

Schools caught in the crossfire:

Documenting damage to Myanmar's education system since the coup

REPORT BY MYANMAR WITNESS, 10 July 2024

Executive Summary

Myanmar Witness has documented 174 distinct incidents of violence affecting educational institutions in Myanmar since February 2021. Schools have been damaged by airstrikes, weaponry, and fire, with some hit multiple times. These events have caused significant infrastructure damage, impacting children's education in the short and long term.

Myanmar Witness' analysis draws from two primary datasets: the primary dataset (113 incidents), and a drone-specific dataset (61 incidents). The data reveals a steady increase in reported incidents affecting schools since February 2021, peaking in March 2024. The trend is consistent with data from the Armed Conflict Location and Event Data (ACLED) on school infrastructure. Additional sources, including the [Global Coalition to Protect Education from Attack \(GCPEA\)](#) and [United Nations Human Rights Council \(UN HRC\)](#) analysis, also indicate a rise since the coup.

The Myanmar military is implicated in 90 of the 113 cases documented in the primary dataset, with just under half resulting in major damage or total destruction to school infrastructure. In contrast, People's Defence Force (PDF) linked incidents generally caused less harm to educational infrastructure.

Sagaing region has the highest number of incidents impacting school infrastructure (36 incidents, 33% of dataset), followed by Shan state Kayin and Kayah (11 incidents each, 10.1% of dataset, respectively) reflecting their status as major conflict zones. The drone specific dataset also indicates 36.8% of drone incidents occurred in Sagaing.

Myanmar Witness has assessed the varying levels of damage inflicted upon schools in their primary dataset, as well as examining damage to the surrounding areas (villages and towns).

31.5% of schools sustained major damage, potentially rendering the schools inoperable, while 9% were completely destroyed (primary dataset). The high percentage of incidents affecting surrounding areas suggests schools may not have been the main target. Thus, damage to schools could be the result of collateral damage during conflict.

Myanmar Witness has collected 64 reports of fatalities and 106 reports of injuries, though very few deaths have been verified due to challenges in verifying and geolocating user-generated content of the victims.

A number of these incidents may be linked to military use of school buildings, though Myanmar Witness cannot fully verify these claims. Regardless, these actions impact educational facilities, reducing access to learning materials and resources for students. Myanmar Witness recommends that international lawyers investigate these events to determine the status of these school buildings as protected sites under international law.

This report presents the available data on incidents affecting schools in Myanmar, highlights the frequency of such events in the context of the ongoing conflict, and seeks to hold those responsible to account. Myanmar Witness also compiled case studies that provide an insight into the trends uncovered during this investigation. Myanmar Witness will continue to monitor and report on incidents that impact on educational infrastructure in the country.

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Introduction

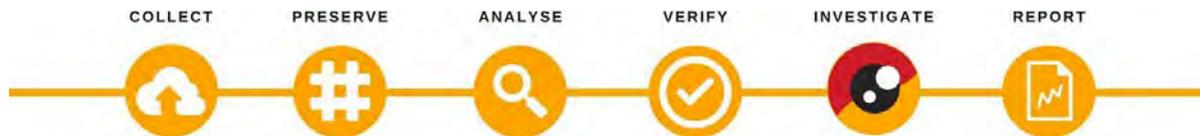
Myanmar Witness has been documenting the effects of the conflict on civilians and infrastructure since 2021, including the systematic damage to educational facilities. Despite the alarming rise in incidents affecting schools, there is a lack of comprehensive analysis on the trends and patterns of these incidents. This report aims to fill this gap by presenting the findings of Myanmar Witness' inquiry into incidents affecting educational facilities.

The reported increase in incidents has been predominantly observed post-coup. Global Coalition to Protect Education from Attack ([GCPEA](#)) found that school enrollment was 80% lower in June 2022 than two years prior, leaving 7.8 million children out of school at the time of their reporting. The [UN HRC](#) also documented around 260 attacks on schools or school personnel between February 2021 and March 2022.

The following sections of this report will provide a detailed analysis of Myanmar Witness' data, including case studies and trends, such as, the types of weapons used and the alleged responsible actors. This report reveals the frequent and persistent damage to schools from February 2021 to April 2024. The ongoing conflict threatens both the education system and the safety of children. In some cases, villages and schools were affected multiple times, further demonstrating the persistent threat this conflict poses to educational institutions.

Methodology

Myanmar Witness follows a methodology of digital preservation and rigorous, replicable analysis. Digital evidence is collected and archived in a secure database and preserved with hashing to confirm authenticity and prevent tampering.



Myanmar Witness uses a confidence judgement system to describe the extent of independent verification of footage:

- **Very High:** Myanmar Witness is 85-95% sure that the event took place as described in claims. Footage is independently geolocated and mostly chronolocated by Myanmar Witness, with strong corroborating evidence on details of the claim (such as that the damaged structure is a school).
- **High:** Myanmar Witness is 70-80% sure that the event took place as described in claims. Footage is geolocated by Myanmar Witness. Other reliable sources confirm the time and date, but it cannot be independently chronolocated. Other details of the claim (such as whether the structure is a school) have not been proven beyond reasonable doubt.
- **Medium:** Myanmar Witness is 50-60% sure that the event took place. The event is somewhat verified, but significant gaps remain, such as the inability to identify or geolocate the mechanism of attack linked to the damage.
- **Low:** The geolocation and chronolocation process has shown the location or timing of the footage to be inaccurate.
- **Unknown:** There is not sufficient evidence for the investigator to make a confidence judgement.

Myanmar Witness has also assigned confidence levels to responsible actors, including:

- **Very High:** Actors confess to the action, and Myanmar Witness has verified evidence of their involvement.
- **High:** Myanmar Witness is at least 80% confident of the actor's involvement, without their admission. This may be based on factors such as exclusive mechanism of attack (e.g. airstrike) or observed insignia, etc.
- **Medium:** Multiple sources suggest involvement, and some evidence from related user-generated content (UGC) supports this, but confidence is not complete.
- **Low:** Evidence suggests the alleged actor was not involved.
- **Unknown:** Insufficient evidence to confidently assess the actor's involvement and/or no allegations of a perpetrator exist.

This report contains images showing how footage has been geolocated. In these images, white lines are used to represent the left and right arcs of vision. Coloured boxes show how landmarks

or distinguishing details in each piece of footage or data corresponds with each other. Geolocation is conducted using a varied array of open source online tools such as Google Earth to match satellite imagery with visual features identified in footage, images or other content - often referred to as user-generated content (UGC). Geolocations are cross-checked and peer-reviewed before they are credited as verified.

Chronolocation is typically conducted by analysing UGC timestamps to determine hard end limits for the possible time frame. This is followed with contextual and visual analysis, for example comparing visible aspects against known indicators such as weather events, shadows or other phenomena which may be indicative of the time in which a piece of UGC was captured. Shadow angle is determined after geolocation and its orientation is used to determine the position of the sun, and thus, time.

If dealing with unverified information, such as witness testimony or outside reporting, Myanmar Witness has made it known that these inclusions are claims and have not been independently verified by Myanmar Witness. Following stringent ethical standards, Myanmar Witness has obscured identifying information about individuals involved, censored private information and images where appropriate, removed links to private individual accounts and archived said information securely. Where applicable, Myanmar Witness has also blurred or excluded graphic imagery.

Schools Database

Myanmar Witness analysed data from its existing database and other sources to create two datasets: a primary dataset, and a drone-specific dataset. Additional UGC was gathered for specific incidents. Data from other sources provided context for the increase in school damage since the coup. Incidents outside the research timeframe (1 February 2021 - 30 April 2024) or deemed irrelevant were excluded. Various factors related to each incident were recorded, including alleged causes, damage, military use, casualties and post-incident status.

Myanmar Witness found no claims in Ayeyarwady and Naypyitaw regions, possibly due to data collection limitations. To address potential bias in observed statistical increases, the Armed Conflict Location and Event Data Project (ACLED¹) was consulted as a reference to verify the significance of these trends. ACLED is a non-governmental organisation that collects, analyses and maps real-time data on political violence, protests and conflicts worldwide.

¹ ACLED's data is not publicly available, hence the lack of source links for this data. Myanmar Witness has compared its data with ACLED's to mitigate potential biases and limitations.

Analysis

Since the start of the conflict in 2021, Myanmar Witness has found that schools have increasingly been affected, with airstrikes being the primary cause of damage. Other incidents involved fire,² heavy weaponry, and ground offensives (see figure 7). The Myanmar military are reportedly responsible for 90 of the 113 cases recorded in the primary dataset (79.6% of incidents).

Myanmar Witness has recorded 174 school-related incidents across two datasets between 1 February 2021 and 30 April 2024. This includes claims of damage to at least 133 schools across Myanmar, with many schools suffering from repeated damage. Of Myanmar Witness' dataset, about 27.7% of the incidents lack sufficient evidence for verification. Where appropriate, the schools allegedly involved in these incidents have been included in our analysis.

Some schools appear to have been directly targeted while others were likely damaged as collateral during broader attacks on villages. Myanmar Witness' data shows that educational institutions at all levels, from preschools to universities have been affected. This destruction often renders schools unusable, severely impacting children's access to education.

