

KEY DATA**NO CCM ARTICLE 4 DEADLINE:**

State not party to the CCM

CMR CONTAMINATION:Not known
Thought to be light**LAND RELEASE OUTPUTS**

Release of cluster munition-contaminated area	Release in 2024 (m ²)	Release in 2023 (m ²)
Clearance	0	0
Technical Survey	0	0
Non-Technical Survey	0	0

Destruction of submunitions during clearance, survey, and spot tasks	2024	2023
Submunitions destroyed	0	0

MAIN CMR SURVEY AND CLEARANCE OPERATOR IN 2024:

- Ethiopia Mine Action Office (EMAO)

KEY DEVELOPMENTS

This is the first time that a country profile on Ethiopia has been included in this annual report. The extent and location of CMR are not yet known due to lack of comprehensive survey. Ethiopia did not formally report any survey or clearance of cluster munition remnants (CMR) in 2024, and Mine Action Review is not aware of any nationally coordinated survey or clearance of CMR prior to 2024. Mine Action Review received photographs, taken in May 2025, of what appears to be a Russian-made AO-1Sch submunition. This concurs with reports published previously elsewhere of possible cluster munition attacks during the recent conflict, which took place in the Tigray region in the north of the country, in 2020–22. Both the Ethiopian and Eritrean air forces possess aircraft capable of delivering RBK-series cluster munitions.

RECOMMENDATIONS FOR ACTION

- Ethiopia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Ethiopia should undertake systematic survey as soon as possible to ascertain the extent and location of CMR and prepare a plan for their clearance and destruction.
- Ethiopia should comply with its obligations under international human rights law to clear CMR on territory under its jurisdiction or control as soon as possible.
- Ethiopia should ensure its national mine action centre has sufficient resources to sustain an effective mine action programme and mobilise the necessary resources to survey and clear CMR.
- Ethiopia should prioritise the urgent establishment of a functional Information Management System for Mine Action (IMSMA) database, following efforts ongoing since early 2024.

CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY

MANAGEMENT

- Ministry of Defence
- Ethiopia Mine Action Office (EMAO)

NATIONAL OPERATORS

- National Demining Companies (Ethiopian Armed Forces)

* These international operators are accredited in Ethiopia for survey and clearance, including battle area clearance, but none was specifically tasked with survey or clearance of CMR in 2024 (or previously).

INTERNATIONAL OPERATORS

- Danish Church Aid (DCA)*
- Danish Refugee Council (DRC)*
- The HALO Trust (HALO)*
- Humanity & Inclusion (HI)*
- Mines Advisory Group (MAG)*

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF CMR CONTAMINATION

There is credible evidence of CMR remaining in Ethiopia from both from the recent non-international armed conflict in Tigray region in 2020–22 and from the international armed conflict between Ethiopia and Eritrea in 1998–2000. The extent and location of CMR are not yet known due to lack of comprehensive survey. It has, however, been suggested that there may be contamination in the Tigray,¹ Afar,² and Amhara³ regions in the north of the country.

The Ethiopian Mine Action Office (EMAO) states that further survey is needed to ascertain the extent and location of any CMR, though it has yet to share any plans to undertake this.⁴ Ethiopia has, however, shared a two-year work plan for survey and clearance of anti-personnel mines and other explosive ordnance (EO) for 2026 and 2027. This work plan incorporates several regions of Ethiopia, including the apparently CMR-affected regions of Tigray and Afar (but not also Amhara). No explicit reference is made to survey and clearance of CMR in the plan.⁵

Photographic evidence of CMR contamination is available. Mine Action Review received photographs taken in Tigray in May 2025 by an international non-governmental organisation (INGO) mine action operator, showing remnants of what appears to be an AO-1Sch submunition.⁶ Previously, in September 2024, Mine Action Review received a photograph taken on an unspecified date in 2024 in Afar, in an EO-contaminated area reportedly cleared by EMAO's explosive ordnance disposal (EOD) teams. The operator that provided the photograph believes the condition of

the submunitions suggests that the contamination is relatively recent, likely resulting from the Tigray conflict of 2020–22, rather than the earlier Eritrea-Ethiopia war.⁷ The operator states that the image taken in Afar shows a Chinese Type 81 submunition, which is similar in design to the US M42 dual-purpose (anti-armour and anti-personnel) submunition. It adds that EMAO teams have reported encountering hundreds of these submunitions. In addition to the Type 81, other submunitions identified in Ethiopia reportedly include the PFM, BLU-63, M42, and MK118 submunitions, and even some combined effects munitions (e.g. the CBU-87). There are also indications of stockpiles of BL-755 and CB-500 cluster munitions.⁸

