



Kenya Crop Conditions Bulletin

April 2023

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National Synthesis

Overview

- Crop conditions are favourable across the country for maize, wheat, rice and beans due to rains received in April. Kitui reported exceptional crop performance for all crops
- Weeding and topdressing were the main activities with counties in North rift reporting planting as rains were received in April
- Wheat is in early vegetative stages in Narok and Nakuru while in north rift it is expected to begin in May/ June.
- General crop performance is good due to the adequate rains received in most areas. Leaching reported in low lying areas in Meru and FAW in Baringo putting the counties under watch condition
- Good harvests expected in most counties as per current crop condition

In the Bulletin

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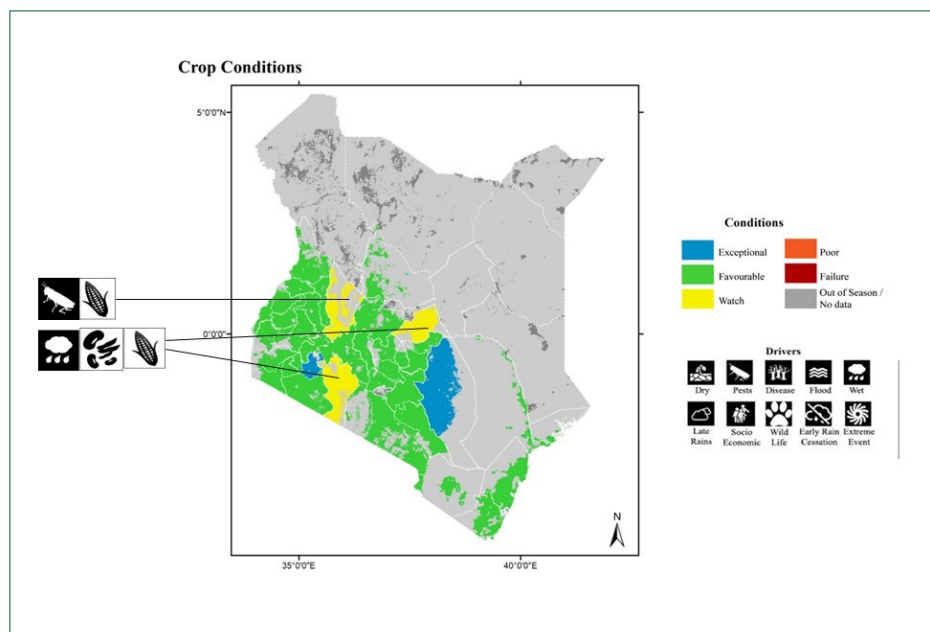
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Regional crop conditions March 2023

Map showing regional crop conditions information in Kenya for March 2023 for maize, beans, wheat, green grams, cowpeas, rice and sorghum. The crop monitor map is based on a combination of several variables including remotely sensed data, ground observations, field reports, national and regional experts. Crops with conditions that are other than favourable are labelled on the map with the driver for the resultant condition. The situation in some areas in the country are under watch due to lack of rains as a result of delayed onset or dry spell in the season.

OUTLOOK (Kenya Meteorological Department (KMD)/State Department for Crops Development (SDCD)

The forecast indicates that several parts of the country are likely to experience near average rainfall. However, the Lake Victoria Basin region, parts of the Highlands West of the Rift Valley, the Coastal region, parts of northeast and isolated areas over Southeastern lowlands are likely to experience near average to slightly above average rainfall.



Assessment by Region

North Rift Region

Generally, the main activities were planting at between 80-98% across the counties in the region. In Trans Nzoia, West pokot, Uasin Gishu there was prolonged dry period in the month of April which led to poor germination of maize in some parts of Kwanza and Endebess Sub counties and delayed planting of maize in Cherangani Subcounty due to the dry spell. There was also increased infestation of the Fall armyworm in Trans Nzoia. Elgeyo Marakwet, Nandi, Samburu and Baringo counties reported timely onset. Beans were still being planted in the region and Elgeyo Marakwet reported planting and 1st Earthing up for Ealy planted potatoes. Wheat was yet to be planted as most of the planting is done in May and June. General condition of the germinated crop is good across the region and the outlook for the expected production is good. Due to the good rains being received the targets are high for this year especially for maize and given the high prices received by farmers for last years crop. In Baringo 98 percent of the land had been planted and germinated and farmers were still planting due to a shortage of ploughing tractors. Unprecedented outbreak of FAW has been reported across all the Sub Counties and they are devastating



Reported FAW in Baringo Central

Table 1: North Rift Region Maize Production

County	Target Are (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Baringo	46,660	1,166,500	37,614	712,350	46	911	46,706	1,050,761
Elgeyo Marakwet	3,200	1,433,600	30,970	3,153,013	131	2,695	32,131	1,010,696
Laikipia	29,000	1,087,500	22,031	382,938	3,303	26,424	32,303	1,005,174
Nandi	67,500	2,040,625	63,103	2,008,469	5,632	95,852	73,132	1,932,414
Samburu	28,000	28,000	7,185	70,918	7,185	70,918	23,100	83
Trans-nzoia	107,000	5,600,000	102,896	4,794,879	0	0	107,000	4,333,500
Turkana	3,500	40,000	3,948	38,022	1,245	15,331	3,675	18,841
Uasin gishu	106,600	5,010,482	103,588	4,235,958	0	0	106,606	4,317,543
West pokot	50,950	1,273,750	30,532	728,511	0	0	50,950	1,146,375
Total	471,216	17,932,457	401,867	16,125,058	17,542	212,130	475,603	14,815,386

