

RCMRD Report- UNSPIDER 2020 RSO meeting

Denis Macharia- Weather and Climate Lead
05/11/2020

List of activities in 2019-2021

2019

1. Flood mapping in Kenya- Oct-Nov 2019
2. Desert Locust monitoring in E Africa- Nov-Dec 2019 (then to present)
3. Charter Activation for landslides in Kenya- Dec 2019
4. Charter training and UNSPIDER conference in Bonn, Germany- Nov 2019

2020

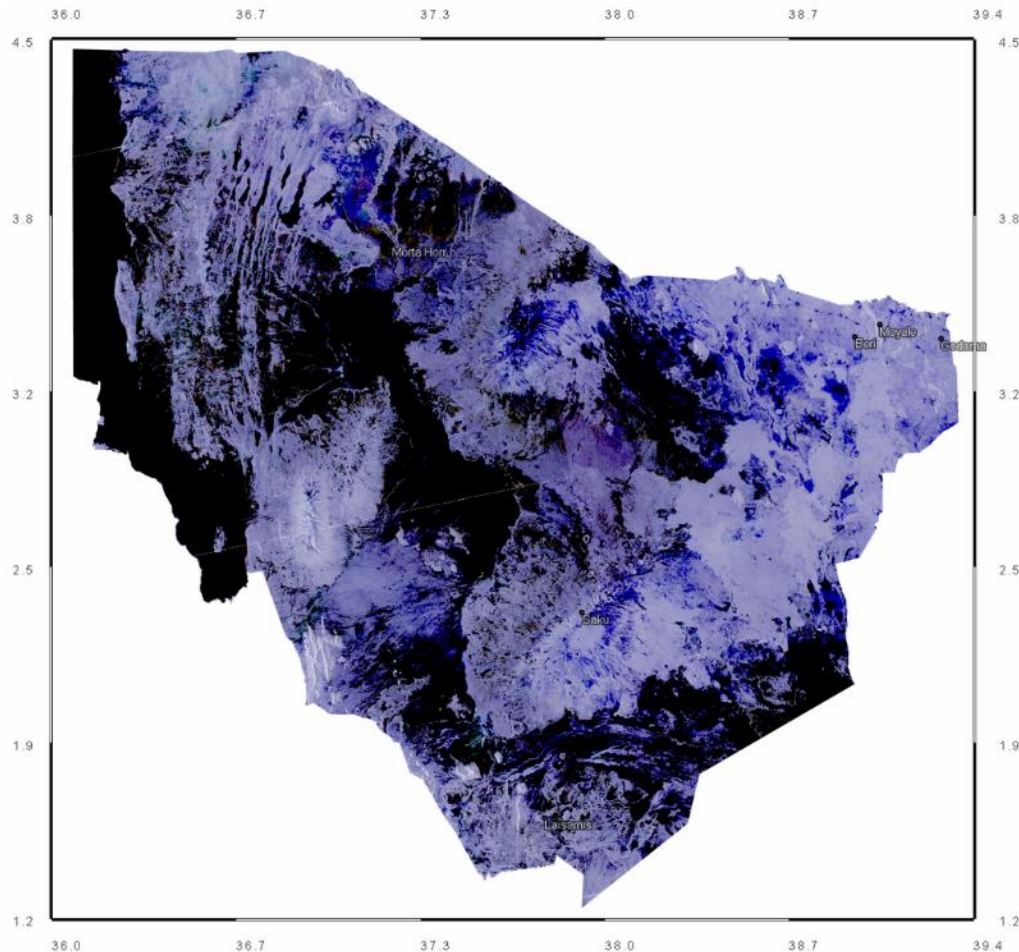
1. VCI forecasting in Kenya (expansion to E Africa n 2021)
2. COVID-19 portal for E&SA region/RCMRD member States
3. VIA in Tanzania- published a peer reviewed article (Sustainability journal)

