

REPUBLIC OF KENYA MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY KENYA METEOROLOGICAL DEPARTMENT BARINGO COUNTY

MARCH - APRIL-MAY 2024 SECTOR ADVISORIES

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SUMMARY OF MARCH - MAY 2024 SEASONAL RAINFALL OUTLOOK

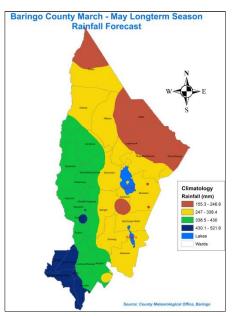


Fig 1. March -May Long Term "Normal Rainfall

Baringo County March - May 2024
Season Rainfall Forecast

W

Rainfall (mm)

221.1 - 306.7

306.8 - 392.4

392.5 - 478.1

478.2 - 563.8

Lakes

Wards

Fig 2. Seasonal Climate forecast valid March-May 2024

- Above average rainfall is expected over Baringo County during March-May 2024 "Long-Rains" Season, fairly distributed in both time and space.
- The rainfall expected to start between 25th March 2024, followed by dry spell, then peak from first to second week of April 2024 and cease during last week of May 2024.
- Fig 1 shows the Baringo County Long Term Mean Average "Normal" rainfall in millimetres
- Fig 2 shows forecasted rainfall amounts expected to fall in each Zone during the MAM2024 season

RAINFALL RANGE: Baringo County expected to receive seasonal rainfall total of between **221mm** to **560mm**.

1.0 AGRICULTURE SECTOR

Enterprise	Advisory	Agronomy	Pests and Diseases	Weather Related	Soil and Water	Post-Harvest	Marketing	Comments
				Disasters	Conservation	Management		
Maize	Low Lands: Farmers advised to plant early maturing hybrid varieties as from first week of April, 2024. Varieties include: Duma 43, DK8031, DH02 &DH04, Panner 4M-19, Sungura, Tosheka MH 401, WH101 Mid Lands: Planting time first week of April. Varieties: DH04, DK777, H513, H517, H520, Panner Highlands: Planting to start 4th Week of march, 2024. Varieties: H6213, H614, H6218, H629, H624, H627.	-Early land preparation should be done latest by 21st March. Farmers to dry plant at correct depth of 2.5cm, three days before onset dateUse well decomposed organic manureApply inorganic fertilizers based on soil analysis results.	-Stockists are advised to stock adequate recommended pesticides for Fall army worm (e.g. Escort, Belt, Ranger, Jackpot, Emaxi, Voliam Targo, Match Brigade) and maize stalk borer control chemicals (eg Tremor, Mashall Bulldock, ITK)Farmers are advised to do scouting for the two pests and procure the required control chemicals in time.	- Farmers on the river basins e.g. Kerio River basin in Barwessa, Sacho, Kolowa and Tirioko Wards to avoid planting maize on the riparian area and to dig drainage channels in those areas where flooding occurs - Farmers along Perkerra River covering Mogotio, Emining, Marigat and Ilchamus wards to avoid planting in the riparian areas.	-Farmers to adopt Construction of terraces on steep slopes e.g, fanya Juu, Bench terraces Strip cropping, Growing of cover crops and grasses -water harvesting for supplementary irrigation/on farm irrigation E.g water pan, Retention, ditchConservation Agriculture. Promote appropriate road runoff management	-Timely harvesting and Dry to 13% Moisture Content Control storage pests by use of recommended chemicals or use of hermatic gunny bags e.g. PICs then store properly in good aerated storesProper handling at harvesting and drying to eliminate contamination by mycotoxins.	-Farmers advised to store their produce until prices improves but ensure they preserve enough stock to last them until the next harvest	-Good yields are expectedThis advisory should be used together with the five or seven days forecasts given by KMD and alerts issued time to time, and the advice from agricultural officers.
Legumes: Beans, Green grams, Cow peas, Garden peas.	Beans: Varieties: KAT X56. RoseCoco, Nyota F1 Wairimu, KAT B1, KAT B9, Chelalang, Green Grams: Varieties: KS20, N26, Ndengu Biashara.	Farmers to use recommended spacing for Beans. For inter crop space 1ft by 1ft For pure stand use spacing of 30cm by 15 cm. GreenGrams : Use spacing of 45x15cm	-The stockiest are advised to stock adequate control chemicals for blight and leaf rust, bean fly (eg Apron Star, Thiram)Stockists are also advised to stock chemicals for control of powdery mildew in Green gram (Macozeb, Azoxy top, Beylaton) The farmers are advised	-There is likelihood of flooding in low lying farms of Kerio valley and perkerraFarmers are advised not to grow crops in riperian areas and plant in elevated areas.	-Farmers to adopt soil erosion control measures such as construction of terraces, Strip cropping, and crop rotationConservation AgriculturePromote appropriate road runoff	-Timely harvesting, -control storage pest by use of recommended chemicals or use of hermatic gunny bags e.g. PICs bags, then store in well aerated stores.	-Farmers advised to store their produce until prices improves but ensure they preserve enough stock to last them until the next harvest	Like above