South Rift Region

The onset of the rains in the region was in mid-march and the conditions were favourable for planting of all crops. In the review period planting was on average 60% with some counties in the region reporting first weeding. Kajiado reported 60% of area has been planted and planting is still ongoing during the month. In Bomet planting is at 70%, with most farmers in lower parts of the county plant during the OND season to avoid waterlogging during the MAM Season. In Narok the crops are at planting to early vegetative with watch conditions on beans due to the wet conditions after resumption of rains. Wheat and potatoes are at early vegetative stages in the county of Narok with conditions being favourable. In Kericho, planting and weeding was ongoing and the conditions are favourable and average yields are expected. Maize is at knee high in Nakuru County with increased acreage due to readily availed GOK subsidized fertilizers coupled with the heavy rainfall witnessed in different parts of the county. The prospects in the county of Nakuru is a good harvest in both upper and lower altitude zones. Beans in the county are at four true leaves to flowering and good harvest are expected due to favourable weather. For wheat in the county, the crop is at early vegetative stages and doing well and good yields are expected. Irish potatoes are performing very well due to the rains and is in various developmental stages a lot of activities revolving around control of insect pests and diseases.



Maize crop situation in Ndabibi (Maiella ward) Bean pure stand at Kapkures Nakuru West Sub County



Wheat in Bahati Subcounty

Table 2: South Rift Region Maize Production

County	Target Are (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Bomet	30,000	459,645	25,951	495,001	7,281	137,470	37,281	597,115
Kajiado	6,913	124,434	6,780	71,895	9,831	129,778	16,744	254,212
Kericho	42,000	1,323,000	35,397	1,138,504	0	0	42,000	1,323,000
Nakuru	90,450	3,256,200	80,374	2,242,768	839	14,267	91,289	3,270,467
Narok	90,000	1,215,000	83,159	1,839,387	21,990	329,850	111,990	1,544,850
Total	259,363	6,378,279	231,661	5,787,555	39,941	611,365	299,304	6,989,644

Central Region

The crops in Kiambu and Muranga were from planting to early vegetative stages with conditions being favourable. In Murang'a the major activities going on currently were weeding, gapping, top dressing and pests and disease control in maize which is at 6 leaves to knee high. There was delay in application of basal fertilizer by many farmers because Murang'a deports received government subsidized fertilizer when most farmers had planted and the crop germinated. Yellowing of maize crop due to leaching is seen to about 40% of land under maize and is being addressed through top dressing. In Nyandarua planting and early weeding of the maize crop while for potatoes planting and 1st earthing up was being done. For wheat it was land preparation and field sanitation ongoing in preparation for planting, while planting and weeding for beans was ongoing. In Nyeri rains started during the month of march and most crops are from germination to early vegetative stages including wheat which is grown in Kieni. The Irish potatoes in the county of Nyeri ,25% early planted crop at vegetative to flowering and generally in the county the prospects for all crops are good due to the god rains received in the month. In Kirinyaga, rice is planted in about 40% of the land during the long rains as compared to the short rains which is the main rice production season and the crop is at planting to early vegetative stages and is in good condition.



Maize and bean crop intercropped, Mathioya Sub County



Maize and cowpea intercrop,
Maragua Sub County



Maize and bean crop intercropped, Gatanga Sub County

Table 3: Central Region Maize Production

County	Target Area (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Kiambu	13,900	250,200	20,075	309,740	10,204	88,933	24,104	339,133
Kirinyaga	20,371	270,162	17,809	245,692	14,348	95,629	34,719	365,791
Muranga	35,715	803,588	34,709	379,016	31,001	248,008	66,716	1,051,596
Nyandarua	19,000	495,900	17,212	288,128	7,350	107,000	26,350	602,900
Nyeri	16,000	230,400	16,720	232,266	13,199	78,783	29,199	309,183
Total	104,986	2,050,250	106,525	1,454,842	76,102	618,353	181,088	2,668,602

Lower Eastern Region

Makueni and Machakos received rains in mid-march and Kitui received rains towards the end of the month. Crop conditions in the region are favourable with Kitui reporting exceptional performance. Generally maize was at vegetative stage with early planted having 4-6 leaves and late planted 3-4 leaves in the three counties and beans reported to be at flowering stage. Pigeon peas in Makueni and parts of Kitui and Machakos had been experiencing moisture stress but after resumption of the rains, the crop has rejuvenated and, in some areas, there is harvesting (green) for short duration crop variety is taking place. Cowpeas which are grown for grain and leaves improved the vegetable supply to households and are in plenty. Expected harvests in the region are good for all crops as rains have been adequate with exception of the hill masses where water logging for beans was reported.

