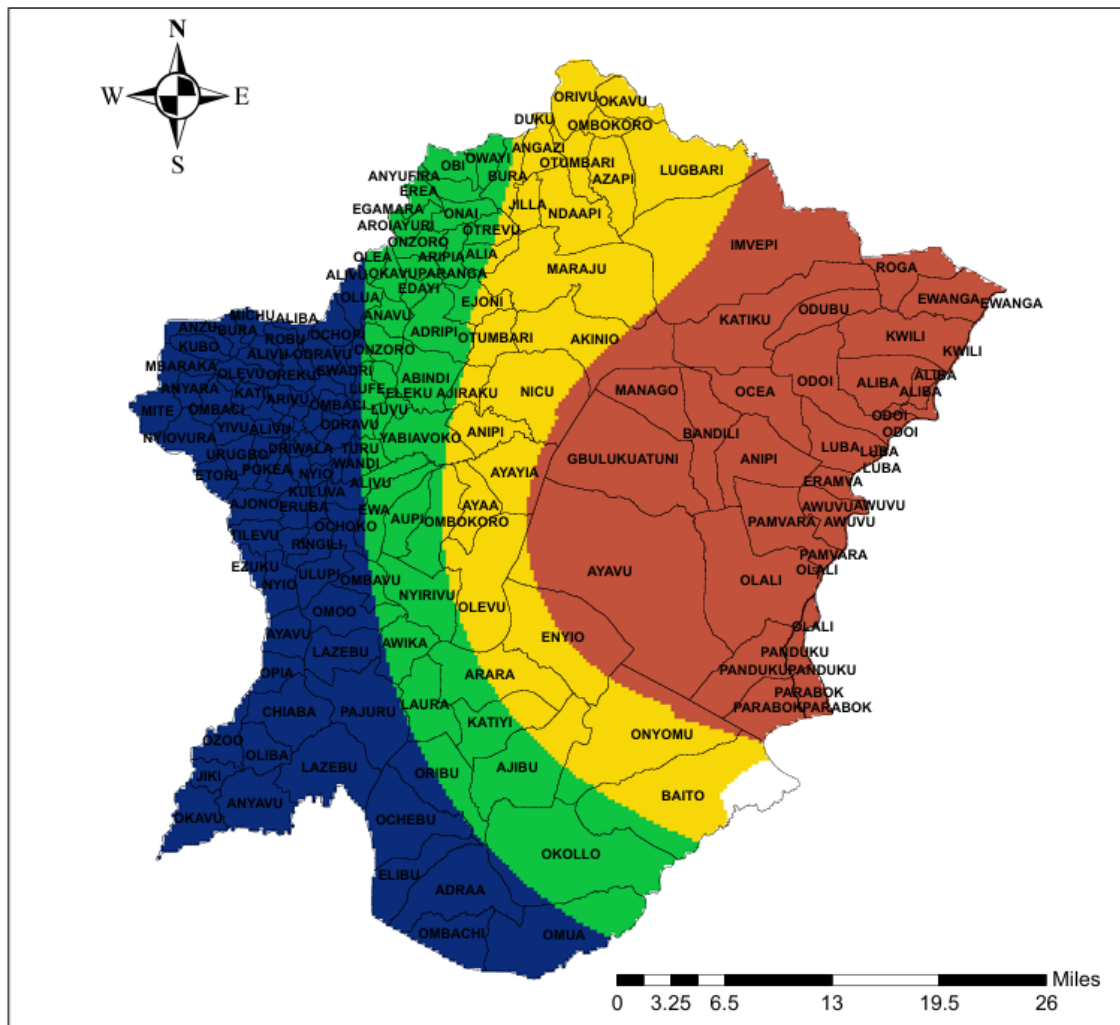


TREE PLANTING SUITABILITY MAP TO GUIDE TREE AND SHRUB PLANTING IN ARUA DISTRICT INITIATIVE BY TSEVETT AGRO SERVICES UNDER FROM YOUTH 4 CLIMATE

