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Commission of Inquiry on Tigray Genocide

Executive Summary

**Report on Tigray's Productive Sector and
Livelihood: Effects and Impacts of the War,
Siege, and Blockade**

Volume 1



November, 2025

Executive Summary

Introduction

This report presents the assessment results of the economic damage and loss caused by the war and siege in Tigray, Ethiopia, a region that has experienced a long history of war and poverty. The assessment used a comprehensive and multidimensional approach to measure the physical and economic impacts of the war on various productive sectors and dimensions, such as manufacturing, trade, productive services, agriculture, financial institutions, and households. The assessment covered the period from November 2020 to August 2022 for the households and from November 2020 to December 2023 for sector assessments, excluding some areas that were inaccessible or unsafe due to the security issue. Due to the security and full siege reasons, the assessment result of damage, loss, and impact is based on the limited information extracted from 657,360 (47%) household heads, 55,271 private firms, and 7 government offices.

The DaLA methodology outlines the systematic process for assessing the physical damage and subsequent economic losses across the Tigray Regional State resulting from the recent war, siege, and blockage. It is structured to adhere to internationally recognized frameworks, specifically the Damage and Loss Assessment (DaLA) methodology developed by UN-ECLAC and used within the Post-Disaster Needs Assessment (PDNA) framework of the World Bank, UN, and UNDP (World Bank, UN, & EC, 2013; UN-ECLAC, 2014).

Assessment Methodology

The extensive geographical scope of the War necessitates an exhaustive approach to ensure an accurate estimation of the total impact.

Sampling Technique: Census-Based Assessment

Given that virtually every administrative area in Tigray was affected by the war, siege, and blockade, the assessment adopted a census-based assessment approach, aiming for universal coverage across all sectors and geographic areas (World Bank, UN, & EC, 2013).

The assessment utilized a phased approach that acknowledged the operational realities of a post-war environment. The initial effort involved rapidly conducting a census of damage and loss across all then-accessible zones to establish baseline recovery requirements, with the explicit understanding that the resulting aggregate figures represented a partial estimate of the total impact. Due to persistent security and logistical challenges, the subsequent plan to mobilize and assess the remaining inaccessible areas is currently pending. Consequently, the data presented in this report only constitutes Volume 1 of the final assessments, as comprehensive damage and loss values remain incomplete until security issues permit the collection of critical data from the unassessed zones.

Target Groups and Data Sources

Data collection was designed to source information from diverse groups and institutions to ensure a comprehensive view of the damage (stock) to assets and the resulting flow losses across the economy.

Table 1: Target Group for the Assessment and Data Sources

Target Group/Data Source	Categorization	Role in Assessment (Action Completed/Established)
Households (HHs)	Primary victims and economic agents	The assessment has focused on identifying damage to residential property, personal assets, and human capital, alongside the loss of income and livelihoods.
Government Institutions	Public sector infrastructure and services	The team has measured damage to public assets (office equipment, agricultural facilities, vehicles, utilities, and administrative buildings) and the resulting loss of public service provision.
Private Firms	Core economic sectors	The assessment has quantified damage to production assets and inventory and the resulting loss of output/sales.
Categorization of Private Firms:	Agriculture, Trade, Productive Service, Manufacturing, Finance Sectors	The methodology has established detailed sector-specific approaches for calculating damage and loss.
Regional State Data	Secondary and macro-level data	The team has utilized official records on infrastructure, public finance, population displacement, and baseline economic indicators.

Data Collection Methods and Tools

The data collection strategy utilized modern, standardized, and secure digital tools to ensure efficiency, accuracy, and geo-referencing of the collected information.

Tools: Standardized survey instruments were designed and deployed using reliable digital platforms such as Open Data Kit (ODK) and KoboToolbox.

- **Instrument Design:** The questionnaires were rigorously designed based on the UN-ECLAC Handbook for Disaster Assessment, the PDNA framework, and specialized guidelines from the FAO (for agriculture), the World Bank, and the UNDP (World Bank, UN, & EC, 2013; FAO, 2017).
- **Key Data Points Captured:**
 - **Description of Damaged Assets:** Type, quantity, age, and extent of damage.
 - **Loss of Production/Income:** Historical and projected data points for loss calculation.
 - **Additional Costs:** Documentation of related expenses incurred due to the war.

Cost Estimation and Valuation Methodology

The valuation methodology strictly adhered to the PDNA's core principles, distinguishing between damage (stock effect) and loss (flow effect) (World Bank, UN, & EC, 2013). This assessment also incorporated a detailed analysis of macroeconomic effects and a preliminary needs assessment.

Damage Assessment (Stock Effect)

Damage was defined and measured as the monetary value of destroyed or physically damaged assets (e.g., buildings, infrastructure, machinery, inventory) at the time of the event.

Valuation Method: The assessment team considered the prevailing replacement cost of the damaged properties/items in the local market.

- **Replacement Cost:** The cost of replacing the destroyed asset with a new asset of similar function and standard, including labor and transportation expenses, was

used to ensure a realistic measure of the cost to restore the productive base (World Bank, UN, & EC, 2013).

- **Adjustment:** For non-market-priced goods (like public services), alternative imputation methods were used based on established valuation standards.

