

Availability of Climate Data in Africa: Challenges and Opportunities

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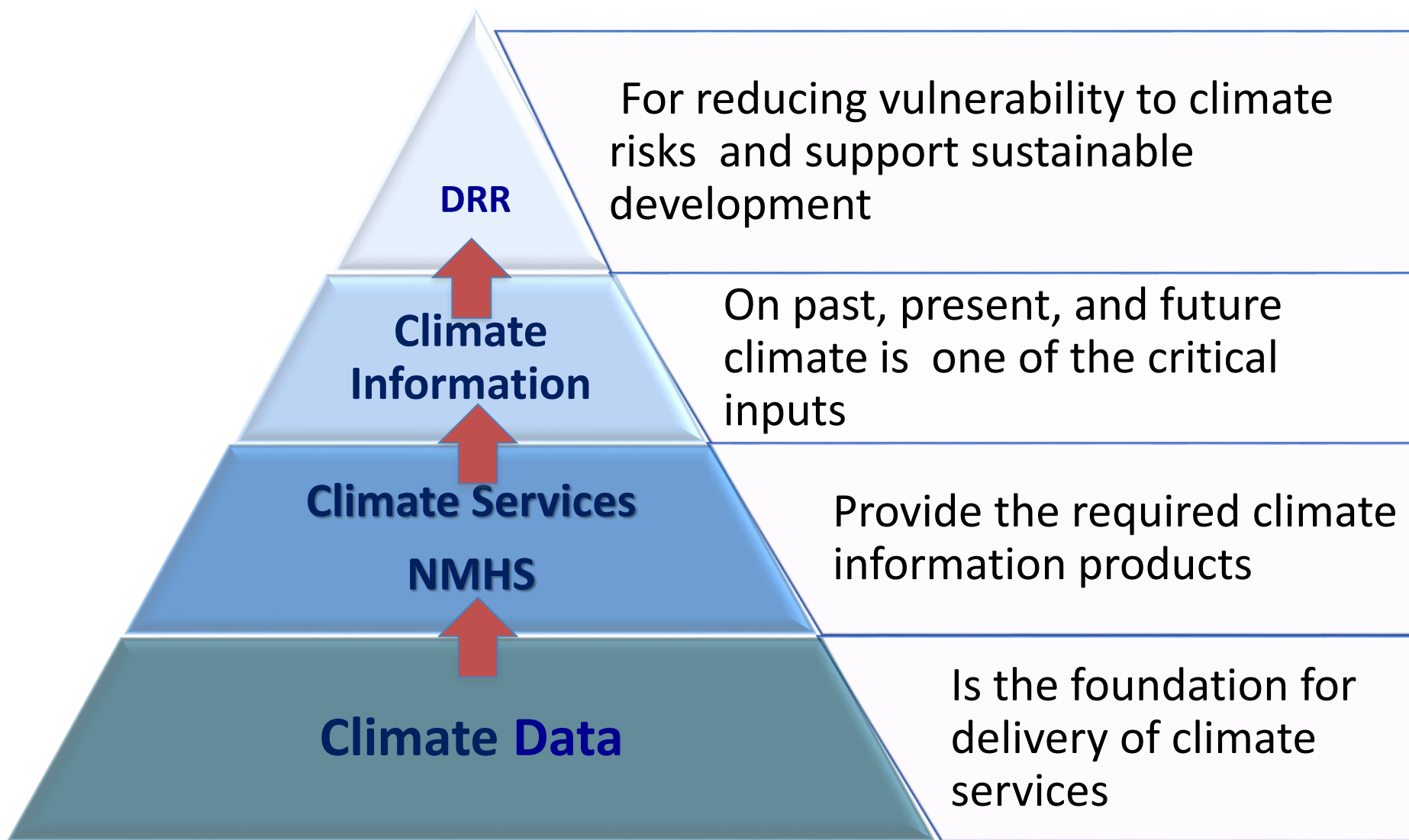


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Outline

1. The value of historical climate data
2. Challenges to availability of climate data in Africa
3. The ENACTS approach to improve availability and use of climate data in Africa