TREE AND SHRUB PLANTING SUITABILITY MAP FOR GREATER ARUA



Color & Class	Tree Group Name	Ecological Zone Description	Common Tree Species (6+)	Suitable Shrubs (4)
 Class 1	 Mvule-Class TreesMoist Indigenous Forest & Agroforestry	Very suitable – river valleys, wetlands, forest edges; deep, moist, fertile soils; high rainfall & humidity	1. <i>Milicia excelsa</i> (Mvule) 2. <i>Maesopsis eminii</i> (Musizi) 3. <i>Ficus natalensis</i> (Mutuba) 4. <i>Markhamia lutea</i> (Lusambya) 5. <i>Lovoa trichilioides</i> (Nkalati) 6. <i>Tectona grandis</i> (Teak) <i>Grevillea robusta</i> – tolerates similar conditions	 1. <i>Vernonia amygdalina</i> (Bitter leaf) 2. <i>Acalypha wilkesiana</i> 3. <i>Croton macrostachyus</i> 4. <i>Hibiscus surattensis</i>
 Class 2	 GrevilleaClass TreesAgroforestry & Fast-growing Species	Moderately high suitability – midlands, moist uplands; moderately fertile, well-drained soils	1. <i>Grevillea robusta</i> 2. <i>Calliandra calothyrsus</i> 3. <i>Leucaena leucocephala</i> 4. <i>Gliricidia sepium</i> 5. <i>Sesbania sesban</i> 6. <i>Eucalyptus grandis</i> (for windbreaks) <i>Pinus patula</i> – good for mid-high altitudes	 1. <i>Tithonia diversifolia</i> 2. <i>Tephrosia vogelii</i> 3. <i>Lantana camara</i> (control advised) 4. <i>Ocimum gratissimum</i>

 Class 3	 Fruit Tree Class Fruit & Nut Trees for Semi-dry Areas	Moderate suitability – flatlands with seasonal rainfall; mixed farming zones	<i>Mangifera indica</i> (Mango) <i>Persea americana</i> (Avocado) <i>Tamarindus indica</i> <i>Anacardium occidentale</i> (Cashew) <i>Citrus sinensis</i> (Orange) <i>Psidium guajava</i> (Guava) <i>Faidherbia albida</i> – suitable in semidry zones	 <i>Carissa edulis</i> <i>Flueggea virosa</i> <i>Solanum anguivi</i> <i>Clerodendrum myricoides</i>
Color & Class	Tree Group Name	Ecological Zone Description	Common Tree Species (6+)	Suitable Shrubs (4)
 Class 4	 Acacia-Vitellaria Class Trees Dryland, Savanna & Restoration	Low to very low suitability – degraded, hot uplands; poor soils, charcoal depleted or semi-arid lands	<i>Vitellaria paradoxa</i> (Shea) <i>Balanites aegyptiaca</i> <i>Acacia Senegal</i> <i>Melia volkensii</i> <i>Azadirachta indica</i> (Neem) <i>Commiphora africana</i> <i>Jatropha curcas</i>, <i>Boscia coriacea</i>, <i>Ziziphus spina-christi</i>, <i>Calotropis procera</i>	 <i>Euphorbia tirucalli</i> <i>Opuntia spp.</i> <i>Senna occidentalis</i> <i>Indigofera arrecta</i>

Inter-Class Planting Compatibility Note:

Class 1 areas (Blue) can successfully grow trees from Class 2–4.