Loss Assessment (Flow Effect)

Loss was defined as the change in the economic flows (income, production, services) that arose as a consequence of the damage over a defined recovery period.

The estimation of total economic loss of firm output/value was predicated on a rigorous counterfactual analysis designed to quantify the difference between projected and actual economic performance. The calculation utilized a three-year pre-war baseline period (2018, 2019, and 2020) to establish the average expected path for output, revenue, or production. The final loss value was then quantified as the differential between this projected output and the actual realized output during the loss calculation period (2021, 2022, and 2023). Integral to this total loss value is the inclusion of foregone values, which are derived from the opportunity cost principle (UN-ECLAC, 2014). This approach quantifies the unrealized economic benefits resulting from War-induced disruption and asset destruction, specifically encompassing foregone income and revenue from collapsed projects, lost salary and wages due to displacement or business closure, and lost savings and interest stemming from financial service interruption or appropriation. Finally, the total loss estimation incorporates additional costs, representing the direct monetary expenditures incurred by households, firms, and governmental entities for immediate operational stabilization, including rental costs for temporary facilities and the purchase costs of temporary or replacement items.

Damage severity levels, damage type, and perpetrators: Damage severity levels, typically categorized using the PDNA/UN-ECLAC framework, range from Minor Damage (covering a small loss percentage, usually [1–25%], requiring minor repairs) to Moderate Damage (involving a more significant loss, often [26–50%], necessitating substantial repairs and component replacement). This is followed by Severe Damage (representing heavy destruction, generally [51–75%] of the asset's value, demanding extensive reconstruction) and culminating in Complete Damage (where the asset is virtually destroyed, ranging from [76–100%], requiring full replacement). Furthermore, a comprehensive assessment identifies the Damage Type (e.g.,

destroyed, broken, burned, stolen, or missing) for specific goods and determines the respective perpetrators responsible for the damage, calculating their proportional share in the destruction.

Impact of the war

The assessment also analyzed the macroeconomic effects of the war on Tigray using variables such as employment, tax revenue, investment flow, export earnings, and income generation. The team will use the damage and loss results to estimate the recovery and reconstruction needs and suggest intervention strategies.

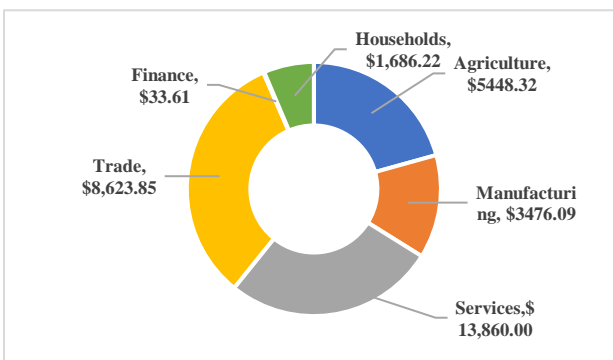
Results

Summary of Damage and Losses

The comprehensive Damage and Loss Assessment (DaLA) for the Tigray Region's Productive Sector estimates a catastrophic total economic impact of US\$ 83,840.87 million (US\$ 83.84 billion), directly caused by the war and the subsequent siege and blockage. The magnitude of this finding is fundamentally tied to the unprecedented scale and breadth of the assessment coverage, which includes 657,360 individual households and a total of 55,371 formal private firms across the productive sectors (such as trade and services), alongside the entire regional financial system (18 banks and 2 microfinance institutions). By covering the entire stock of private, public, and household assets and productive capacity, the resulting monetary values represent the full, aggregated economic destruction of the regional productive base.

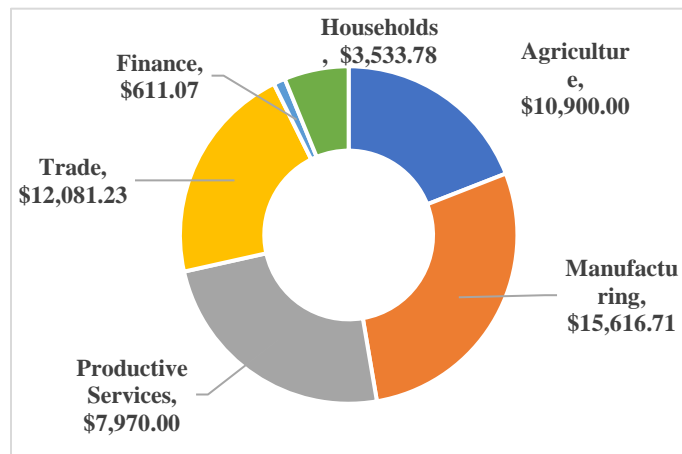
The total effect is critically segmented into damage (physical destruction of assets) and loss (foregone production and income). Physical damage accounts for US\$ 33.13 billion (39.5%), while economic loss totals US\$ 50.71 billion (60.5%). This finding, where the total loss value significantly exceeds the damage value, points to an important fact: the prolonged siege and blockage, which systematically cut off banking, trade, and essential services, inflicted a more severe, systemic financial collapse on the economy than the direct physical destruction from warfare alone.

