

**Presentation on Rain clouds
Findings at Nature and Culture
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Rainclouds

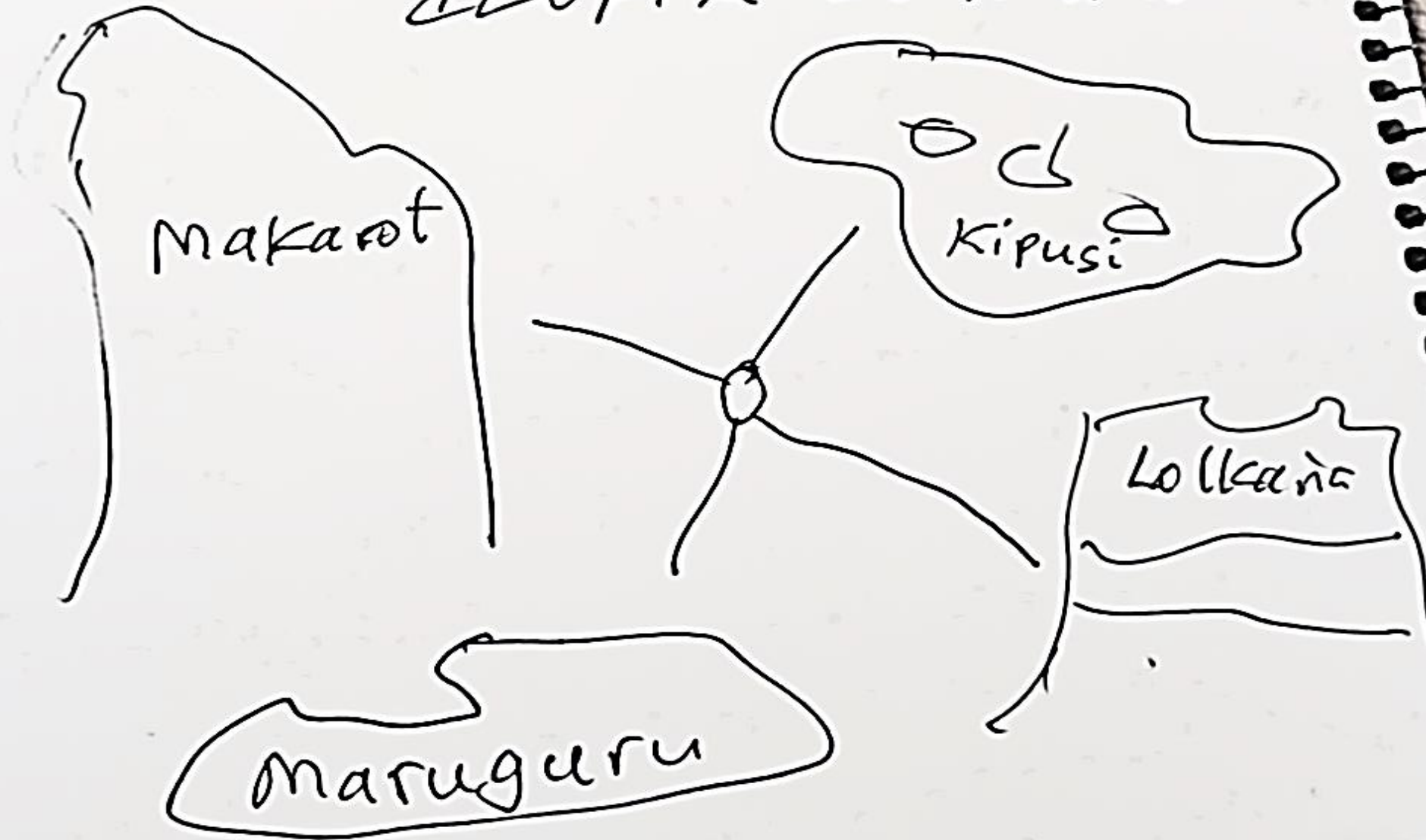
LOPIR LEWCHAN

Makarot

Kipusi

Lollana

maruguru



Olopiro lo Maluguru/Maluguru raincloud



Olopiro lo Lolkaria/Lolkaria raincloud



Olopiro le Kipusi/Kipusi raincloud



Olopiro le Makaron/Makaron raincloud



Nanyuki clouds, Oldoinyo Keri/ Okinya /Kenya



Kipusi and Nanyuki rain clouds look alike

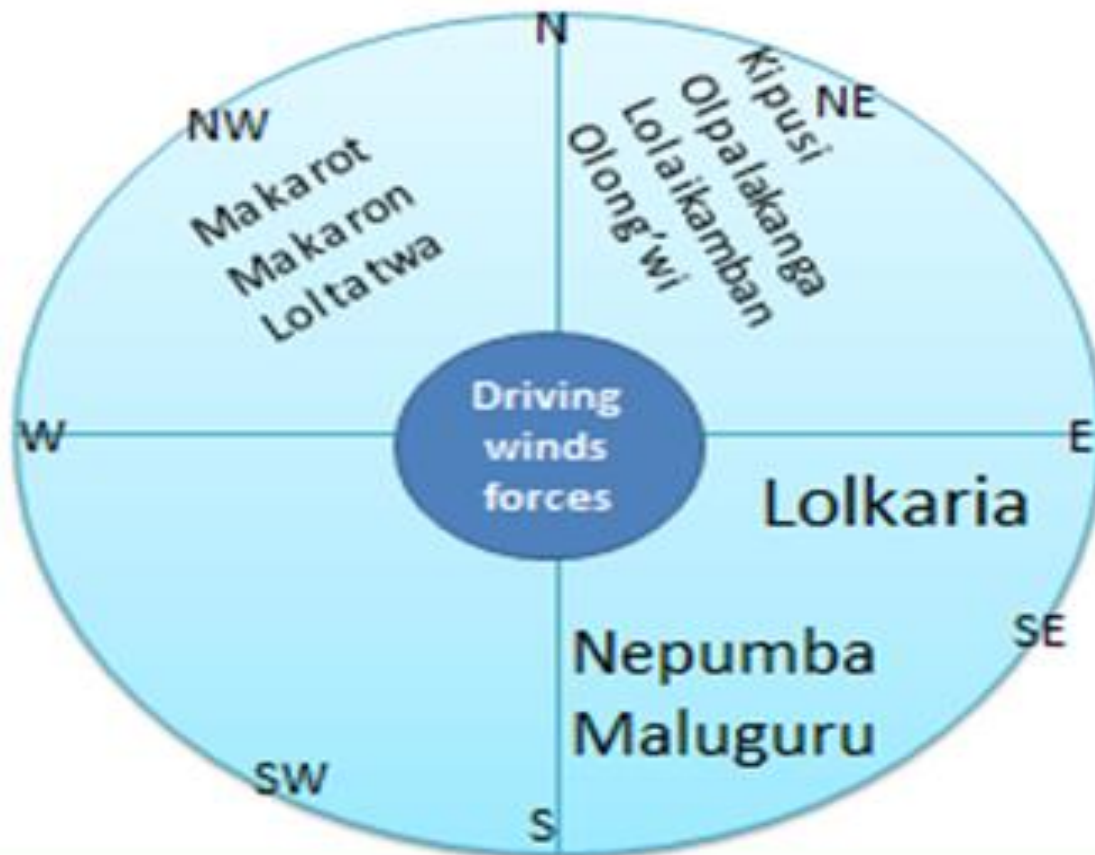


