

CASE OF COMMUNITY IN OTUKE DISTRICT - UGANDA

INDIGENOUS KNOWLEDGE INDICATORS

From 15th -18th of March is onset of seasonal rain (MAM)

SCIENTIFIC INTERPRETATIONS

Scientists also predict these periods as the onset of the first rainfall season most of the time because its a periods when the sun is approaching the equator. This is so because where the sun is, precipitation is always evidence.

Weather Forecasting



INDIGENOUS KNOWLEDGE INDICATORS

When you find it is very hot in particular hour of the day, it is expected to rain within the shortest time

SCIENTIFIC INTERPRETATIONS

Sudden rise in temperature over the tropical region is associated with atmospheric turbulence leading a strong updraft resulting to precipitation over the area in which it prevail.

Weather Forecasting



INDIGENOUS KNOWLEDGE INDICATORS

Looking at the sky in terms of cloud coverage and when the whole sky is covered by "dark clouds"

SCIENTIFIC INTERPRETATIONS

Dark clouds are mostly of cumulonimbus type. This type of cloud is one of the indicator scientist use for predicting heavy precipitation which can result in flooding over the area in which it falls.

Floods Forecasting



INDIGENOUS KNOWLEDGE INDICATORS

Heavy thunder storm happening

SCIENTIFIC INTERPRETATIONS

Thunderstorm resulting from convective type of rainfall and can be heavy enough to cause flooding. This is used for predicting flood by scientists especially with the help of radar.

Floods Forecasting



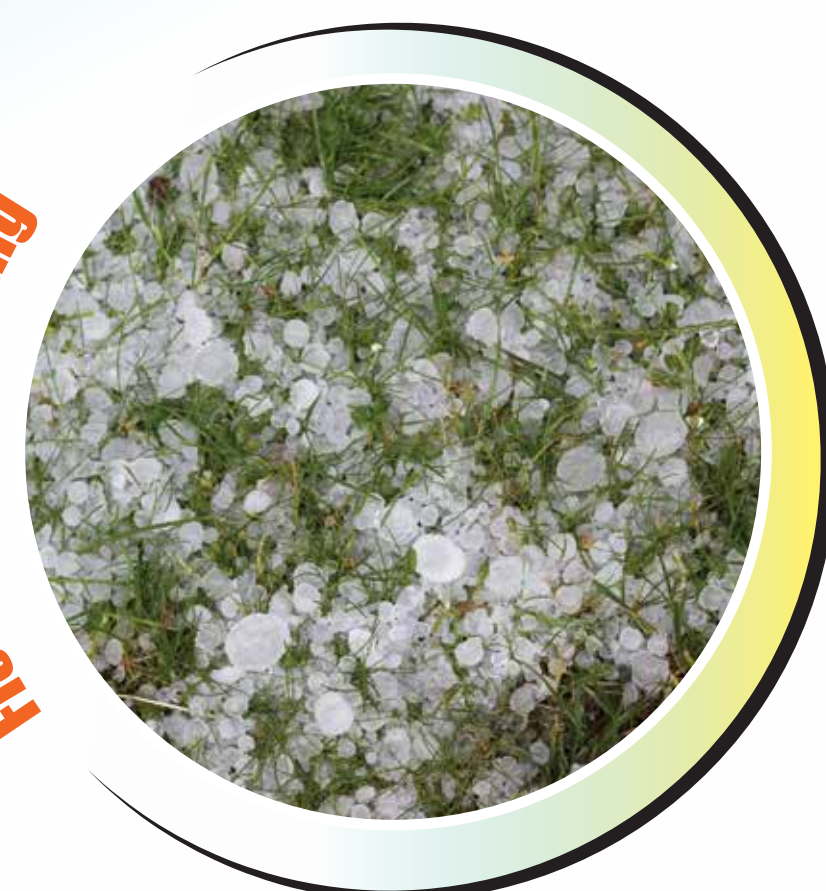
INDIGENOUS KNOWLEDGE INDICATORS

Occurrence of hailstone at the beginning of the season

SCIENTIFIC INTERPRETATIONS

Occurrence of hailstorm at the begining of the rainfall season is an indicator for the rainfall season with high chances to be characterise by flood.

Floods Forecasting



INDIGENOUS KNOWLEDGE INDICATORS

A sudden rise in temperature during the end of the dry season (February or March)

SCIENTIFIC INTERPRETATIONS

Scientifically, sudden rise in temperature over the tropical region is associated with lower level convergence and upper level divergence leading to a very strong updraft resulting to precipitation over that area.

Weather Forecasting



Climate Change signal



INDIGENOUS KNOWLEDGE INDICATORS

Receipt of intense rainfall at beginning of rainfall season

SCIENTIFIC INTERPRETATIONS

Scientists use amount and duration of the rain at the beginning of the season as an indicator for predicting the onset of seasonal rainfall.

INDIGENOUS KNOWLEDGE INDICATORS

Flowering of a particular tree species called "Owilakot"

SCIENTIFIC INTERPRETATIONS

Such a unique tree species starts flowering upon coming in contact with moist atmosphere condition due to the changing weather pattern which signal a changing season. This moisture is brought by the wind mostly from large water bodies and are deposited over land. The increase in moisture in the atmosphere is one of the key indicators scientist use for predicting rain.

Weather Forecasting



INDIGENOUS KNOWLEDGE INDICATORS

Very strong and variable wind blowing from the East locally known as "Ajuru"

SCIENTIFIC INTERPRETATIONS

Scientifically, such wind is called easterlies. Easterly wind is one of the key indicator of the driver of our seasonal rainfall over Uganda because of it high Relative Humidity content since it comes from the sea. Its strength and variability is due to uneven heating of the earth surface as the sun migrate over head the equator during the first season characterizing the convective system of rainfall which is predominance over tropical region in which Uganda resides

Weather Forecasting