The analysis of physical damage (US\$ 33.13 billion) highlights a concentrated destruction across the region's infrastructure and private property. The services sector incurred the largest share of this destruction at US\$ 13,860.00 million (41.84% of all damage), suggesting targeted action against high-value, essential civilian infrastructure. The trade sector was the second most affected, with US\$ 8,623.85 million in damage, reflecting extensive looting and demolition of commercial buildings and inventory. Critically, the Households category sustained US\$ 1,686.22 million in physical damage (5.09% of total damage). Although smaller than the damage to commercial sectors, this figure represents the direct destruction of private homes, personal



assets, and household farm tools, uniquely impacting the livelihood base of the civilian population and creating a profound displacement crisis. Agriculture (US\$ 5.45 billion) and manufacturing (US\$ 3.48 billion) also suffered substantial asset destruction, but the collective focus of the immediate physical destruction was heavily on the urban and livelihood foundations.

The most profound economic consequence is captured by the massive economic loss (US\$ 50.71 billion), which resulted from the cessation of economic flows. The manufacturing sector was the most severely crippled by these losses, accounting for the highest share at US\$ 15,616.71 million (30.79% of all losses). This is a direct measurement of productive failure resulting from the blockade's prevention of raw material and fuel inflows. Similarly, the trade sector suffered US\$ 12.08 billion in foregone revenue due to market isolation, and agriculture registered US\$ 10.90 billion in long-term losses from planting failures and lack of vital inputs. Furthermore, the Households category recorded a direct loss of income totaling US\$ 3,533.78 million, demonstrating the devastating effect on individual purchasing power. These findings confirm that the overall economic consequence evolved from localized physical damage during the war to widespread, systemic economic strangulation during the subsequent blockade.



The strategic implications are clear: reversing the US\$ 83.84 billion impact requires immediate and targeted interventions that address the primary driver of the crisis. While asset replacement, including support for damaged households, is necessary, the recovery plan must prioritize restoring the fundamental conditions for production by urgently reopening and sustaining supply chains, telecommunications, and a fully functional financial system. These actions are essential to rapidly revive the high-loss sectors of manufacturing, trade, and agriculture and enable the productive base to generate income, creating a sustainable path toward long-term economic recovery and self-sufficiency.

Table 2. Total Damage and Loss (US\$ Million)

Productive Sector	Damage	Share (%)	Loss	Share (%)	Total	Share (%)
Agriculture	5,448.32	16.45	10,900.00	21.49	16348.32	19.50
Manufacturing	3,476.09	10.49	15,616.71	30.79	19092.79	22.77
Services	13,860.00	41.84	7,970.00	15.72	21830.00	26.04
Trade	8,623.85	26.03	12,081.23	23.82	20705.08	24.70
Finance**	33.61	0.10	611.07	1.20	644.68	0.77
Households**	1,686.22	5.09	3,533.78	6.97	5220.00	6.23
Total	33,128.09	100.00	50,712.79	100.00	83,840.87	100.00

Source: CITG Survey, 2022 and 2023 (** represented in the 2022 survey period.)

Productive Sector and Household Livelihood Damage by Perpetrators (US\$ in Millions)

This analysis provides the definitive attribution for the US\$ 33.13 billion in physical damage inflicted upon Tigray's productive sectors and household livelihoods. The combined data goes beyond general war reports to show that the allied forces used a planned, systematic, and specialized strategy. Rather than random acts of violence, the destruction was executed through a deliberate division of labor where each major perpetrator group the Ethiopian National Defense Force (**ENDF**), the Eritrean Defense Forces (**EDF**), and the Amhara Militia Forces (**AMF**)—focused on dismantling a distinct pillar of the economy. The data confirms that the severity and mode of attack (from complete destruction to dominant looting) were precisely tailored to achieve maximum economic and social paralysis, making the damage a central strategic objective of the war.

Table 2: Productive Sector and Household Livelihood Damage by Perpetrators (US\$ in Millions)

Perpetrators List	Trade	Agriculture	Household	Services	Manufacturing	Total Value(US\$ in Millions)	Share (%)
Single Actors							
ENDF	1,253.22	382.22	813.16	8,938.34	531.41	11,918.35	36.01
EDF	1,235.11	1,813.01	549.66	1,291.18	610.37	5,499.33	16.62
AMF	2,732.05	173.85	229.95	130.89	571.82	3,838.56	11.60
IRF	0	78.88	45.02	2,603.18	95.12	2,822.20	8.53
EFP	14.14	0	24.54	531.46	572.98	1,143.12	3.45
AFF	112.75	0	10.2	364.67	127.79	615.41	1.86
Two-Party Combinations							
ENDF_EDF	705.83	301.73	0	0	718.39	1,725.95	5.22
ENDF_AMF	6.23	0	0	0	12.65	18.88	0.06
EDF_AMF / AMF_EDF	144.6	0	0	0	9.84	154.44	0.47
ENDF_EFP	0.56	0	0	0	75.79	76.35	0.23
EDF_IRF (incl. IRF_EDF)	4.9	0	0	0	39.95	44.85	0.14
EFP_AMF	144.1	0	0	0	0	144.10	0.44
Multi-Party & Combined							
Combined Forces	1514.85	2,698.64	0	0	50.165	4,263.66	12.88
ENDF_EDF_AMF (3-Party)	748.3	0	0	0	3.56	751.86	2.27
Others	7.21	0	13.73	0.28	56.255	77.48	0.23
TOTAL	8,623.85	5,448.33	1,686.26	13,860.00	3,476.09	33,094.53	100.00

