MYANMAR Earthquake: Shan pre-crisis profile



OVERVIEW: MARCH 2025 EARTHQUAKE

On 28 March 2025, a magnitude-7.7 earthquake struck Myanmar's Sagaing region, followed by a magnitude-6.4 aftershock in Mandalay region (ECHO 28/03/2025; AJ 28/03/2025). In response, Myanmar's military junta, known as the State Administrative Council (SAC), declared a state of emergency in six affected states and regions: Bago, Magway, Mandalay, Nay Pyi Taw, Sagaing, and Shan state (particularly southern Shan) (Firstpost 28/03/2025; AHA Centre 04/04/2025). Southern Shan state is among the most severely affected areas, with magnitude-5 and above aftershocks causing extensive damage across the state (Shan News 07/04/2025).

On 6 April, the SAC reported around 3,471 people killed, 4,671 injured, and 214 still missing (Reuters 06/04/2025). These figures are anticipated to increase in the coming days as humanitarian responders gain access to additional affected areas. It is also likely that the current numbers primarily reflect casualties reported from territories under the control of the SAC, as very little information comes out of areas under the control of ethnic armed organisations (EAOs). Despite a temporary ceasefire publicly declared by both the Myanmar Armed Forces (MAF) and the Brotherhood Alliance (a coalition of several prominent EAOs) set to last until 30 April, the practical adherence and comprehensive implementation of this cessation of hostilities across all involved factions remain uncertain, particularly given the complex and fragmented nature of active conflict across Shan (BBC 02/04/2025; Mizzima 04/04/2025). On 7 April, the MAF resumed aerial strikes in Nyaungshwe township, southern Shan state, despite no active conflict in the area (Shan News 07/04/2025).

In southern Shan state, the most severe shaking affected Hopong, Hsi Hseng, Kalaw, Langkho, Lawksawk, Nyaungshwe, Pinlaung, and Taunggyi townships. Nyaungshwe is one of the most affected townships, with 39 reported deaths by 29 March (IOM 01/04/2025). Nyaungshwe's specific geological characteristics, potentially including soft soil near Inle Lake that could amplify seismic waves, may have intensified the damage (Shahzada et al. 04/2025). By 5 April, the impact of the quake had killed at least 89 people in southern Shan across Kalaw, Nyaungshwe, Pinlaung, and Taunggyi townships. The earthquake damaged or destroyed at least 3,560 houses and 28 hospitals in multiple townships. Over 13,000 people have been displaced, seeking shelter in collective centres and religious buildings, while others are forced to sleep in open spaces owing to a lack of emergency shelters (0CHA 31/03/2025; Eleven 05/04/2025). In southern Shan, the earthquake caused significant damage to housing infrastructure across multiple townships. In Kamparni village, located near Myinthaik village and Myinthai station in Thazi township, 18 out of 65 houses sustained structural damage.

In Pinlaung township, reports indicate that numerous houses were also affected, although the exact number remains unconfirmed. The most extensive impact has been recorded in Nyaungshwe township, where a total of 2,337 houses across villages surrounding Inle Lake have been damaged, highlighting the widespread destruction and urgent need for shelter support in the region (Eleven 05/04/2025).

Public infrastructure, including religious structures such as pagodas, also sustained damage. Telecommunications have been heavily disrupted, particularly in southern Shan, where internet connectivity is unavailable and phone services remain limited (IFRC 30/03/2025).

By 30 March, urgent needs included emergency shelter and non-food items, WASH, healthcare and food assistance (0CHA 31/03/2025). In remote village tracts within townships like Langkho, Mawkmai, and Mong Nai are likely to face significant logistical challenges for aid delivery due to difficult terrain and limited road networks.