While Myanmar Witness strives for accuracy, the number of schools affected is not exhaustive and may be influenced by data collection limitations and biases. For example, the main dataset (113 incidents) includes various types of school damage, while a separate dataset focuses on drone attacks (61 incidents) near schools. The PDF often releases footage of their drone attacks, while other actors may not and as a result that dataset skews toward attacks linked to PDFs.

While some schools may have been used by armed groups for military purposes, the evidence remains inconclusive in many of the cases investigated by Myanmar Witness. However, a one-year study by the UN since the coup has identified around 320 instances of schools being used by the armed groups, suggesting these claims may have some merit. Regardless of the specific circumstances, the widespread damage to schools will impact the education of children in Myanmar.

The sections below provide a monthly and geographic breakdown of incidents impacting schools, before analysis of the extent of damage to schools and their surrounding areas, the causes of damage, the claimed perpetrator, and casualties. Myanmar Witness also selected emblematic case studies which provide an insight into the trends identified during this investigation.

² Fire damage has many potential causes, including heavy weaponry, airstrikes, or individuals purposefully setting buildings alight. Myanmar Witness has coded events as 'fire' if sources provide no other explanation for the incident. If the content shows fire damaged structures, but the content or post itself implies this damage was caused by other means, such as airstrikes, then it is coded in the 'aircraft' category.

Monthly Breakdown

Since February 2021, the frequency of damage to school infrastructure has risen significantly, with a consistent upward trend when analysed using a three-month moving average (see figure 1). Incidents peaked in March 2024, with 11 reported cases, 8 confirmed to have damaged schools. The period from February 2021 to April 2024 in the primary dataset also saw a notable increase in airstrikes, with March 2024 recording the highest number of reported incidents. The consistent rise in incidents involving damaged school infrastructure, with only occasional decreases (in August, September, and October), highlights the urgent need for the protection of Myanmar's civilians and vital infrastructure.

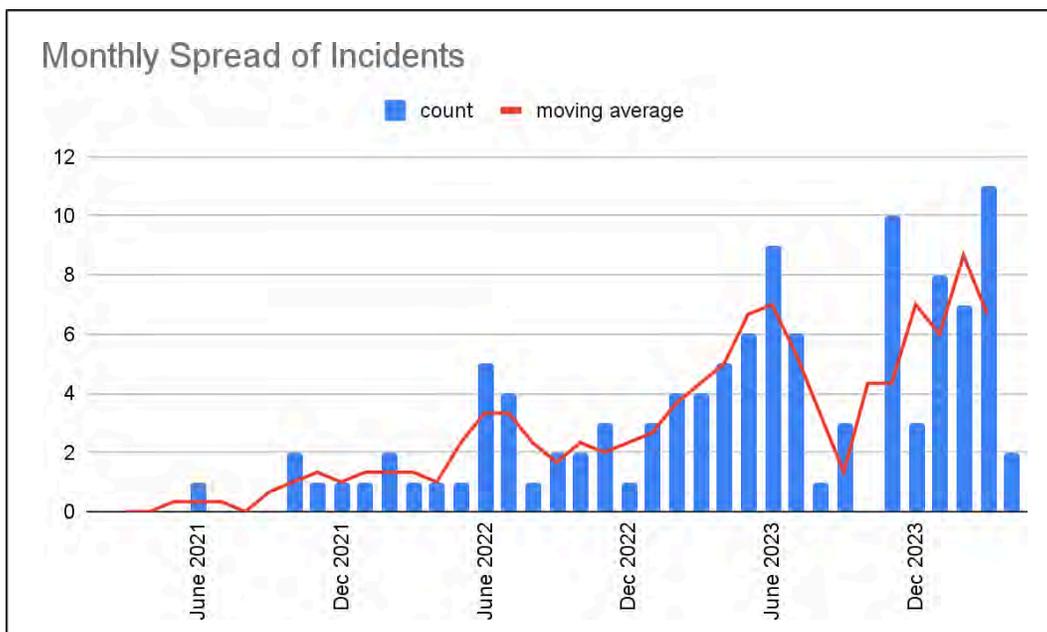


Figure 1: Bar chart showing the breakdown of monthly incidents collected and analysed by Myanmar Witness.

Geographic Breakdown

By analysing the locations of incidents impacting schools, Myanmar Witness has found that most incidents occur in areas of [known resistance](#) to the Myanmar military. The Sagaing region, for example, has the highest number of incidents affecting schools (36 incidents, 33% of dataset), followed by Shan, Kayin and Kayah states (11 incidents each, 10.1% of dataset, respectively). This pattern of violence against educational institutions in Sagaing and Shan directly reflects the region's status as a major conflict zone. Myanmar Witness has identified similar trends in other investigations, including a concentration of reported [airstrikes](#) and [fires](#) in Sagaing, and the conflict's impact on [medical facilities](#). Analysis of the drone-specific dataset also reveals that a significant portion of drone-related incidents (16 incidents, 38.6% of dataset) occurred in Sagaing.

Figure 2 shows the geographical distribution of incidents documented in Myanmar Witness' primary database and the drone-specific database. The concentration of events in Sagaing is also recorded in ACLED's dataset.

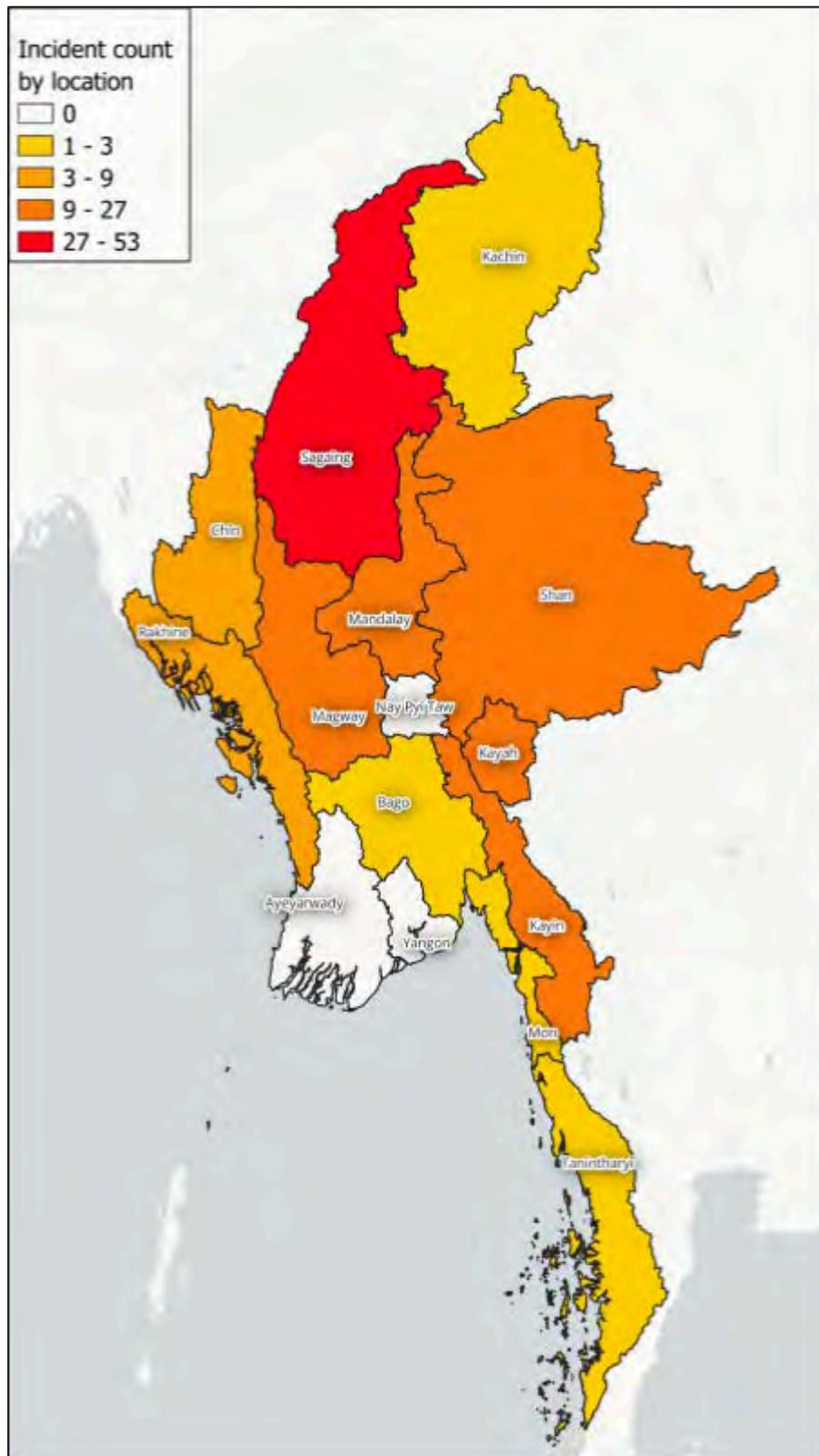


Figure 2: Geographical distribution of incidents documented in Myanmar Witness' primary database and drone database.