2020-21

1. CBFEWS establishment in Malawi (33 villages in 8 districts)- UNDP funding
2. Crop monitoring and vulnerability assessments in Eswatini (former Swaziland) using UAV and Remote Sensing- CTCN/UNIDO funding
3. Drought Risk Impact Platform- Groundwater demand forecasting in Kenya and Ethiopia
4. Support UNSPIDER activities in Africa as appropriate

Flood mapping- Kenya

MARSABIT COUNTY



Flood Overview

Kenya Red Cross (KRC) reported the following flooded areas in the 5th November update;

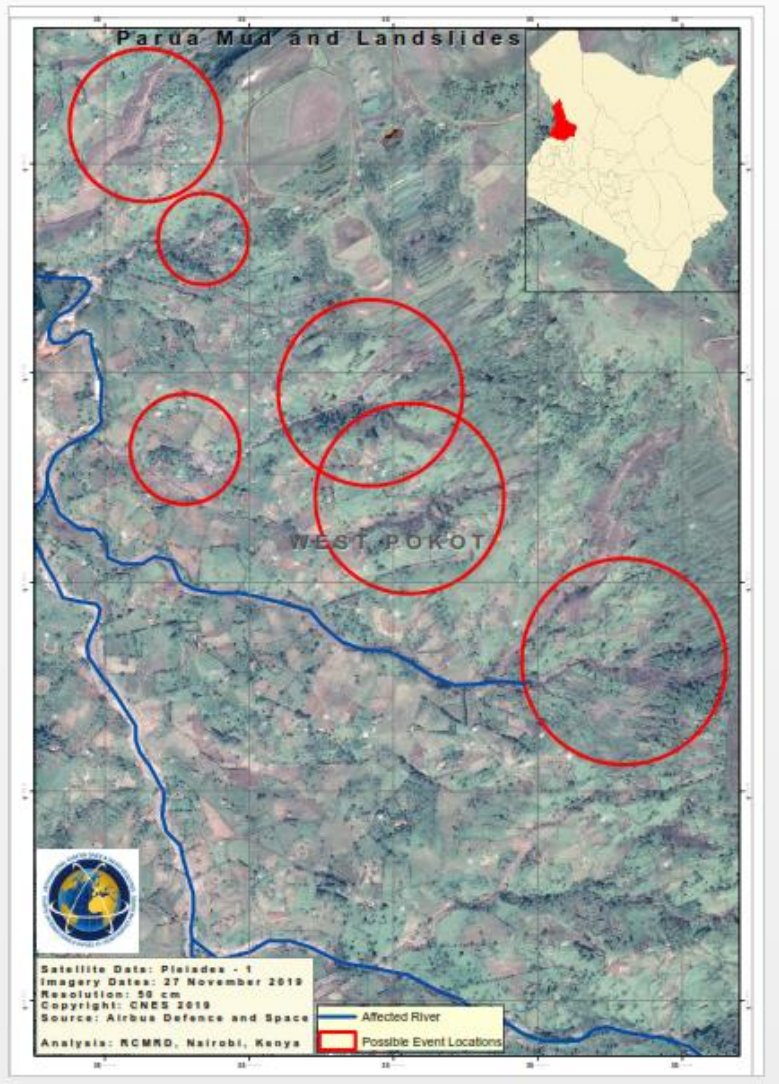
Moyale, Kanisa, Boris Junction, Godoma, Yabello & Watiti.

The impacts of the October Flood included;

- Affected HHs = 1,055
- Affected Pop. = 3,198
- Livestock death = 30,647
- Fatalities = 1

