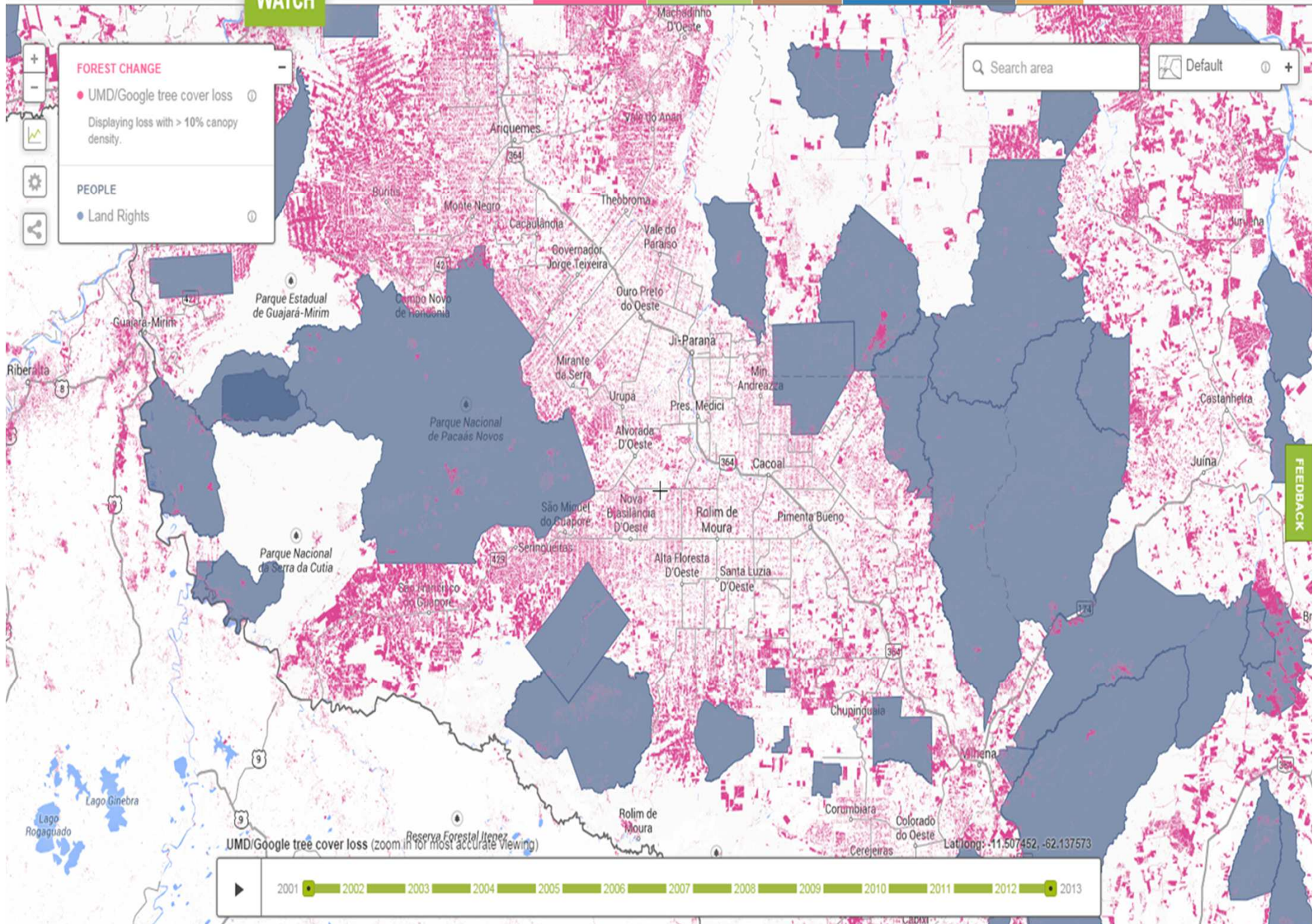
Search area

Default

UMD/Google tree cover loss (zoom in for most accurate viewing)

