



HOA DRIVE, IBLI PAYOUT SUMMARY REPORT - ETHIOPIA

MARCH – JUNE 2023 SEASON, PHASE 1 (March to April)

1. BACKGROUND

DRIVE is a Horn of Africa project funded by the World Bank and implemented by governments with an aim of enhancing pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the Horn of Africa. DRIVE was launched in 31 August 2022 and has two components:

- Component I: Package of financial services for climate resilience
- Component II: Livestock Value Chains and Trade Facilitation.

ZEP-RE (PTA Reinsurance Company) oversees Component I implementation in four countries (Kenya, Somalia, Ethiopia, and Djibouti). This component has insurance, savings, digital accounts, and platform coordination. Component II is implemented by the Ministry of Finance and Ministry of Agriculture. In Ethiopia, the government is targeting the implementation of the DRIVE Project in all arid and semi-arid lands (ASAL) with an aim of reaching pastoralists with resilience building tools against drought as well as develop capacity for the livestock value chain development. The IBLI product was developed to be used to back pastoralists' savings in the case of severe drought. It is designed to keep animals alive in an affordable way and to rapidly trigger and distribute payouts without the need for evidence of livestock dying. The IBLI product is designed based on a forage scarcity index developed using anomalies in the Normalized Difference Vegetation Index (NDVI) based on EVIIRs data from 2002 to 2021.

This report covers the first payout of the Long Rains season covering the months of March 2023 – April 2023 for the Oromia, SNNP & Somali regions in Ethiopia. For this season, sales were recorded in **33 out of 124** UAIs priced for in Ethiopia. Out of the 33 UAIs, pasture conditions were relatively good in the observation period, March – April 2023, with NDVI signals showing above average vegetation conditions. However, 7 UAIs had poor vegetation conditions in March but the improvement in April was not sufficient, thus on average being lower than the trigger, hence triggering a payout.

The payout calculations have been done by ACRE Africa, in their role as the payout calculation agent, and have been internally reviewed by ZEP RE. Further, the Z-Scores¹ have been validated² by data service providers and validation agent, Planet.

¹ The z-score describes the variation in the NDVI relative to the historical time series by subtracting the average and dividing by the standard deviation of the historical NDVI readings.

² See Final Data Report for more details.

2. UNDERWRITING AND PAYOUT DETAILS

UNDERWRITING DETAILS

Insured:	Pastoralists in the Oromia, SNNP & Somali regions of Ethiopia against prolonged forage scarcity ONLY because of drought.
Product description:	The product's main aim is to provide cover against prolonged forage scarcity ONLY because of a drought. It triggers payment to pastoralists to help maintain their livestock in the face of severe forage scarcity. The payment amount depends on the value derived from an the NDVI index. The pricing and payouts are the same within each UAI ³ level.
Coverage period:	1 st October 2022 to 30 th September 2023
Calculation period:	1 st March 2023 to 30 th April 2023 (Long rains, Phase 1).
Type of Cover:	Index based livestock insurance based on Normalized Difference Vegetative Index, NDVI
Scope of Cover (Perils):	Forage scarcity because of drought.
Areas of Cover:	Ethiopia (Oromia, SNNP & Somali regions).
No. of insured farmers:	52,805
Sum Insured:	ETB 1,883,928,243
Premium:	ETB 365,517,980

PAYOUT DETAILS

Period Of Loss:	1 st March 2023 to 30 th April 2023
Date Reported:	July 2023
Calculated payout:	ETB 38,946,723

Following the concluded Phase 1 of the Long Rains season and the finalization of the payout calculations, **the early payout for March to June 2023 season for the 52,805 pastoralists covered in Ethiopia is ETB 38,946,723.**

The maximum payout is **ETB 12,619,908** (32.4% of total payout) from the Dasenech UAI in the Dasenech Region.