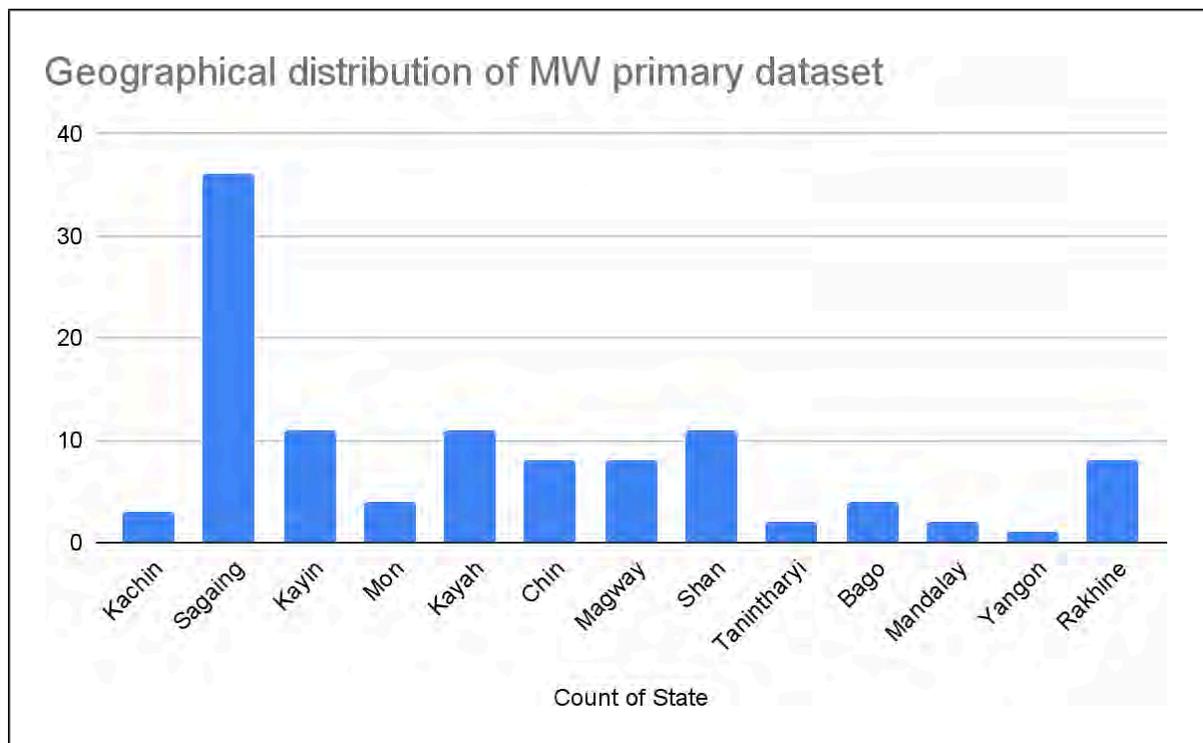


Figure 3: Bar chart showing the breakdown of incidents by region, collected and analysed by Myanmar Witness.

Extent of damage to school infrastructure (primary dataset)

Myanmar Witness assessed the varying levels of damage inflicted upon the schools in the primary dataset. The data reveals that:

- 43 incidents (38.7%) had minor damage (e.g. bullet holes or minor damage to walls and school gate; school facility may remain operable)
- 35 incidents (31.5%) had major damage (e.g. such as severe roofing and wall damage that rendered the school potentially inoperable)
- 21 incidents (18.9%) were categorised as damage 'not visible' (e.g. UGC not available showing the surrounding area)
- 10 incidents (9%) were completely destroyed

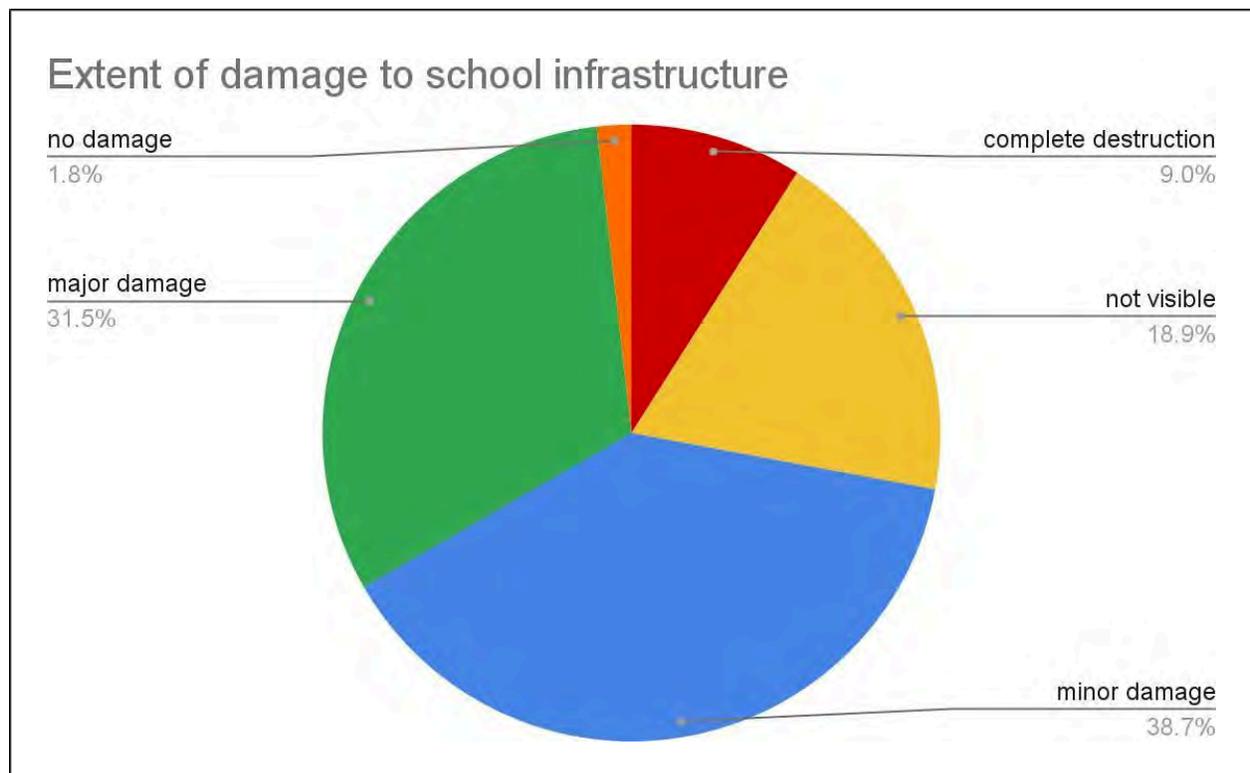


Figure 4: Pie chart showing the proportion of schools that suffered from varying levels of damage, from the primary dataset.

Extent of damage to surrounding areas (primary dataset)

The primary dataset reveals that surrounding areas (village or towns) were damaged in 49.6% of the investigated incidents:

- 56 incidents (49.6%) had visible damage to surrounding areas
- 42 incidents (37.2%) had potential damage to surrounding areas (e.g. claims that the surrounding area was damaged, but this is not verified by MW)
- 9 incidents (8%) had no damage to surrounding areas
- 6 incidents (5.3%) were categorised as damage 'not visible' (e.g. UGC not available showing the surrounding area)

The high percentage of incidents affecting surrounding areas suggests schools may not have been the main target. Thus, damage to schools could be the result of collateral damage during conflict.