Note: The figure for the Finance sector represents the monetary damage value; however, the attribution of perpetrators in this sector (as analyzed in the main text) is based on the frequency of damage incidents (occurrences), not the monetary value

The single-actor part (ENDF, EDF, AMF, IRF) collectively accounts for over **72.5%** of the total physical damage, with the two primary national forces leading the destruction:

ENDF: The Destroyer of Social & State Infrastructure (35.98% Total Share) The Ethiopian National Defense Force (ENDF) is the single largest overall perpetrator, responsible for nearly 36% of all physical damage (US\$ 11.92 billion). This damage is overwhelmingly concentrated in the service sector (US\$ 8.94 billion). This pattern confirms a strategic focus on eliminating the state's functional capacity and the social backbone (health, education, utilities), reflecting actions aimed at paralyzing the region's organizational structure.

EDF: The Eritrean Defense Forces (EDF) hold the second-highest overall share (US\$ 5.51 billion). Unlike the ENDF, the EDF's damage is most concentrated in agriculture (US\$ 1.81 billion), with a secondary focus on services (US\$ 1.29 billion). This indicates a pervasive role across the rural and urban environment, specializing in the destruction of long-term productive assets like farm equipment and irrigation.

AMF: The Agent of Commercial Extraction (11.59% Total Share) The Amhara Forces (AMF) show a sharp specialization, with nearly 71% of their total attributed damage (US\$ 2.73 billion) concentrated in the trade sector. This clearly positions the AMF as the primary perpetrator in actions related to the destruction, seizure, and looting of commercial buildings and inventory, effectively dismantling the region's market wealth.

The high impact of coordinated and joint operations

The aggregated damage figures reveal the strategic importance of two- and multi-party coordination:

The Two-Party Alliance (ENDF_EDF): The combination of ENDF and EDF resulted in US\$ 1.74 billion in damage (5.24% share), heavily concentrated in Manufacturing (US\$ 718 million) and Trade (US\$ 706 million). This confirms a tactical synergy, where the two military forces aligned to destroy critical industrial and commercial targets that required larger-scale operations.

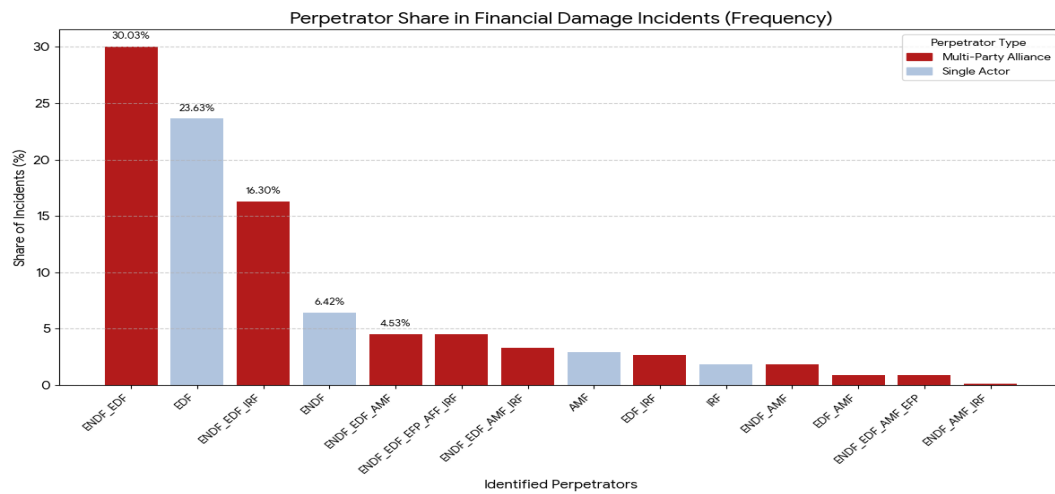
Maximal Coordination in Agriculture (8.15% Share): The largest single-cell amount outside of the three primary actors is the US\$ 2.70 billion attributed to "Combined Forces" in Agriculture. Based on the definition of involving four or more actors, this massive figure confirms that rural asset destruction was executed through large, highly coordinated joint operations. This scattershot, multi-actor approach ensured comprehensive destruction of the farming base while diffusing individual attribution.

Pervasive Civilian Damage

Despite the low overall monetary total of the household sector (US\$ 1.69 billion), the breakdown shows that over 80% of this civilian asset destruction was caused by the two major national forces: ENDF (48.22%) and EDF (32.60%). This confirms that the largest military forces operating in the region shared the primary objective of destroying civilian homes and personal property.

The data within the aggregated table reveals a calculated campaign characterized by strategic specialization: national military forces (ENDF and EDF) systematically targeted the essential social and agricultural bases of the economy, while the regional ally (AMF) focused intensely on commercial wealth and market assets. The high damage figures attributed to the combined forces further demonstrate that this destruction constituted a unified, joint strategic effort executed through varied operational structures.