³ UAI – Unit Area of Insurance per region as is determined based on the homogeneity of vegetation conditions and pastoral migration extents. Also, rangeland dominance, forage availability, seasonality and drought history are also considered.

Table 1: Summary of the region's coverage statistics

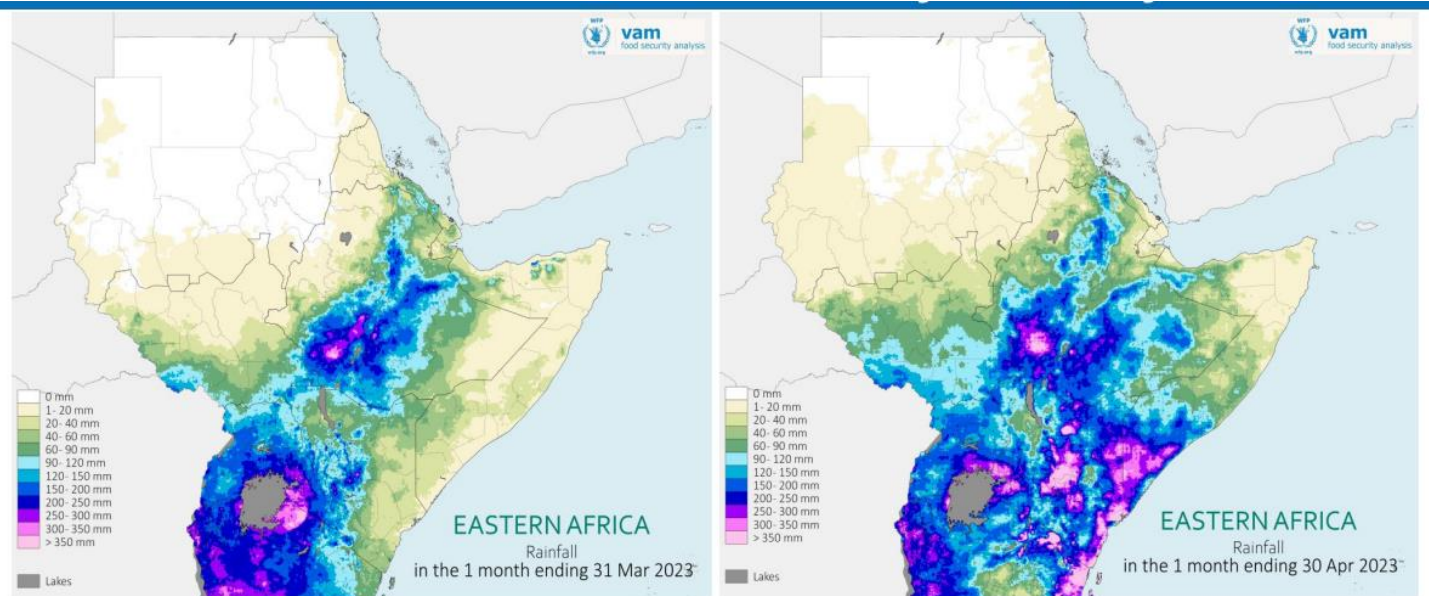
Unit Area of Coverage	No. of Pastoralists	Total TLUs	Pastoralists Payment (10%)	Total Premium	Total Sum Insured	Total Payout (Phase 1)	Payout percentage ⁴
Oromia	21,242	103,087	13,038,834	153,968,950	773,152,500	26,326,815	2.89%
Bada Hiddi	1,531	7,655	1,001,274	10,774,015	57,412,500	-	0.00%
Bada Yabello	694	3,470	462,906	5,182,740	26,025,000	5,465,250	21.00%
Badda Arero	837	4,185	510,570	5,822,298	31,387,500	-	0.00%
Ganda Qonan Bula Teltele	2,571	12,855	1,619,730	18,051,484	96,412,500	8,869,950	9.20%
Garacha Dire	2,079	9,948	1,472,896	15,203,385	74,610,000	-	0.00%
Garacha Tula Dhas	96	358	42,244	524,219	2,685,000	-	0.00%
Golba Arero	727	3,635	460,918	5,432,826	27,262,500	-	0.00%
Golbo	268	989	110,948	1,530,963	7,417,500	-	0.00%
Golbo Dire	970	4,850	560,660	7,170,566	36,375,000	-	0.00%
Gomole	1,571	7,215	974,025	11,991,053	54,112,500	7,196,963	13.30%
Malbe Dillo	238	1,190	140,896	1,716,181	8,925,000	-	0.00%
Malbe Teltele	304	1,520	163,917	2,273,873	11,400,000	-	0.00%
Malbe Yabello	793	3,965	397,298	5,992,412	29,737,500	-	0.00%
Mirga Arero	380	1,900	222,708	2,923,292	14,250,000	-	0.00%