Root crops: sweet potatoes, Irish Potatoes, cassava	Source for clean planting material from recommended Reliable sources e.g. KALRO, ATC's, CIP, ADC.	Early planting, especially for Irish potatoes is recommended -Sweet potatoes/cassava be planted on the on-set of rain.	to do regular scouting/surveillance for the diseases and to procure the recommended chemicals timely and apply to control the disease/pest. Possible incidences of blight for Irish potatoes: -Plant tolerant varieties -Practice spraying where necessary -Practice crop rotation and field hygiene.	-Flash floods may affect farms situated in low lying areas and farms near river banksFarmers are advised not to plant in riparian areas.	management -Adopt on farm water harvesting technologies such as Zai pits and semi circular bundsAdopt agro forestry -Adopt FMNR technology Laying of ridges during land preparation to harvest water.	-All harvested produce should be stored in well-aerated storesIrish potatoes should be protected from direct sunlightPiece meal harvesting of cassava and sweet potatoes -Value addition e.g drying of cassava and sweet potatoes	-Farmers to regularly undertake market research -Adopt aggregation for high bargaining power. -Farmers are advised to conduct market research before harvesting Aggregation of irish potatoes for better Prices.	
Fruits: Mango, Avocado, Macadamia, Pawpaws, Oranges/Citrus	-Early preparation of planting holes at least 2 months prior to planting -Manuring/ Fertilization of fruits at onset of rains	-Weeding of fruits - Observe correct spacing for fruits	-Carry out regular surveillance and scouting for pests and diseasesagrodealers are adviced to stock recommended pesticides for control of CBD and leaf rust in coffee e,g copper based fungicides from different companiesIn mangoes, stockists to stock pheromone traps for control of fruit fly, also	-There will occasional flash floods in low lying areas therefore farmers are advised not to plant fruit trees in those areas.	-In low lands farmers are advised to construct water harvesting micro catchments such as Trapezoidal bunds, semi circular bunds and retention ditches.	-Harvest fruits that have reached physiological maturity.	-Farmers to form cooperative for marketing and value addition.	

			stock marshal, Emmaron					
			and thunder.					
			-Farmers to observe field					
			hygiene to control spread					
			of diseases.					
Oil Crops:	-Farmers to adopt BT	-Early land	-Stockists are advised to	In low lying areas	Farmers are	Farmers are	Farmers to	
Cotton,	Cotton variety,	preparation	stock recommended	flash floods may	advised to lay soil	asked to harvest	aggregate the	
Sunflower and	-Sunflower H8998 and	should be done	pesticides for control of	occur.farmers are	conservation	at the right time	produce	
Groundnuts	Kenya Fedha	latest by 21st	common pests and	advised not to plant	structures e.g	to prevent	through FPOs	
	-Mwangaza and	March.	diseases	on those areas which	fanya juu terraces,	rotting of the	so that they	
	Ndovu varieties for	-Planting to be		experience flooding	retention ditches	produce.	can make use	
	groundsnuts	done at onset of			and contour	Dry to the right	of better	
	-Cheplambus Variety.	rains			bands.	moisture	bargaining	
						content to	power.	
						prevent		
						aflatoxin attack		

2.0 LIVESTOCK

Enterprise	Advisory	Agronomy/ Husbandry	Pests and	Weather	Soil and water	Post harvest	Marketing	Other
			diseases	related	conservation	management		comments
				disasters				
Pasture and	-Consider	-Bush clearing	-Take	-Soil erosion	-Plant fodders	-Ensure	-Own use	-Conserve
Fodder Production	establishing new	-Ploughing and	measures to	-Leaching	as stabalizers	adequate	during dry	fodder as
	plots of perennial	harrowing	control	-flooding of	for soil	drainage of	season	silage and hay
	fodders such as	-Sourcing of quality	Moles,	pasture fields	conservation	silo pits and	-Sales of	-Can be
	Cenchrus Ciliaris.	pasture seeds	Locusts, Army	-Cases of	structures and	proper storage	surplus to	utilized as
	Eragrostis	-Planting and early	worms etc,	afflatoxins	along the	structures of	neighbors,	standing hay
	superba, boma	sowing	head smut	-Poor	contours	dry fodders.	organise	
	rhodes, fodder	-Use adequate manure	(Plant KK	germination for	-Cut off	-Harvesting at	groups	
	sorghum	fertilizer and other	series)	seed based	drains.	the right time	-Set up digital	
	brachiaria, sugar	inputs		establishment	-Planting	and season	marketing	
	graze in Tiaty,	-Weed control		-Poor quality	fodder crops		platform	
	Mogotio, Baringo	-Top dressing		hay	like Nappier,			
	South, Saimosi,	-Seed harvesting		Low yieds	brachiaria			
	Bartabwa and	-Hay harvesting			using Zai pits			
	Barwesa							
Animal Production	-Breed selection	-Proper selection of	-Proper	-Be on the	-Avoid grazing	-Selection and	-Maintainance	