Finance Sector Damage Perpetrators



As indicated in the figure above, the damage incidents in the finance sector reveal a pattern of calculated, highly coordinated systemic paralysis, demonstrating that the disabling of the financial infrastructure was a core strategic objective executed primarily through joint operations. The two-party ENDF_EDF alliance is the single largest contributor, responsible for 30.03% of all incidents, with the top three entries of which are two- or three-party coalitions (ENDF_EDF, EDF, and ENDF_EDF_IRF) collectively accounting for over 70% of the frequency of damage occurrences. This strong concentration in multi-actor involvement underscores the high operational requirement for executing successful attacks on financial targets, confirming that the sector's functional collapse was achieved through a unified military strategy rather than incidental acts by single actors, who played a relatively marginal role (e.g., ENDF at 6.42%, AMF at 2.93%).

Damage Severity in Tigray's Productive and Livelihood Sectors

The analysis of damage severity across Tigray's key economic sectors reveals a pattern of catastrophic and systemic asset destruction resulting from the war. The severity levels, ranging from minor/slight to complete/total damage, serve as a critical quantitative measure of the economic cost, indicating the depth of loss to both capital stock and immediate livelihoods. A dominant concentration of value in the highest severity category underscores the need for massive, structural reconstruction rather than simple repair.

Damage Severity in Tigray's Productive and Livelihood Sectors (US\$ in Millions)

Damage Severity Level	Trade	Agriculture	Services	Manufacturing	Households	Finance	Total Damage Value (US\$ Millions)	Share (%)
Complete/Total Damage	7,721.98	4,965.89	8,835.88	2,061.99	1,253.91	70.23%	24,839.65	76.73
Severe/Major Damage	779.5	139.55	595.27	110.93	188.6	3.05%	1,813.85	5.60
Moderate Damage	99.83	329.72	3,691.71	1,025.21	73.67	4.31%	5,220.14	16.13
Minor/Slight Damage	12.54	13.16	27.77	273.07	60.63	11.74%	387.17	1.20
Unspecified/Other	-	-	0.52	-	109.41	10.69%	109.93	0.34
Sector Grand Total	8,613.85	5,448.32	13,151.15	3,471.20	1,686.22		32,370.74	100.00

Note: The Finance sector value in this table is presented as a percentage measure; consequently, the overall share calculation is derived exclusively from the remaining five sectors

Overall Productive and Household Livelihood Damage

The productive and household livelihood sectors incurred an aggregate quantified monetary damage of US\$ 32.37 billion. Compared to previous calculations, the profile of destruction is now demonstrably more concentrated in the highest severity level. Specifically, the Complete/Total Damage level now accounts for 76.73% of the total damage value, up from the previous figure of 70.43%. This increase of 6.3 percentage points in the highest severity bracket significantly heightens the conclusion that the war's primary impact was the total elimination of productive capacity and capital assets. This revised figure reinforces the interpretation that the economic crisis is fundamentally one of capital stock annihilation. Consequently, the proportionate impact of Moderate Damage is now slightly reduced to 16.13% (from 14.80%), and Minor/Slight Damage is reduced to 1.20% (from 1.10%). However, the overarching conclusion remains: the setback is profound, demanding extensive, long-term structural reconstruction.

The damage severity level for the Services and Trade sectors remains robust: they collectively absorbed over 61% of the monetary loss, signaling a devastating blow to the commercial and public infrastructure core. The services sector sustained the highest absolute damage value at US\$ 13.15 billion, with the majority categorized as complete damage (US\$ 8.84 billion). Similarly, the Trade Sector recorded a loss of US\$ 8.61 billion, with US\$ 7.72 billion of that amount classified as Complete Damage. This stability reinforces the finding that the crippling impact on essential infrastructure and commercial logistics is the single largest component of the overall economic loss.

The core interpretations for the primary and secondary sectors are also reinforced by the new overall severity: the Agriculture Sector's US\$ 5.45 billion loss, with over 91% in Complete Damage, confirms the systematic annihilation of rural livelihoods and the creation of a protracted food security catastrophe.

The manufacturing sector's US\$ 3.47 billion loss continues to signify a severe erosion of the region's industrial base, directly impacting future employment and diversification prospects.

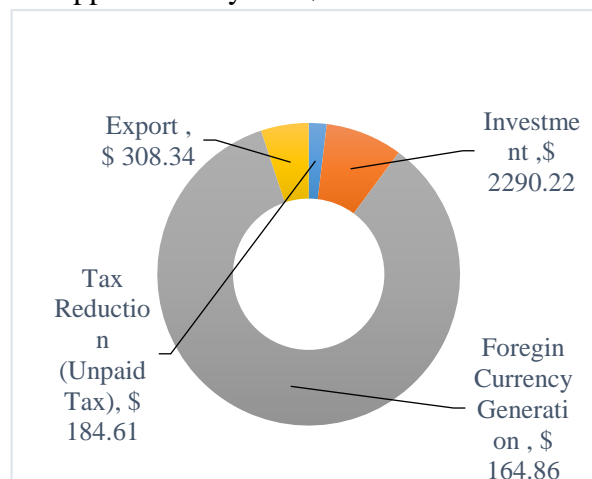
The household sector damage, totaling US\$ 1.69 billion (primarily complete damage), remains the direct quantifiable cost to civilian livelihoods and is a primary driver of the mass displacement crisis.