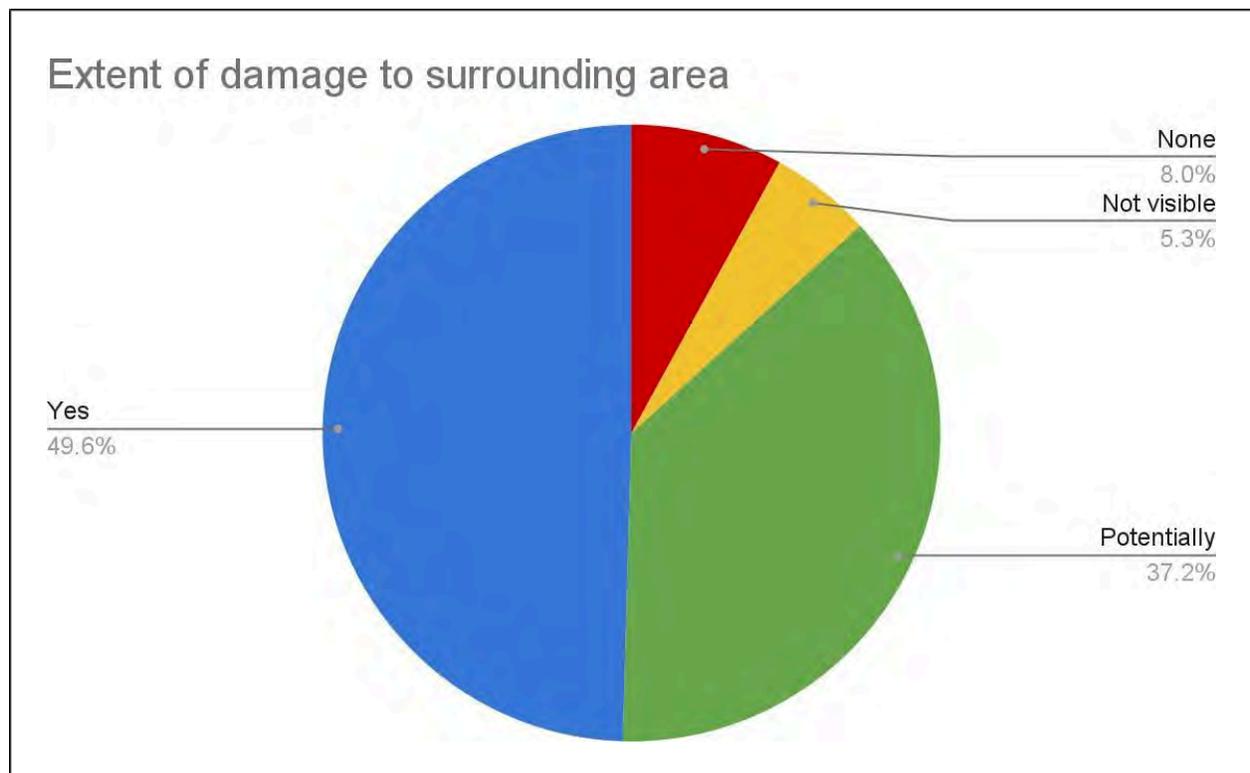


Figure 5: Pie chart showing the proportion of incidents that also included damage to the surrounding areas from the primary dataset.

Extent of damage to schools (drone-specific dataset)

The drone-specific dataset was harder to analyse as the footage is usually taken from a distance, resulting in most incidents being labelled as 'not visible,' as shown in figure 8. The damage to school infrastructure in the majority of drone incidents not classified as 'not visible' is classified as minor, rather than major.

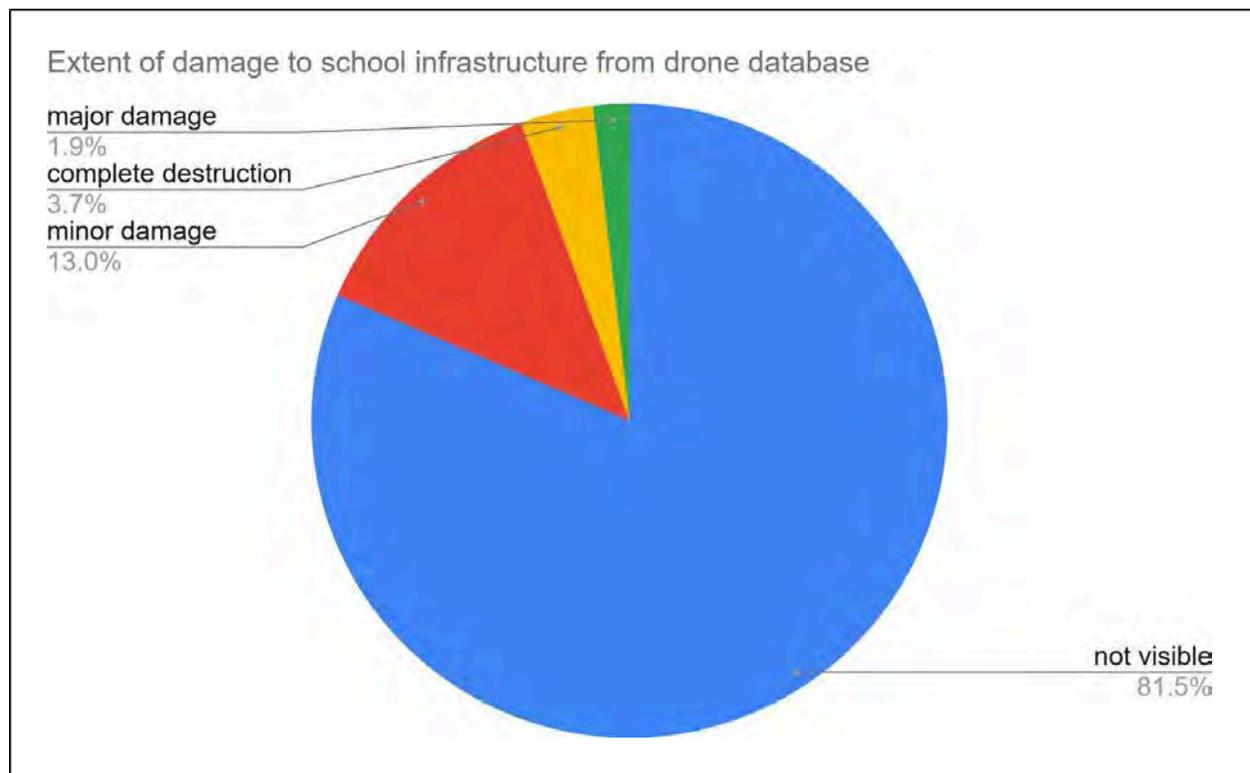


Figure 8: Pie chart showing the proportion of schools that suffered from varying levels of damage, from the drone-specific dataset.

Extent of damage to surrounding areas (drone-specific dataset)

In most cases where damage is visible, it is not limited to school buildings alone. The surrounding areas often show signs of destruction as well. This pattern supports the theory that schools are typically not the primary targets of attacks but rather are collateral damage during conflict (figure 9).

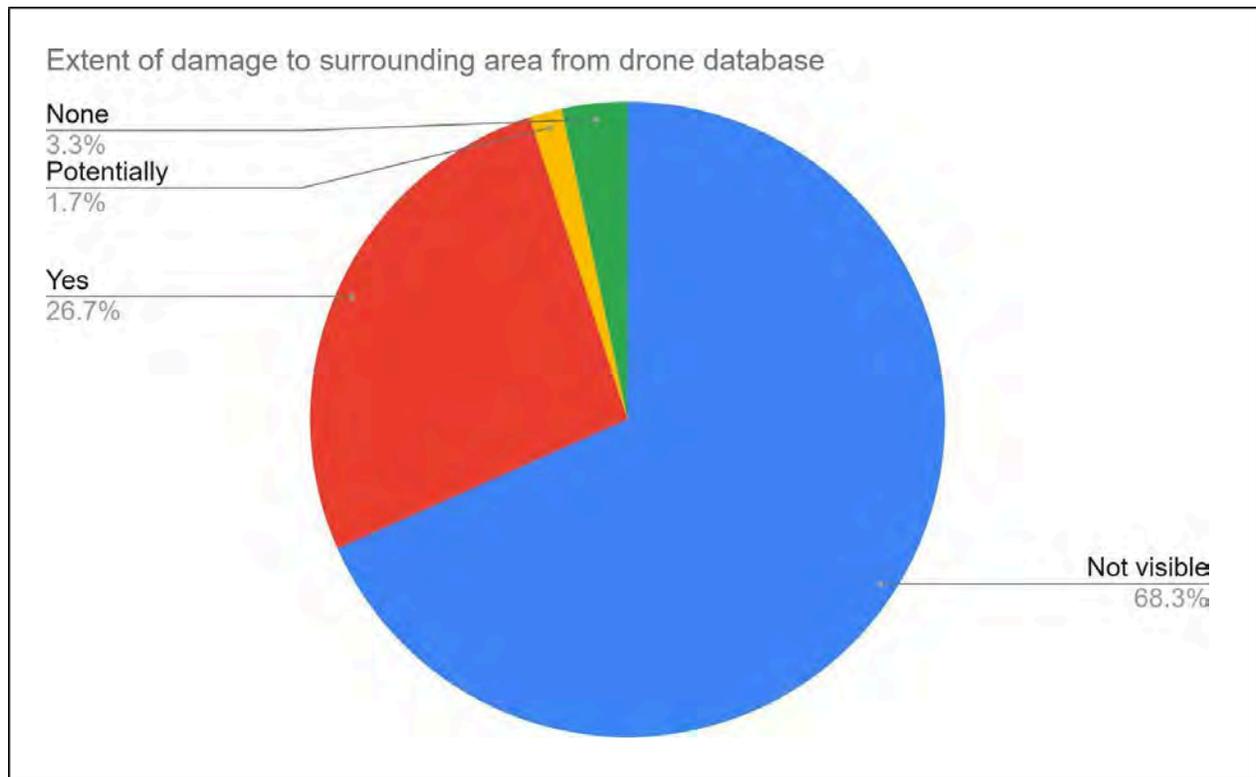


Figure 9: Pie chart showing the proportion of incidents where surrounding areas were damaged in school-related attacks, from the drone-specific dataset.

Causes of damage to schools

Between February 2021 and to April 2024, the most common cause of damage to school infrastructure identified in the primary dataset was airstrikes (49.6%), followed by fire (11.5%) and ground battles (11.5%). See figure 10. As the Myanmar Air Force is the only actor capable of carrying out airstrikes with manned aircraft, this implicates them in a high proportion of these events. 'The 'cause' classification was determined through identification of claims associated with an event, and where possible corroboration with UGC analysis for higher confidence in the claims.