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FEEDBACK



3. INVESTIGATING THE ECONOMIC RATIONALE OF INVESTING IN ECOSYSTEMS



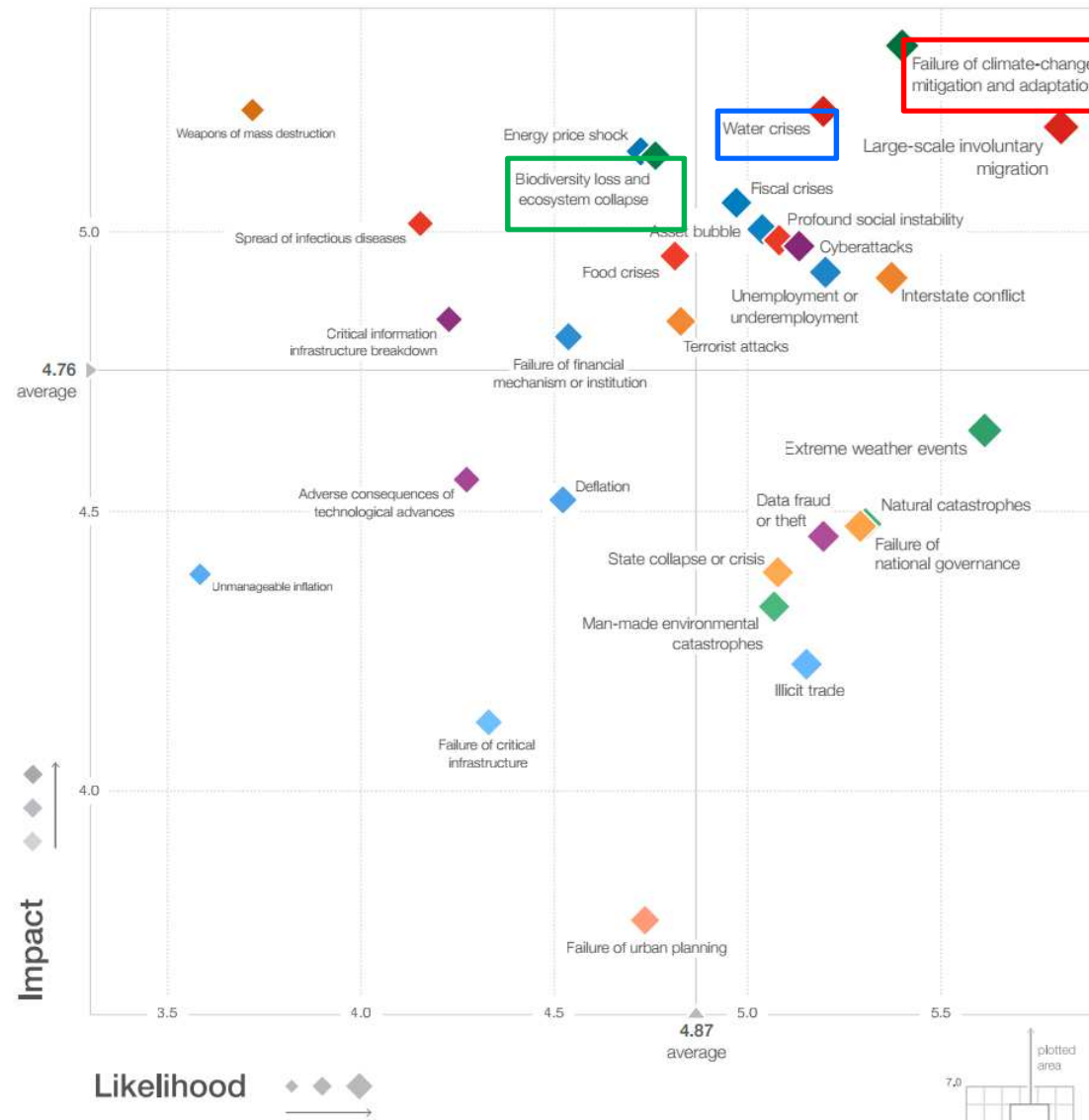
Source: FAO 2015; Photo: Alexander Edward/Flickr

WRI'S RESEARCH STANDARDS GO BEYOND THE USUAL

- Think tank**
 - ✓ Robust
 - ✓ Well written & presented
 - ✓ Independent of bias
 - ✓ Value added
- Do tank**
 - ✓ Fit for audience
 - ✓ Timely
 - ✓ Institutionally coherent
 - ✓ Actionable