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Late maize crop



Greengrams



Maize/beans intercrop

Table 4: Lower Eastern Region Maize Production

County	Target Are (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Kitui	44,352	152,878	31,095	140,873	45,694	365,552	90,046	518,430
Machakos	106,299	835,529	78,064	537,106	67,378	606,402	173,677	1,441,931
Makueni	60,000	540,000	68,864	294,211	65,400	523,200	125,400	1,063,200
Total	210,651	1,528,407	178,023	972,190	178,472	1,495,154	389,123	3,023,561

Upper Eastern Region

In Meru County the month of April has been relatively wet with several rainy days over the county. This has led to good performance of crops. In low lying areas however there has been a lot of leaching leading to stunting of maize/sorghum and yellowing of beans. The leaching has been compounded with low fertilizer use due to high cost hence stunted crops. Parts of Imenti and Tigania sub counties are ones experiencing very poor crop performance despite the very good rains due to the excessive rains. In Embu, the rains have been uniform and reliable in the whole county and planting was completed of the targeted area. High cost of fertilizer led farmers to reduce the acreage under maize and plant more legumes that do not require a lot of fertilizer Maize is at 7-8 leaves stage while beans, cowpeas and greengrams are from vegetative to flowering stages. As per the crop at current stage, good production will be expected all factors remaining constant. In Tharaka Nithi, April was a wet month in all Ecological zones favouring crop development. Crop condition in the field is favourable with no major pest incidences. Maize on average is beyond knee high, beans and green grams at flowering stage. Sorghum and millets at booting stage. Wheat production in Meru has been influenced by socio economic factors especially high cost of seed and fertilizer. Short rain is the main season for wheat in Meru. This season (LR) the crop is mainly grown by large scale farmers who practice conservation agriculture

The crop conditions were favourable due to the adequate rains in the region. The north eastern region acreages under crop usually very low and easily achieved.

Table 5: Upper Eastern Region Maize Production

County	Target Are (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Embu	16,950	83,639	17,595	231,734	17,835	142,680	34,785	226,319
Garissa	79	79	344	674	59	472	138	1,352
Mandera	1,600	1,600	10,644	7,473	400	2,000	2,000	11,585
Marsabit	240	240	233	1,485	800	4,000	1,040	6,160
Meru	45,800	45,800	26,335	332,609	49,672	525,102	95,472	768,102
Tharaka Nithi	17,720	17,720	11,259	142,047	12,855	79,468	30,575	97,918
Wajir	30	30	189	3,097	210	3,989	240	4,081
Total	82,419	357,806	66,599	719,119	81,831	757,711	164,250	1,115,517

Coast Region

The rainfall distribution in some counties in the region has been poor. In Taita Taveta a few pockets of the county received some rains last week of March and for the rest of the county the rains started last week of April. The crop is doing well for the areas that received rainfall earlier. The crops are at early vegetative stage and while other farmers are still planting where rains were received late. The crop condition is generally and based on the prevailing conditions over 80% yield will be realized. For rice the crop is at early vegetative stage and all is planted in irrigation schemes in Taveta subcounty. In Kwale and Kilifi, the month of April has been characterized by rainfall well distributed in the County. Land preparation and planting was in progress. Maize, greengrams and cowpeas are at planting to early vegetative stages with exception of sorghum which is planted in Kinango Sub County where planting is in progress. For rice in Matuga, Msambweni and Lungalunga Sub counties, the crop has been planted. In Tana River, the whole County have experienced some rains though they were erratic and the distribution was generally poor as heavy rains were experienced for a very short time the maize is at early vegetative and planting stages in most farms after the rains received. Planting is still going on in the rain fed areas but in the major and minor Irrigation Schemes crop is at early Vegetative stage. There were no reported cases of any pest attack.

Table 6: Coast Region Maize Production

County	Target Are (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Kilifi	67,689	7,686	60,647	578,820	11,852	85,027	79,541	92,712
Kwale	39,188	440,865	55,847	533,606	21,117	168,936	60,305	609,801
Lamu	41,800	564,300	19,097	314,417	5,362	63,411	47,162	647,711
Mombasa	645	3,483	584	4,835	4	20	649	3,503
Taita Taveta	6,500	70,200	8,061	87,553	8,300	66,400	14,800	136,600
Tana River	7,700	117,396	3,026	42,839	1,922	17,933	9,622	135,329
Total	163,522	1,203,930	147,262	1,562,070	48,557	421,727	212,079	1,625,657

Nyanza Region

The region received good rains from the second week of March; however, in Homabay County, the onset of rainfall was delayed. In Kisumu, the long rains season performance has been promising with above average distribution in time and space. So far over 85% of the households have planted. Most of the households in the upper parts (the whole of Kisumu west, upper Nyakach, upper parts of Kisumu east, Seme and Muhoroni) of the county have planted approximately 95% whereas the lower parts (Lower Nyakach, lower parts of Kisumu East, Muhoroni and Seme) have so far planted slightly above 75% of their target. The maize crop is from planting to knee-high while beans are at planting to flowering stages. Sorghum is at planting to knee high with the upper parts of the county achieving approximately 80% whereas the lower parts have achieved 95%. For rice, preparation for long rains crop have started in some schemes whereas the crop on the paddy fields are for short rains' season the crop is at grain formation and harvesting. In Homabay, maize is between 2nd weeding and tasselling and the crop is in good condition though there has been high incidence of Fall Army Worm despite the ongoing rains. Bean crop is between vegetative growth and podding while sorghum is at vegetative stages to booting. General prospects are a good crop this season. Beans were at flowering stages In Nyamira and Kisii, beans are almost at the reproductive stage and in good condition, while maize is from the early vegetative stage and in good condition. In Migori, maize is generally above knee high. Some green maize appeared in the market in the last week of the reporting month. In Siaya, all crops in Siaya are at planting or early vegetative stages and in favourable condition.



