

# Applying innovative cloud computing technology for the effective management of Groundwater resources to promote Sustainable food security within the Sokoto Basin, Nigeria

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# Scientific Background and Objectives

- ❖ The low adaptive capacity of climate change in developing countries has aggravated occurrences of intense weather events and enhanced vulnerabilities of food securities.



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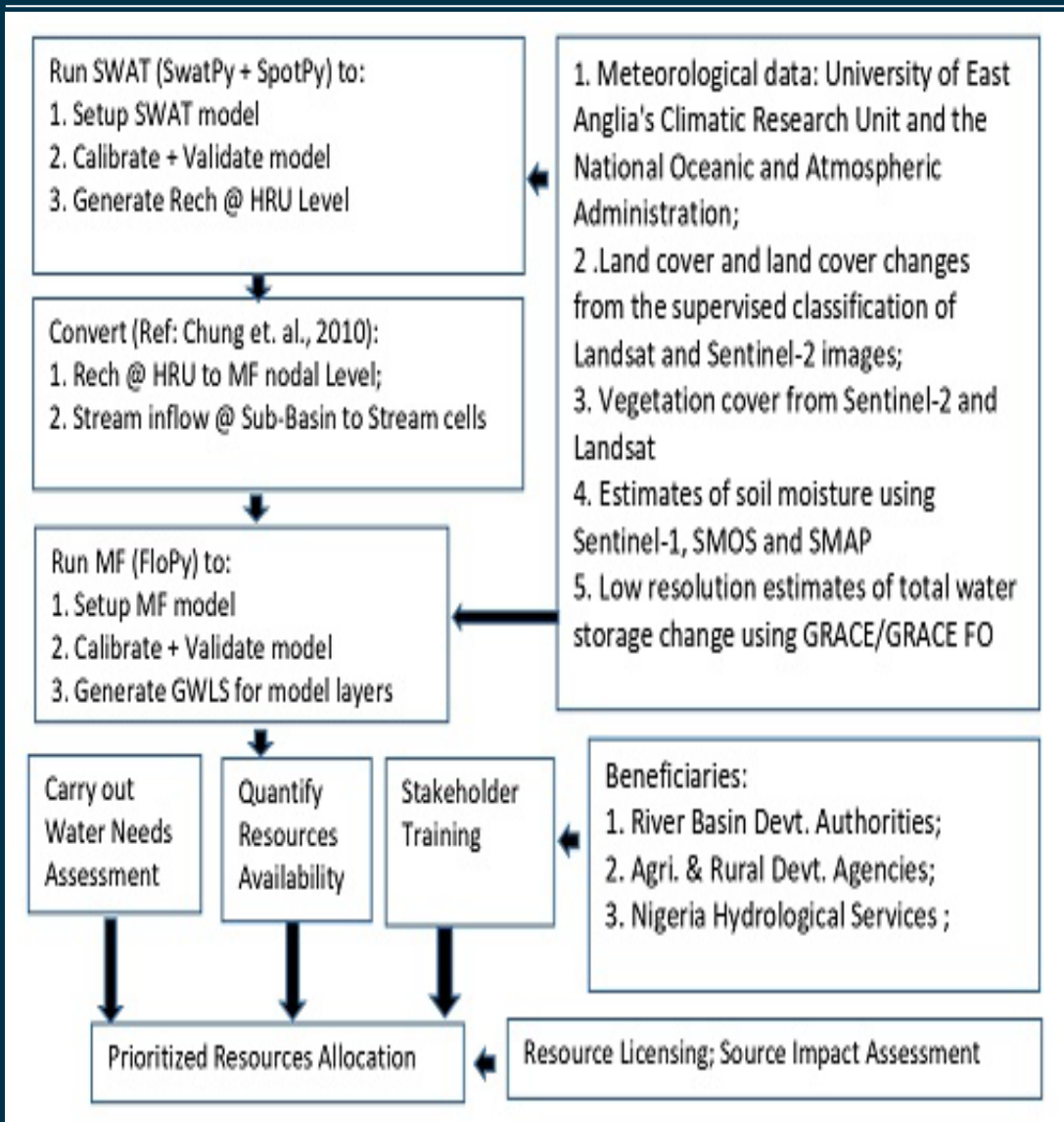
Age	Formation	Class	Group	Description	
Quaternary	Sandy Drifts and Laterites		Continental		
Post Paleocene	Gwandu Fm	Aquifer	Continental	Laterites, Sst; Grits;	
Paleocene	Oolitic Ironstone		Sokoto	Clay; Clayite Fm	
	Gamba Fm	Aquiclude			
	Kalambaina Fm	Aquifer			Marine Lst;
	Dange Fm	Aquiclude			Marine Lst
Maastrichtian	Wurno Fm	Aquifer	Rima	Sand; Sst	
	Dukamaje Fm	Aquiclude		Clay; Shale	
	Taloka Fm	Aquifer		Clayite; Sst	
Cretaceous / Late Jurassic	Gundumi Fm	Aquifer	Basal	Sst	
	Ilo Fm	Aquifer			
PreCambrian	Basement Complex	Aquiclude		Metamorphic Rks	



## Effects & Impacts:

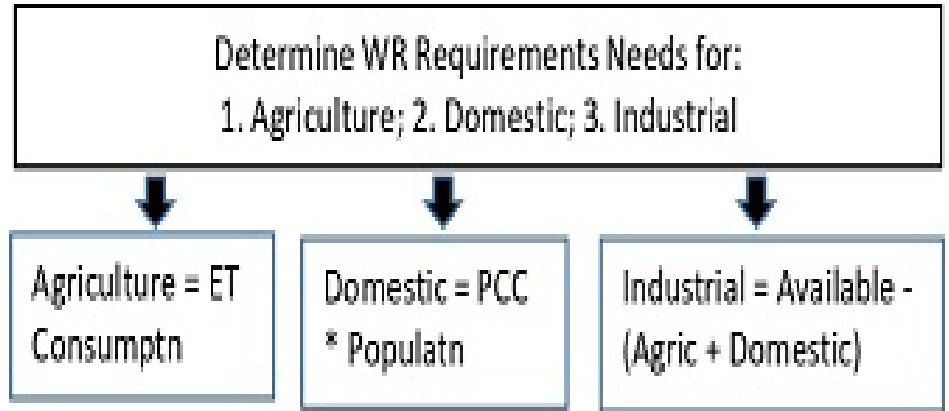
- ✓ Decreasing available potable water;
- ✓ Vulnerability of agricultural production;
- ✓ Expanding desertification;
- ✓ Intensified conflicts between the pastoralists and the farmers;

## Vertical Stratification as Presented:



**Prioritized allocation:**

1. Available groundwater resources will be allocated;
2. Following calculated assessment needs as threshold to control water usage;
3. Through existing pipe networks;
4. Evoke transparency in the groundwater management;
5. Mitigate recurrent agitations.



# Project Team



S/N	Name	Affiliation	Role	Email Address	Photograph
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**THANK YOU FOR LISTEN**

**Questions?**