WORLD ECONOMIC FORUM: ECOSYSTEM DEGRADATION IS A GLOBAL RISK

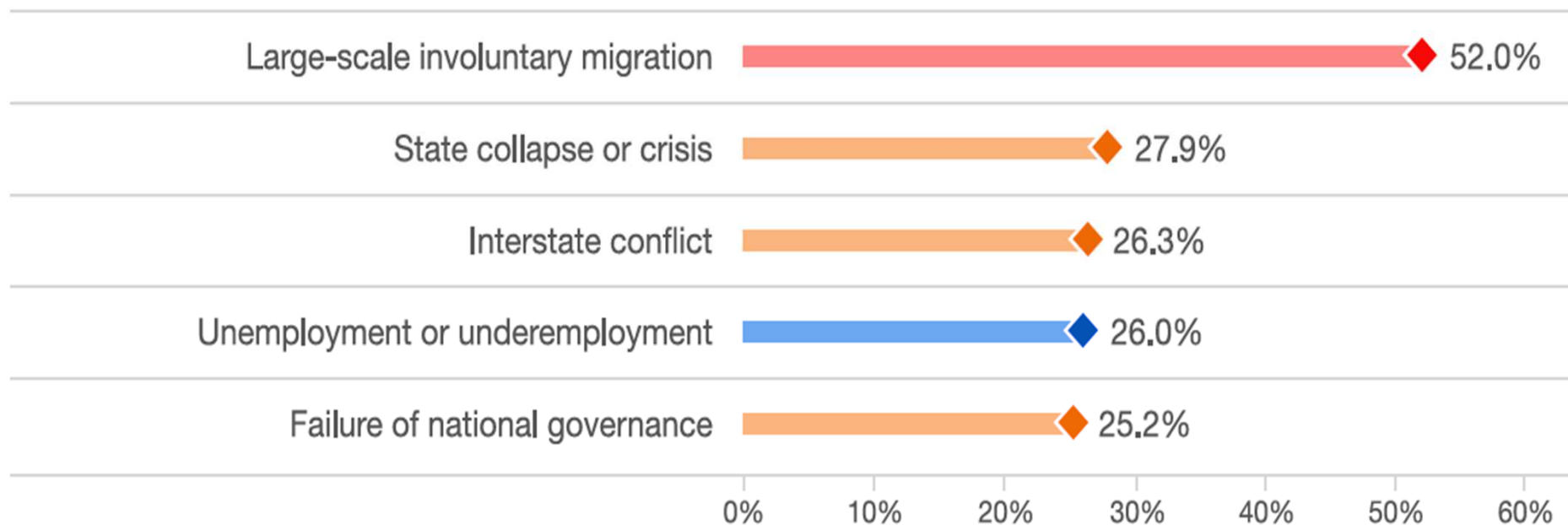


Top 10 risks in terms of Impact

- 1 Failure of climate-change mitigation and adaptation
- 2 Weapons of mass destruction
- 3 Water crises
- 4 Large-scale involuntary migration
- 5 Energy price shock
- 6 Biodiversity loss and ecosystem collapse
- 7 Fiscal crises
- 8 Spread of infectious diseases
- 9 Asset bubble
- 10 Profound social instability

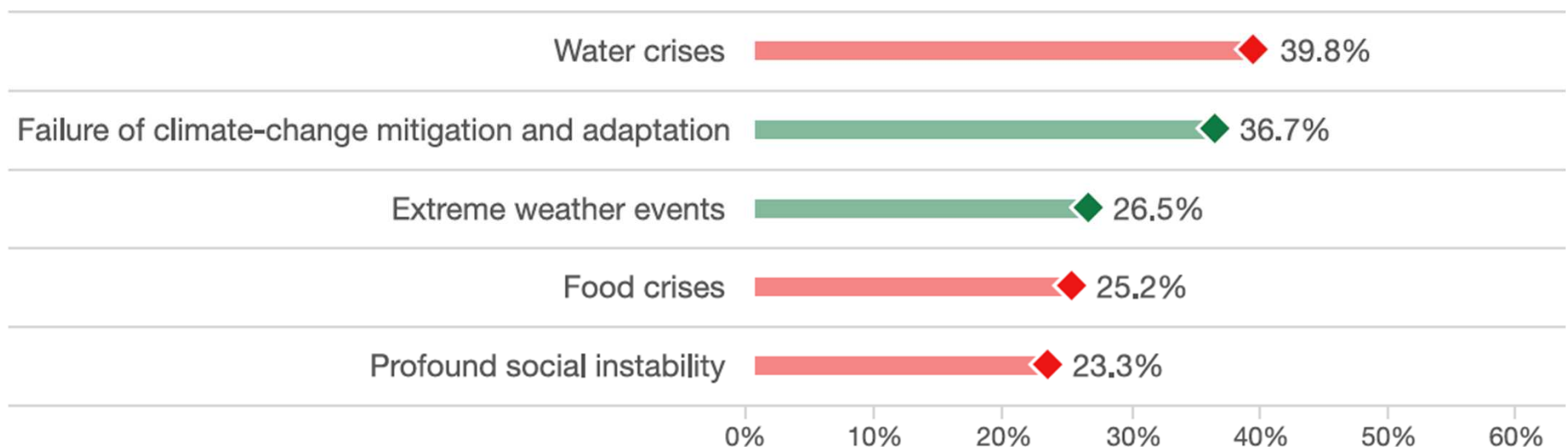
WHAT WORRIES YOU?

Global Risks of Highest Concern: For the Next 18 Months



WHAT WORRIES YOU?

Global Risks of Highest Concern: For the Next 10 Years



Note: Percent of participants mentioning the respective risk to be of high concern for the time frame of 18 months or 10 years, respectively. Participants could name up to five risks in each time frame. In each category, the risks are sorted by the total sum of mentions.

Climate change
threatens our
existence



Zzz...



Climate change
threatens our
economy



!!!





THE GLOBAL COMMISSION ON THE ECONOMY AND CLIMATE

Better Growth, Better Climate: The New Climate Economy Report

CONCLUSION: RESEARCH HAS MAJOR ROLE TO PLAY



WE ARE ARMED ... ONLY WITH PEER-REVIEWED SCIENCE

BUT IT NEEDS TO BE:

- 1. INTEGRATED**
- 2. UNLOCKING 'BIG DATA' OPPORTUNITIES**
- 3. FOCUSED ON ACCELERATING CHANGE**



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