Finally, the finance sector's data, while presented as a percentage of functional severity, strongly contributes to the revised overall severity profile. The 70.23% concentration in complete damage within the finance sector is a key factor driving the 76.73% figure for the overall complete damage share. This high percentage in the finance sector signifies a bimodal structural failure where critical financial infrastructure was either completely destroyed or rendered non-functional, thereby serving as a fundamental constraint on the immediate capacity for commerce, wage payments, and capital mobilization necessary for economic recovery.

Impact of the war in the Productive Sector

(a) Macroeconomic and Microeconomic Impact of the war

The short-term economic shock, calculated to be approximately US\$2.95 billion and accompanied by the rendering of 368,449 employee's unemployable, represents a critical structural blow to the regional economy. The vast majority of this loss, over 77%, stems from the collapse of investment (\$2,290.22 million), leading to a severe "scarring" effect on the economy's potential GDP. The destruction and halt of capital formation—factories, machinery, and infrastructure—mean the economy is operating on a significantly and permanently lower productive frontier. Alongside this, the sharp reduction in tax collection (\$184.61 million) immediately creates an unsustainable fiscal crisis, forcing the government to incur heavy borrowing to finance crucial reconstruction efforts, thus initiating a debt overhang that will constrain public spending and crowd out private investment for years to come. Furthermore, the combined losses in export and foreign currency generation (\$473.2 million) critically strain the balance of payments, leading to a chronic shortage of foreign exchange. This instability will fuel imported inflation by raising the cost of essential inputs, deterring foreign direct investment, and severely impeding the restart of key productive sectors like manufacturing and agriculture. Ultimately, the macroeconomic impact is not a temporary deficit but a fundamental erosion of the region's capital base, fiscal stability, and trade capacity, requiring a generation-long effort to restore the underlying drivers of growth.



Job Loss Rate/Unemployment

Sector	Pre-War Employment	Employment During War (2021-2022)	Job Loss (Affected Manpower)	Job Loss Rate (%)	Victims Among the Workforce (Manpower)
Manufacturing	184,144	12,078	172,066	93.44%	10,013
Trade	73,716	10,619	63,097	85.60%	4479
Agriculture	49,046	6,911	42,135	85.91%	
Services	102,962	11,811	91,151	88.53%	3657
Total	409,868	41,419	368,449	89.89%	18146

Source: CITG Survey, 2022 and 2023

The surveyed productive sectors Manufacturing, Trade, Agriculture, and Services—suffered an estimated overall job loss rate of nearly 90% (89.89%) between the pre-war period and 2021-2022, resulting in 368,449 workers losing their livelihoods. This severe loss confirms the near-total functional elimination of the formal economy, moving the crisis beyond a recession into a humanitarian and social stability catastrophe. At the sectoral level, the manufacturing










sector was the hardest hit, experiencing a devastating 93.44% job loss rate, which aligns with reports of systematic asset destruction in the industrial base. The remaining sectors, Services (88.53%), Agriculture (85.91%), and Trade (85.60%), all sustained comparable job loss rates above 85%, demonstrating that the elimination of employment was a universal outcome across all major segments of the economy.

Direct Human Cost: Victims Among the Workforce

Beyond the massive loss of employment, the workforce suffered a significant direct human toll. The figure of 18,146 victims (representing employees who were killed, injured, or went missing/lost) highlights the severe physical danger faced by workers. This direct human cost, which equates to approximately 4.92% of the total affected manpower (368,449) and 43.81% of the workforce still employed during the War period (41,419), underscores that the crisis was characterized not only by economic destruction but also by targeted violence against the civilian labor force. The high number of direct employee victims compounds the challenge of post-War recovery by eliminating experienced human capital, adding an irreparable layer of social and economic trauma to the structural unemployment crisis.

(b) Microeconomic Impact of the War in Tigray

Based on data for 657,360 household heads, the key microeconomic impacts of the war are summarized below:

Impact Category	Key Indicator	Pre-War Status (Baseline)	Post-War Status (2021/2022)	Change/Severity
Damage Incidence 	HHs experiencing any damage	23% were safe (Implied)	77% experienced damage	Widespread destruction of assets and security.
Forced Displacement 	HHs forcefully displaced	Not displaced (Implied 39%)	61% displaced	Average duration of 274 days .
Income Loss 	Total HH Income (USD)	\$2.633 Billion (2019)	\$29.68 Million (2022)	Major income decline.
Subjective Poverty 	HHs considered Poor/Very Poor	Approx. 21% (2019)	Approx. 91% (2022)	Dramatic reversal of economic status.
Food Insecurity 	HHs Food Secure	74.20% (2019)	18.73% (2021/2022)	81.27% became food insecure post-war.
Food Inflation (Max) 	Vegetable Price Increase	Baseline (Implied)	310% increase	Massive price surges on essential food items.
Livestock Loss 	Total Number of Animals	2,754,118 (2020)	983,109 (2022)	Loss of over 1.77 million animals.
Agricultural Land Loss 	Arable Land Left Fallow	Negligible (Implied)	30.7% (2021/22 season)	Critical loss of productive capacity.
Unemployment Rate 	HH Sector Unemployment Rate	Implied (Based on 232,100 unemployed)	74.1% (2022)	111.71% increase in unemployment.