In addition to photographic evidence, teams from one INGO mine action operator have gathered multiple testimonies of cluster munition strikes in Tigray, although these were not accompanied by direct physical evidence at the time. The operator explains that, in the absence of mine action activities in Tigray during and for some time following the end of the conflict in late 2022, at-risk communities have coped with EO threats by removing and relocating surface contamination. Larger items of EO are often piled in known locations while smaller items are hidden or buried.⁹ The operator believes the testimonies they have received regarding cluster munition strikes are credible, based on their analysis and supported by admittedly limited photographic evidence. It also believes that teams will encounter cluster munition-contaminated area as operations expand into less populated and more remote districts.¹⁰ The operator has also received information from

1 Landmine and Cluster Munition Monitor, "Ethiopia", accessed 10 May 2025, at: <https://bit.ly/43bhTl5>; and "Eritrea", accessed 10 May 2025, at: <https://bit.ly/43bhTl5>; and email sharing preliminary findings, requiring further national review, 8 August 2024.

2 Email sharing preliminary findings, 8 August 2024.

3 "Battlefield Ethiopia -Federal forces cluster bomb Kutaber and Mekele", video posted by the Military and Foreign Affairs Network, 26 October 2021, at: <https://bit.ly/4miV5IX>; and email sharing preliminary findings, 8 August 2024.

4 Interview with Brigadier-General Tadesse Amelo, Director, EMAO, in Geneva, 10 April 2025.

5 2025 Anti-Personnel Mine Ban Convention (APBMC) Article 5 deadline Extension Request, pp. 40–52.

6 Email sharing preliminary findings, 14 May 2025.

7 Email sharing preliminary findings, 30 September 2024.

8 Ibid.

9 Email sharing preliminary findings requiring further national review, 18 February 2025.

10 Ibid.

the United States (US) and French military missions, both of which are providing training in explosive ordnance disposal (EOD) to EMAO and Ethiopia's Ministry of Defence (MoD), confirming the presence and clearance of submunitions by EMAO and MoD teams.¹¹ The operator asserts that direct evidence of CMR contamination has been confirmed, not only by its own teams but also by those of other operators, but that the absence of a national information management system for recording and maintaining contamination data has exacerbated a lack of clarity on the issue.¹²

As noted previously, credible evidence exists of CMR contamination remaining from both from the 2020–22 Tigray conflict and the 1998–2000 war. The Landmine and Cluster Munition Monitor (the Monitor) refers to evidence that cluster bombs were used in Ethiopia's Tigray region during the first half of 2021, but states that "the responsible party and circumstances of use are not known".¹³ According to the Monitor, both the Eritrean Air Force and the Ethiopian Air Force possess aircraft capable of delivering RBK-series cluster munitions.¹⁴ Media reports and social media posts and images indicate that several types of RBK-series cluster munition may have been used in attacks on Gijet and Samre, south-west of the city of Mekelle, the regional capital of Tigray, on 20–25 February 2021; and in attacks on Guyya and Menji, near the town of Abi-Adi Tembien (also in Tigray), on 13 June 2021. The air-delivered cluster munitions reportedly used included RBK-250; PTAB-2.5M; and RBK-250-275 AO-1SCh.¹⁵ Health organisations assisting conflict victims are said to have described injury patterns consistent with those inflicted by explosive submunitions.¹⁶