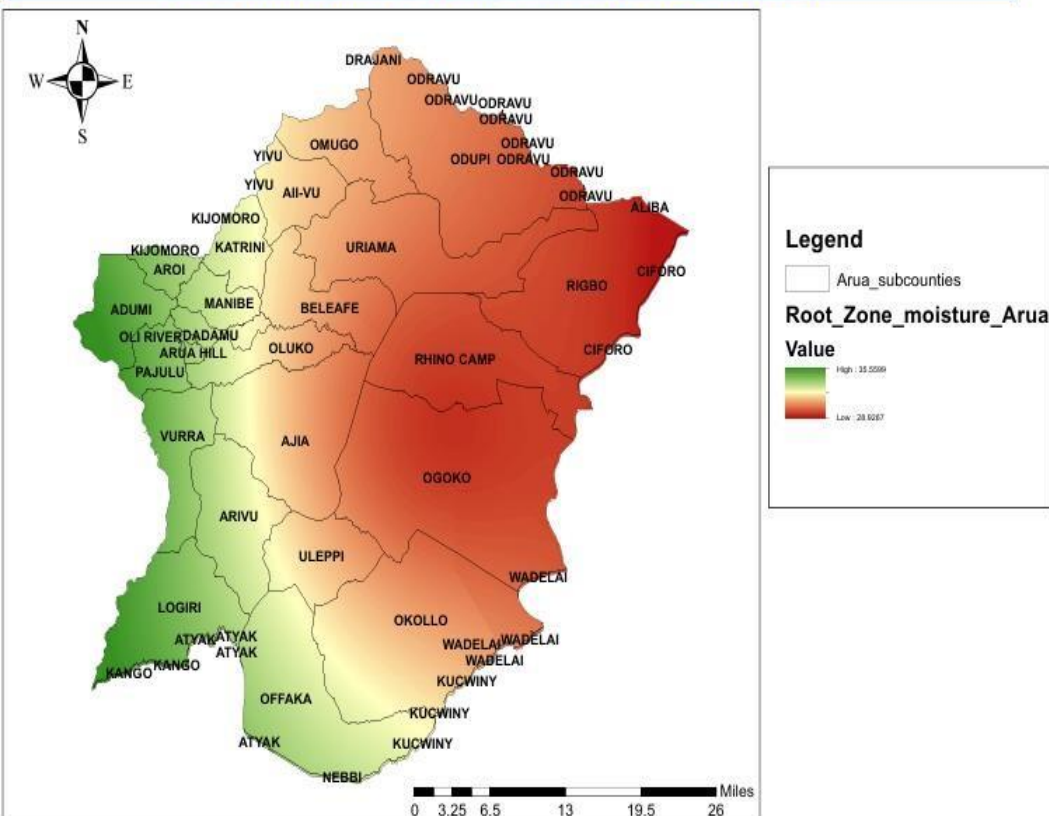
Class 3 (Yellow) can support Class 4 trees.

Class 2 (Green) can grow trees from Class 3 & 4.

Class 4 (Brown) is limited to drought-resistant and restoration species only.