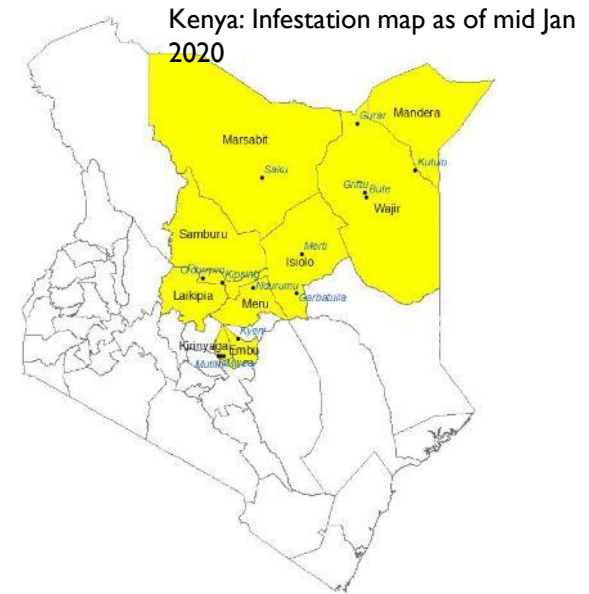
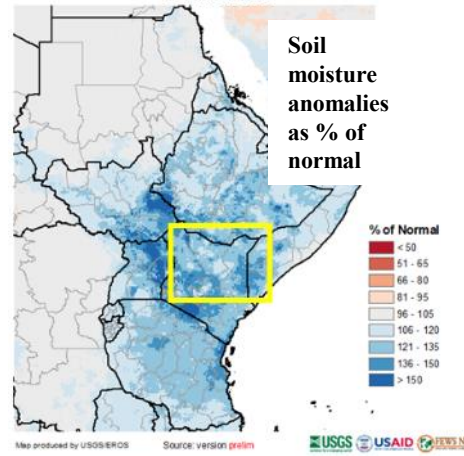
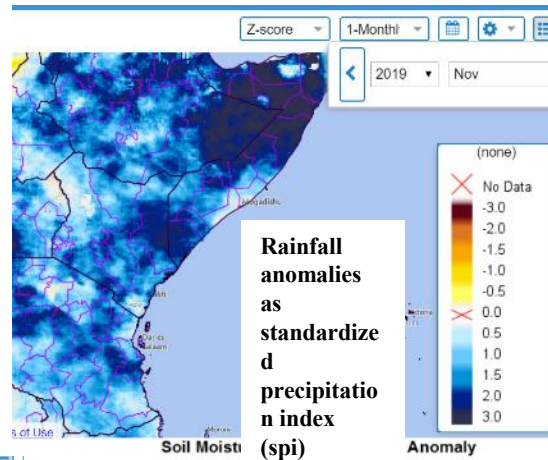
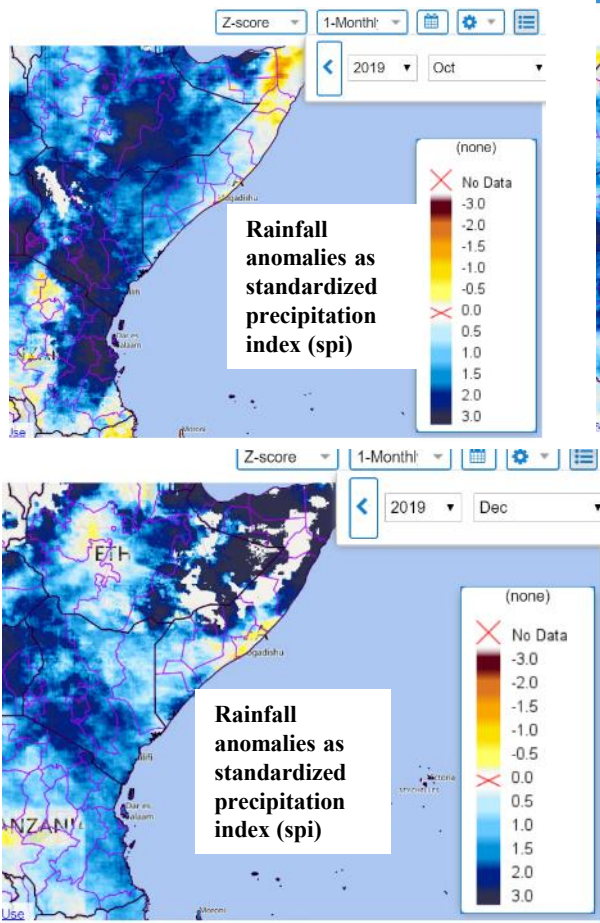


Landslides mapping- Kenya



- Charter Activation #633 by Victor Addabor-Ghana
- RCMRD provided VAP services
- Mapping targeted landslides in Pokot county, Kenya

Desert Locust infestation-Monitoring Ecological conditions



From satellite imagery, RCMRD provided monitoring assistance by tracking rainfall, soil moisture and vegetation conditions as drivers of outbreaks.