As well as possible CMR contamination as a result of the recent conflict, there is also the possibility of legacy CMR

contamination in Ethiopia from the 1998–2000 war between Ethiopia and Eritrea, during which both sides used cluster munitions. In June 1998, Eritrean aircraft dropped cluster munitions in Mekelle, in Tigray, hitting a school.¹⁷ It is unclear if remnants from this attack have been identified or cleared since.¹⁸

Ethiopia has not, to date, reported on the extent and location of CMR contamination. Ethiopia drafted the Ethiopian National Mine Action Standard (ENMAS) 09.11 on Battle Area Clearance in November 2024, which states: "In Ethiopia, while the use of cluster munitions and related widespread contamination is not a predominant phenomenon, localized contamination still poses challenges to community safety and economic recovery. BAC efforts in the country therefore focus on addressing these targeted contamination issues".¹⁹

In April 2025, EMAO responded to Mine Action Review's enquiry about the extent and location of CMR contamination in Ethiopia by stating that further survey is needed to ascertain this. EMAO added that they were not aware of any evidence of contamination available from operators and would be glad to review it.²⁰ Previously, in July 2024, the United Nations Mine Action Service (UNMAS) in Ethiopia reported to Mine Action Review that UNMAS teams had so far encountered only one case of CMR in the country, but acknowledged that survey so far and thus available data were limited.²¹

It is possible that security risks could present a barrier to future survey and clearance in some CMR-affected areas. According to EMAO, as at April 2025, there was some ongoing insecurity in Amhara,²² and an assessment of the security conditions for mine action operations was needed at the border with Eritrea in Tigray.²³

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Ethiopia also has areas containing anti-personnel mines (see Mine Action Review's *Clearing the Mines* report on Ethiopia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

EMAO was established in 2001 by Ethiopia's Council of Ministers, following the end of the conflict with Eritrea, as an autonomous civilian body responsible for mine clearance and risk education. It reported to the Office of the Prime Minister.²⁴ In 2019, after several institutional transitions, Ethiopia reported that the responsibility for the national mine action programme had been transferred back to the headquarters of the MoD.²⁵

11 Information provided with request for anonymity, 8 August 2024.

12 Information provided with request for anonymity, 14 April 2025.

13 Landmine and Cluster Munition, "Ethiopia", accessed 10 May 2025, at: <https://bit.ly/3YHLRMe>.

14 Ibid.

15 Landmine and Cluster Munition Monitor, "Eritrea", accessed 10 May 2025, at: <https://bit.ly/43bhTl5>.

16 Email from sharing preliminary findings requiring further national review, 8 August 2024.

17 "A Guide to Cluster Munitions", Convention on Cluster Munitions (CCM) and the Geneva International Centre for Humanitarian Demining (GICHD), 3rd edition, Geneva, May 2016, p. 22; Landmine and Cluster Munition Monitor, "Eritrea", accessed 10 May 2025, at: <https://bit.ly/43bhTl5>; and Landmine and Cluster Munition Monitor, "Ethiopia", accessed 10 May 2025, at: <https://bit.ly/3YHLRMe>.

18 Landmine and Cluster Munition Monitor, "Ethiopia", accessed 10 May 2025, at: <https://bit.ly/3YHLRMe>.

19 ENMAS 09.11, First Edition, November 2024, Battle Area Clearance, p. 1.

20 Interview with Brigadier-General Tadesse Amelo, EMAO, in Geneva, 10 April 2025.

21 Email from Francesca Chiaudani, Chief, Mine Action Programme, UNMAS, Ethiopia, 31 July 2024.

22 Conflict broke out in Amhara between forces of the non-state-armed group, the Fano, and Ethiopian armed forces in April 2023. See "Scores of Ethiopians die in long-running Amhara conflict, rights body says", *Reuters*, 24 January 2025, at: <https://bit.ly/3EZoeIq>; "Understanding the Conflict in Ethiopia's Amhara Region", Centre for International Policy Studies, 16 January 2025, at: <https://bit.ly/44H620D>; and "Ethiopia's Ominous New War in Amhara", Crisis Group International, 16 November 2023, at: <https://bit.ly/3FdY30w>.

23 Interview with Brigadier-General Tadesse Amelo, EMAO, in Geneva, 10 April 2025.

24 Council of Ministers Regulation No. 70/2001, 5 February 2001.

25 2019 APBMC Article 5 deadline Extension Request, p. 9.