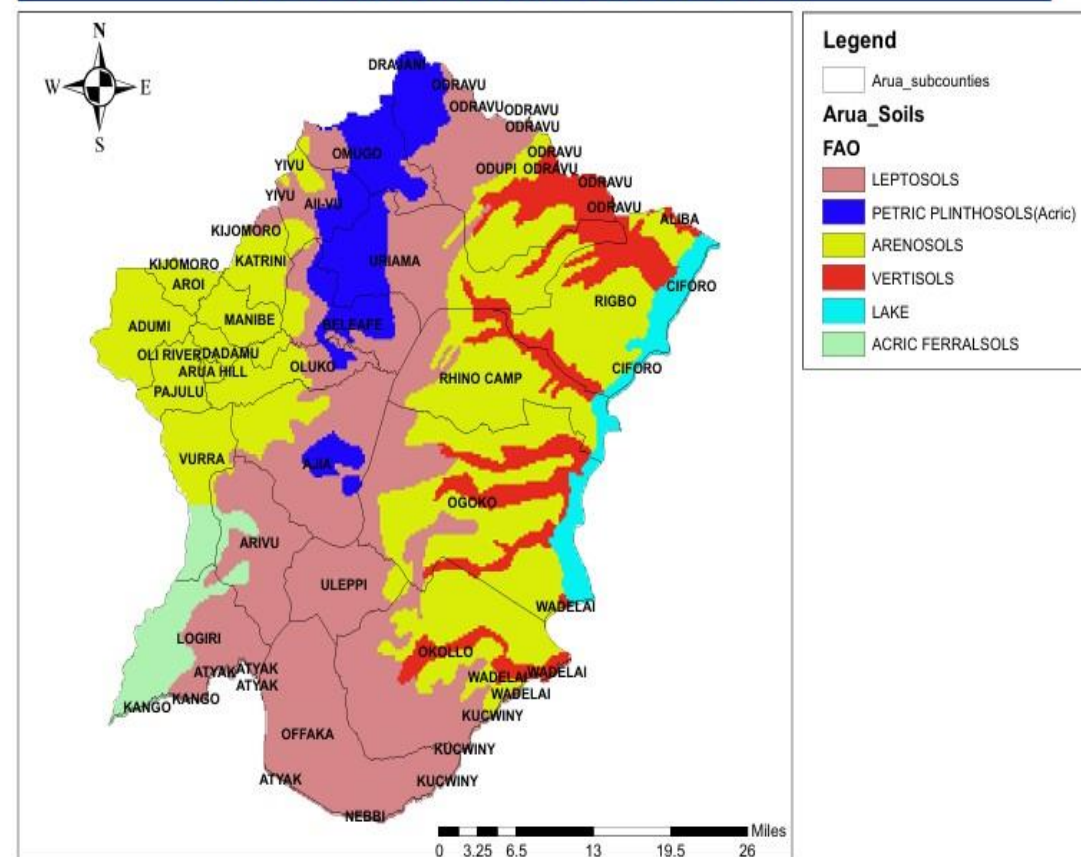
COMPOSITIONS (MAPS THAT WERE USED TO COME UP WITH THE TREE AND SHRUB PLANTING SUITABILITY MAP

ROOT ZONE MOISTURE OF SOILS IN ARUA DISTRICT



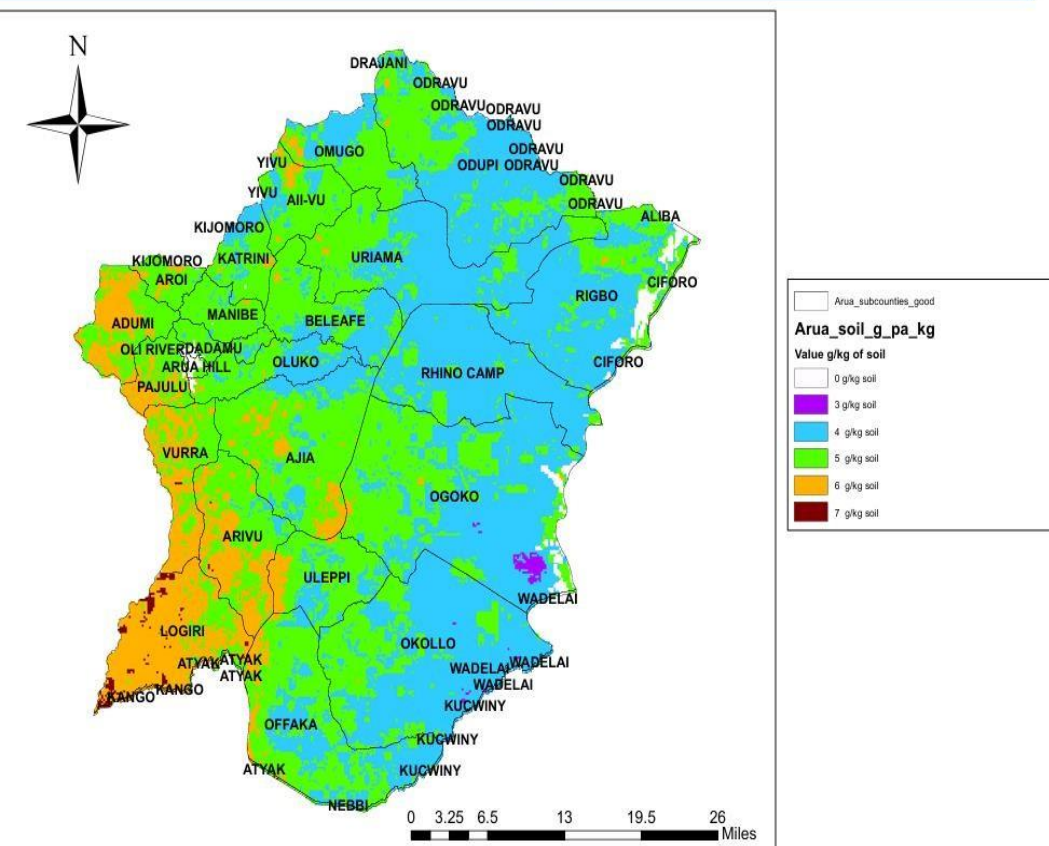
This map indicates the moisture content of soils in Arua district with areas in green having the highest moisture content which tends to reduce as it tends to the drier areas in red as of 2025