KEY MESSAGES: SHAN REGION

- Prior to the earthquake, the affected townships were already dealing with significant humanitarian needs such as access restrictions, displacement and targeting of humanitarian infrastructure because of pre-existing complex conflict dynamics between the MAF and various EAOs as well as among EAOs. A marked escalation in armed conflict between the MAF and burgeoning armed resistance groups has been aggravating the situation since October 2023, directly affecting townships such as Lawksawk, Nyaungshwe, Pinlaung, and Taunggyi (ICG 17/11/2023; ACLED 26/11/2024).
- Decades of conflict and more recent escalations, especially after the 2021 coup, have displaced at least 134,000 people. Many displaced people live in temporary shelters or host communities with inadequate access to food, healthcare, and clean water. Southern Shan has also received displaced populations from neighbouring areas, further straining local resources (0CHA 28/03/2025). The earthquake is likely to result in multiple displacement which is likely to compound reliance on overstretched local support systems.
- Despite a ceasefire declaration by the MAF and the Brotherhood Alliance until 30 April to allow for humanitarian response, the adherence of all armed groups to this truce remains uncertain amid the complex and widespread conflict in Myanmar (BBC 02/04/2025; Mizzima 04/04/2025).

- Between 2021 and December 2024, 118 incidents targeting healthcare were documented in Shan state, including arrests, facility damage, occupation, and the killing of health workers, with the annual number ranging from 16–39. The geographic focus of these incidents shifted from southern Shan, which saw a decrease in 2024, although a full recovery is yet to be observed, to northern Shan, which has experienced the majority of reported violence against healthcare since 2023 (Insecurity Insight 03/2025; Shan News 28/03/2025).
- At least 24% of the humanitarian organisations located in Myanmar have a presence in southern Shan. Some work with community-based organisations that implement programmes locally (MIMU 01/04/2025; Action Aid Myanmar accessed 08/04/2025).
- By December 2024, the total number of people in need within Shan state had reached at least one million. The 2025 Humanitarian Needs and Response Plan targets only 18.5% (185,000 people) though (0CHA 13/12/2024). Anticipated reductions in funding from the US, Myanmar's primary humanitarian donor, also suggest that the actual number of people reached will likely be even lower, potentially leaving a significant portion of the identified needs unmet (0CHA accessed 07/04/2025).

ANTICIPATED SCOPE AND SCALE

- The Department of Meteorology and Hydrology has issued a weather advisory warning of potential sporadic rainfall and strong winds across the region between 6–11 April. This forecast is attributed to the interaction between warm air masses from the Andaman Sea and the Bay of Bengal and a cold air front originating from a high-pressure system over mainland China. The department also cautions that unseasonal weather conditions may include thunderstorms, lightning, hail, and strong gusts, which could further complicate response and recovery efforts in affected areas this is likely to result in landslides in upland areas (Eleven 04/04/2025). At the same time, humanitarian organisations have raised concerns that the combination of unseasonal rainfall and extreme heat may increase the risk of negative health outcomes and disease outbreaks as earthquake-affected populations are exposed to the elements, many of whom are currently sheltering in the open without adequate access to WASH services (Reuters 06/04/2025).
- Although both the MAF and the Brotherhood Alliance (a coalition of key EAOs) have publicly announced a temporary ceasefire intended to last until 30 April to support the delivery of humanitarian aid, the extent to which this truce is being observed and effectively implemented across all parties remains unclear. This uncertainty is compounded by the highly fragmented and complex conflict dynamics within Shan state, challenging consistent enforcement (AP 03/04/2025; BBC 02/04/2025; Mizzima 04/04/2025). Such declarations have historically had limited implementation impact, with ceasefires often disregarded affecting humanitarian assistance (AP 03/04/2025; The Conversation 04/04/2025; Reuters 06/04/2025). Inter-group violence particularly between EAOs is likely to persist at the same time that the announcement is hindering humanitarian access and disrupting response efforts.

 In hard-to-reach areas such as remote parts of Langkho, Mawkmai, and Mong Nai, humanitarian responders will face compounded operational challenges, including limitations in staffing capacity, insufficient warehousing for relief items, and high dependency on informal coordination with local actors and community-based organisations.