GENDER AND DIVERSITY

See Mine Action Review's *Clearing the Mines* report on Ethiopia for further information on efforts to integrate gender and diversity considerations into the programme of survey and clearance of anti-personnel mines in Ethiopia.

ENVIRONMENTAL POLICIES AND ACTION

See Mine Action Review's *Clearing the Mines* report on Ethiopia for further information on efforts to mainstream environmental considerations into the programme of survey and clearance of anti-personnel mines in Ethiopia.

INFORMATION MANAGEMENT AND REPORTING

In 2024, UNMAS was supporting EMAO with the development of a functioning national database.²⁶ Humanity and Inclusion (HI) is also extensively assisting EMAO in developing a functional national information management system (IMS); providing technical support, equipment, and capacity-building.²⁷ EMAO stated in April 2025 that clean-up of data and on-site verification were ongoing.²⁸ Strengthening and improving Ethiopia's mine action IMS by "operationalising" IMSMA Core remained one of EMAO's key objectives as at March 2025.²⁹ It is not clear to what extent Ethiopia plans to disaggregate contamination by weapon type, including CMR, in the developing national database.

HI reported to Mine Action Review that it continued to maintain a detailed and IMSMA Core-compliant record of all operations and findings, including findings pertinent to CMR, and is prepared to share this data with the national database as soon as it becomes functional. HI also recommends that Ethiopia should implement robust data collection systems for CMR-related incidents as well as prioritise data-sharing between hospitals, humanitarian actors, and mine action operators, to help inform effective risk education.³⁰

PLANNING AND TASKING

Ethiopia has not yet revealed any plan to survey and clear CMR, and has yet to allocate any CMR survey or clearance tasks to operators. HI requested a task order and submitted its implementation plan, which does include threat assessment of CMR as a potential secondary threat, in November 2024, with a relevant task order being issued in February 2025.³¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

EMAO issued twelve Ethiopian National Mine Action Standards (ENMAS) and two standard operating procedures in 2024, which serve as the basis for Ethiopia's quality management system.³² However, INGO mine action operators suggested in early 2025 that the ENMAS still had gaps and that they were yet to be officially endorsed or issued as at May 2025. Operators reported that twelve draft standards were in place, mostly developed by UNMAS and INGO mine action operators, including ENMAS 09.11.³³

26 Emails from Francesca Chiaudani, UNMAS, 7 and 26 June 2024.
27 Email from Alberto Casero Gómez-Pastrana, Chief of Operations, Armed Violence Reduction Division, Ethiopia Mission, Humanity and Inclusion (HI), 19 May 2025.
28 Interview with Brigadier-General Tadesse Amelo, EMAO, in Geneva, 10 April 2025.
29 2025 APBMC Article 5 deadline Extension Request, p. 40.
30 Email from Alberto Casero Gómez-Pastrana, HI, 4 April and 19 May 2025.
31 Ibid.
32 2025 APBMC Article 5 deadline Extension Request, p. 7.
33 Emails from and interviews with INGO mine action operators in March to May 2025.

OPERATORS AND OPERATIONAL TOOLS

Ethiopia's national capacity to survey and clear CMR is not yet clear. EMAO has an EOD team, a clearance team, and a survey desk. EMAO is also supported by "other standby forces of the MoD Main Engineering department, that could provide surge support".³⁴ Some operators have expressed concern that EMAO's EOD teams are not yet sufficiently trained or equipped to safely address CMR contamination, for example, lacking the necessary medical equipment and personnel to safely deploy in the field.³⁵