CLASSIFICATION OF SOILS IN ARUA DISTRICT



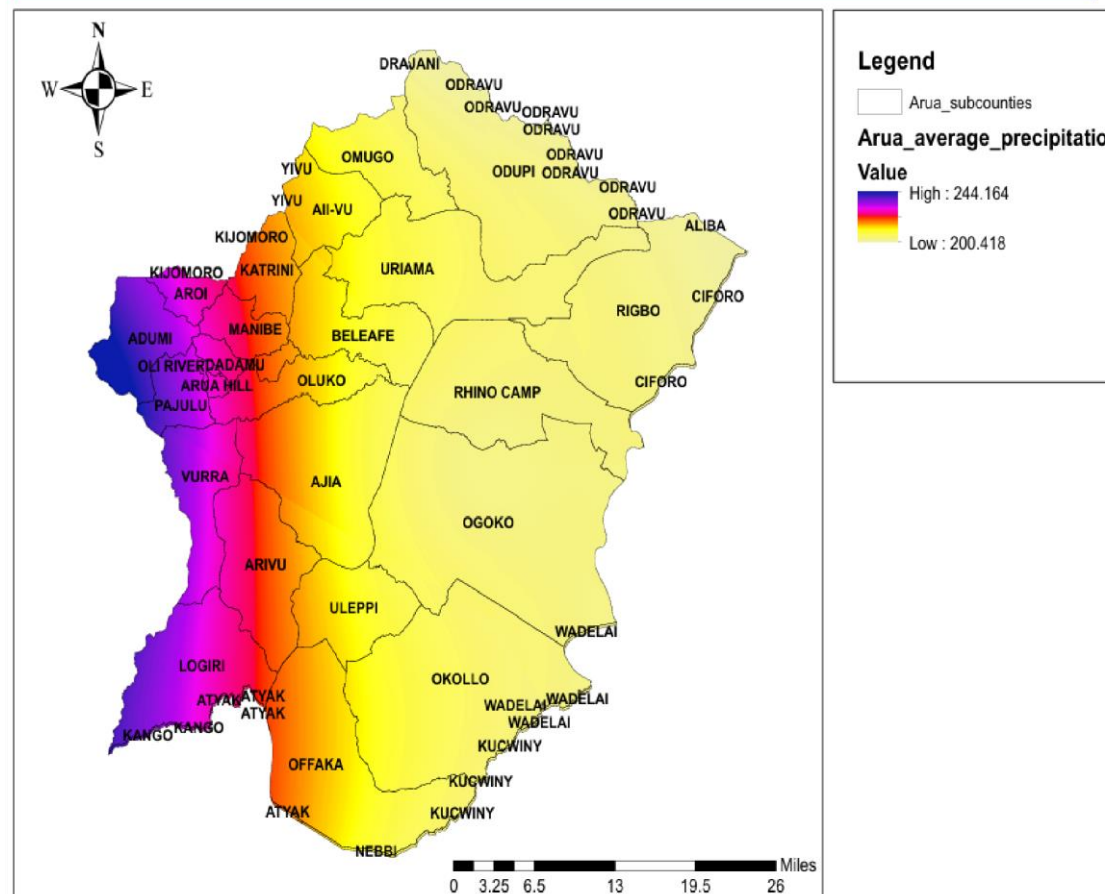
This map indicates the various classification of soils in Arua district according to FAO