Fire damage has many potential causes, including heavy weaponry, airstrikes, or individuals purposefully setting buildings alight. Myanmar Witness has coded events as 'fire' if sources provide no other explanation for the incident. If the UGC analysis shows fire-damaged structures, but the UGC or post itself implies this damage was caused by other means, such as airstrikes, then it is coded in the 'aircraft' category.

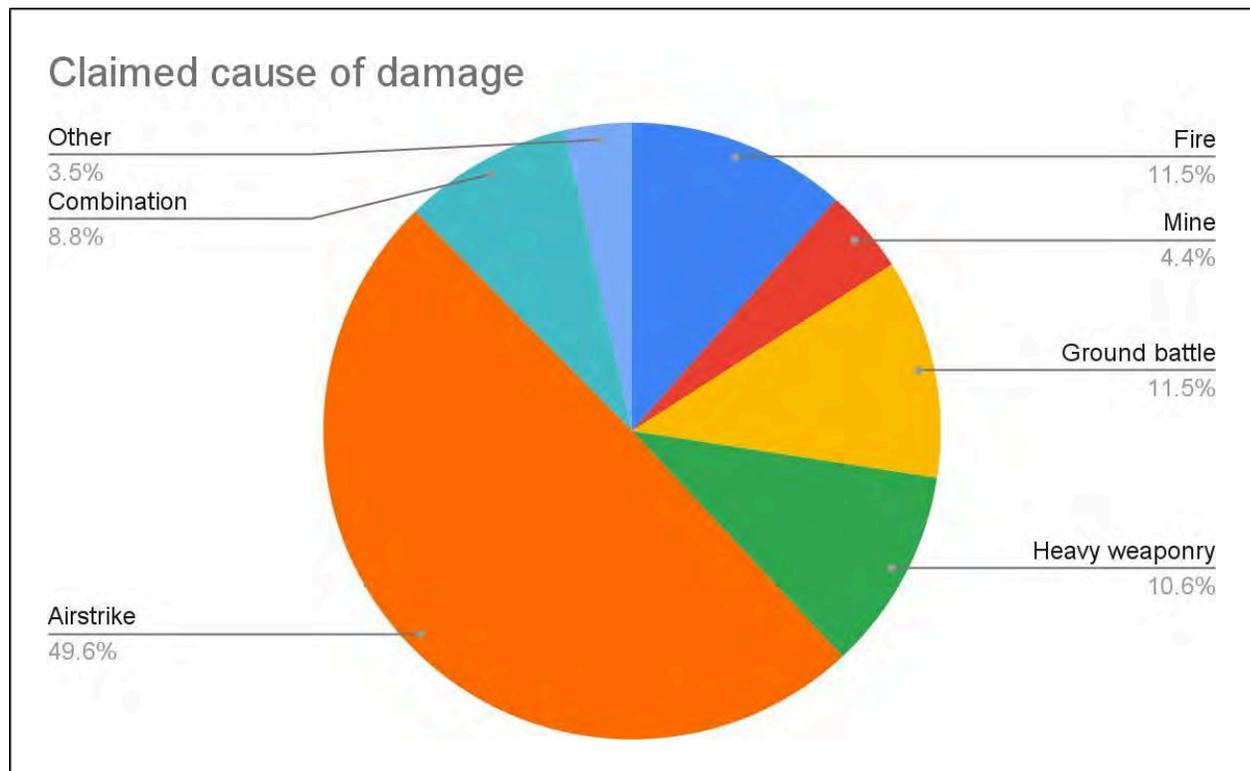


Figure 10: Pie chart showing the causes of infrastructure damage to schools in the primary dataset.

Claimed perpetrator

In Myanmar Witness' primary dataset, the Myanmar military is the main actor accused of damaging schools, particularly through airstrikes (49.6% of incidents). The Myanmar Air Force is the only actor with the capability to carry out airstrikes in this conflict. The Myanmar military are reportedly responsible for 90 of the 113 cases recorded in the primary dataset (79.6% of incidents). See figure 11. Notably, 45.5% of these military-linked incidents resulted in major damage to or complete destruction of school facilities. In contrast, PDF related incidents in the primary dataset generally result in unverifiable or minor damage to schools. This highlights the disproportionate level of destruction caused by the Myanmar military compared to other groups active in the conflict.

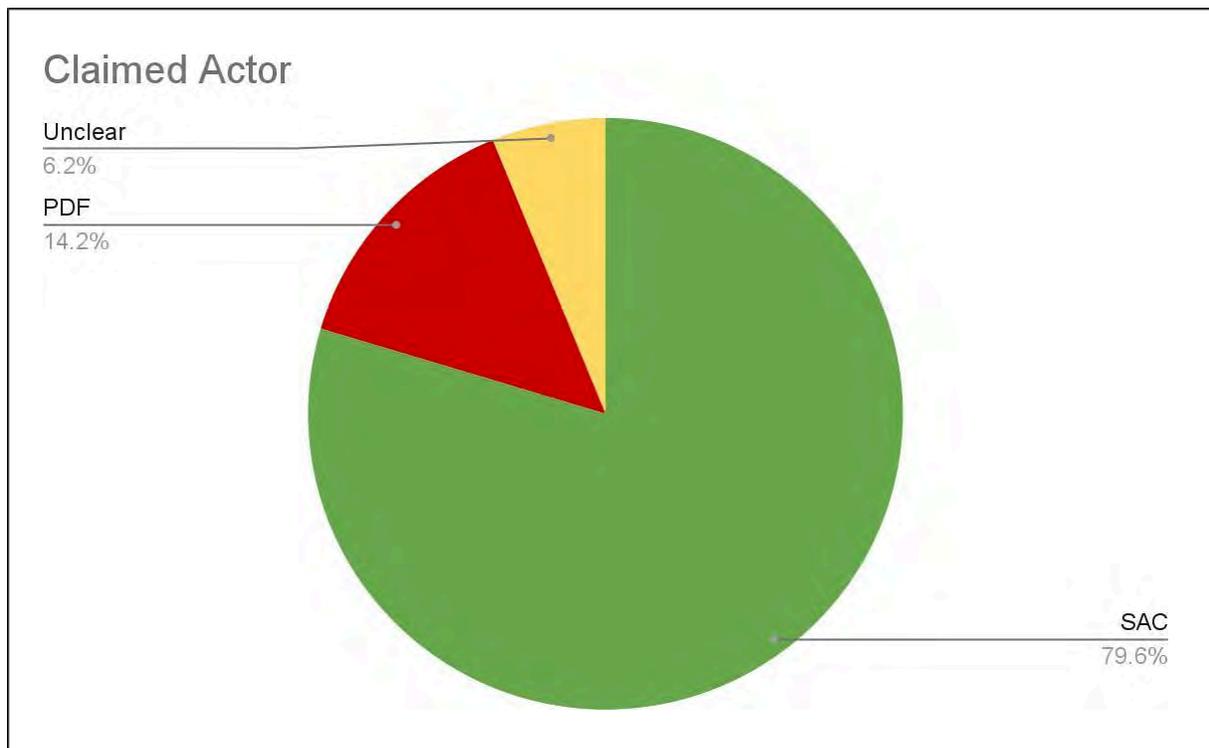


Figure 11: Pie chart showing the alleged actor in the incidents documented in the primary dataset.

Casualties

Myanmar Witness has collected approximately 64 reports of deaths and 106 reports of injuries related to events in the primary database. However, very few deaths have been verified due to challenges in verifying and geolocating UGC of the victims. For example, often, images of victims do not contain geolocatable features. One of the few successful verifications was in the case of the [Kanan airstrike](#), which Myanmar Witness has covered extensively.

Case Studies

This report presents four emblematic case studies selected from the 174 documented incidents of school infrastructure damage. These case studies were chosen based on high confidence in their verification levels, which were determined by factors such as available UGC, identification of involved actors, chronolocation, and corroborating information. They provide a detailed understanding of the impact of conflict on educational infrastructure.

The selected case studies illustrate the various methods of damage, including airstrikes, heavy weaponry and ground assaults. While the exact causes of damage in all cases could not be confirmed, the nature and intensity of the incidents offer insights into the tactics employed by the actors involved.