Pure Beans stand in Bonchari



Maize crop in Bonchari Borabu

Table 7: Nyanza Region Maize Production

County	Target Area (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Homabay	40,930	699,903	43,652	714,294	29,502	370,648	70,432	1,070,551
Kisii	34,500	745,200	29,507	491,183	34,752	726,543	69,252	1,471,743
Kisumu	48,500	1,080,000	45,448	890,672	11,280	128,111	59,780	1,208,111
Migori	73,700	1,619,100	46,817	748,062	35,490	418,469	109,190	2,037,569
Nyamira	25,000	421,200	37,801	867,098	26,456	411,406	51,456	832,606
Siaya	50,120	902,160	24,458	446,923	21,325	170,600	71,445	1,072,760
Total	272,750	5,467,563	277,683	4,158,232	158,805	2,225,777	431,555	7,693,340



Western Region

Most areas in the western region, planting is almost complete at 95% - 98 % except in very few farms, most maize fields are at first weeding to knee height and top dressing. The crops are doing well, the few incidences of AAF that were reported were controlled. Beans are at early vegetative to flowering stages and performance is good. Busia, over 98% of the land has been planted, major activities in maize and sorghum crop fields are at weeding and top dressing and most beans fields are in vegetative to reproductive stage. Vihiga county witnessed hailstones, but they are unlikely to have an impact on production. Average yields expected in the county if the situation remains the same.

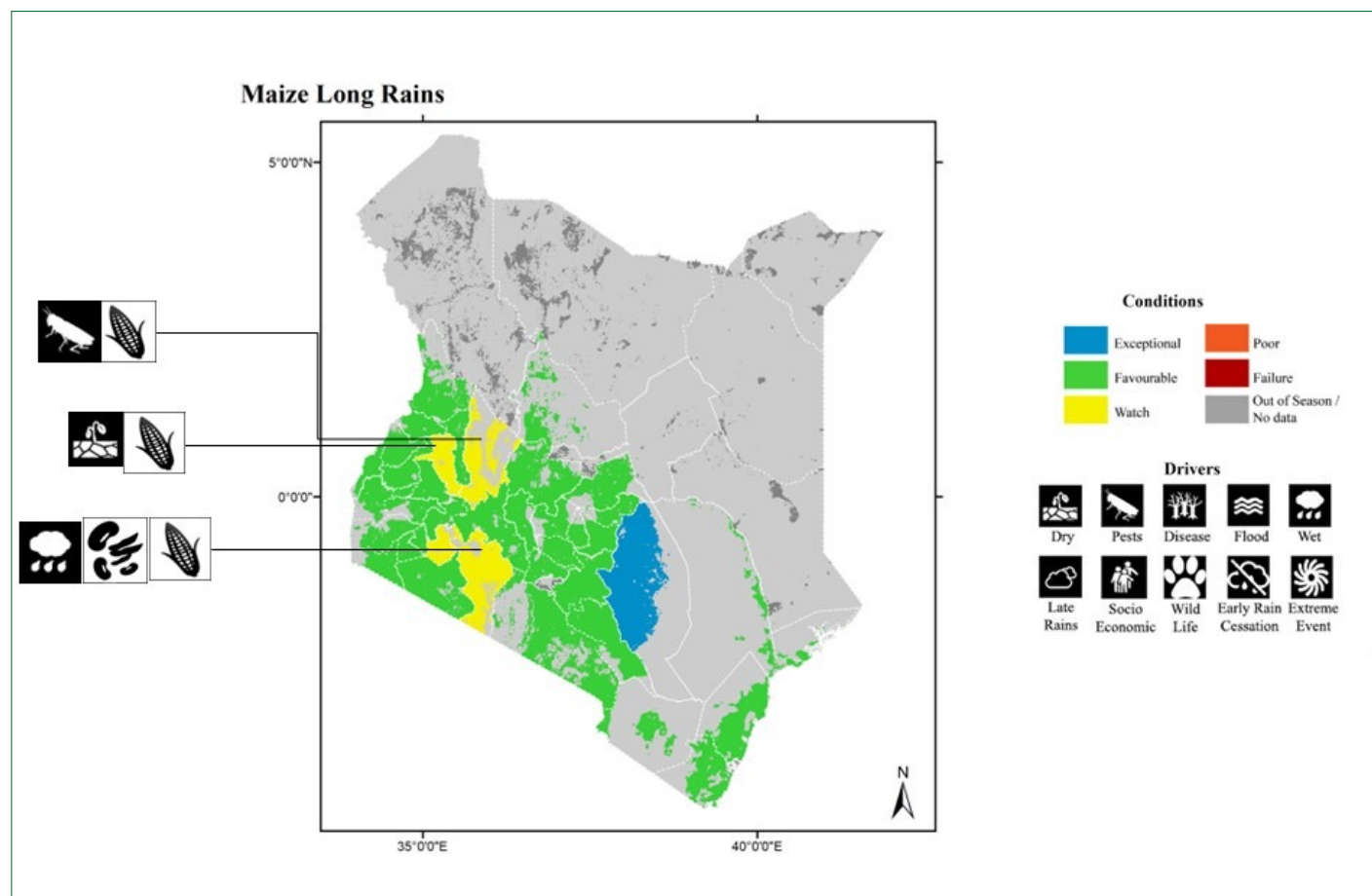
Table 8: Western Region Maize Production