SOIL CARBON CONTENT OF SOILS IN ARUA



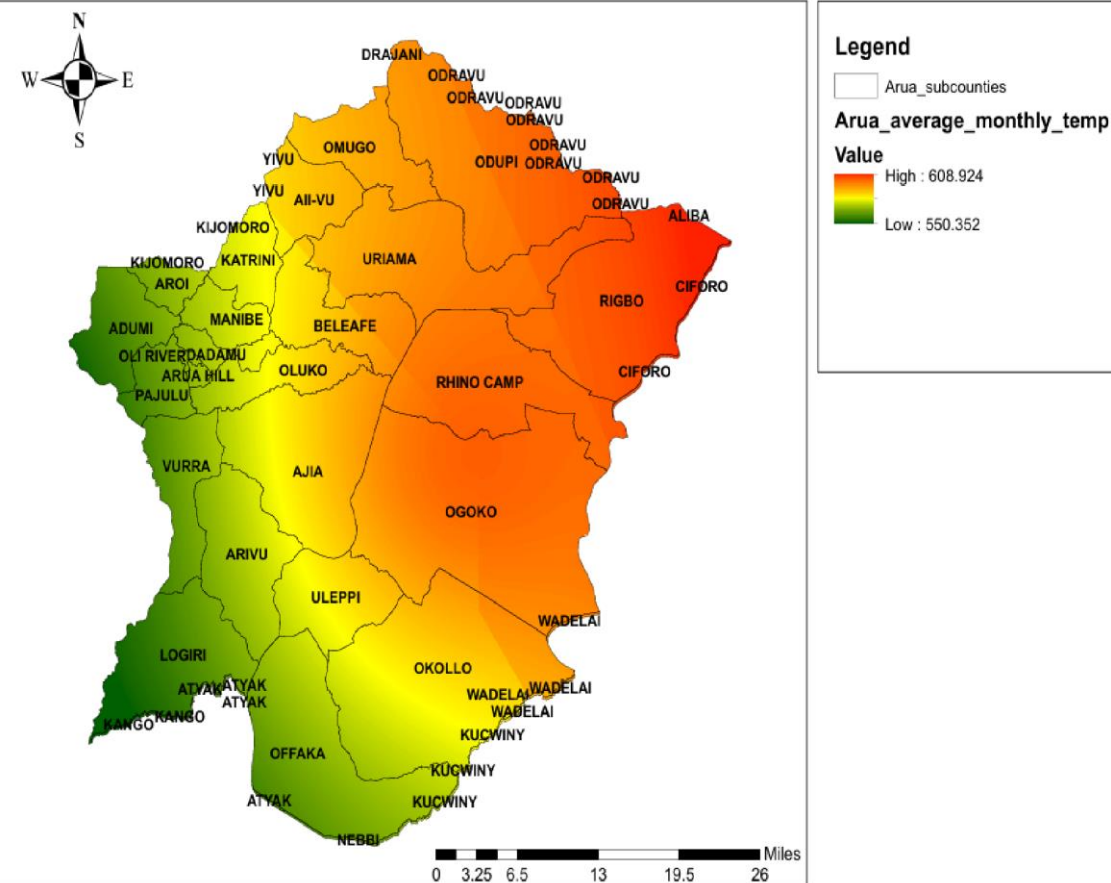
This Map Indicates the soil carbon content in grams per Kilogram of soil (g/kg) ranging from zero to seven and above, Soil carbon (SC) is a key component in climate action as of 2025