Cattle	-Breeding	breeding stock	housing	lookout for	near water	culling	of exixsting
Sheep	-Disease control	-Breeding through	-Proper	likelihood of	ways.	-Avoid in	livestock sale
goats	and prevention	i.e Bull selection,	nutrition and	livestock	-Drain water	breeding	yards and
	-Feeds and feeding	Artificiial insemination	feeding	drowning.	around	-Encourage	construcion of
	regime	-Proper feeding,	regime	-Disease	livestock	Commercial	new ones.
		-Housing	-Disease, pest	outbreaks such	bomas.	livestock off	-Formation of
		-Ddisease control	and vector	as FMD, RVF,	-Plant	take and de -	Cooperative
			control	LSD, CCPP, PPR	pasture/	stocking	groups for
				and sheep and	fodders on		marketing of
				goat pox	soil		Livestock and
				-Disruption of	conservation		l/sock
				grazing zones	structures		products
				due to floods	-Avoid		-Strengthen
				-Migration of	overstocking		Community
				livestock due	-Paddocking		partnership
				to floods	and		with the
					Rotational		county on
					grazing		Livestock
							marketing
							-Impassable
							roads may
							affect delivery
							of produce to
							markets
							-Sourcing of
							breeding
							stock from
							reputable
							breeding
							farms
							-Engaging
							professinals in
							breeding of
							L/stock
							-Formation of
							SACCOS
							where

Honey production	-Use of modern hives like langstroth, KTBH, Improved log hives -Apiary siting -Hive inspecton	-Feeding of bees -Pest and disease control -Colony multiplication	-Regular inspection of hives -Control of pests and diseases	-Swarming -Migration Absconding	-Conservation of indigenous fodder -Planting of fodder trees	-Proper harvesting, processsing and packaging	farmers will access credit facilities -Value addition -Branding -Packaging -Labeling -Set up digital marketing platform	Alternative source of livelihood
Fish production	-Site selection for construction of pond -Escavation of fish pond, sourcing of dam liners -Stocking of the fish pond and lakes	-Feeding -Monitoring for disease -Re stocking -Sourcing of fishing equipments	-Take measures to control pests and diseases -Avoid spillages of contaminating materials -Fencing around the ponds using	-Floods -Disease outbreaks -Sweeping of agro chemicals into the lakes and ponds	Construction of cut off drains -Planting of trees around thelakes and ponds	-Fish inspection -Availing fish cold chains -Value - addition	-Promotion of fish as white meat -Packaging and transportation to markets using refrigerated vehicles -Set up digital marketing platform	Alternative source of livelihood
Chicken production	-Enhance breeds -Housing -Feeding regime and feed formulation -Disease control	-Feeding and ration formulation -Vaccination and disease control -Proper housing -Breeding and breed improvement -Biosecurity	-New castle, Coccidiosis -Infectious coryza, fowl pox and fowl typhoid	-Disease outreaks -Increase of predators	-Proper sitting of poultry house -Water harvesting from poultry house roofs -Proper disposal of dropping	Transportation of chicken using cages -Egg storage at temperature below 20 -Refrigerated containers in transportation of meat	-Formation of marketing Cooperatives societies for Chicken and eggs -Value addition by putting in place slaughter slabs for	Alternative source of Livelihood for pastoral communities

