

Federal Democratic Republic of Ethiopia



REQUEST FOR AN EXTENSION OF THE DEADLINE FOR COMPLETING THE DESTRUCTION OF ANTI-PERSONNEL MINES IN MINED AREAS IN ACCORDANCE WITH ARTICLE-5 PARAGRAPH-1 OF THE CONVENTION OF THE PROHIBITION OF THE USE, STOCK PILING, PRODUCTION AND TRANSFER OF ANTI-PERSONNEL MINES AND ON THE THEIR DESTRUCION.

An extension request for five year

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Glossary and Abbreviations

APMBC	Anti-personnel Mine Ban Convention
AT/AV	Anti-Tank/Anti-Vehicle (landmine)
CEMAO	Combat Engineering Mine Action Office
CL	Community Liaison
CLO	Community Liaison Officer
DPPC	Disaster Prevention and Preparedness Commission
EDP	Ethiopian Demining Project
EOD	Explosive Ordnance Disposal
EMAO	Ethiopian Mine Action Office
ENMAS	Ethiopian National Mine Action Standard
ETB	Ethiopian Birr
ERW	Explosive Remnants of War
FDRE	Federal Democratic Republic of Ethiopia
GICHD	Geneva International Centre for Humanitarian Demining
IDP	Internally Displaced Persons
IMAS	International Mine Action Standard
IMSMA	Information Management System for Mine Action
ISU	Implementation Support Unit
ELIS	Ethiopian Landmine Impact Survey
ENMAS	Ethiopian National Mine Action Standards
MBT	Mine Ban Treaty
MDD	Mine Detection Dog
MDGs	Millennium Development Goals
MoFED	Ministry of Finance and Economic Development (Ethiopia)
MRE	Mine Risk Education
NDF	National Defense Force
NG	Next Generation (IMSMA)
NGO	Non-governmental organization
NPA	Norwegian People's Aid
QA	Quality Assurance
QC	Quality Control
RaDO	Rehabilitation and Development Organization
RRT	Rapid Response Team
SHA	Suspected Hazardous Area
SOP	Standard Operating Procedures
SIDA	Swedish International Development Agency
TS	Technical survey
UNICEF	United Nations International Children's Emergency Fund
UNDP	United Nations Development Programme
UNMAS	United Nations Mine Action Service
USD	United states Dollar
UXO	Unexploded Ordnance

I. Executive Summary

Ethiopia was one of the first countries to sign the Anti-Personnel Mine Ban Convention in December 1997. Ethiopia ratified the Convention on December 2004 and the Convention entered into force for Ethiopia on June 2005. At the time Ethiopia ratified the Convention, it was well known that Ethiopia was one of the 10 most heavily Land mine contaminated countries around the world. Mines and UXO's are used in Ethiopia since the invasion of Italian colonialism in 1935-41, the war in the eastern region of Ethiopian Somali in the border of former Somalia in 1977-1978, the long Internal conflict the struggle for the democracy 1974-1991 in all country and the recent Ethiopia and Eritrean war in the northern region of the country in the border of Tigray and Afar Administrative Regions 1998-2000 resulted in the country presence of mined areas.

To address mined contamination, the Ethiopian Demining Project (EDP) was established in 1995 as a non-combatant unit of the Ministry of National Defence, distinct from the Army's Corps of Engineers. The international community, however, only became involved in 1998, when the UN carried out an assessment in the country, but due to the conflict with Eritrea could not develop a programme. Following the ceasefire and December peace agreement with Eritrea signed in June 2000, the Ethiopian government invited the UN to provide further advice and assistance on assessing the possibility of developing a national mine action programme. Adopting the main recommendations identified in a UN evaluation, In February 2001, The Council of Ministers decree N°70/2001 established the Ethiopian mine action office (EMAO) as an autonomous legal entity responsible for mine clearance and mine risk education accountable to the Prime Minister's office. Other tasks, such as victim assistance and anti-personnel mine (APM) stockpile destruction fell under the responsibility of the Ministry of Labour and Social Affairs and of Defence, respectively.

The first effort to establish a national picture of contamination in Ethiopia was the carrying out of the Ethiopian Landmine Impact Survey (ELIS). The Ethiopian Landmine Impact Survey (ELIS) was performed from 2001-2004 in nationwide and established nationwide baseline data. The survey covered Ethiopia with a high degree of confidence that it had found virtually all impacted communities. Of all 14,980 communities in Ethiopia, the ELIS determined through the Rapid Assessment or Preliminary Opinion Collection process that 3,280 communities were alleged to be impacted.