AVERAGE MONTHLY PRECIPITATION IN ARUA DISTRICT



This is the map for the annual precipitation in Arua starting with areas with high precipitation as high as 244 mm to as low as 200 mm, as of 2025

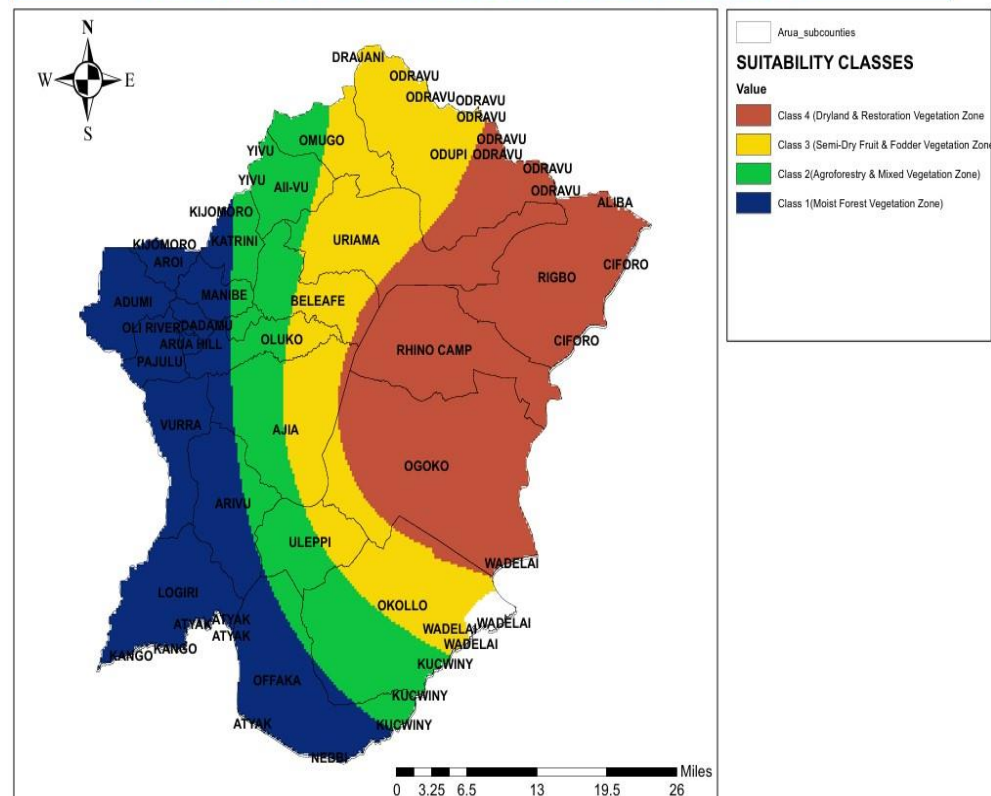
AVERAGE MONTHLY TEMPERATURE IN ARUA DISTRICT



This is the thematic Map of Arua district showing areas of lower temperatures in green which become hotter tending to the red zone in the map

THE TREE AND SHRUB PLANTING SUITABILITY MAP

TREE AND SHRUB PLANTING SUITABILITY MAP FOR ARUA



After combining the for maps for, soil moisture, soil carbon, Humidity, Precipitation, and soil type classification , this is the tree and shrub planting guiding map developed, Guiding which tree and shrub species are suitable for which area for effective high survival and effective climate action