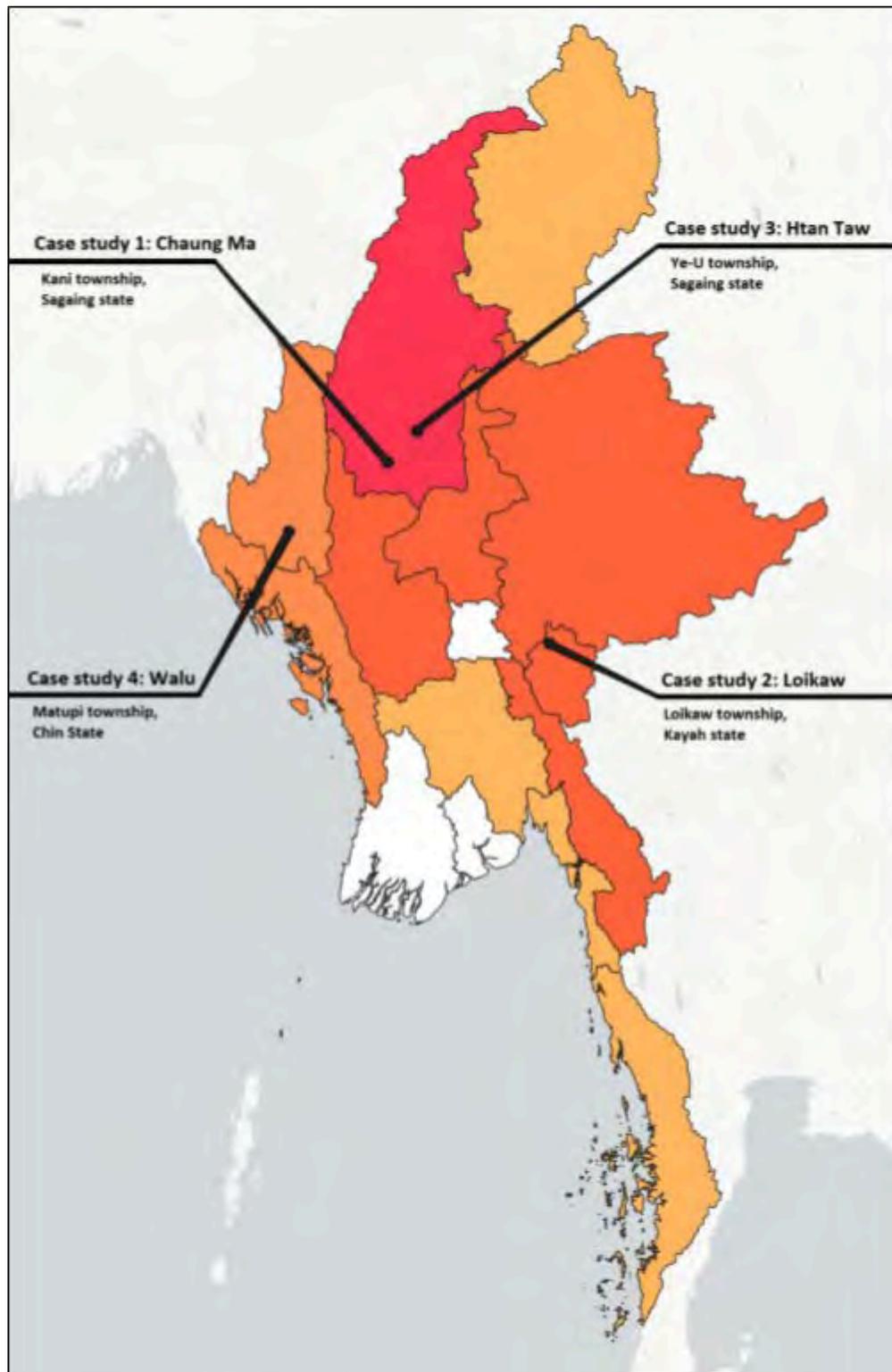


Figure 12: Map showing the location of the case studies analysed by Myanmar Witness.

1. Kani Township, Sagaing - May 2023

Background

During April and May 2023, Kani township (ကနီမြို့နယ်), in Sagaing region, was allegedly struck by airstrikes multiple times. Airstrikes were reported on [24 April 2023](#), 17 May 2023, and 28 May 2023. This case study focuses on the 17 May event.

During the 17 May 2023 airstrike, an educational institution in Chaung Ma village (ချောင်းမ) was [reportedly](#) damaged. Various sources, including personal social media accounts, media outlets including the [Mandalay Free Press](#), and aircraft tracking channels on telegram, claim that the Myanmar Air Force conducted airstrikes in Chaung Ma village on 17 May 2023, resulting in major damage of a school (sources redacted due to privacy concerns). Two children were reportedly injured during these attacks.

An airstrike on 28 May 2023 also reportedly hit another school in Kani Township (Min Ma village), according to the [Kani Board of Education Facebook page](#) (figure 13) but due to limited UGC, this event has not been explored in this case study.



Figure 13: Kani Board of Education Facebook page reported on the destruction of schools in Kani township, including Chaung Ma and Min Ma village on 28 May 2023 (source: Facebook).

Myanmar Witness’ analysis

Myanmar Witness has high confidence that an educational institution in Chaung Ma village was hit by a Myanmar Air Force airstrike, around the 17 May 2023. This conclusion was determined through open source analysis, UGC analysis, and extensive geolocation efforts. The UGC analysed includes footage showing:

- a Q-5 aircraft apparently releasing munitions in the vicinity of Chaung Ma;
- damaged school buildings; and,
- photos of ordnance reportedly found at the scene, indicating the involvement of aircraft in the attack.

This case study is emblematic as it shows the use of military aircraft. While Myanmar Witness has not confirmed the presence of civilians or injuries as claimed, the verified destruction demonstrates a disregard for civilian infrastructure.

Aircraft seen over Chaung Ma village

Myanmar Witness identified footage which appears to show two consecutive airstrikes on Chaung Ma village (source redacted due to privacy concerns). The footage shows smoke rising above Chaung Ma village (geolocated, coordinates withheld for privacy). An aircraft is visible (but unidentifiable) and can be seen releasing an object, likely ordnance (shown in the yellow box in figure 14 below), before a large explosion can be heard. The source claimed this event took place on 17 May 2023. The footage corroborates reports from the [Mandalay Free Press](#), and UGC from Facebook and YouTube, which claimed there were two airstrikes on Chaung Ma village on 17 May 2023.



Figure 14: Video footage geolocated by Myanmar Witness to Chaung Ma showing smoke plumes, an aircraft releasing an object - likely ordnance (shown in yellow) - before the sound of an explosion (source redacted due to privacy concerns).

Additional footage reportedly showing the same event was identified, and geolocated by Myanmar Witness to Chaung Ma village (source redacted due to privacy concerns). The footage appears to show an aircraft resembling a Q-5 (an aircraft within the Myanmar air force inventory) firing ordnance (figure 15). The source claimed this took place on 17 May 2023.



Figure 15: A still image from a video allegedly showing a Myanmar air force (MAF) Q-5 firing towards Chaung Ma on 17 May 2023, geolocated by Myanmar Witness (source redacted due to privacy concerns).

Damaged school buildings

Myanmar Witness assesses that it is highly likely an educational facility in the village was damaged by the airstrikes. [Photos](#) of a destroyed building were geolocated to Chaung Ma village school [2.283743, 94.892570] (figure 16). The images show damage consistent with an airstrike: the roof is damaged and caved in, and the surrounding vegetation is also damaged (figure 17).



Figure 16: Images of Chaung Ma school showing major damage was geolocated by Myanmar Witness to 22.283743, 94.892570 (source: [Mandalay Free Press](#)).



Figure 17: Photos of Chaung Ma school show major damage, with the roof caved in, consistent with an airstrike (source: [Mandalay Free Press](#)).

Date and time

While all sources stated that this event took place on 17 May 2023, Myanmar Witness could not verify the precise date or time using open-source research skills. Using Sentinel-2 imagery, between 31 March 2023 and 31 May 2023, ground changes are visible in the Chaung Ma village school compound, potentially indicating the loss of a school building. While this time gap is very large and does not confirm a specific date of the attack, it does show the school was damaged between April 2023 and May 2023 (figure 18).



Figure 18: Sentinel-2 imagery shows a difference in the ground that could indicate the loss of a school building in the compound (source: Sentinel-2).

Munitions

Photos showing debris, munition casings, and pits in the ground, were geolocated to Chaung Ma village [22.290499, 94.892775] (source redacted due to privacy concerns). These images were not geolocated to the school, but instead to nearby areas in the village. While this does not add weight to the claim that the school itself was hit, it does signal that an event took place, involving ordnance in the village.

While the debris cannot be positively identified, the source also alleged this event took place on 17 May 2023, and the imagery lends weight to the claim that an airstrike took place in this location (figure 19).



Figure 19: Images posted on social media showing debris and ground pits, geolocated to Chaung Ma village (source redacted due to privacy concerns).

2. Loikaw Township, Kayah - November 2023

Background

On 13 November 2023, Loikaw University in Loikaw township (လွိုင်ကော်လိပ်တန်း), Kayah State (ကယားပြည်နယ်), was [allegedly](#) attacked by the Karenni National Defence Forces (KNDF). The attack was aimed at Myanmar military's Light Infantry Battalion (LIB) units 425 and 6, which were [reportedly](#) using Loikaw University as an operational base at that time.

During the incident, the KNDF reportedly [rescued](#) teachers affiliated with the Civil Disobedience Movement (CDM). The clashes, which extended over two days, reportedly resulted in the deaths of nearly all members of Myanmar military units LIB 425 and half of LIB 6. On the afternoon of 14 November 2023, 32 troops from LIB 6 reportedly [surrendered](#) to the KNDF.