County	Target Area (Ha) LR 2023	Target Quantity (Bags) LR 2023	LTA Achieved Area (Ha) LR	LTA Achieved Production LR	Target Area (Ha) SR 2023	Target Quantity (Bags) SR	Target Annual Area (Ha) 2023	Target Annual Quantity (Bags) 2023
Bungoma	82,629	1,949,189	2,944	55,922	85,573	2,005,111		
Busia	35,000	567,000	9,795	134,756	44,795	701,756		
Kakamega	78,500	2,260,800	16,010	245,708	94,510	2,506,508		
Vihiga	20,000	441,000	10	132,000	30,080	573,000		
Total	216,129	5,217,989	38,829	568,386	254,958	5,786,375		

Assessment by Crop

Maize Conditions Long Rains Summary

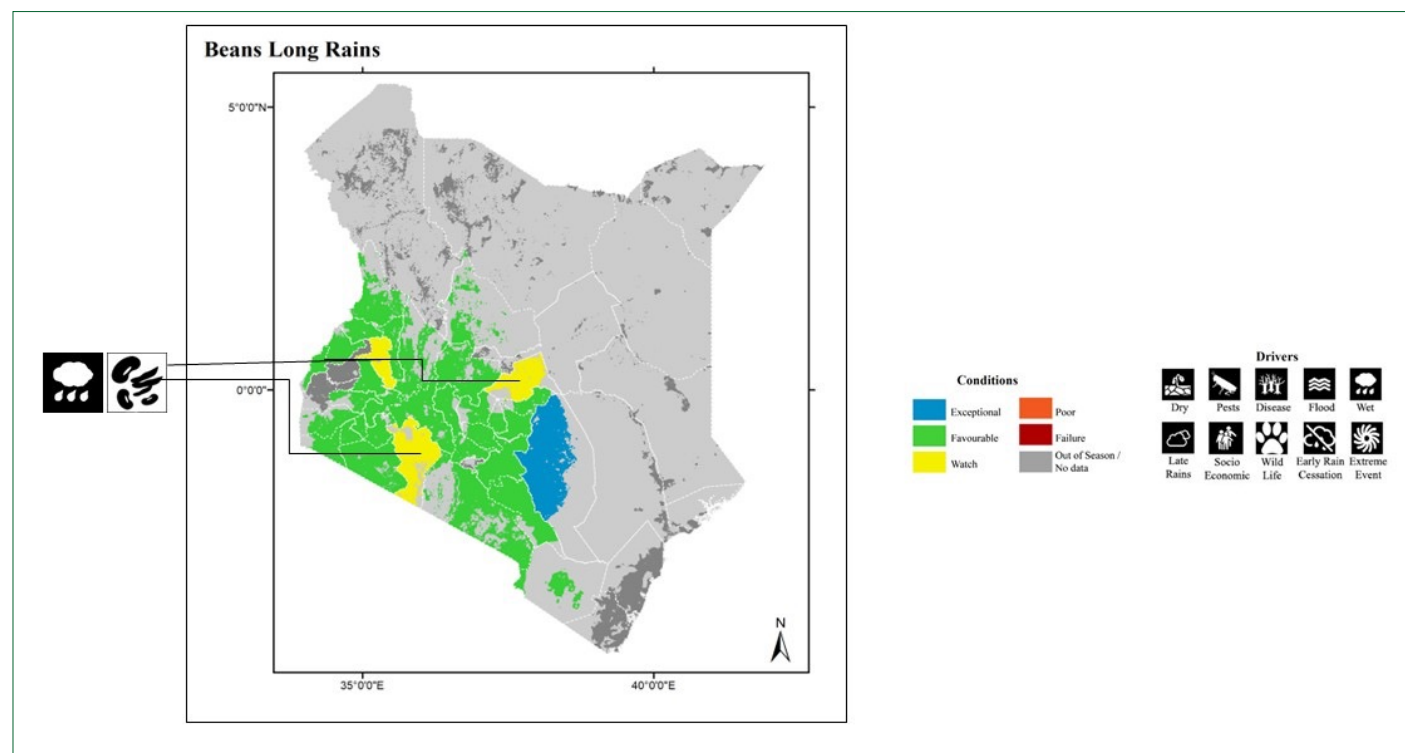
Maize conditions are favourable in whole country where the crop is from planting in some areas where rains were received in April to early vegetative stage to tasselling in pockets in Nyanza. Main activities for the crop were weeding and topdressing which was critical for areas where planting fertilizer was not available in good time. Conditions are under watch in Narok and Bomet due to excessive rains while in Uasin Gishu it was due to extended dry conditions. Samburu and Kitui where conditions were under watch in March due erratic rains and in coast where the onset was not fully realised have since improved after resumption of rains. Migori reported some green maize being consumed from the early crop. In Baringo 98 percent of the land had been planted and germinated and farmers were still planting due to a shortage of ploughing tractors. Unprecedented outbreak of FAW has been reported across all the Sub Counties and they are devastating. Based on the current conditions the outlook is good for the crop due to the good rains being received and the reported good crop performance.



Bean Conditions Long Rains

Beans conditions are favourable in the whole country where the crop is from early vegetative stage to flowering with a few counties reporting initiation of podding. Conditions are under watch in Narok, Samburu where the rains are erratic whereas in coast and Kitui where the onset is not fully realised.