<http://data.rcmrd.org/ewx-viewer/>

COVID-19 portal for E&SA region



RCMRD

Home

Total Cases

Government Status

About Coronavirus

Contacts

RCMRD.org



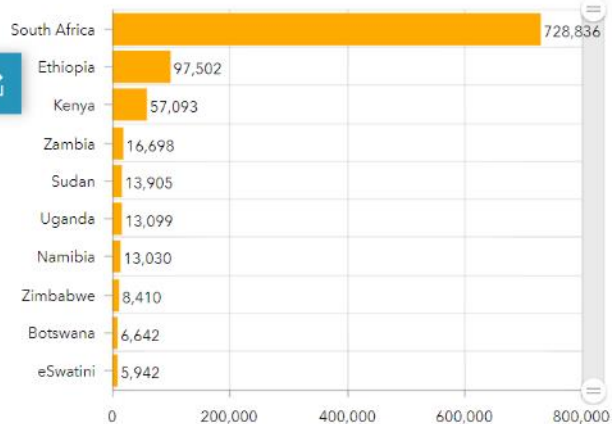
Coronavirus Total Cases at our Member ... Eastern & Southern A...

All Countries

Countries News Cases

None (Reset Map)

Top 10 Total Cases at RCMRD Member States



Deaths Reported

Zambia = 349

New Cases in last 24 hours

+39

Active Cases

129,594

Recovered

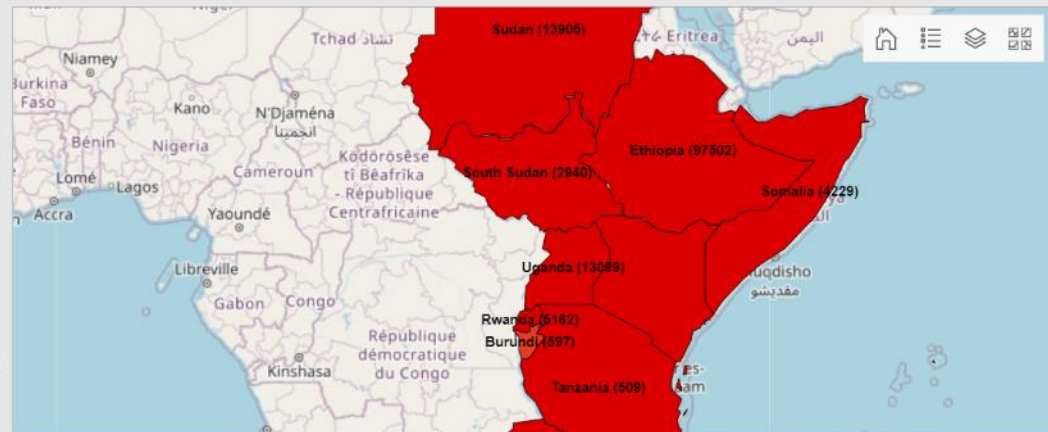
829,689

Deaths

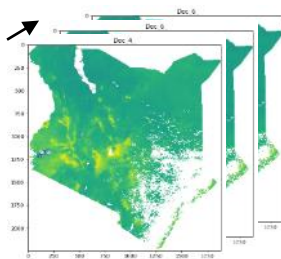
24,361

Total Cases

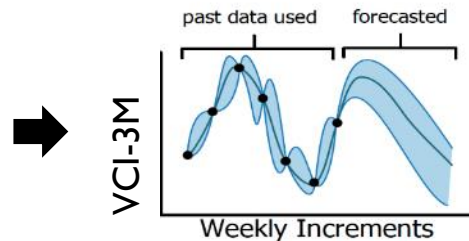
983,644



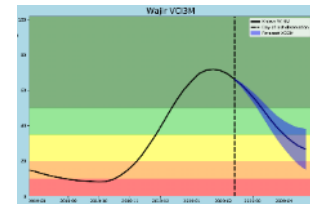
Drought monitoring- VCI based forecasting



