HOA DRIVE, IBLI PAYOUT SUMMARY REPORT - ETHIOPIA

MARCH – JUNE 2024 SEASON

1. EXECUTIVE SUMMARY

This report covers the payouts of the DRIVE Index Based Livestock Insurance (IBLI) product being sold in Ethiopia. The product's main aim is to provide cover against prolonged forage scarcity ONLY due to a drought. It triggers payment to pastoralists to help maintain their livestock in the face of severe forage scarcity. The payout amount depends on the value derived from a Normalized Difference Vegetation Index (NDVI). The pricing and payout methodologies are the same across all UAIs and result in the same price/payout within each UAI¹ level.

This report covers payouts for the Long Rains season, covering the months of March 2024 – June 2024 for the various regions under cover i.e. Oromia, Somali, South Ethiopia and Southwest Regions, whose details are outlined below:

Registration period	OND 2023	MAM 2024			
Cover Period	1 st October 2023 – 30 th September 2024 1 st March 2024 – 28 th February 202!				
Product structure	- Short rains: 1 st October – 31 st December 2023	- Long rains: 1 st March - 30 th June 2024			
	- Long rains: 1 st March - 30 th June 2024	 Short rains: 1st October – 31st December 2024 			
Regions covered	4 - regions - Oromia, Somali, South Ethiopia, Southwest	4 - regions - Oromia, Somali, South Ethiopia, Southwest			
Total number of pastoralists covered	29,916	54,730			
Total number of TLUs covered	109,391	231,503			
Total sum insured	ETB 821,430,048	ETB 1,736,269,828			
Total premium amount	ETB 173,932,785 ETB 365,300,511				
	PAYOUTS				
Total number of pastoralists receiving payouts	N/A	N/A			
Total payout amount (ETB)	N/A	N/A			

Table 1: Ethiopia Coverage and Payout Summary

The determination of payouts relies on data provided by Planet, a leader in delivering daily Earth insights through satellite imaging, which empowers organizations with a comprehensive view of our changing planet. To enhance the credibility of these figures, secondary sources on pasture conditions were incorporated to corroborate the results,

¹ 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 considered.

adding an extra layer of validation to the process. Furthermore, the Z-Scores have undergone validation by Planet as the validation agent as well. The Z-score describes the variation in the observed vegetation index relative to the historical data by subtracting the average and dividing by the standard deviation of the historical index readings.

This report includes a term sheet that shows Z-scores and how far they are from a specified threshold, which helps determine whether there was a drought during the covered periods. A Z-score higher than the threshold means vegetation levels were healthy, so no drought occurred. A Z-score lower than the threshold indicates lower-than-expected vegetation levels, suggesting some level of drought.

2. DETAILED RESULTS

There was no payout in any of the UAIs. The total coverage for the 84,646 pastoralists covered are shown in the tables below:

Table 2: Distribution of coverage per region

REGISTERED SEASON	OND 2023				
REGION	Total number of pastoralists covered	Total number of TLUs covered	Total premium amount (ETB)	Total sum insured (ETB)	
Oromia	9,043	33,570	ETB 52,504,965	ETB 253,687,817	
Somali	12,991	43,407	ETB 69,238,110	ETB 325,186,344	
South Ethiopia	7,553	30,936	ETB 49,691,200	ETB 231,471,152	
Southwest	329	1,478	ETB 2,498,510	ETB 11,084,735	
Grand total	29,916	109,391	ETB 173,932,785	ETB 821,430,048	

REGISTERED SEASON	MAM 2024				
REGION	Total number of pastoralists covered	Total number of TLUs covered	Total premium amount (ETB)	Total sum insured (ETB)	
Oromia	29,150	109,330	ETB 167,022,075	ETB 819,973,529	
Somali	21,236	101,816	ETB 170,360,911	ETB 763,616,918	
South Ethiopia	4,139	19,640	ETB 26,726,340	ETB 147,301,630	
Southwest	205	717	ETB 1,191,185	ETB 5,377,751	
Grand total	54,730	231,503	ETB 365,300,511	ETB 1,736,269,828	

3. DROUGHT SITUATION

The 2024 March to June rainy season brought favorable rainfall² to southern and southeastern Ethiopia, leading to improved vegetation conditions. The rains replenished rangeland resources, resulting in better pasture availability

² Observed climate conditions for May to July (MJJ) 2024

across the region.³ This improvement in vegetation supported the recovery of grazing lands, which is crucial for sustaining livestock and ensuring the resilience of pastoral communities.