			chicken -Set up digital	
			marketing	
			platform	

3.0 ENVIRONMENT AND WATER

Sector	Advisory	Weather Related Disasters	Soil and Water Conservation	Action/Comment
Environment and water	Protection of forests (cut lines)	Extended droughts,	Soil fertility, Siltation, increased	Kenya Forest Service, (KFS) Community Forest
	and specific tree species	Landslides, loss of	soil erosion	Association, CFA, Local Administration, Village elders,
	(mutakaryan)	biodiversity, human-wildlife		Kenya Wildlife Service, (KWS).
		conflicts		
	Protection of water catchment	Flush floods, drying of springs	Increased soil erosion	CFA, community action, Water Resource Authority,
	areas			WRA, Water Resource Users Associations, (WRUAs),
				Kenya Water Towers Agency, KWTA
	Enforcement of at least 10% of	N/A	Improved soil conservation, soil	Ministry of Environment, Ministry of Agriculture, KFS,
	their farms as forests		restoration and water	Local administration
	(Agroforestry)		catchment	
	Protection of community lands for	N/A	Soil regeneration, improved soil	Community committees, Ministry of Lands, National
	environmental conservation		fertility, biodiversity	Lands Commission, KFS, WRA to protect the
			conservation.	community lands
	School and homesteads	N/A	Decreased soil erosion	Ministry of Agriculture, Ministry of Environment, CFA,
	Fruitification			Families and schools' administration
	Restoration of catchment and	Drying of water catchment	Soil erosion	WRA, CFA, WRUAs, Community members to look at
	riparian areas (Privatized and	areas		how to manage blue gums and plant resilient
	planting of blue gums)			indigenous trees
	Pegging and demarcation of	Biodiversity loss	Increased soil erosion	WRA, WRUAs, NEMA, CFA, community committee
	riparian and communal lands			members
	Investment in water conservation	Flush floods	Likelihood of soil erosion	Ministry of Environment, WRA, WRUAs,
	measures (tanks, water pans,			
	reservoirs, dams)			
	Invest in clean energy	N/A	Improved soil cover	Ministry of Energy
	technologies like biogas, Solar			
	Invest in sustainable farm	N/A	Improved soil conservation	Ministry of Agriculture, Ministry of water and
	management practices and			irrigation, Water Resource Users Associations,
	effectiveness of extension officers			
	(Agroecology, CSA)			
	Management of pesticides and	Biodiversity loss	Loss of soil fertility	Ministry of Agriculture, Ministry of Environment,
	insecticides use			Regulatory bodies (KEBS)

Tree nurseries establishment (youths, women, Persons living with disability, groups) blended species-mangoes, coffee, indigenous trees	N/A	Improved soil conservation, reduced soil erosion	Ministry of Environment, Ministry of Youth Affairs, CFA, international organizations, Ministry of Agriculture
Management of invasive species (Prosopis, Karelmot) and parasitic species e.g Nomtoiwe/Kipkoch (from <i>Croton megarlocarpus, Wapurgia ugandensis</i> and tebeswo)	Biodiversity loss	Loss of soil fertility	KFS, Ministry of Environment, CFA to produce biochar and organic compost manure
Conservation and preservation of indigenous tree species (Milk trees).	Loss of biodiversity	Soil conservation	KFS, CFAs, Local administration
Waste management, wastes getting washed into the various water bodies	Health related impacts including cancer	Pollution of surface and underground water bodies and soils	WRA NEMA, Ministry of Environment.

4.0 DISASTER AND RISK REDUCTION

HAZARD	RISK	ADVISORY RESPONSE	ACTION	AREA/LOCATION
Floods, flash floods	-Destruction of homes/properties	-Residence in flood prone areas to relocate to safer	-Community	Countywide
	-Displacement of people	grounds.	-Kenya Metorological Department	
	-Water borne diseases	-Continuous updates on flood development and stay	Dept,	
	-Drowning of both people and	informed through local news and other official	-WRA	
	livestock	channels.	-County and National Goverment,	
	-Paralyzed transport systems and	-Timely repair and improvement of drainage system	-Development partners	
	communication including power	-Upgrading of road networks	-KENHA/KURA/KERRA	
	lines.	-Construction of structures that can hold/withstand	-Kenya Power	
	-Destruction of farm produce.	floods		
		-Avoid grazing livestock in flash flood prone areas		
		during the rain season.		
		-Construction of checkdams along the rivers.		
		-Construction of dykes and gabions.		
		-Avoid crossing flooded rivers, people to use bridges.		
		-Farming near river beds to be avoided and encourage		