SHAN: REGIONAL CONTEXT

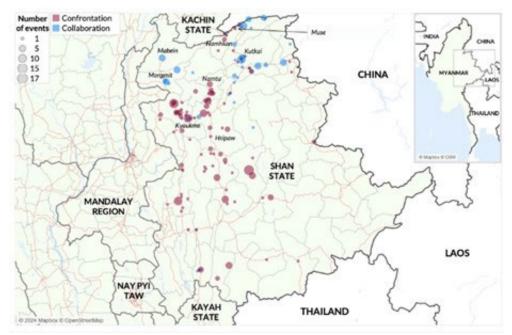
Conflict

Since the February 2021 military coup, security in southern Shan state has significantly deteriorated, marked by increasing fragmentation and the rise of new armed parties. The emergence of People's Defence Forces, aligned with the National Unity Government, has intensified clashes with the MAF and introduced new layers of complexity to the conflict (Vrieze 10/2024; Asia Maior 27/06/2024). While the MAF initially concentrated efforts on consolidating control over urban centres, EAOs in southern Shan have reasserted territorial claims, occasionally aligning with People's Defence Forces. These alliances are often fluid, resulting in overlapping and, at times, conflicting interests among anti-military groups (ICG 12/01/2022; ISEAS 2021).

By 26 March, southern Shan had been experiencing several months of intensified armed conflict, with ongoing clashes between MAF and EAOs reported in townships including Hsihseng, Hopong, Panglong, Pai Khun, and Mong Pai (Moe Bye) that has resulted in displacement, heightened protection risks and access challenges (Shan News 26/03/2025).

Since the coup, inter-group confrontations between EAOs and other anti-military political parties have been recorded across 9 of Myanmar's 14 states and regions. Shan state has accounted for approximately 70% of all recorded confrontations between February 2021 and October 2024 (ACLED 26/11/2024). This high concentration is primarily driven by longstanding competition among established EAOs over territorial control, influence, and access to strategic resources. Although the MAF called for a temporary ceasefire between 2–22 April, the intensification of inter-group rivalries may slow the response to the affected (BBC 2/04/2025).

Map 1. Recorded violent confrontations and collaborations between EAOs in Shan state



Source: ACLED (26/11/2024)

By 2023, Shan state had become the world's leading opium-producing region, a trend largely driven by the economic decline following the 2021 military coup. Southern Shan accounted for approximately 48% of the state's total opium cultivation, with significant activity concentrated in townships such as Hopong, Loi Lem, Paikon, and Panglong. The drug trade has become a key source of revenue for various armed groups, including military-backed militias, fuelling localised conflict over the control of cultivation areas and trafficking routes. This has obstructed humanitarian access or worsened community tensions where law enforcement/service delivery is weak (Shan News 02/01/2024; ACLED 26/11/2024).

Profile of main armed parties in Shan state

Southern Shan hosts several ethnic groups, including the Shan, Pa-O, Intha, Danu, and Ta'ang, each with distinct identities and historical claims to autonomy. This ethnic diversity has contributed to the proliferation of armed groups with competing interests and territorial claims.