Smoke like cloud is part of rain scattering on the sky



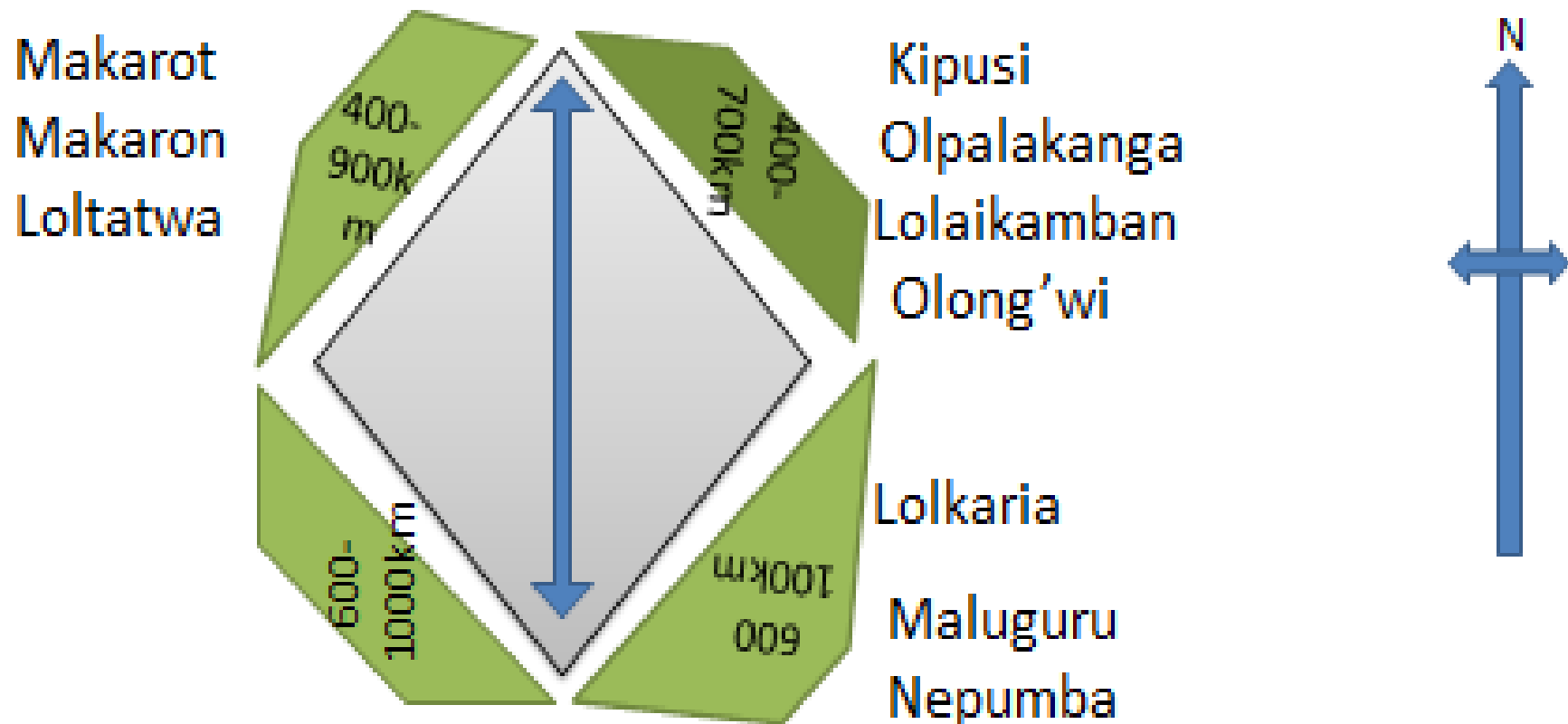
Distance from cloud to cloud

Position of rain clouds habitats and driving winds forces



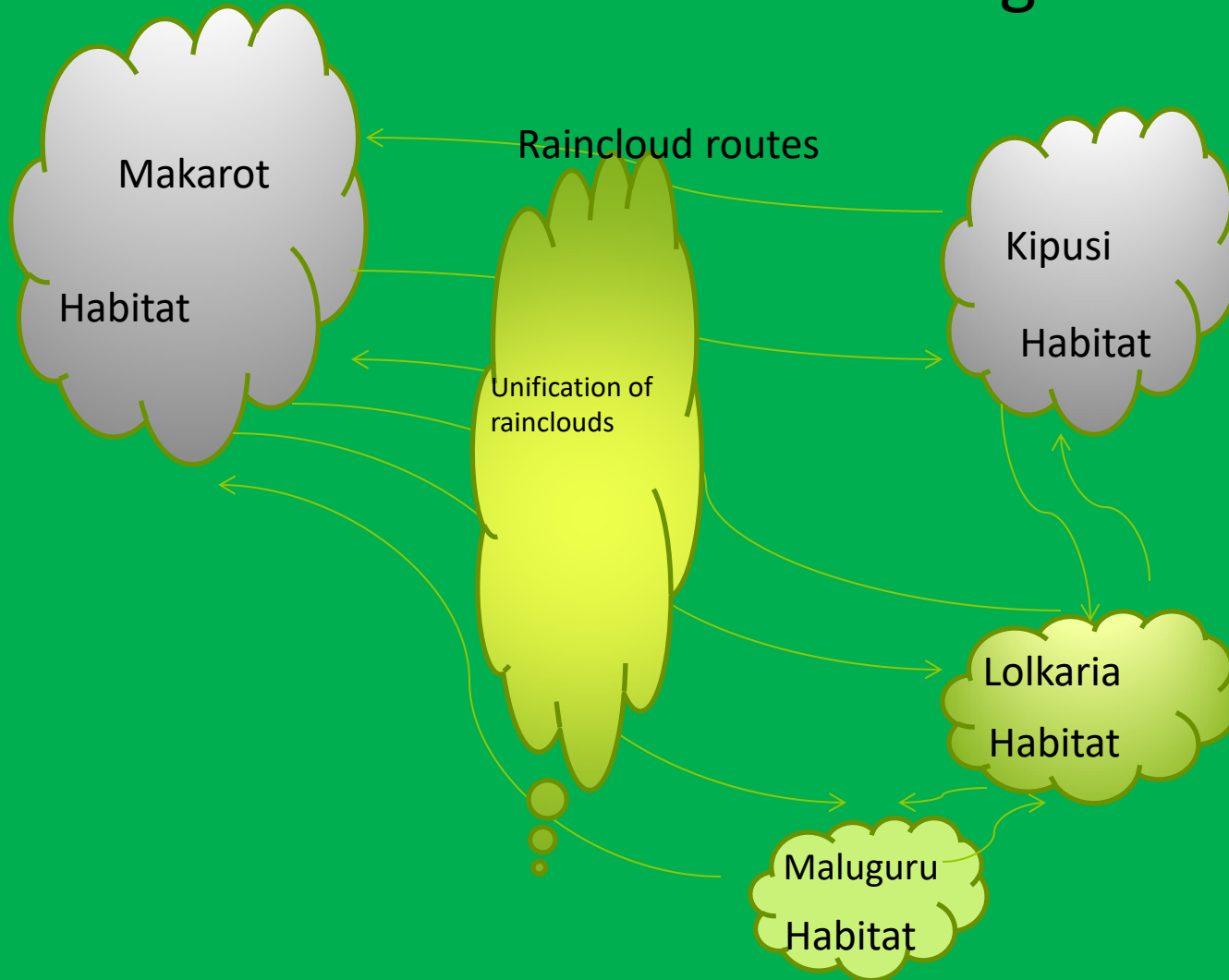
Diameter

Distance Diameter in KM from Each Rain Cloud Habitats



Clouds routes

Rainclouds unite and rain in a large area



Unification of rain clouds



Rainclouds activity and disappearance

No	Name of cloud (s)	Existence/Activity
1.	Loltatwa, Makarot, Makaron, Makaro (Olopiro lo Nkishu (Cattle cloud)), Lemakat (Soda ash cloud), Loldupai (Fibre cloud)	<ul style="list-style-type: none"> ✓ First rank rain cloud for heavy/long rains and long-distance rain covering a diameter of between 600-900km ✓ The most respected and honoured rain cloud in the Maasai community. It identified as Olopiro lo Nkishu. ✓ It's recorded disappearance range from 13-18 years; disappeared since 1998 and came back in 2011 and 2016 to date 2017.
2.	Kipusi, Olpalakanga, Lolaikamban, Olong'wi	<ul style="list-style-type: none"> ✓ Second rank rain cloud for heavy rains ✓ Active with continuous disappearance and comeback ✓ Heavy rains/long rains ✓ Short rains ✓ Assistance to Makaro rain cloud
3.	Lolkaria, Olosupuko, Losupuko	<ul style="list-style-type: none"> ✓ Active with short rains (Ilkisirat) heavy and less rains ✓ Help attract Makaro move towards eastern belt and unite with other rain clouds such as Nepumba, Kipusi and Lolkaria.
4.	Nepumba, Maluguru	<ul style="list-style-type: none"> ✓ Active with heavy and less rains ✓ Assistance to Lolkaria ✓ Help attract Makaro move towards eastern belt