1. The value of climate data for DRR



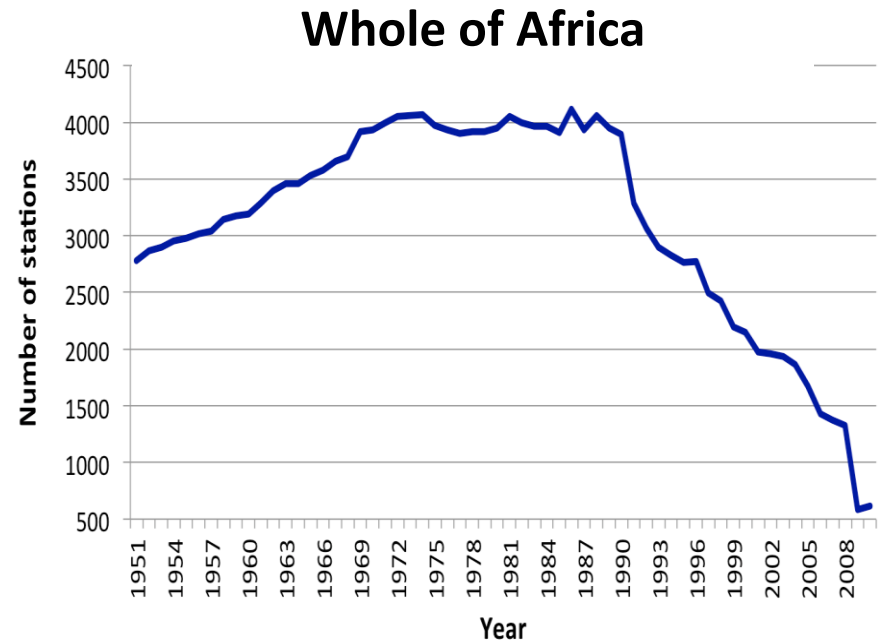
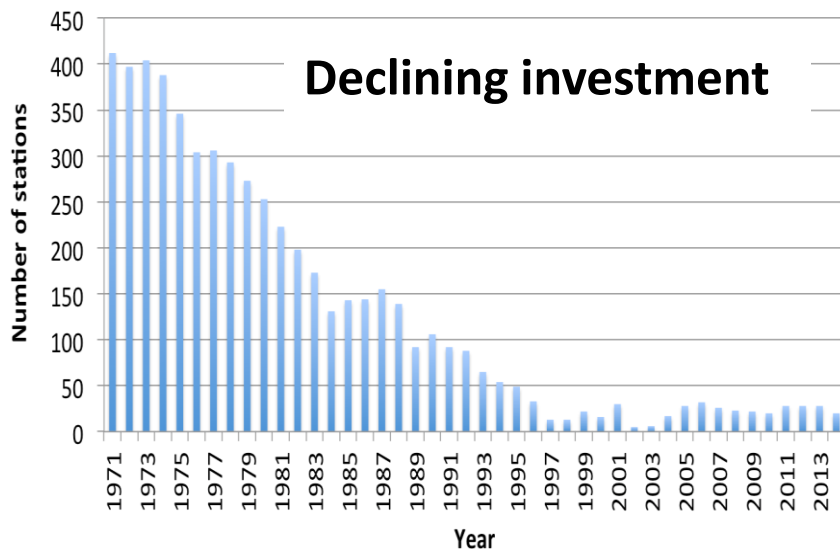
The value of historical climate data

- **Putting observed and anticipated climate into context**
- **Assessing climate-related baseline risks**
- **Understanding the nature of climate variability and trends**
- **Understanding the impacts of climate on different socio-economic activities**
- **Developing and validating climate predictions/projections**
- **... and much more**

2. Challenges to availability of climate data in Africa

- Number of weather stations not adequate over many parts Africa, and declining
- Most stations are located along main roads
 - ➔ Limited availability climate information and services to the rural community
- Serious gaps in observations (missing data)
- Questionable data quality
- Limited access and use of the available data