Source: CITG Survey ,2022

The war in Tigray has had a catastrophic microeconomic impact on households, leading to the near-total collapse of livelihoods. Based on data from 657,360 household heads, the war caused a swift and severe reversal of economic status, marked by widespread destruction and displacement, with 77% of HHs suffering asset damage and 61% being forcefully displaced for an average of 274 days. The most acute impact was the plunge into poverty, as subjective poverty surged from approximately 21% to 91%. This was directly related to a huge drop in income, with total household income falling from \$2.633 billion in 2019 to just \$29.68 million in 2022. People's ability to make a living was severely harmed: the number of households with enough food dropped from 74.20% to only 18.73%, worsened by huge price increases (like 310% for vegetables) and the loss of farming resources, including more than 1.77 million animals and The resulting unemployment rate soared to 74.1%. The total estimated damage and loss reached \$4.67 billion, with the loss value (\$2.986B) exceeding the damage value (\$1.7B), crucially demonstrating that the sustained blockage and economic inactivity were more devastating to household well-being than the direct physical destruction of assets.

(D) Impact Financial Sector Gap in Tigray

The war inflicted a complex and contradictory impact on Tigray's financial sector, showcasing remarkable community financial resilience alongside a catastrophic failure in core lending functions and profitability. This analysis compares performance before the war (June 30, 2020) and after (June 30, 2023).

Banks are showing resilience in deposits while experiencing a collapse in lending.

Banks demonstrated resilience in customer outreach and deposit mobilization but experienced a profound functional crisis in lending:

- **Outreach & Deposits:** Growth: Banks successfully opened 23 additional branches (5% increase) and saw a rise in both deposit customers (9.43%) and loan customers (12.55%). Total accumulated deposits grew by a significant 17% (US\$ 194.56 million), with annual demand deposits surging by 98%, indicating community trust and a return of liquidity post-siege.
- **Lending & Credit Risk:** Catastrophic Failure: The core function of providing credit collapsed, with the average annual loan disbursement plummeting by over 96% (a US\$ 121.28 million reduction). This freeze in lending occurred despite deposit growth, highlighting a severe capital outflow or lending constraint. The ultimate cost is reflected in the Expected Credit Loss, which skyrocketed from 0.68% to an alarming 69% of outstanding loans (US\$ 300.85 million), reflecting the systemic destruction of borrower businesses.
- **Profitability:** Banks reported an estimated lost profit of US\$ 173.32 million and incurred over US\$ 14.22 million in additional costs.

Microfinance Institutions (MFIs): Mixed Performance

MFIs, while crucial for small enterprises, showed similar functional contradictions:

- **Outreach & Deposits:** Strong Growth: MFIs achieved a 46% growth in total accumulated deposits and an extraordinary 1,029% surge in annual demand deposits, signaling powerful grassroots resource mobilization. Outreach was stable, with branches increasing by 2.42%.
- **Lending & Credit Risk:** New lending collapsed, with Average Annual Loan Disbursement declining by nearly 95%. This functional failure, combined with deposit

growth, adversely affected profitability. Consequently, Expected Credit Loss surged by 1,440%, indicating MFIs anticipate losing 22.49% of their outstanding loan portfolio.

- **Profitability:** MFIs reported an estimated lost profit of US\$ 76.78 million and incurred US\$ 6.16 million in additional costs.

In summary, both commercial banks and MFIs faced an existential crisis defined by a collapse in lending (down 95-96%) and a catastrophic surge in bad debt (up 1,440% to 11,186%), effectively paralyzing their ability to fuel post-War economic recovery, despite a surprising show of confidence from depositors.

Conclusion and Recommendations

Conclusion

This comprehensive Damage and Loss Assessment (DaLA) confirms that the war, siege, and blockade inflicted a catastrophic and strategically targeted economic destruction on the Tigray Regional State, totaling US\$83.84 billion. This finding is not merely a quantification of war damage but a conclusive diagnosis of systemic economic paralysis achieved through the deliberate annihilation of the region's productive capital and its capacity for self-sufficiency.

Systemic Prioritization of Economic Strangulation

The key finding is that the economic loss (US\$50.71 billion) critically outweighs the physical damage (US\$33.13 billion), establishing that the prolonged blockade was a more devastating economic weapon than direct motive warfare. The cessation of economic flows, particularly to the Manufacturing (30.79% of all loss) and Trade (23.82% of all loss) sectors, fundamentally erased the commercial and industrial base, rendering the entire region economically non-viable.

Extinction of Capital Stock and Human Capital.

The severity analysis demonstrates a crisis of capital stock annihilation, with 76.73% of the quantified damage value falling into the Complete/Total Damage category. This high figure, driven by the complete collapse of the service, trade, and finance sectors, moves the recovery imperative beyond simple repair and into a profound, decade-long structural reconstruction challenge. This is compounded by the staggering 89.89% job loss rate across all productive sectors, which constitutes an unprecedented crisis of human capital degradation and social destabilization.