Indicators of rains

Indicator in Maa	Name-English	Characteristics
Embaso	Fog	Landed cloud
Enkoleliyo	Dew	Cold drop of on leaves or grass
Osemo	Rainbow	Appear during or before rains
Enkang' e Nkolong'	Sun Krall	A circle surrounding the sun
Enkang' o Olapa	Moon Krall	A circle surrounding the moon
Enkoitiko	Zebra clouds	Zebra strips clouds extended on sky
Olwao	Winds	Blowing towards east or west,nort or south
Enkijape	Cold temp.	Cold,will smell of rain drops,cloud on sky
Enkirowaj	Hot temp.	Sunny, warm and humid
Im'benek	Leaves	Some trees green before coming of rains
Intapuka	Flowers	Some trees and flowers flowering before rains
Ing'oiing'oe,	Insects	Insects migration
Intaritik,Imotonyik	Birds	Migration,crying,singing,fly below clouds or in blue sky
Ing'wesi	Wild animals	Migrate, smell rain water, cry and celebrate
Inkishu	Livestock	Migrate towards rain water direction,cry,celebrate

Embaso/Mist



Enkoleliyo/Dew



Rainbow/Osemo



Sun kraal



Rain and season indicators

1. Plants flowering and giving new leaves
2. Rainclouds making lighting and thunderstorm from a far distance
3. Insects migration and sounds
4. Birds making sounds and migrate
5. Warm and cool temperatures
6. Moon and Sunn kraals
7. Zebra like clouds extending on the sky
8. Livestock smelling rain water and move toward that direction when driven to graze
9. Community prophets/seer dreams and interpret
10. Smoke like clouds moving around on the sky
11. Mist/fog
12. Dew
13. Neighbouring clouds cover mountains and rivers
14. Winds
15. Calm of trees

Astronomic knowledge



Three star chase

1. Kilekeny
2. Olokiro/Alakira Okir Air/Oipirita Enkai
3. Olokiro lo Oltorobo



Ilanyamuk/Three stars rains

- Ilmuran orewita Olbalo le Ker/Male star/warrior taking a he sheep

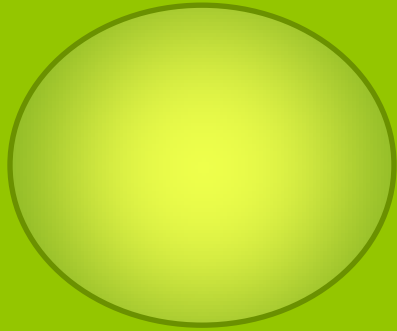


Inkokwa

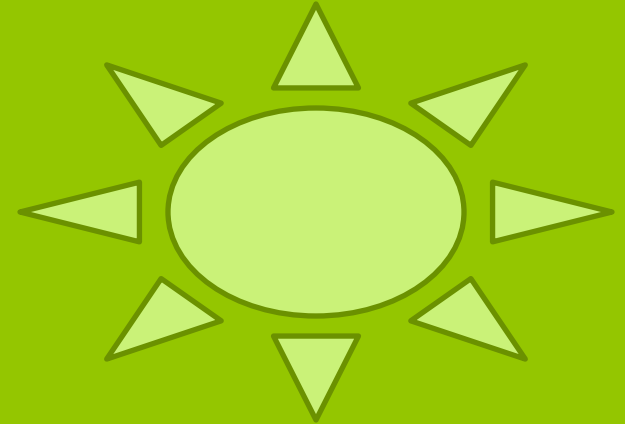
- Ilokir lo Intomonok/Femal stars



Olapa/Moon and Enkolong'/Sun














Olapa/Moon



Enkolong'