All these communities were visited by ELIS interviewer teams and further studies were carried out in areas alleged not to contain mines. The ELIS identified 1,492 communities covering 1,916 SHAs with an affected area estimated at 2,443,116,287 square meters suspected to contain anti-personnel mines and UXO in ten of the eleven regions of the country. Eighty-two percent of the impacted communities, however, were clustered in the three regions of Afar, Somalia and Tigray in the northern and eastern parts of the country. The ELIS, it must be said, had some flaws one main one was the lack of precision in identifying mined areas. The huge areas identified as mines were the size of the communities and not those of specific mined areas overestimating the amount of contamination and necessarily requiring additional costly survey efforts.

The ELIS provided the first overall picture of the landmine problem in the country and documented the socio-economic impact of landmines and Explosive Remnants of War (ERW) contamination. The ELIS reported more than 1.9 million people in the 1,492 communities affected by landmines. Ten percent of the impacted communities (152 communities) were high impact, while 21% (308 communities) were medium impact and 69% (1,032 communities) were low impact. The ELIS also recorded 16,616 mine/ERW casualties with 9,341 resulting in death and 7,275 resulting in injury of the victim. Two-thirds of the victims were engaged in herding and farming activities when the accident occurred.

The presence of landmines and ERW hampered the access to land in many areas, causing food insecurity and representing an obstacle to the peace consolidation process in the border areas. One half of the impacted communities reported blocked access to pasture land. Over one third of all impacted communities reported blockage to local roads and trails and rain-fed crop land. Nomadic pastoralists suffer from blocked access to water (eight percent) and forage (14%).

Transport corridors are the second most blocked resource. Thirty-eight percent of the impacted communities report blocked local road and trails as a more serious problem than main roads. The topography of the three most impacted regions is generally flat, thus permitting relatively easy avoidance of mined secondary and tertiary roads. The third blockage category in importance is rain fed cropland with 35% of impacted communities reporting problems. Rain fed cropland is a main feature of Ethiopian agriculture and this blockage represents serious hardship in some communities.

During the period of 2002-2012 the Ethiopian Mine Action Office cleared 59,629,764 Square meters and about 1,190,317,900 square meters previously suspected hazard areas were technically verified and released for the community use. According the Ethiopian Landmine Impact Survey completed in 2004 and government's survey out of 1,916 SHAs, 1,602 SHAs and 58 SHA's newly found by advanced technical survey teams were cleared and freed technically by land release techniques. As the matter of this there are 314 suspected hazardous areas equal to 1,193,168,623 square meters that remain to be surveyed, cleared and released by the 2020 deadline. Those remained suspected hazardous areas were in Afar, Benshangul, Gambela, Oromia, Tigray and Somalia regions. The total amount of remaining area to be released suspected hazard areas does not including along the Ethio-Eritrean confrontation Border. When the Ethiopian Land Mine Impact Survey conducted survey the border has been under the control of UNMEE so no one has entered to the areas to survey. Because the delineation is not marked on the land between the two countries border and it is not safe to enter during that time even now and not yet confirmed the demarcation on the land so it was not surveyed.

Those are previously surveyed by the ELIS.

Since 2002, the EMAO, with the support of a number of donors and Norwegian People's Aid (NPA) has carried out efforts to confirm the results of the LIS and carry out mine clearance throughout the country. In its efforts, of the 1,916 suspected hazardous areas identified by the ELIS, 259 areas have been released through General Survey, an additional 1,207 areas were confirmed to be free of mines through Technical Survey and 136 were confirmed to contain mines through Technical Survey. The remaining 363 areas of the LIS measuring 1,191,516,634 square meters remain to be submitted to technical survey. It is expected that only 0.5% of these areas will be confirmed as mined.

In the process of verifying the ELIS data and through populations reports an additional 58 areas outside of the ELIS data were identified and confirmed mined by technical survey activities. Therefore, in order for Ethiopia to meet its mine clearance obligations under the Convention it still needs to carry out clearance of 196 mined areas measuring 37,872,244 square meters and carry out technical survey activities in the remaining 363 areas identified by the ELIS.