Miyu	2,000	8,437	1,003,504	11,872,603	63,277,500	63,278	0.10%
Moyele	3,889	19,445	2,293,237	31,386,978	145,837,500	-	0.00%
Qaqalo Moyale	2,294	11,470	1,601,103	16,120,063	86,025,000	4,731,375	5.50%
SNNP	3,438	17,712	2,578,500	25,785,000	132,841,132	12,619,908	9.50%
Dasenech	3,438	17,712	2,578,500	25,785,000	132,841,132	12,619,908	9.50%
Somali	28,125	130,391	18,576,403	185,764,030	977,934,611	-	0.00%
Moyele	464	2,144	346,144	3,461,440	16,083,350	-	0.00%
Kalfo	950	4,834	729,605	7,296,050	36,255,661	-	0.00%
Hargele	2,758	11,077	1,600,825	16,008,250	83,074,546	-	0.00%
Dolobay	2,314	8,015	1,195,000	11,950,000	60,108,821	-	0.00%
Erer	194	969	149,574	1,495,740	7,270,987	-	0.00%
Measo/Mulo	1,900	9,500	1,442,100	14,421,000	71,246,776	-	0.00%
Afdem	412	2,061	283,044	2,830,440	15,459,420	-	0.00%
Goro Baqaqsa	1,482	7,416	948,480	9,484,800	55,617,629	-	0.00%
Dolo Odo	4,974	20,677	3,141,140	31,411,400	155,079,024	-	0.00%
Debeweiny	705	3,524	520,290	5,202,900	26,426,405	-	0.00%
Cherati	4,148	20,727	2,903,600	29,036,000	155,451,668	-	0.00%
Elkare	522	2,611	333,558	3,335,580	19,580,407	-	0.00%
E/Ime	4,973	25,174	3,216,167	32,161,670	188,808,295	-	0.00%
Bokolmayo	1,030	5,168	731,300	7,313,000	38,758,088	-	0.00%
Bare	923	4,616	731,016	7,310,160	34,618,321	-	0.00%
Kebribeyah	376	1,879	304,560	3,045,600	14,095,211	-	0.00%
Grand Total	52,805	251,190	34,193,737	365,517,980	1,883,928,243	38,946,723	1.78%