Sun

The moon circle and rain calendar transient

Name of Moon	Moon dimension	Significant of the moon transient (ascending and descending)		Changes seen
Oibor Uni (en'duata Olapa)		Possibility of rain at the beginning of the month	New moon	No rains or Unpredictable rains
Oibor tomon o Ng'uan(10 th day of Moon)		Possibility of rains	Tenth day of moon	No rains or Unpredictable rains
Oloyado			White full moon	
Olonyori			Yellow full moon	
Olonyokie		It can rain, Not good time for ritual activities	Red full moon	No rains or Unpredictable rains
Osopia Oituruku		Possibility of rain	Gold full moon	
Esopia e polos(Esopia E kiparon)			¾ of Gold Moon	
Esopia Nasuju/Nabaiye(20 th day of the month)			Last part of Gold Moon	
Emugie Naituruku				
Emugie e Polos				
Emugie Nabaiye (23 rd day of the month)				
Erikwa nabo (24 th day of the month)			Late appearance of moon	
Erikwa nasuju (25 th day of the month)			Late appearance of moon	
Erikwa Nabaiye(26 th day of the month)			Late appearance of moon	
Erikwa Nabaiye(5days of darkness)			Late appearance of moon	
Enking'atata (Late rise of the month)			Late appearance of moon	
Enkeya Olapa		Possibility of rain at the end of the month	End of month	No rains or unpredicted rains

Maasai Year (Olari) and drought (Olameyu) month cycle

Maasai Year (*Olari*) and drought (*Olameyu*) month cycle

No.	Month name in Maa	Month name in English	Status and changes seen
Start of green part of year			
1.	<i>Olkuluwa</i>	October	hears lightning and storming from a far end. In the evening changes the rain starts showing sign, trees greening and new leaves growing. During this part of the year there can have <i>Olkisirata</i> rains-start of rains)
2.	<i>Olgisan (Oladalu)</i> (Sunny month)	November	The rain starts, start of the New Maasai year During this part of the year there can have <i>Olkisirata</i> rains-start of rains)
3.	<i>Osomiso (oridntimi)</i> -thick cover of grass and bushes)	December	Pasture and leaves grown and it is evergreen with lush grass and water. Increased cover of plants, grass and flowers) During this part of the year there can have <i>Olkisirata</i> rains-start of rains)
4.	<i>Olng'er-ng'erwa (Longariak Naibor)</i> -wet period of year)	January	Plenty of water in water ponds, rivers and green pastures booming.
5.	<i>Olekimba (Enkata Olojing'ani oji Olkimbai) (Oltumuren)</i> (green time of year)	February	The month of rain, matured grass and leaves and plenty of water with Tsetse fly and <i>Olkimbai</i> flies biting livestock and humans
6.	<i>Enkokwai-</i> (Rains of female star <i>Inkokwa</i> -The six stars)	March	The wet month with waters everywhere and green pasture and leaves for animal. Time of abundant milk for pastoral families
End of green part of year			
7.	<i>Kiper-Loibor Nkariak-</i> (Ilanyamuk rains) - Time of clean and white water)	April	Short rains and start of dry season
8.	<i>Kujitaat</i>	May	Grass and trees start drying
9.	<i>Kujuorok</i>	June	Grass and tree leaves drying
10.	<i>Kiper</i>	July	Dry grass and leaves and burn of grass time
11.	<i>Pushuke</i>	August	Dry spell
12.	<i>Oltung'us</i> (Rain cloud gathering month)	September	livestock due to long spell of drought and low shortage of water. End of dry season and beginning of year of rains, the green part of Maasai year. There are changes seen, the rain starts moving to October and November in recent years. This month used to be the beginning of the new year known as <i>Olari</i> . In 1972 it rained in August and later used to rain in September and moved to October and sometimes it rains in November or December.
End of dry part of year and eve of green year			

Disappearance of some rainclouds cause droughts



No grass



Tree die of water and burn from warm



Livestock die



Recommendations

1. Use of customary laws to take care of biodiversity
2. Perform rituals
3. Use of indigenous knowledge to take care of biodiversity
4. Protection of rain cloud habitats
5. Community forecasters collaborate with National weather bodies
6. Empowerment of indigenous weather management and forecasting
7. Application of the knowledge for weather management, adaptation and mitigation

Ashe Naleng(Thank you)