- The Shan State Army-South (SSA-S), under the political leadership of the Restoration Council of Shan State, is one of the most prominent Shan nationalist groups advocating greater autonomy. On 19 February 2024, the council introduced a mandatory conscription policy for men and women ages 18–45 within its territories, requiring six years of service in the SSA-S. Penalties for non-compliance are reported to be severe, exposing the affected population to protection risks (GPM 27/02/2024; Geneva Call 09/11/2023; DVB 28/02/2024).
- Shan State Army-North, aligned with the Shan State Progress Party, operates in different territories and shares similar autonomy goals. Although historically in conflict with the SSA-S, the progress party maintains an alliance with the MAF and declared a truce with the SSA-S on 30 November 2023, stating intentions to unify the two factions in the future. This has contributed to instability in shared border areas with other EAOs (GPM 27/02/2024; Geneva Call 09/11/2023; DVB 28/02/2024).
- United Wa State Army (UWSA), operating in northeastern Shan, is one of the most powerful and well-armed ethnic forces in Myanmar. It governs the Wa Self-Administered Division and maintains a stable ceasefire with the central Government. Although it does not pursue independence, the group exerts substantial economic influence through trade with China and has been linked to arms and narcotics production. It has acquired advanced weaponry, including surface-to-air missiles from China, to counter government air strikes. Additionally, UWSA-controlled areas are largely closed to humanitarian actors and governance structures operate independently of the central state (GPM 27/02/2024).
- Ta'ang National Liberation Army (TNLA) represents the interests of the Palaung (Ta'ang) population and operates predominantly in northern and central Shan. Estimated to have a force of 10,000–15,000 troops, the TNLA is affiliated with several coalitions, including the United Nationalities Federal Council, the Northern Alliance, the Three Brotherhood Alliance, and the Federal Political Negotiation and Consultative Committee. It also administers the Pa Laung Self-Administered Zone and has been linked to movement restrictions and localised protection concerns, particularly in contested townships (GPM 27/02/2024).
- **Myanmar National Democratic Alliance Army**, the armed wing of the Myanmar National Truth and Justice Party, operates primarily within the Kokang Self-Administered Zone and holds membership in the same alliances as the TNLA (GPM 27/02/2024).

Additionally, the **Kachin Independence Army (KIA)** maintains a presence in northern Shan, and various smaller ethnic armed organizations and local militias also operate within the state. KIA maintains a presence along the strategic corridors bordering Kachin State. While KIA is less active than other groups in Shan, its alliances and engagements continue to affect humanitarian access in contested northern areas (ICG 17/11/2023).

PRE-CRISIS HUMANITARIAN NEEDS

Shelter

By 25 March, there were an estimated 134,900 IDPs in southern Shan, many of whom were concentrated in southern townships such as Hopong, Hsi Hseng, and Moebye (UNHCR 25/03/2025). Many had likely been displaced multiple times owing to frequent climate hazards and recurring conflict in the region. Many of the IDPs were sheltering in formal IDP camps, monasteries, churches, and orphanages without adequate services (COAR 20/06/2023; MIMU 30/09/2024).

By 28 March, aerial bombardments and shelling had affected displacement sites, leading to civilian casualties and extensive damage to shelters, homes, schools, and religious structures, especially in southern Shan states. Reports of extortion by EAOs targeting civilians and displaced populations in Hopong, Nyaungshwe, and Pekon townships in southern Shan are also likely to further worsen the already dire conditions faced by communities affected by conflict and the earthquake (OCHA 28/03/2025).

WASH

Decades of conflict, displacement, and underdevelopment have affected the WASH situation in southern Shan state. By December 2024, WASH services in southern Shan were classified at severity level 3, reflecting substantial challenges in accessing safe drinking water, sanitation, and hygiene services (0CHA 13/12/2024). Access to safe water sources has been a significant challenge, particularly in rural and conflict-affected areas, with only 55% of the population in Shan having access to improved drinking water in August 2020. Many communities rely on sources such as streams and unprotected wells, exposing them to contamination and waterborne diseases. At the same time, only 64% of the population has access to improved sanitation (MIMU accessed 07/04/2025). The recent earthquake is expected to have destroyed WASH infrastructure, worsening these challenges and further limiting access to essential WASH services for affected populations.

Health

The healthcare system in Shan state has been severely affected by conflict since the 2021 military coup, with access to medical services already limited in southern Shan. The recent earthquake is expected to further strain the system, as it increases the demand for healthcare through injury-related needs and a likely rise in disease outbreaks among displaced populations, who face inadequate access to essential health services.

Between 2021 and December 2024, a total of 118 incidents targeting healthcare were documented. These included the arrest of at least 54 health workers, damage to 25 health facilities, 15 instances of armed groups occupying medical centres, and the killing of at least six health personnel. While the annual number of such incidents has ranged from 16–39 across the state, the geographic concentration of violence has shifted. Since 2023, most reported incidents have occurred in northern Shan state, whereas southern Shan has experienced a notable decrease – reporting one-third fewer incidents in 2024 compared to previous years (Insecurity Insight 03/2025; Shan News 28/03/2025).