A growing number of international survey and clearance operators have been accredited to work in Ethiopia in recent years. EMAO has stated that in November 2024 it "processed the desk accreditation for six international NGOs for field deployment", namely for: BBC Media Action,³⁶ DanChurchAid (DCA), Danish Refugee Council (DRC), The HALO Trust (HALO),³⁷ HI, and Mines Advisory Group (MAG).³⁸ HALO was already operational, having worked in the country since August 2022, clearing mined areas on the border with Somaliland.³⁹ HI aimed to have multi-tasks teams (MTTs) fully operational by the end of March 2025, having initiated non-technical survey (NTS) in Ethiopia, including limited EOD tasks (relocating safe-to-move items of EO), in November 2024.⁴⁰ Danish Refugee Council (DRC) had three NTS teams trained and ready to deploy as at November 2024. It was in the final stages of importing equipment and hoping to start NTS imminently as at March 2025.⁴¹ Operators note that bureaucratic delays in the importation of essential equipment has proved challenging in some cases.⁴² As at June 2025,

DRC reported that it had resolved this to some extent, having received some survey equipment, but was still facing challenges importing equipment required for clearance, including explosives, detonators, and detonation cord. It also needed clear direction on the authority required to store and transport these items within Ethiopia.⁴³

Ethiopia reported that, as at the middle of 2025 HI, DRC and MAG planned to recruit and train seven multi-task teams (MTTs) in Ethiopia, capable of EOD, survey, and clearance, including BAC.⁴⁴ According to Ethiopia's 2026–27 plan for survey and clearance of anti-personnel mines and other EO, international operators have been assigned to work in CMR-affected regions, although at the time of writing there was no indication that survey or clearance tasks specifically of CMR would be issued. Ethiopia stated that DRC would focus on survey and clearance (including BAC), and EOD, in the North Western Zone of Tigray. DCA would focus NTS and EOD efforts in Afar, with potential expansion to Amhara.⁴⁵ HI would work in various parts of Tigray, including NTS, EOD, clearance, and BAC in Tigray's South Eastern and Central zones, but is prepared to deploy to other regions if required and additional funding is secured.⁴⁶ HALO would initially concentrate its efforts in the Afar region, deploying three multi-task teams capable of EOD, NTS, and EORE, but was prepared to deploy to other regions if required, and if funding allowed. HALO planned to commence operations in Afar in July 2025.⁴⁷ MAG was to undertake survey, clearance, and EOD in Tigray and Amhara.⁴⁸

LAND RELEASE OUTPUTS

LAND RELEASE OUTPUTS IN 2024

Table 1: Land release outputs in 2024 (Mine Action Review data)

Release of cluster munition-contaminated area	Release in 2024 (m²)
Clearance	0
Technical Survey	0
Non-Technical Survey	0
Destruction of submunitions during clearance, survey, and spot tasks	2024
Submunitions destroyed	0

No survey or clearance of CMR was reported by Ethiopia in 2024. Mine Action Review is not aware of any nationally coordinated survey or clearance of CMR by Ethiopia prior to 2024.

34 2025 APBMC Article 5 deadline Extension Request, pp. 28–29.

35 Emails from INGO mine action operators, 8 August and 30 September 2024, and 28 May 2025.

36 BBC Media Action to be deployed for explosive ordnance risk education and victim assistance only. Email from Pierrick Rouat, Country Director, Ethiopia, The HALO Trust (HALO), 28 May 2025.

37 In March 2024, HALO was instructed to cease operations and to renew its Ministry of Defence accreditation. In coordination with EMAO, HALO secured its re-accreditation in October 2024. Email from Pierrick Rouat, HALO, 28 May 2025.

38 2025 APBMC Article 5 deadline Extension Request, p. 7.

39 Email from Rob Syfret, Head of Region for the Horn of Africa, HALO, 2 July 2024.

40 Emails from Alberto Casero Gómez-Pastrana, HI, 18 February and 19 May 2025.

41 Email from Christian Green, HMA Operations Manager, DRC, 20 March 2025; and online interview, 26 March 2025.

42 Emails from and interviews with INGO mine action operators, March to May 2025.

43 Email from Christian Green, DRC, 12 June 2025.

44 2025 APBMC Article 5 deadline Extension Request, pp. 10.

45 Ibid., pp. 30–31.

46 Email from Alberto Casero Gómez-Pastrana, HI, 19 May 2025.

47 Email from Pierrick Rouat, HALO, 28 May 2025.

48 2025 APBMC Article 5 deadline Extension Request, pp. 30–31.