Challenges to availability of climate data



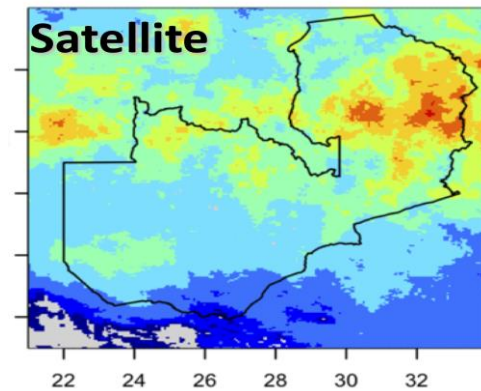
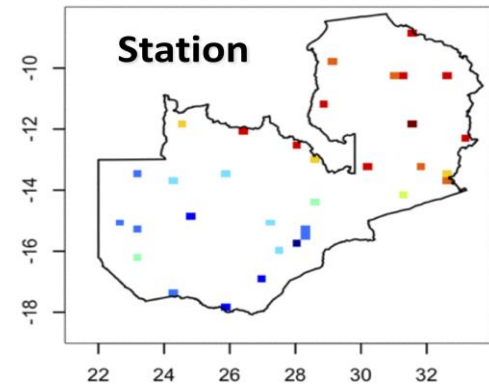
**Average number of stations
used in the GPCC gridded gauge
product of Africa**

3. The ENACTS approach

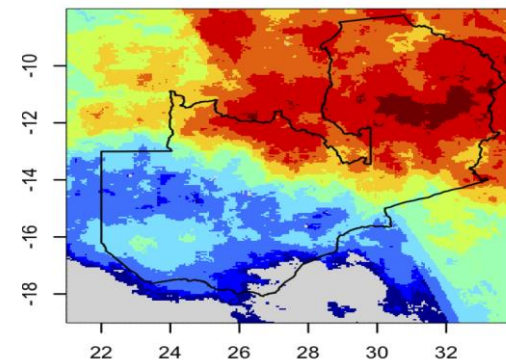
- **ENACTS = Enhancing National Climate Service**
- Strives to simultaneously improve availability, access and use of climate information.
- Works with NMHS to quality-control all available station data and combine them with satellite and reanalysis products.
- The main focus of ENACTS is creation of reliable climate information for **local decision-making**.

Improving Data Availability

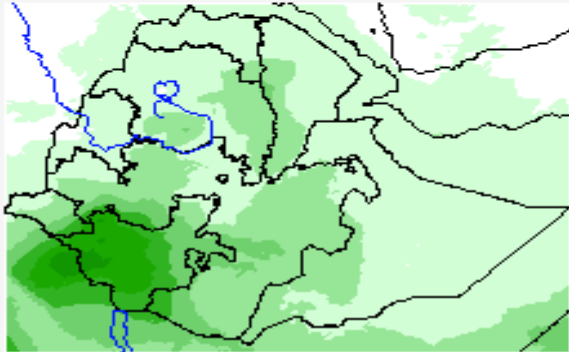
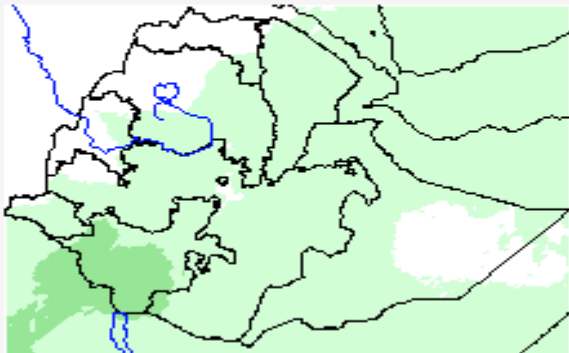
- Assess and improve quality of all available data
- Combine station observations and proxies (satellite and reanalysis) to fill spatial and temporal gaps
- Generate historical time series
 - Data available every 4km
 - >30 years for precipitation
 - >50 years for temperature
- Quality is higher than the best global data set



Combined



Improving access

Climate Analysis	Climate Monitoring	Climate Forecast
Monthly Climate Analysis Rainfall and temperature time series (1983-2010) reconstructed from station observations and remote sensing proxies. This interface allows users to view rainfall, maximum and minimum temperature climatologies and anomalies. 		
Dekad Climate Analysis Rainfall and temperature time series (1983-2010) reconstructed from station observations and remote sensing proxies. This interface allows users to view rainfall, maximum and minimum temperature climatologies and anomalies. 		