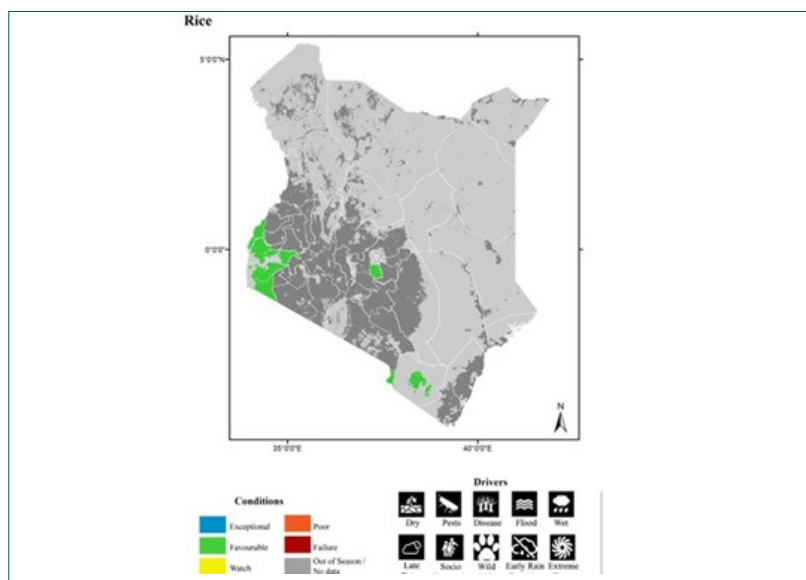
Based on the current conditions the outlook is good for the crop due to the good rains being received and the reported good germination especially if the dry planted crop where it was over 95%.



Rice Conditions Long Rains

In rice growing areas the crop is in good condition as it grown under irrigation. In Kisumu preparation for long rains crop have started in some schemes whereas the crop on the paddy fields is for short rains' season. The crops were at stages grain formation, and harvesting. However, most of the short rains' season crops have been harvested Normal production expected. Rice in Taita Taveta is doing well and is in good condition and 95% of the targeted yield will be realized. Kirinyaga crop at this period is is 40% during the long rains with main crop being planted in July to be harvested in November December.

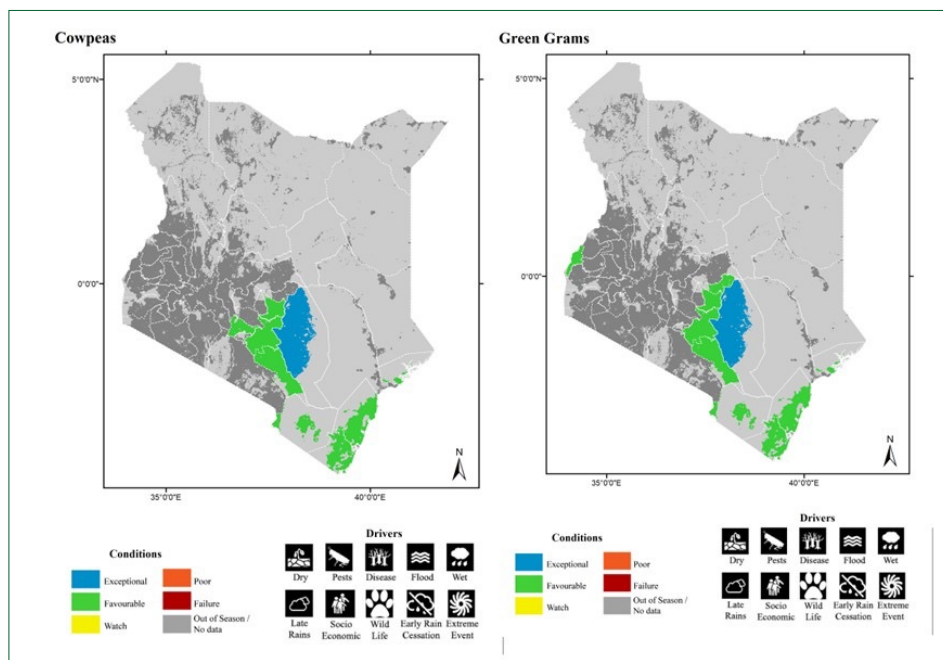
The crop is in good condition





Cowpeas and Greengrams Conditions Long rains

The main growing areas of these crops for grain are in Upper and Lower Eastern and to a lesser extent Coast. In other parts of the country, cowpeas are grown for leaves. In the main growing areas, the crop is from at late vegetative to reproductive stages and was being eaten green. Performance was good across all reporting counties. Kitui reported exceptional performance due to the good rains this season.