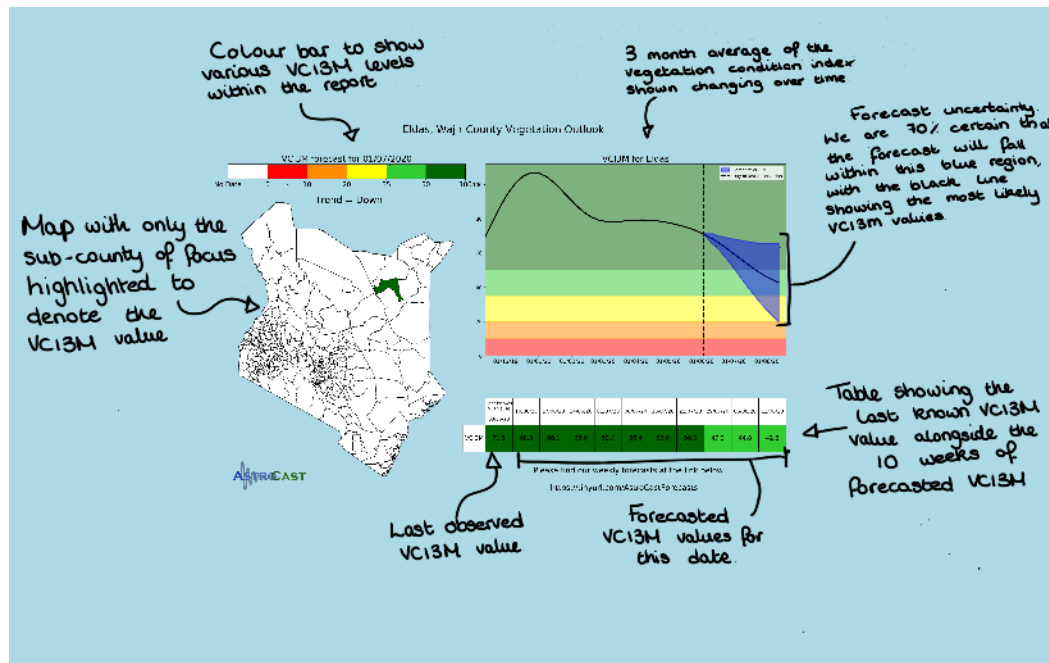
NDVI/VCI timeseries



Gaussian Processes



12-week forecast



VCI3M in %	Drought Category	Color
≥50	Wet	Dark Green
35 to 50	No Drought/Normal	Light Green
21 to 34	Moderate Drought	Yellow
10 to 20	Severe Drought	Orange
<10	Extreme Drought	Red