Ethnic minority communities residing in the highland areas of Shan state continue to face significant barriers to accessing adequate healthcare services. These challenges stem from the remoteness of their locations, poor transportation infrastructure, and the limited allocation of healthcare resources (Shan News 28/03/2025). The fragmented control of territory, with multiple armed groups maintaining authority over different parts of the region, has further disrupted the delivery and accessibility of health services (Insecurity Insight 03/2025). As a result, this could slow response efforts and create a higher disease burden because of delayed outbreak detection, which will heighten the risks of preventable diseases.

In 2022, there were 13 general hospitals, 55 other general hospitals, including rural health centres, and 99 station hospitals across Shan state (MIMU accessed 10/04/2025).

The escalation of armed conflict in Myanmar – including the use of air strikes, indiscriminate shelling, and landmines – has significantly increased the demand for mental health and psychosocial support, particularly for children and families affected by trauma, displacement, and loss. Between January–September 2024, 889 conflict-related casualties were recorded nationwide, representing 85% of the total 1,052 casualties reported in the previous year. Shan state accounted for the highest proportion, contributing to 25% of all casualties during this period (0CHA 13/12/2024; WVI 01/04/2025).

Food security and malnutrition

Worsening food insecurity in southern Shan is expected to be further aggravated by disruptions to supply chains resulting from the recent earthquake. Since the February 2021 military coup, armed clashes between the MAF and several EAOs have severely affected agricultural production, restricted access to markets, and disrupted logistical networks. Southern Shan, historically known for its agricultural output, has been facing substantial obstacles in maintaining food production given mobility constraints, infrastructure damage, and escalating insecurity (UNDP 12/2023; Frontier Myanmar 04/05/2022; USAID et al. 26/04/2019).

According to a Myanmar Household Welfare Survey based on seven rounds of surveys between the December 2021 to February 2022 period and the April–June 2024 period, **Shan reported the third-highest proportion (29%) of households with a low food consumption score in 2024**, as shown in Map 2 (IFPRI 11/2024). Data from the WFP indicates that, until late 2023, around 25% of households in conflict-affected parts of Shan state were experiencing inadequate food consumption. Many of these households have been forced to adopt coping strategies with negative outcomes, such as reducing the size and frequency of meals or selling essential livelihood assets to meet basic needs (IFPRI 11/2024; WFP 02/10/2023; OCHA 05/04/2024).

Map 2. Proportion of households with a low food consumption score (April–June 2024)



Significant displacement resulting from the protracted conflict has further strained food availability. Rising levels of malnutrition, particularly among children and pregnant women in IDP settlements across the country, have become a growing concern. In 2025, high food inflation combined with declining household incomes has significantly reduced the quality of diets. Consequently, more than 40% of children ages 6–23 months lack access to the diverse and nutrient-rich foods necessary for healthy growth, development, and survival (OHCHR 13/03/2025).

With markets disrupted and humanitarian access constrained, displaced households are heavily dependent on irregular aid deliveries and informal community support networks to meet their food and nutrition needs resulting in a rise in acute malnutrition and a strain on nutrition services (UNDP 12/2023; USAID et al. 02/2021).

Protection

By December 2024, around 492,900 people needed protection assistance in Shan. According to OCHA, all townships in southern Shan experienced between severe and catastrophic levels of protection needs (OCHA 13/12/2024). Between January–September 2024, over 3,200 protection-related incidents and nearly 5,900 human rights violations were recorded, affecting more than 194,900 people (39%) in Kachin, Kayin, Magway, Rakhine, Sagaing, and Shan states and regions. While disaggregated data was available, Shan is widely recognised as one of the most affected states.

The reduction in the availability of essential services has significantly increased protection risks for at-risk groups in southern Shan, particularly women and children, limiting access to maternal and child health services, disability support, and chronic disease management and making it difficult for these groups to meet even their most basic needs. The lack of access to education and safe spaces also exposes children to heightened risks of exploitation, child labour, and recruitment by armed groups (UNICEF 21/11/2024; Myanmar Protection Cluster 20/02/2025).