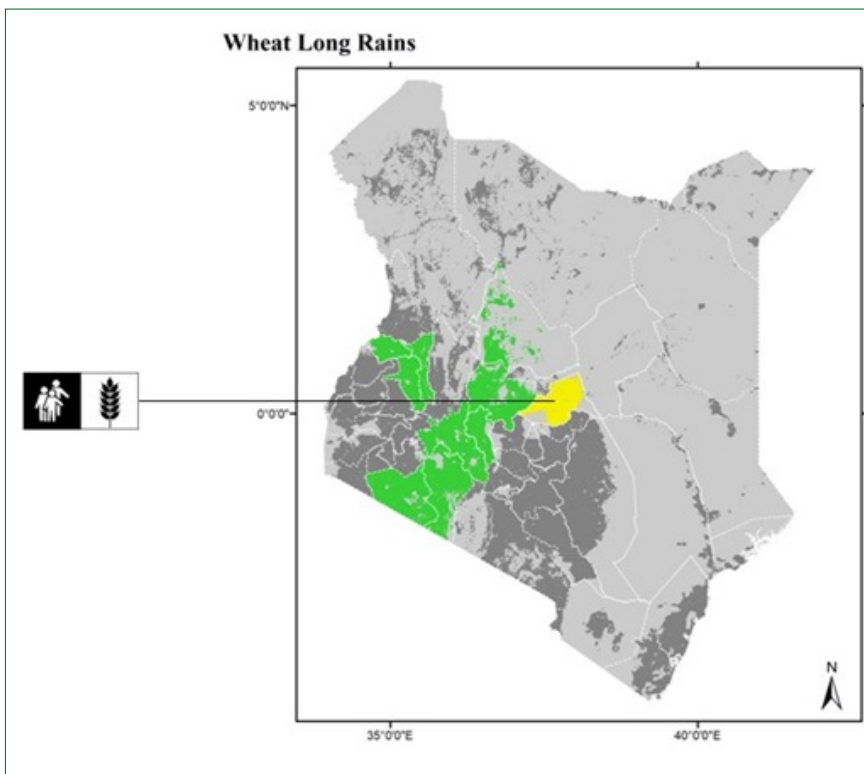


Wheat Conditions Long Rains

Wheat is mainly grown in Narok, Meru, Uasin Gishu, Trans Nzoia, Laikipia, Elgeyo Marakwet and Nyandarua counties. Wheat is at early vegetative stage in Narok and Nakuru and in the northern rift counties are at land preparation and minimal planting stages. Planting in North rift is mainly may to June.

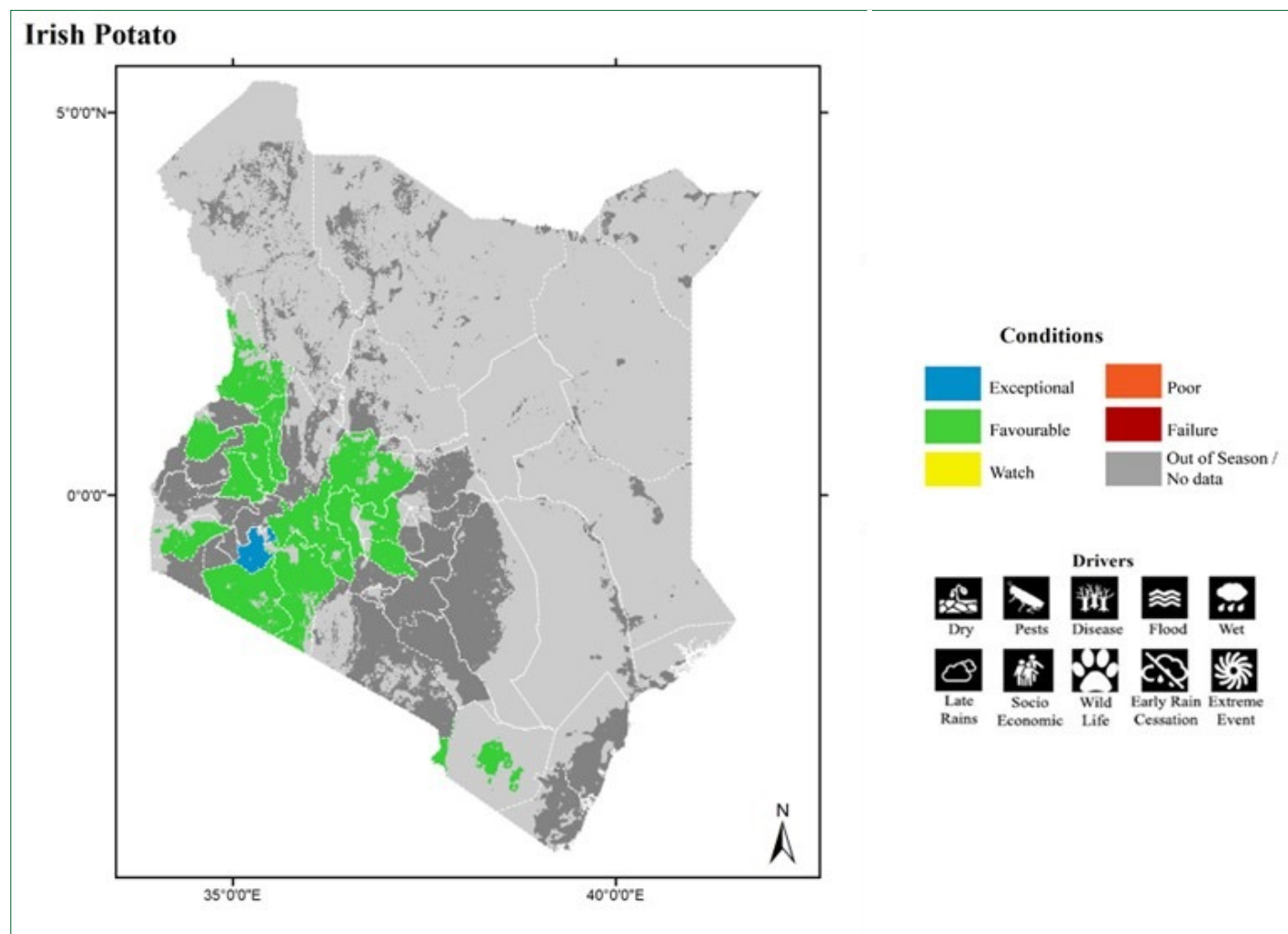


Wheat Crop at Bahati Subcounty



Irish Potatoes

Irish potatoes are sprouting to early vegetative stages in all potato growing regions. Main activities are from weeding to first earthing up. The crop is in good condition. The current rains continuing will ensure a good yield.