Kenya Red Cross



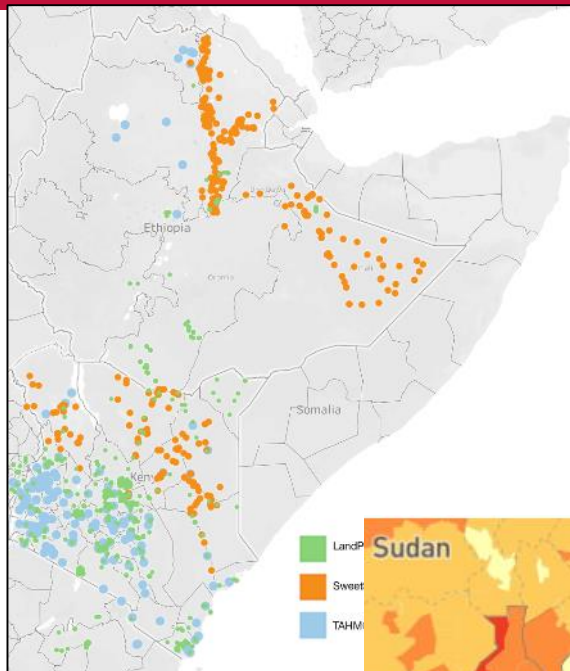
REGIONAL CENTRE FOR
MAPPING OF RESOURCES
FOR DEVELOPMENT

US
UNIVERSITY OF SUSSEX

ASTROCAST
US University of Sussex

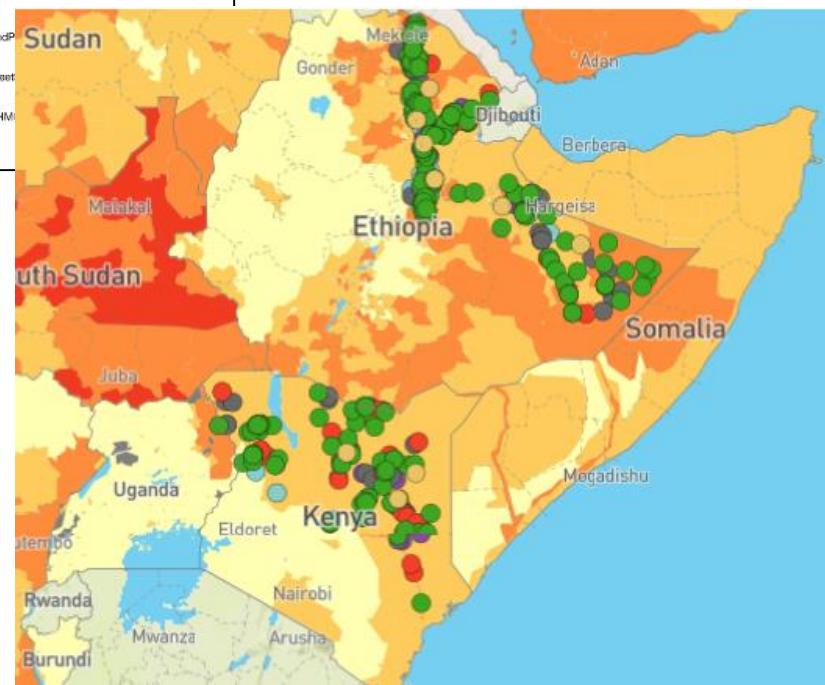
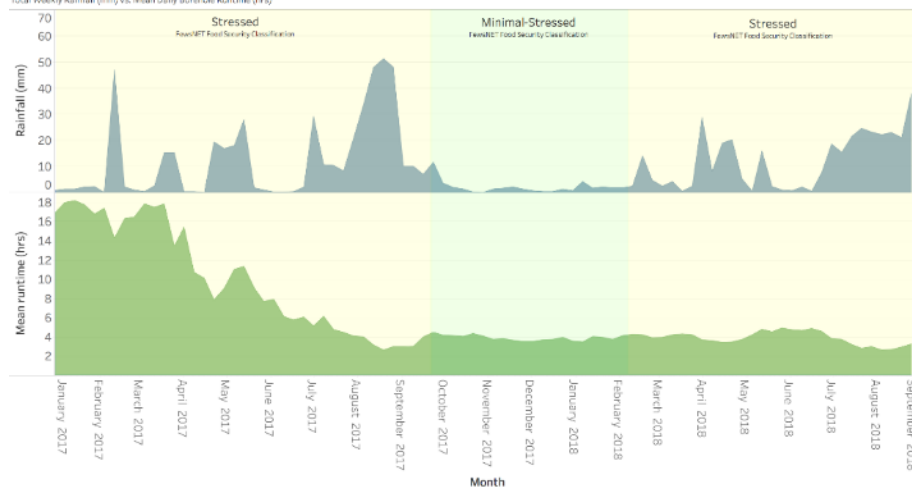
Drought Resilience Impact Platform (DRIP)