Women and girls face elevated risks of gender-based violence, including domestic abuse, sexual exploitation, and harassment, particularly in overcrowded and poorly monitored displacement sites where privacy and security are minimal (PreventionWeb 26/05/2023; Myanmar Protection Cluster 20/02/2025). Older people and people with disabilities often face mobility challenges and barriers to accessing aid and information, leaving them more isolated and dependent on others for survival (HelpAge 06/2023).

By June 2024, Shan state had the highest number of recorded casualties from landmines in the country at 25% (UNICEF 01/06/2024). In several contested towns across the country, including in southern Shan, the MAF have heavily deployed landmines in critical locations, including urban areas, roads, and access routes endangering civilians. This widespread contamination poses a significant threat to civilian safety and hinders the return of displaced populations, prolonging their displacement with the risk of mine-related incidents (Shan News 25/09/2024; Myanmar Protection Cluster 20/02/2025).

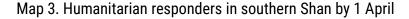
Despite the rising number of landmine-related incidents, there had been no formal demining initiatives or official public safety alerts by March 2025. The lack of protective measures will likely leave residents, especially children, exposed to severe risks from unexploded ordnance, as the majority of the displaced are sheltering in non-designated places, exposing them to landmines (Shan News 26/03/2025).

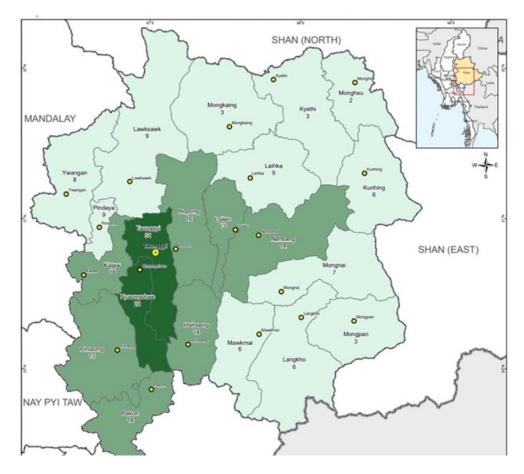
PRE-EARTHQUAKE HUMANITARIAN ACCESS AND RESPONSE CAPACITY

The presence and activities of numerous armed groups and the MAF create a volatile security environment. This insecurity manifests through frequent clashes, the establishment of checkpoints with inconsistent and often restrictive procedures, and the persistent threat of landmines and unexploded ordnance. Despite these access constraints, the 2025 Humanitarian Needs and Response Plan for Myanmar targets only 18.5% of the over one million people in need in Shan state, and anticipated funding cuts from key donors such as the US are expected to further diminish the response capacity (Shan News 27/03/2025; ACLED 26/11/2024; OCHA 13/12/2024).

Bureaucratic and administrative impediments imposed by both the MAF and EAOs severely restrict humanitarian access in southern Shan. These obstacles include lengthy and opaque processes for travel authorisations, particularly to areas outside of government control. Restrictions on the types of aid permitted, the number of personnel allowed to travel, and the frequency of movements add further layers of complexity. There are increasing reports of harassment, intimidation, and even extortion at checkpoints, further deterring humanitarian groups (OCHA 13/12/2024; ACAPS 28/02/2024). These factors directly impede the movement of humanitarian personnel and supplies, leading to delays, diversions, and, in many cases, the complete denial of access to certain areas (IASC 01/2022).

By February 2025, there were 48 (24% of the country's total) documented humanitarian and development organisations operating in southern Shan (26 INGOs, ten national NGOs, nine UN agencies and other international organisations, and three Red Cross offices). Most were operating in the health (18), mine action (10), protection (15), livelihoods (8), WASH (5), and agriculture (8) sectors, with some operating across multiple sectors. The distribution of the organisations across the earthquake-affected townships by 28 February is as shown in Map 3 (MIMU 01/04/2025).





Source: MIMU (01/04/2025)