However, since April, heavy rains and floods affected several parts of Ethiopia, including the regions of Oromia, Somali, and others, resulting in the displacement of 95,000 people and impacting over 590,000. These floods, exacerbated by unusually strong winds, caused significant damage to homes, infrastructure, and croplands, while ongoing outbreaks of cholera and malaria compounded the challenges.⁴

Despite some localized flooding, the overall impact of the rainfall on vegetation has been positive, contributing to a healthier environment and offering a more stable outlook for the region's ecosystems.





Source : https://earlywarning.usgs.gov/fews/product/900

³ Impacts of above average rainfall in East Africa

⁴ Ethiopia - Floods 27 May 2024

Progression of drought for the long rains season in Ethiopia

The progression of drought conditions in the region, particularly during the long rains season, has been positively impacted by the increased rainfall. The drought indicators reviewed for this period are consistent with the results indicated in the report. The shift from prolonged dry conditions to more favourable moisture levels reflects a crucial change in the region's environmental status.

4. ADDITIONAL DROUGHT INITICATORS

Additional drought indicators were reviewed for the period under observation to corroborate the NDVI indicator used to calculate the Claims payout. These are:

Vegetation Anomaly

The vegetation anomaly index assesses the health of vegetation compared to typical conditions for a given area. In the covered regions, the index was above 1.5, reflecting above-average vegetation health, with some areas showing even more vibrant conditions, indicated by index values exceeding 2. This suggests that the healthy vegetation was supported by near-normal rainfall and enhanced soil moisture. These favourable conditions fostered vegetation growth and mitigated drought risks. Increased rainfall contributed to positive vegetation anomalies, with improved soil moisture creating an ideal environment for growth. This is especially crucial in drought-affected regions where restoring grazing lands benefits pastoral communities. However, in flood-prone areas, excessive water may have caused localized damage to vegetation.





Source: NGDI Dashboard (ngdi-dashboard.azurewebsites.net)

Precipitation Anomaly

The precipitation anomaly measures how current precipitation levels deviate from the historical average for a specific area, indicating whether rainfall is significantly higher or lower than usual. During this period, the precipitation anomaly was close to normal, with an index ranging from -1 to 1. The review of the precipitation index revealed that some regions experienced rainfall levels typical of the historical average, while others saw higher-than-average rainfall. This resulted in generally wet conditions across the country, which were favourable for vegetation growth and aligned with the NDVI data.

Figure 3: Precipitation Anomaly for Ethiopia IBLI regions (March - June 2024)



Source: NGDI Dashboard (ngdi-dashboard.azurewebsites.net)

Soil Moisture Anomaly

The soil moisture anomaly measures how current soil moisture levels deviate from the historical average for a specific area. Values ranging from -1 to 1 in some regions indicate near-normal conditions, suggesting that soil moisture levels were close to typical expectations. In Oromia, conditions were moderately wet. The soil moisture anomaly confirmed that increased rainfall improved soil moisture, creating favourable conditions for vegetation and effectively mitigating drought during this period. Enhanced soil moisture facilitated better vegetation growth and reduced drought stress. However, in flood-affected areas, excess moisture may have led to waterlogging, potentially hindering agricultural activities and causing longer-term soil degradation.



Figure 4: Soil Moisture Anomaly for Ethiopia IBLI regions (March - June 2024)

Source: NGDI Dashboard (ngdi-dashboard.azurewebsites.net)

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ANNEX TO THIS REPORT

- 1. Term sheet with the index.
- 2. Graphic showing the progression of the drought from March 2024 to June 2024 in the Horn of Africa.
- 3. Final Data Report from Planet.
- 4. Calendar timelines.