Climate Outlook

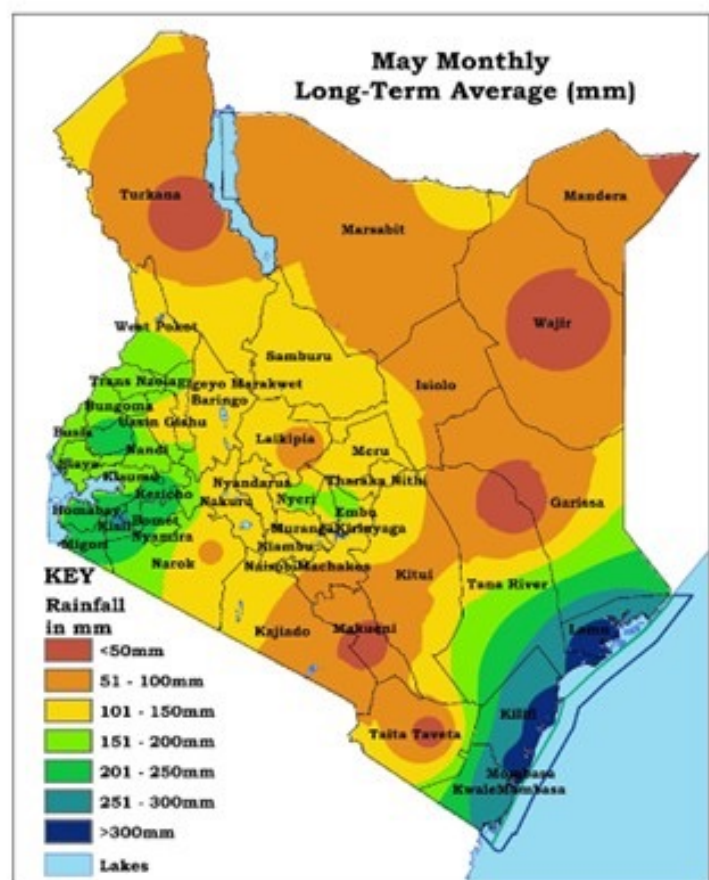
Review of April and Outlook for May 2023

Weather Review for April 2023

April marks the peak of the Long Rains (March-April-May) season. Most parts of the country experienced rainfall during the month except over Northwest and parts of Highlands West of the Rift Valley (Trans Nzoia and West Pokot) which remained dry for most of the month save for the beginning and towards the end of the month when rainfall was experienced. The rainfall recorded during the month ranged from near to above the April Long Term Mean (LTM) over several parts of the country except over Embu, Moyale, Nyahururu, Voi, Eldoret, Kakamega, Nyeri, Kericho, Narok, Garissa and Kitale where below average rainfall was recorded. The month was characterized by severe storms over several parts of the country.

The Rainfall Forecast for May 2023

The forecast indicates that several parts of the country are likely to experience near average rainfall. However, the Lake Victoria Basin region, parts of the Highlands West of the Rift Valley, the Coastal region, parts of northeast and isolated areas over Southeastern lowlands are likely to experience near average to slightly above average rainfall.



Rainfall Forecast for May 2023








Ministry of Agriculture &
Livestock Development
State Department for Crop
Development

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Terms and Definitions

Crop Condition Classes

	Exceptional	Conditions are much better than average at time of reporting. This label is used only during the grain-filling through harvest stages
	Favourable	Conditions range from slightly below to slightly above average at reporting time
	Watch	Conditions are not far from average but there is a potential risk to final yields. There is still time and possibility for the crop to recover to average conditions if the ground situation improves. This label is only used during the planting-early vegetative and the vegetative-reproductive stages
	Poor	Crop conditions are well below average. Crop yields are likely to be 10-25% below average. This is used when crops are stunted and are not likely to recover, and impact on yields is likely
	Failure	Crop conditions are extremely poor. Crop yields are likely to be 25% or more below average

Driver Definitions

These represent the key climatic drivers that are having an impact on crop condition status. They result in production impacts and can act as either positive or negative drivers of crop conditions.

	Higher than average wetness that results in destruction ie due to water logging and leaching of nutrients		This is a catch-all for all other climate risks (i.e. frost, hailstorms, mudslides etc.)
	Late start of the season		Area is flooded
	Rains end earlier than expected in the season		Destructive insects, birds or animals
	Destructive plant diseases		Drier than average
	Social or economic factors that impact crop conditions (i.e. policy changes, agricultural subsidies, government intervention, etc.)		Crop destruction by wildlife

Conflict: Armed conflict or civil unrest that is preventing the planting or harvesting of the fields by the farmers

Acronyms

The normalized difference vegetation index (NDVI) is a measurement of plant health based on how a plant reflects light (usually sunlight) at specific frequencies.

RCMRD	Regional Centre for Mapping of Resources for Development	SDCD	State Department for Crops Development
SERVIR	Joint development initiative of NASA and USAID	MoALF	Ministry of Agriculture, Livestock and Fisheries
UCSB	University of California Santa Barbara	MLND	Maize Lethal Necrosis Disease
UMD	University of Maryland	GHACOF	Greater Horn of Africa Climate Outlook Forum
USAID	United States Agency for International Development	ICPAC IGAD	Climate Prediction and Application Centre
FAW	Fall Army Worm		

Partnerships