These efforts have been carried out through the employment of National Mine Action Standards and Standard Operating Procedures which, with the support of Norwegian People's Aid, have been updated in accordance with amendments to International Mine Action Standards. Operations have also been carried out employing overall quality management including quality assurance and quality control efforts to ensure that operations are in accordance with NMAS and IMAS.

Mine clearance operations in Ethiopia have had a number of qualitative benefits with over 2 million people having benefited from these actions. Benefits of mine clearance activities over the years have included the resettlement of people displaced by the conflict, infrastructure reconstruction and repair, release of land for productive use increasing food security and agricultural development, contribution to peace and security of previously conflict affected regions, amongst others.

Without prejudice to the above major achievements, the mine action was faced with some difficult in the course of accomplishing its obligation. Although it has completed most of its operations but the final effort have been made difficult due to the following circumstances:

- **Insecurity:** Some of the suspected mine contaminated areas are located in border and remote areas where it is inaccessible for civilian demining staff in terms of security and safety.
- **Accessibility:** Naturally unfriendly characterized by harsh climate, absence of basic social services for the supply of basic needs (including shelter, water, medical, infrastructure etc) and located in remote areas. The remaining areas are located in remote parts of the country, typically in the Somali region, and, for security reasons, were not accessible to a civilian humanitarian agency like EMAO.
- **Limited operations:** Continuous redeployment of demining teams in scattered minefield areas and absence of fund.
- **New Hazards found:** As the surveys were carried out and the ELIS which was completed in 2004 came to a conclusion, new hazards were found which were added to the IMSMA data base.
- **Climatic Factor:** Three months out of the year mine action more or less comes to delay because of heavy rain in most part of Ethiopia. Lack of suitable roads and other infrastructures make it impossible for the teams to carry their operation and reach hazardous areas during the rainy season.

- **Lack of information:** there is not precise knowledge about the number and locations of all areas contaminated by landmines in the country. Ethiopia acknowledges that landmines may have been left because of lack of information during clearance operations, because of ground movements, exposure to rain or climatic conditions. It is also possible that more mines have been recently laid due to arising new conflicts. As observed in all countries that went through protracted periods of conflicts, a thin, diffuse, scattered residual contamination composed of various and heterogeneous unexploded devices –including landmines – will remain present for a long period. The scope of this residual contamination remains unknown in Ethiopia.

In 2012 the Ethiopian Government dissolved the EMAO by decree and the remaining task was placed under the responsibility of the Ministry of Defence combat engineers division for the following key reasons:

1. The remaining confirmed areas will be easily reachable to Ministry of National Defence than to the civilian Mine Action Program.
2. With demining resources and donations coming shorter and shorter, it is important that the landmine clearance is carried out by Ministry of National Defence, as Defence is in a better position for budgeting compared to the Mine Action Program.
3. The Built capacity will be in better use by Ministry of National Defence, as Ethiopian forces are widely involved in peace keeping operations in so many countries.

This responsibility includes the clearance of the remaining inaccessible minefields and Compliance to the Anti- Personnel Mine Ban Convention (APMBC), since 2012 till now responsibility of the mine clearance and relevant activities conducted by combat engineer's division Demining section. As responsibility for the remaining jobs to meet the APMBC, the MoND has taken some measures including the transfer of assets.

Since the closure of EMAO, the Ministry of Defence combat engineers division has been moving forward to implement its plan to address the remaining suspected hazardous areas and confirmed mined areas. Before deploying clearance teams to those areas, the division is strongly working on capacity building by developing mine action standards through combat engineer teams, parallel to ERW clearance /spot task. The aim of this preparation and capacity building is to conduct training and clearance activities with minimal costs that can be covered by the combat engineers own budgets.

In order to implement the plan, Ethiopia does face a number of challenges including the following:

- To complete the work of the Demining training center left unfinished by Ex-EMAO, Ethiopia will require a significant amount of capacity building. For this, Ethiopia's training center, which is close to the capital city of Addis Ababa, has the basic establishment for the purpose of training deminers to a high standard. Unfortunately, at the time being, and in accordance with Ethiopia's plan, the training center is not completed due to the fact that the combat engineers division has a lack of funds to complete the training center buildings. Nonetheless, the combat engineers division has begun to facilitate the training with its limited budget. Unfortunately, Financial support is required.
- To specialized and certify Teams of RRT and EODs through advance training: In our case most clearance activities are conducted on mine fields, and our deminers are getting an experience throughout their course of work. However, our deminers are less experienced on planning and implementing assets to address other explosive remnants of war. While the division has taken some steps on training units regarding this task, it needs international support and technical advisors.
- To fully equipped all the Teams of RRT and EODs: The Rapid Response Teams are equipped with old demining equipment which according to their life time the equipment reaches their shelf life in the coming New Year. The Division will aim to replace this equipment on time to meet the milestones of the plan. However, the budget is limited to replace the equipment and purchase spares.