Sources, including [Mizzima](#) and [Radio Free Asia Burmese](#), posted videos showing civilians or 'Non-CDMs', being loaded into a truck by individuals wearing uniform consistent with that of the KNDF. In the background of some [videos](#), the sounds of the clashes can be heard.

Myanmar Witness' analysis

Myanmar Witness geolocated multiple pieces of UGC associated with this incident and believes it is highly likely that an attack by the KNDF on Loikaw University, where Myanmar military units were reportedly based, occurred. This included UGC showing:

- KNDF personnel assisting civilians, geolocated to Loikaw University;
- the surrender of Myanmar military personnel who had been located within and fighting from the University buildings; and,
- KNDF personnel helping people to [escape](#) from the other side of the University compound, approximately one kilometre away from the video of the military surrenders [19.698095, 97.195336] (figure 21).

This case study underscores the use of educational facilities in Myanmar during the conflict, which typically compromises their protected status under international law.

The location

The incident took place at Loikaw University, geolocated by Myanmar Witness at approximately, 19.690611, 97.200791 (see figure 20). The footage shows the University compound is visibly damaged, corroborating claims that clashes took place in the area.



Figure 20: Footage showing destruction in the Loikaw University compound, as well as KDNF personnel, was geolocated to around 19.690611, 97.200791 (source: [Mizzima](#)).

University Staff

According to a list released by the [Interim Executive Council of Karenni State](#) (IEC), there were 134 staff who were trapped in the university area during the KNDF attack. This suggests the university compound, or at least parts of it, was still operational when the Myanmar military troops allegedly occupied the facility and were subsequently attacked by the KNDF.

Myanmar Witness identified UGC showing KNDF personnel assisting civilians, as well as individuals claimed to be teachers, to leave Loikaw University amid fighting (figure 21).



Figure 21: Still imagery from a video shows uniformed and plain-clothed armed individuals consistent with KNDF uniforms assisting civilians out of the Loikaw University compound. Video footage geolocated to 19.698095, 97.195336 (source: [RFA Burmese](#)).

Date and time

While Myanmar Witness cannot directly confirm the exact time of the clashes, the available evidence strongly suggests the attack took place over the course of 13-14 November 2024, with the surrender of Myanmar troops occurring on the afternoon of 14 November. The timing of the surrender appears consistent with the evening of 14 November 2023, based on the shadows

and visible damage to the University buildings (see figure 22). This was chronolocated using shadow analysis via Suncalc.



Figure 22: Photos show uninformed individuals consistent with Myanmar armed forces surrendering at Loikaw University (source: [Mizzima](#)).

3. Ye-U Township, Sagaing - May 2023

Background

On 9 May 2023, at around 1400 local time, Htan Taw village (ထန်းတော), Ye-U Township (ရှေးဦးလိမ္မော်တန်း), Sagaing Region, was [reportedly](#) attacked by an aircraft, resulting in major damage to a high school just after children had left the building. There were no reported casualties, as the children had allegedly been dismissed at 1200 local time, before the incident happened.

According to the [Mandalay Free Press](#), a high school affiliated with the CDM was the primary target of the attack. Following the February 2021 coup, CDM and National Unity Government (NUG)-supported [schools](#) started emerging in rural areas, under resistance control, that lacked educational resources. The [Mandalay Free Press](#) reported that the incident aimed to disrupt teachers associated with the CDM, though Myanmar Witness has not verified these claims.

Myanmar Witness' analysis

Myanmar Witness assesses that it is highly likely that the Myanmar Air Force carried out an airstrike on a school in Htan Taw village. This conclusion was determined through open source analysis, UGC analysis, and extensive geolocation efforts. The information analysed includes:

- UGC showing damage to school buildings and school gates, geolocated to Htan Taw village (figure 28);
- satellite imagery showing damage to the school buildings;
- media reports related to the attack, with accompanying imagery; and
- local flight tracking telegram channels which claim that an aircraft departed from and returned to Tada-U airport, within a timeframe capable of conducting an airstrike.

Myanmar Witness has not confirmed whether the school in question is linked with the CDM, however, the targeting pro-NUG and CDM-affiliated schools is a pattern that Myanmar Witness has observed during the conflict. This case study also highlights the use of military aircraft in Myanmar.

Damage to Htan Taw village school buildings

[UGC](#) identified by Myanmar Witness and geolocated to Htan Taw village, show damage to the village compound school buildings and school gates at around 22.730283, 95.306382 (figure 23 and 24). Myanmar Witness classified the visible damage to the school as 'major'.



Figure 23: Geolocation of Ye-u school strike from 9 May 2023, image located at 22.730283, 95.306382 (source: [Myanmar Pressphoto Agency](#)).



Figure 24: Photos showing damage to Ye-u school at 22.730283, 95.306382 (source: [Myanmar Pressphoto Agency](#)).

The visible damage to the school compound also corroborates the occurrence of an airstrike at the location. The [damage to the school](#) does not appear consistent with fire damage, as there

are no signs of scorching or ash. The building and gate show evidence of impact, with both small and large holes present. UGC indicates significant damage both inside and outside the building. Circular holes in the roof and walls suggest that the damage may have been caused from above or high-altitude sources, possibly by large weapons.

Date and time

One of the images identified by Myanmar Witness was timestamped at 1456 local time on 9 May 2023. Comparing this image with other pieces of [UGC](#) showing damage to the school gates, it appears that further imagery was taken between 1400 and 1600 local time (figure 25). This was geolocated by Myanmar Witness and chronolocated using shadow analysis via SunCalc.



Figure 25: Chronolocation of images showing the school with visible damage, at 22.730283, 95.306382 (source: [Myanmar Pressphoto Agency](#)).

Aircraft

According to 'local watch' social media pages (source redacted due to privacy concerns) and [Myanmar Now](#), aircrafts departed from Tada-U airbase in Mandalay, approximately 100 kilometres away at 1353. Myanmar Witness assessed information from the airbase flight tracking telegram channels (these channels typically report takeoff times, landing times, and flight directions), which contained reporting from separate sources that jets were heading in the direction of Htan Taw village at 1353. Cross-referencing this information with landing times reveals that an aircraft likely took off around 1353, and landed back at Tada-U airbase around 1425 local time. This provides enough time for an aircraft to have reached Htan Taw village between 1400 and 14200, before returning to the airbase. This adds to the corroboration of the timeframe for the airstrike. While the exact timing of the events cannot be directly confirmed, the available evidence strongly suggests the attack took place around 1400 local time on 09 May 2023.

4. Matupi Township, Chin, November 2023

Background

On 15 November 2023, educational institutions in Walu village (ဝေဝလူ့), Matupi township (မတူပီလမ်ဝန်), Chin State was allegedly damaged by airstrikes. According to [local news reporting](#), two Myanmar Air Force aircraft bombed and shot at the village at around 1900 local time. A defence forces page (source redacted due to privacy concerns) suggests the event took place at 1830, and notes the destruction of 22 homes, 1 church, and 2 schools. They also state that 11 people died, including 8 children and 3 adults, with others injured.

The attack was allegedly in response to local fighting in the Matupi district, where local defence forces had blocked access between Matupi-Hakha for the Myanmar military (source redacted due to privacy concerns). Despite ongoing fighting, Walu village has not been directly involved in hostilities since it was taken by the Chin forces. A [local media](#) report suggested that these recent actions could be retaliatory against the Chin forces; however Myanmar Witness cannot confirm this.

Myanmar Witness' analysis

Myanmar Witness assesses it is likely that an airstrike took place in Walu village. This conclusion was determined through open source analysis, UGC analysis, and geolocation efforts. The information analysed includes:

- UGC associated with this incident, showing completely destroyed village structures, caved roofs, and broken wood, geolocated to Walu village;
- satellite imagery showing damaged structures;
- UGC showing potential munitions;
- UGC showing craters in the ground consistent with heavy weaponry;
- UGC showing the victims; and
- media reports.

The geolocated damage seen to infrastructure is vast and could have been caused by the alleged airstrike on the village, but no UGC showing aircraft were identified. Additionally, Myanmar Witness didn't identify any information on flight tracking channels that could be consistent with flight times related to this incident.

The source of much of the imagery for this case has not been included here due to privacy concerns but may be available upon request.

Destroyed civilian infrastructure

The location of destroyed civilian buildings was verified by matching UGC showing damaged structures with satellite imagery [21.286919, 93.478633] (figure 26, source redacted due to privacy concerns). However, Myanmar Witness is unable to assess if a school was directly affected.

Through analysis of the structural damage evident within the UGC, it is evident that a significant attack, likely aerial, must have occurred to cause the level of destruction seen in the images (source redacted due to privacy concerns). Many wooden planks are broken and roofs have collapsed, adding weight to the claim that an airstrike took place (figure 27).



Figure 26: Geolocation of heavily damaged village structures in Walu township at around 21.286919, 93.478633 (source redacted due to privacy concerns).



Figure 27: A photo showing destruction to structures allegedly from the Walu village attack, not geolocated by Myanmar Witness (source redacted due to privacy concerns).

Time of event

The event allegedly took place on 15 November 2023. Sentinel-2 imagery shows changes to the ground surface between 9 November 2023 and 24 November 2023, suggesting that significant damage occurred in the area during this time frame (figure 28).