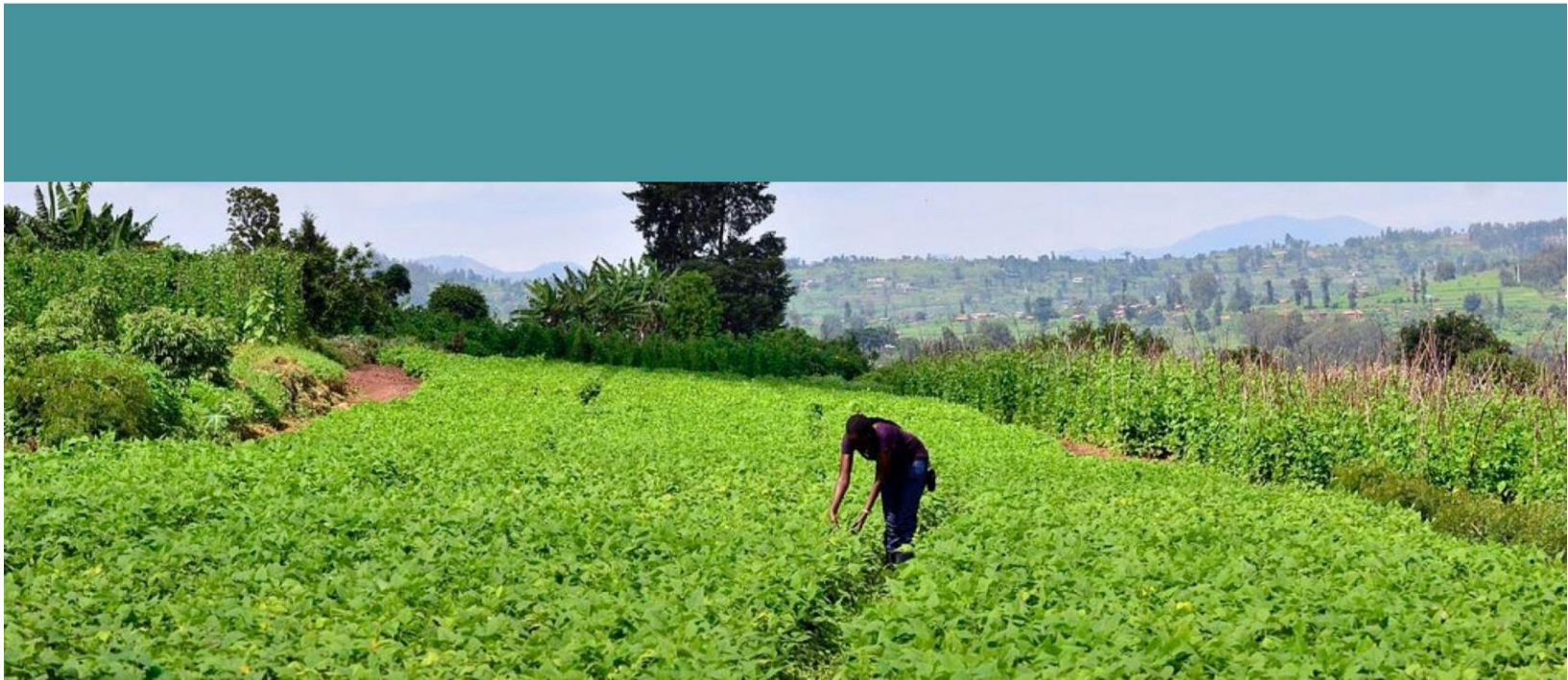
Application example

Rwanda Climate Services for Agriculture

Empowering Farmers to Manage Risk
and Adapt to a Changing Climate



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



RAB
Rwanda Agriculture Board



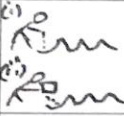
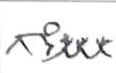
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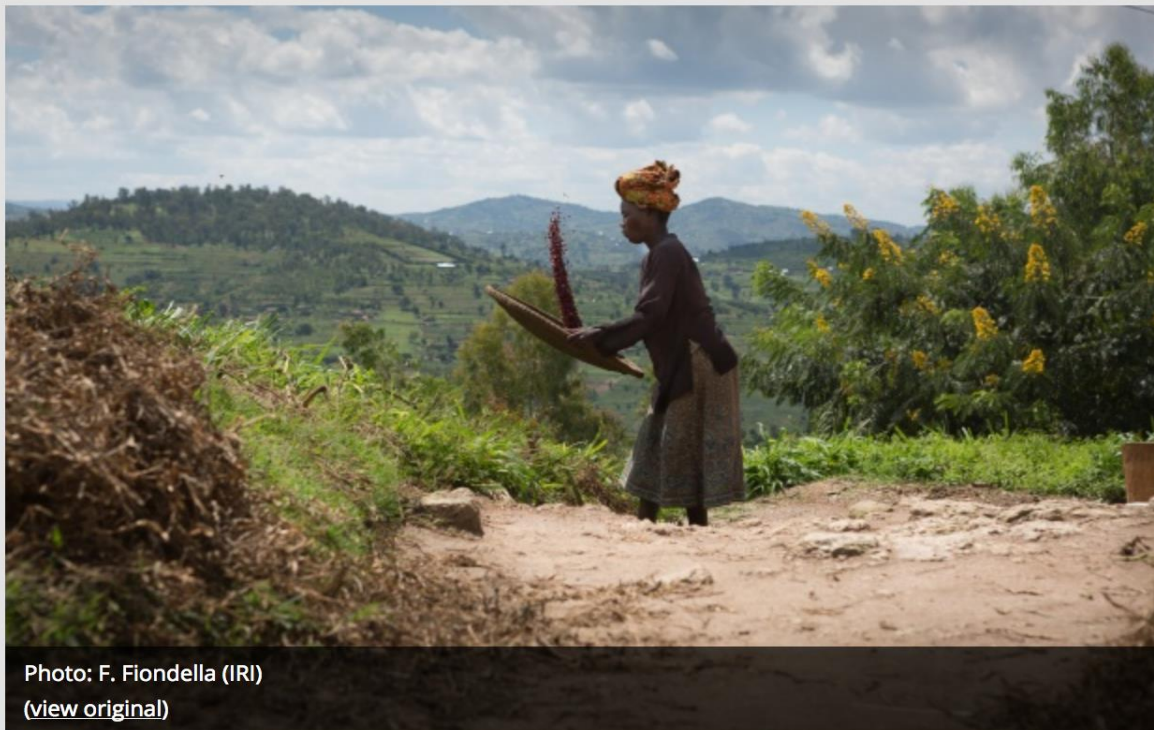
Application example: Participatory Integrated Climate Servicers for Agriculture(PICSA)

- Evaluating current farm strategy
- Understanding historic climate
- Identifying options
- Comparing options and making plans
 - Participatory budgets

	Time					
	I	II	III	IV	V	VI
Activities						
Inputs	₦ 000 \$ 00	(i)  \$ (ii)  \$	₦ 00 \$ 0		₦ 00 \$ 0	₦ 0000 \$
Family labour		(i)  (ii) 	₦ 00		₦ 00	₦ 0000
Outputs					 \$	 x 5 \$
Produce consumed						 x 1
Cash balance / profit	-VE \$ 00	-VE \$	-VE \$ 0		+VE \$	+VE \$
						Cash Balance +VE \$

Application example: Participatory Integrated Climate Servicers for Agriculture(PICSA)

Rwanda Climate Services for Agriculture project awarded the first ever Climate Smart Agriculture Project of the Year 2018



Release date

Wednesday, May 16, 2018

Flagships



Climate Services and Safety Nets

Regions



East Africa

Photo: F. Fiondella (IRI)

[\(view original\)](#)



Thank You

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