⁴ This is as a percentage of the total sum insured, but the maximum payout percentage is capped at the number of months for the observation period. Expected maximum payout for the Long Rains, Phase 1 was 23.57% after allowing for the deductible of 5%. A 5% deductible is applied to the payout percentage whereby, if the payout percentage is greater than 5%, then the final payout percentage will be (x-5%), if it is less than 5%, then the final payout % will be 0%.

3. DROUGHT SITUATION⁵

The March-May seasonal rains performed relatively better than was forecasted in the previously drought affected areas except in central Somalia, eastern Uganda, central Equatoria state in South Sudan, and southwest Kenya. The improved rains to an extent eased the impacts of the prolonged drought experienced since late 2020. The favourable rains improved rangelands and vegetation, replenished water resources, supported crop production, and led to improved livestock body. Nevertheless, the favourable rains brought new risks and challenges associated with flooding and landslides in various parts of the region. Some of the flood affected areas are in Ethiopia (**Somali**, Sidama, **Oromia**, Afar, Amhara and Afar regions). The vegetation and water resources significantly improved across the pastoral and agropastoral areas leading to improved livestock grazing resources – except in localised areas in central Somalia, **southeast Ethiopia** and southwest Kenya where moisture was not sufficient. As a result, livestock body condition and productivity is improving enabling households' access to milk for consumption. Livestock deaths also declined except in cases where livestock were in very weak body condition not to withstand the wetter-than-normal conditions or were affected by emerging diseases or killed/washed by flood waters.

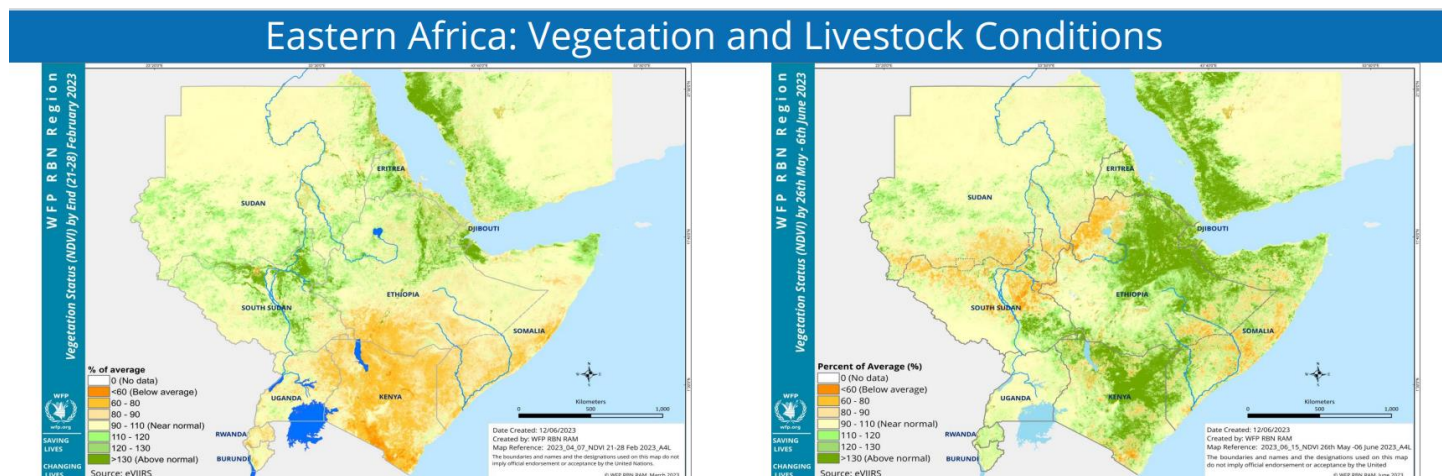
Figure 1: Map showing the rainfall amounts in the various regions in East Africa for March and April



In Ethiopia, the Belg/**Gu**/Genna seasonal rains were largely been characterised by early to timely onset and above-average rainfall performance, generally supporting cropping conditions. However, over the Belg-receiving regions of southwestern and western Ethiopia, the long rains (March-November) were delayed by 2-3 weeks. **Improved vegetation conditions and replenishment of water resources are now evident across much of Ethiopia following the March rains**, thus providing relief for pastoral communities in these areas. However, flash floods and livestock losses were reported in many parts of eastern Ethiopia – including parts of Addis Ababa city, Afar, **eastern Oromia**, and central and **northern Somali** regions, with more severe floods in southern and eastern Somali, Borena, and Konso regions. On the other Famine Early Warning Systems Network 3 Seasonal Monitor March 31, 2023 e-MODIS Normalized Difference Vegetation Index (NDVI), percent of the 2003- 2017 median, March 21-31, 2023 Source: USGS/FEWS NET Figure 2 hand, Belg-receiving parts of Gambela and Oromia regions are showing signs of increasing rainfall deficits and below-average vegetation conditions.