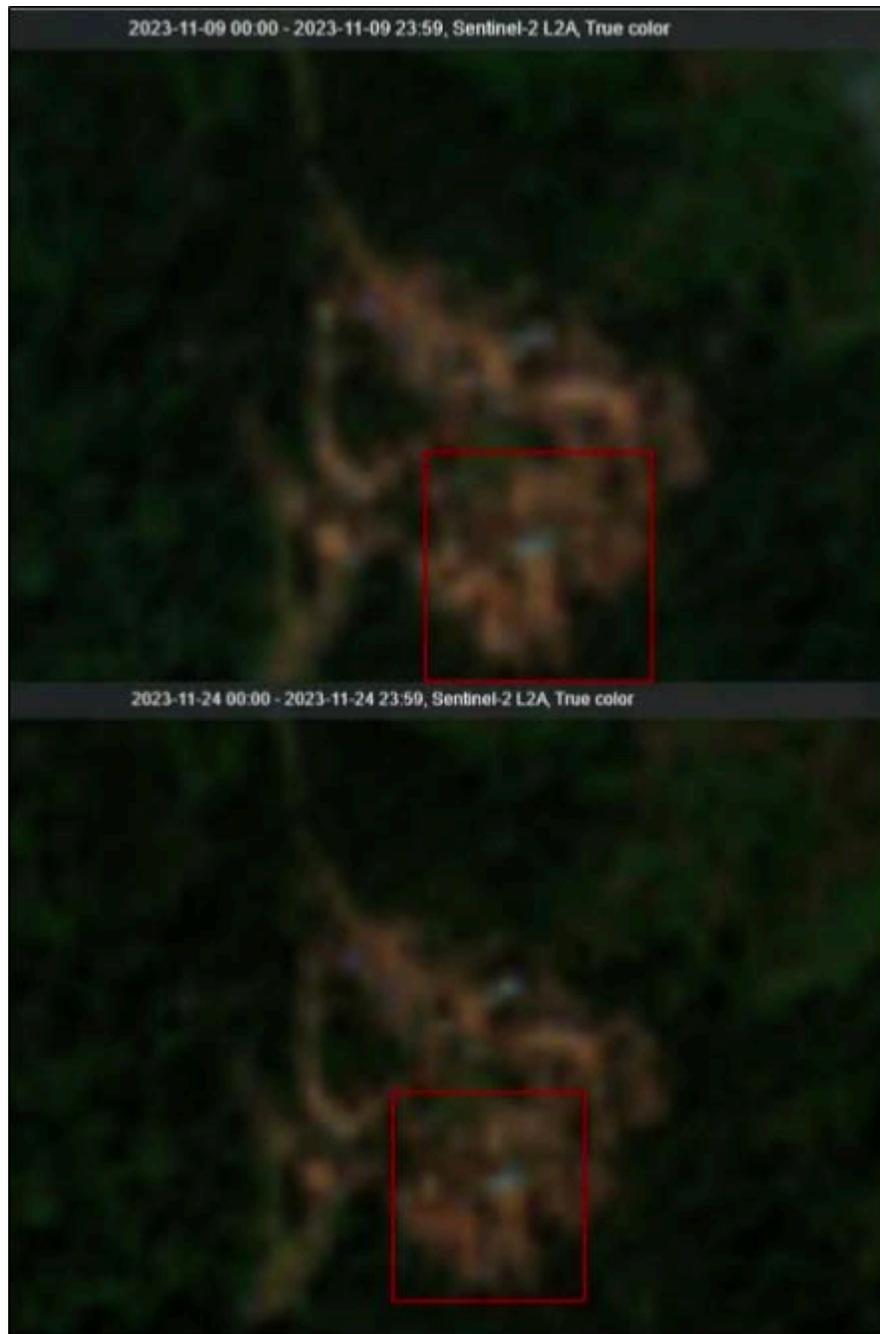


Figure 28: Satellite imagery showing slight changes in the ground in Walu village between 9 November 2023 - 24 November 2023 could suggest damage (source: Sentinel-2).

Munitions

Myanmar Witness identified UGC showing munitions reportedly found at the scene, along with images showing craters in the ground, consistent with the use of heavy weaponry (source redacted due to privacy concerns). While Myanmar Witness could not identify the source of the munitions, these findings appear consistent with claims that there was an attack in the village (see figures 29 and 30).



Figure 29: UGC shows damages to the ground next to a destroyed/burned out structure, not geolocated (source redacted due to privacy concerns).



Figure 30: UGC shows munitions allegedly found after the attack, not geolocated. Myanmar Witness could not confirm what these correspond to or geolocate them to Walu village. (source redacted due to privacy concerns).

Victims

[Local media reports](#) claim that eleven people died during this event, including eight children and three adults, with others injured. Photos were uploaded to social media and shared, reportedly showing the victims of this event. The photos show victims ranging from old (figure 31, left) to very young (figure 31, right), depicting both deceased or injured individuals. Photos allegedly from the funerals show at least three deceased individuals wrapped in blankets being buried together.

Verifying this footage is difficult as images of victims often don't contain geolocatable features. Myanmar Witness used 'reverse image search' to determine if the images had surfaced on the internet prior to the alleged event date. The images were not uploaded prior to the event, increasing the likelihood that they were related to the event in question (figure 31).



Figure 31: Images show injured and deceased individuals, including children, affected by the alleged airstrike. Not verified by Myanmar Witness (source: [Chinland Defense Force Matupi](#)).

Conclusion

This report documents 174 distinct instances of damage to education facilities in Myanmar, since February 2021, significantly impacting their infrastructure and civilian functionality amid ongoing conflict. Schools have been damaged by airstrikes, weaponry, and fire, with some targeted multiple times. These events have devastating real-world consequences, causing extensive damage to facilities and surrounding villages. These actions diminish educational opportunities and undermine places of safety for children and young people during the conflict.

Analysis of the 113 incidents of school damage and 61 drone incidents of alleged school infrastructure damage reveals an increase in such incidents since Myanmar Witness began collecting data in June 2021. This trend is consistent with the increase in damage to other facilities, such as [medical centres](#), and the heightened use of [airstrikes](#) in Myanmar since the coup, as previously identified and analysed by Myanmar Witness.

Areas of known conflict have been particularly affected, such as Sagaing region, Shan state, Kayin state and Kayah state. While 9% of the schools were completely destroyed, a further 31.5% of schools sustained major damage, potentially rendering the schools inoperable. In almost half (49.6%) of cases, the surrounding areas were also affected, signalling that schools may not be the primary target of attacks, instead they are caught in the crossfire.

While fatalities are hard to verify using open source research skills, Myanmar Witness has collected 64 reports of fatalities and 106 reports of injuries, providing a snapshot into the human toll of these events.

The Myanmar military was responsible for the majority of incidents documented, with 90 out of 113 cases in the primary dataset implicating them. Nearly half of these incidents resulted in significant damage to school infrastructure. Notably, incidents linked to the PDF tended to have minor damage to educational infrastructure.

This research does not definitely prove that the Myanmar military systematically occupies civilian sites, like schools, as a strategy during conflict. However, this report has identified instances where the military are occupying educational facilities when they are attacked, or defence forces claim military necessity for attacking schools. Myanmar Witness recommends that international lawyers investigate these events to determine the status of these school buildings as protected sites under international law.

The four case studies reveal the human impact of school attacks on communities in Myanmar. The alleged airstrikes conducted by the MAF as part of their campaign against opposition forces have hit schools, rendering them unsafe and damaging or sometimes completely destroying the infrastructure. This damage will require significant resources and rebuilding time, impacting these communities for years after the incidents. There have been claims that these attacks have killed and injured children and other civilians. Although Myanmar Witness cannot confirm with a high likelihood that these claims or UGC of deceased individuals are directly related to the

incidents, the use of typically protected sites for military operations heightens the risk of civilian injuries if proper evacuations are not conducted. Evidence from the Loikaw case study suggests that the Myanmar military did not adequately evacuate civilians. This lack of distinction is a worrying trend evident in the incidents and case studies, suggesting that schools are not always targeted for perceived military objectives but often suffer collateral damage from military exercises by both sides of the conflict.

By providing data on the impact on educational facilities since the conflict began, Myanmar Witness seeks to shine a light on the frequency of these events and hold perpetrators to account. Myanmar Witness will continue to monitor and report on incidents that impact on educational infrastructure in the country.

Appendices

1. Abbreviations

• Armed Conflict Location and Event Data	ACLED
• Civil Disobedience Movement	CDM
• Global Coalition to Protect Education from Attack	GCPEA
• Karenni Nationalities Defence Force	KNDF
• Myanmar Air Force	MAF
• National Unity Government	NUG
• People Defence Force	PDF
• User-generated content	UGC
• United Nations	UN

2. Limitations

Myanmar Witness' data may be subject to collection biases, including but not limited to, the availability of reliable sources, reporting limitations in conflict zones, and potential misinformation. Myanmar Witness strives to mitigate these biases through cross-verification of sources and data triangulation.

A detailed methodology and limitations report is available upon request.