Trans-African Hydro-Meteorological Observatory



Creating African Climate Synergy

John Selker, co-Director







Your Challenge: Lead climate observation culture into this Century

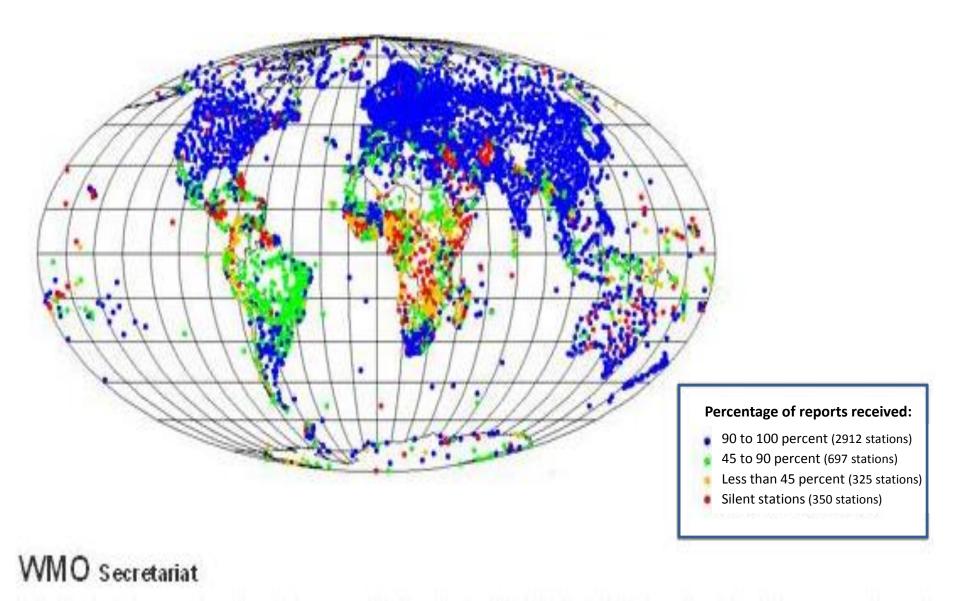
Redefine

- U What a Met Service can do.
 - Multiply your impact: \$1,500/station means 250 stations costs \$375,000.
- The line between private and public:

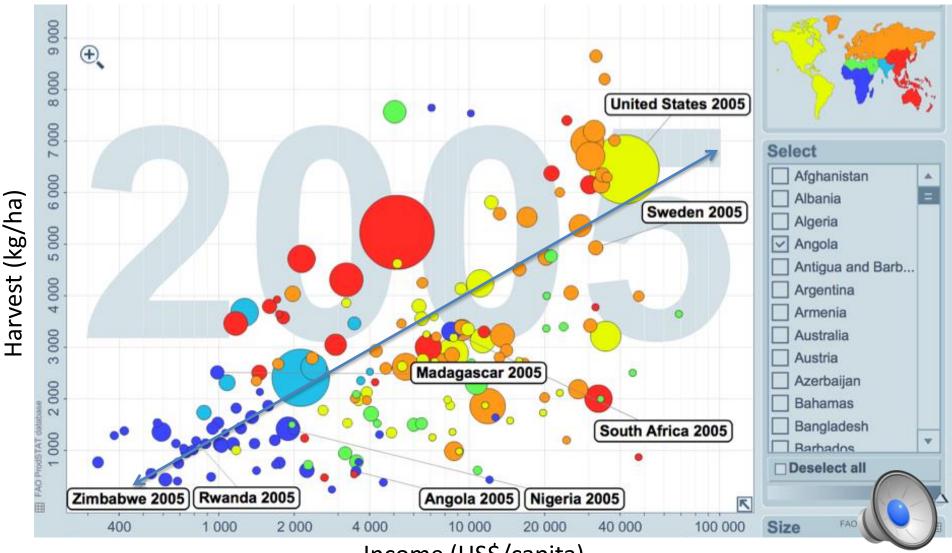
define goals, empower creativity, maintain excellent records, be agents to realize opportunities of climate understanding, ...

If it looks like yesterday, it is not right.

Silent Weather Stations



Opportunity for IMPACT



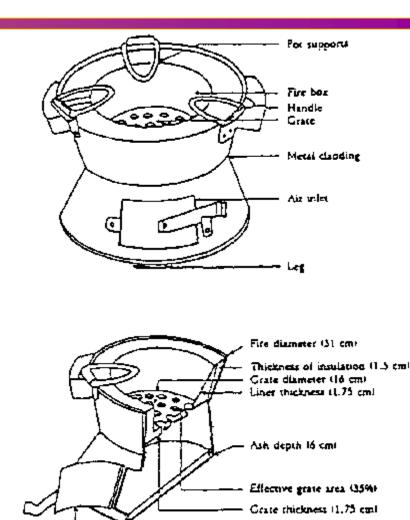
Income (US\$/capita)

A drawing/design that change the world



Laurie Childers, 1983





We learned it can be done in Africa

Air inlet door 165 cm²l

Instruments: 30 km spacing across Africa Education: Sister Schools and curriculum Workshops: Empower African Students Data: Free to Government, Research



All about the winners workshop week & winning designs in the Sensor Design Competition 2014

The TAHMO Final Challenge is the closing of the TAHMO Sensor Design Competition 2013.

Features: Solar powered 6-mo reserve battery **GSM** communication **GPS** Temp (3 ways) **Relative Humidity** Accelerometer Sonic wind **Drip-count rain** Shortwave solar Barometer SDI-12 port

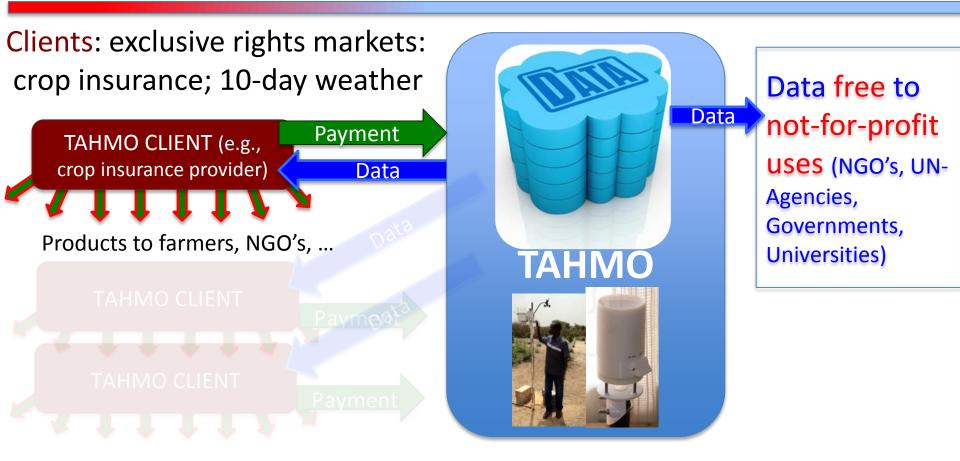








TAHMO^A African Climate Synergy Fixing a broken economic chain





Station Standards

- Employ validated sensing methods,
- but
- Incorporate methods that leverage explosion of sensing, communication, and artificial intelligence opportunities.
- Redundancy per station and within network

TAHMO Goals/Methods

-Monitor the changing African Climate at the scale of agro-hydrologic variability (30 km) -Provide context-rich science education -Provide data products for food security -Engage students around the world -Employ a sustainable business model -Find the path by which the benefits of these data can be realized by all.