⁵ [Eastern Africa Seasonal Monitor: March-May 2023 & June-September Outlook \(June 2023\) - Somalia | ReliefWeb](#)

Figure 2: Map showing the progression of the vegetation conditions before and after the onset of the long rains in various regions in East Africa.



NDVI in late (21-28) February (Map 13: left), and late May/early June (26th May -5 June) 2023 (Map 14: right) a percent of average (shades of greens indicate average to above average, browns/orange for below average)

4. DATA AND MAPS

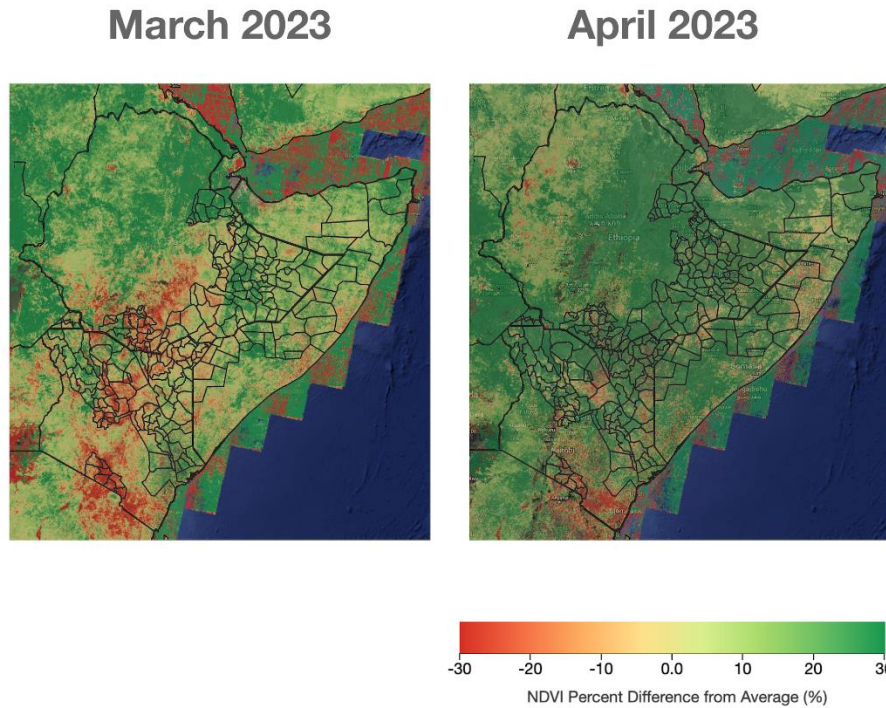
The table below shows a brief description of the data set used.

Table 2: Summary of the data characteristics

Data Source & Data Characteristic	
ITEM	Description
Data Source	eVIIRS
Characteristics	Visible and infrared imagery along with global observations of Earth's land, atmosphere, cryosphere, and ocean.
Historical time series length	10 years but with 10 years backwards normalization
Spatial Resolution	375 m X 375 m
Temporal Resolution	7- or 10-day data composited data sets updated every 5 days
Data Availability (free or premium)	Free
Instruments	Suomi National Polar-orbiting Partnership (Suomi NPP) and NOAA-20 satellites

The map below shows the vegetation progression, within the East African Region, from the month of March 2023 to May 2023, with the level of greenness increasing in the outlined areas under coverage.

Figure 3: Horn of Africa NDVI Anomaly Maps (March - April 2023) for all the delineated areas.



ANNEX TO THIS REPORT

1. Term sheet with the index.
2. Graphic showing the progression of the drought from March 2023 to April 2023 in the Horn of Africa.
3. Final Data Report from Planet.