- DRIP is monitoring water sources for more than 3M people using a combination of electronic borehole sensors and remote sensing based models

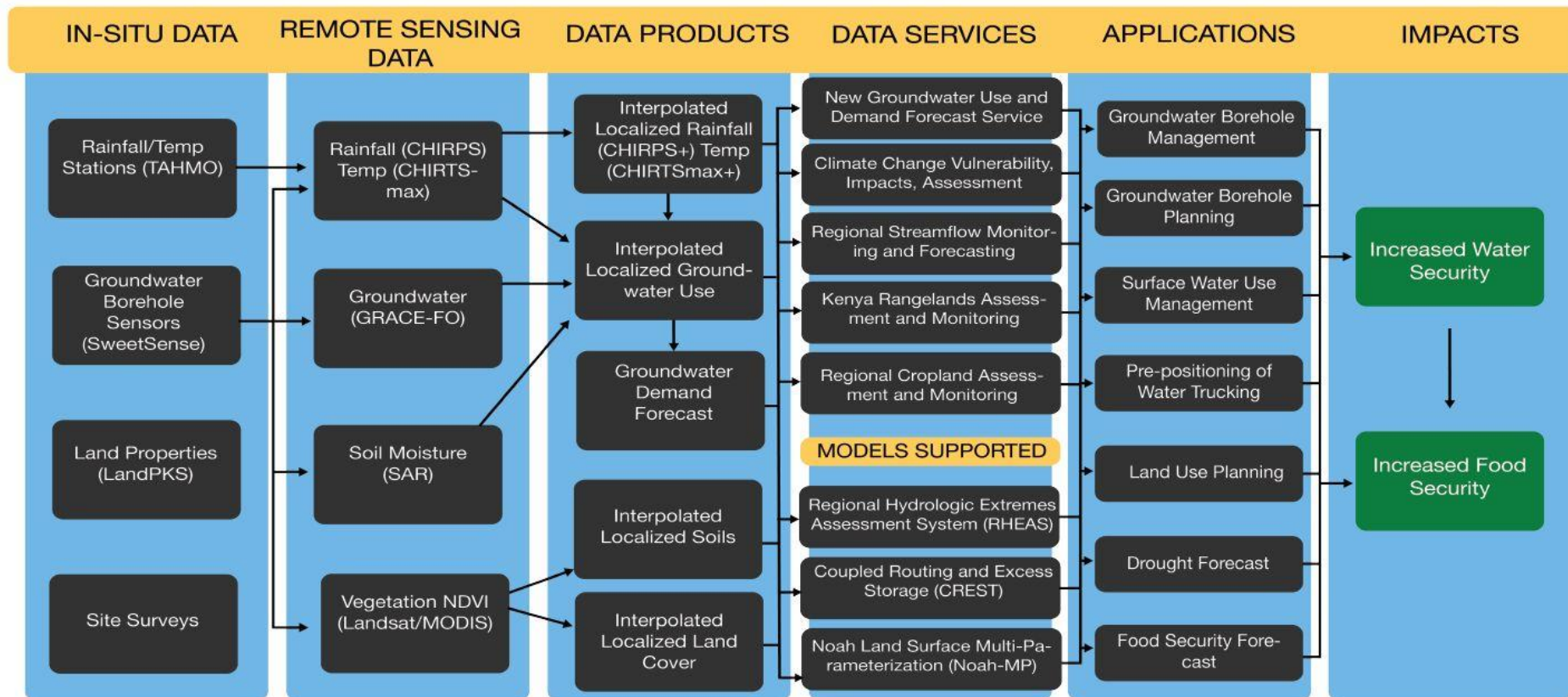


- Leveraging WASH partnerships in East Africa including the Millennium Water Alliance, USAID and national agencies

Afar, Ethiopia
Total Weekly Rainfall (mm) vs. Mean Daily Borehole Runtime (hrs)



DRIP Workflow



THANK YOU



**ASANTENI
SANA!**