		tree planting and planting of naiper grass along the river banksParents/Guardians are adviced to accompany children to and from School in flood/Landslides risk areas -Communities adviced to maximize water harvesting at household level especially roof catchment and existing systems must be cleaned before allowing water into them on the onset of long rains.		
Human and livestock diseases	-Malaria and water born diseasesRift VALLEY FEVER -Costipation -Foot rot -Worms -Pneumonia	-Stocking of medical and agro chemicals suppliesIncreases medical outreachesSupply of netsAdvice people to to treat drinking waterPeople are adviced to avoid open defication and use of latrine -Ensure proper disposal waste to prevent contamination of water sources	-Community County and National Goverment, -Development partners -Private entities	Countywide
Land Slides	-Environmental degradation -Access roads cut offLoss of life and property	-Enhance agro-forestry -Relocate to safe areas -Monitor land status or cracks on the ground Community adviced to map safe access routes for escapeEarly warning of key messages	Community -Kenya Metorological Department, -County and National Goverment Development partners -Community disaster monitoring and respose committees	Mount Tiaty-Tirioko Ward Kabartonjo Ward and Saimo Soi ward in Baringo North Sacho ward-Baringo Central
Transport and public safety	-Landslide on the slopes along the road blocking the roadAccidents on the slippery roads -Over passing of flood waters on roadsDeposits of soil/mud on roads	-Clearing of drainage systems -Putting relevant road signs -Appropriate road designs such as putting culverts and storm water waysRelevant authority should ready to respond to incidences -Drivers to be cautious on the road.	-Community -County and National Goverment Development partners Private entities	
Power lines destruction	-Likelihood of damage of electricity power lines as a result of rotting posts, trees falling etc	Surveillance and servicing of power lines.	Community and Kenya Power	Public to be advised to be on the lookout of possible risk of electrocution
Stormy Winds	-Destruction of infrastructure, classrooms, household shelters, falling of electric poles, destruction of farm crops and produce	-Prune big and heavy trees, prune trees near electric linesStrenghthening of roofs and houses -Construct houses in areas with tree cover / wind breakers	-Community -County and National Goverment -Development partners -Private entities	Public to move from risk prone areas. Increase vigilance. Clear risk trees sorrounding houses
Lightning	-Loss of life and livestock	-Install lightining arresters in building -Avoid using trees as sheds	-Community -County Disaster Response	Ribko ward Tiaty West Saimo Soi Ward

-Avoid walking in open field when raining	Committee	Baringo North
	-Kenya Metorological Department,	Ravine –Koibatek Sub-
	-Development Partners	County

5.0 OTHER SECONDARY EFFECTS

HAZARD	RISK	ADVISORY RESPONSE	ACTION	AREA/LOCATION
Food insecurity	-Acute malnutrition	-Livelihood diversification	-Community	Countywide
	-Inadequate food supply	-Communities trained on post harvest training technics	-County Disaster Response	
	in the household	-Timely disposing of livestock to avoid loss	Committee	
			-Kenya Metorological	
			Department,	
			-Development Partners	
Psychosocial issues	-Suicide	-Make psychosocial support services available	-Ministry of Health	Affected areas across all Zones
	-Poor decision making	-Seek psychosocial support	-Development partners	
	-Mental illness			
Insecurity	-Loss of lives and	-Communities are adviced to :	-County and National	-Mukutani Ward-Baringo South
	livehoods	-Plan for peace initiatives	Goverment	-Saimo Soi and Bartabwa Wards-Baringo
		-Embrace improved livestock breeds and diversify		North
		livelihoods		-Tirioko, Silale –Tiatu West
		-Enhanced security in hotspot areas through patrols		-Churo Amaya in Tiaty East
Family separation	-Child neglect	-Strengthen reporting and referral mechanisms	Community	Countywide
	-Sexually Gender Based	-Strenthen alternative dispute resolution mechanism		
	Violence	-Set up cash transfer programmes		
	-Early marriages and			
	FGM			

GENERAL PUBLIC SAFETY

- Stay informed about weather updates through local news and official channels.
- We urge all residents and stakeholders to take advisories seriously and make necessary preparations.
- Proper planning and response can significantly reduce the negative impacts of enhanced rainfall.
- Prepare an emergency kit with essential supplies including food water, flashlight and first aid supplies.
- Lets work together to ensure the safety and well-being of everyone in Baringo County during this upcoming season.

EMERGENCY CONTACT

In case of emergencies, contact Area Assistant Chief, Chief, Ward administrator or you can contact County Disaster Management Office through Contact Toll Free no: 1554.

CONCLUSION

The advisories have been co-developed with financial support from the Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) and Kenya Meteorological Department. AICCRA is supported by a grant from the International Development Association of the World Bank. Contributors to the advisories included:

- Baringo County Government Crops and Livestock officers
- Kenya Red Cross
- World Vision

- Save the Children
- Association of Women in Agriculture (AWAK)
- RECONCILE

- Christian Impact Mission and
- Self Help Africa
- Indigenous Women and Girls
 Initiative (IWIG)

Please use this seasonal advisory in conjunction with weekly, monthly and regular weather updates issued by the **County Meteorological Office, Baringo.**

For further information, please contact:

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