Strategic and Coordinated Attribution of Destruction

The perpetrator analysis conclusively proves that the destruction was not incidental but a calculated campaign characterized by strategic specialization. The Ethiopian National Defense Force (ENDF) focused on destroying social and state infrastructure (services), the Eritrean Defense Forces (EDF) targeted long-term rural productive assets (agriculture), and the Amhara Militia Forces (AMF) specialized in the destruction and extraction of commercial wealth (trade). Furthermore, the concentration of attacks on the financial sector by multi-party coalitions underscores that the functional collapse of commerce and capital mobilization was a unified, high-priority military objective. The resulting devastation of household assets by the dominant national forces confirms that civilian livelihood destruction was an integral part of the overall strategy.

Recommendations

Based on the nature, magnitude, and strategic attribution of the damage, the recovery and reconstruction efforts must pivot from conventional post-War aid to a high-impact, investment-led program focused on immediately restoring the foundations of productivity and market functionality.

Immediate Policy and Logistical Intervention (Restoring Economic Flow)

Full and Unconditional Restoration of Financial and Communication Systems: The most immediate and critical priority is the full, unfettered restoration of banking, telecommunications, and energy services. Given the high loss value, economic life cannot resume until capital can flow, wages can be paid, and firms can communicate with supply chains. This must precede large-scale physical reconstruction.

Targeted Supply Chain and Trade Corridor Re-establishment: Implement a rapid, internationally monitored program to reopen and guarantee the security of key import corridors essential for the Manufacturing and Trade sectors. This is necessary to break the "economic strangulation" that caused the largest portion of the loss and prevent sustained imported inflation from chronic foreign exchange shortages.

Structural Reconstruction and Capital Recapturing

Sovereign Debt Relief and Capital Mobilization: Provided the evidence of economic capital annihilation and the subsequent fiscal crisis, the national government and international partners must initiate a dialogue on sovereign debt restructuring or relief to alleviate the projected debt overhang. This action is a prerequisite for creating the fiscal space required for public-led reconstruction investment.

Seed Capital and Credit Guarantee Fund: Establish a dedicated, multilateral Seed Capital and Credit Guarantee Fund to rapidly inject liquidity into the most damaged high-loss sectors (Manufacturing and Trade). This fund must specifically target the replacement of the \$2.29 billion loss in Investment by offering subsidized credit and risk guarantees to surviving firms and entrepreneurs, thus reversing the decline in potential GDP.

Human Capital and Livelihood Rehabilitation

Emergency Livelihood Support for the Employable Workforce: Implement a time-bound, unconditional cash transfer program for the 368,449 unemployable workers to stabilize household income and mitigate the human capital drain. Simultaneously, launch sector-specific vocational training programs focused on construction, utility repair, and high-demand agricultural techniques to reintegrate the workforce into the reconstruction economy.

Justice-Informed Reconstruction Framework: All recovery funds must operate within a framework that acknowledges the conclusive evidence of strategic, specialized destruction by perpetrators. This is crucial for establishing accountability, ensuring that recovery planning is equitable, and building the necessary institutional trust to secure the stability required for long-term investment.

Note to the reader

This document constitutes **Volume I of the Productive Sector War Damage and Loss Assessment (DaLA) Report**. It presents verified, self-reported data from households, private firms and their respective supporting public institutions across the Tigray region. Due to constraints in temporal and geographic coverage, **subsequent volumes will follow** to incorporate additional findings.

Key considerations for interpreting this volume:

- Figures presented herein accounts for only **civilian properties and entities**, excluding any damage to military objects and infrastructure.
- **No extrapolation or estimation** has been applied. All figures reflect actual submissions, standardized only for price comparability (e.g., price of vehicles of the same model).
- The monetary values reported represent **intergenerational assets and accumulated wealth**, not annual budgets or gross domestic product figures. They should not be compared with fiscal or economic aggregates.
- **Losses far exceed visible damage**. The prolonged siege and blockade—lasting more than two years—led to widespread disruption of production goods and service and lasting setbacks in each-subsectors in the productive sector, which persisted long after the damage occurred.
- These cumulative losses, though harder to quantify, are **central to understanding the full impact of the crisis** and must inform any recovery or justice framework.
- This report is constrained to cover the following due to its institutional, temporal and geographical scope:
 - Damage and losses in the productive sector in Western Tigray are likely underreported due to ongoing security and access challenges. The figures for the Western zone in this document only reflect data from private firms that are now IDPs but survived the war.
 - Damage and loss sustained by financial SACCOs (Savings and Credit Cooperative Organizations) and Insurance companies.
 - Damage and loss to the productive sector related to the "last round war," referring to impacts that occurred outside the main November 2020–November 2023 reporting period.

Readers are encouraged to approach this volume as a foundational reference, recognizing both its rigor and its limitations. The data herein reflects lived realities and institutional memory, and its interpretation demands sensitivity to context, scale, and the enduring consequences of the war.

For the details you can read the whole Report Document at: <https://citghub.org/report-on-tigrays-productive-sector-and-livelihood-effects-and-impacts-of-the-war-siege-and-blockade-volume-1/>