Unfortunately, over the course of its initial 10 years since entry into force of the Convention, Ethiopia has not been in a position to fulfill its obligations under Article-5. In order to complete the work left unfinished by EMAO Federal Democratic Republic of Ethiopia is requesting an extension totalling five years from 1 June 2015 until 31 May 2020, to accomplish and to fulfill its Article 5 obligations. This time frame is necessary for Ethiopia to:

- Solicit and acquire the support of international advisors
- Provide training and capacity building to demining teams, rapid response teams and EOD teams.
- To full equip Rapid Response Teams and EOD teams
- Complete the work of the Demining Training Centre left unfinished by Ex-EMAO
- To complete the survey and clearance of the remaining mined areas

SURVEY AND CLEARANCE YEARLY MILE STONES

2015: The demining operations will resume using existing capacity and resources.

- The existing Man power and the material re organize, restructure and give the refreshment course for the four companies and four TS/RRT teams in the first four months of 2015 from July to October 31 2015.
- Beside these the mine action standards will be developed and updated, the standards of operational procedures of Mine Clearance and Land Release will be updated and integrated with the updated IMAS.
- The deployment of the demining companies will start from November 2015 the 4 demining companies, 4 Technical Survey and Rapid Respond Teams will deploy to their assigned operation places to establish their camps.
- In Somali Region in Degehabur wereda communities', in Tigray Region Mai hamato operations will be resumed by the Combat Engineering mine action office demining companies and in Benshangul region in mined areas kumruk, komosha will be resumed clearance by 2 TS/RRT, 1 TS/RRT team will resume survey in Afar Region and 1TS/RRT team will resume survey in Somali region from December 2015 and will continue.
- Beside to that, Technical and Non-technical survey will be resumed in Afar, Somali, Oromia and Gambela regions in all registered areas are to be visited by Combat Engineering Mine Action Office Technical Survey Teams from December 2015 to update the current information in the database and at the end of 2017 will have a clear picture of the remained contaminated areas square meters to support the oncoming clearance operations.

2016:- The operations will continue in the regions

- In Tigray region it is expected that the 2 Demining companies will be able to conclude 3 mined areas that was started at the end of 2015 by first quarter of 2016. With this accomplished Combat Engineering Mine Action Office will smoothly divert its capacity to Somali and Afar region and will continue clearance in the Fik zone Danga soora mined area and in Afar region based on the survey results.
- In Somali region the operation will continue by the 2 demining companies on the Degehabur wereda in 4 mined areas.

- In Benshangul Region the TS/RRT teams will conclude the 2 mined areas on the first quarter of 2016 and 1 TS/RRT team will be shifted to Gambela region and 1 Technical Survey/RRT team will shift to Oromia region continue the survey on the areas not visited and conclude the survey by the end of 2016.
- In Afar Region the Technical Survey team will conclude its 14 SHAs survey by the first quarter of the 2016 and give the updated information on the SHA's visited and new areas found on the region with accurate location and will be shifted to Somali region to continue their survey.

2017:- The operation will continue in the regions not concluded

- In Somali region the operation will continue on suspected hazardous areas in Degehamado where 3 areas will be cleared to release for the local communities, infrastructure and development projects by the two demining companies. The two companies which clearing at Fik zone will continue their clearance to conclude by the end of 2017.
- TS/RRT that operates in Somali region will continue surveying and updating the communities where they visited and they will come with updated information on SHAs, new founded mined areas and accurate location of mined areas to update the data base.
- The total areas identified by the Technical Survey Assessment in Somali, Afar, Gambela and Oromia regions will give us the intelligible picture of the remaining SHAs mined areas and newly founded mined areas with updated information, accurate location and square meters of the mined areas to be cleared. These will direct us to the base line when to be finished the Anti-Personal Mine Clearance in Ethiopia to fulfill his APMBC obligations.

2018-2020 The operation will continue based on the facts of Assessment to become cleared.

The Combat Engineering Mine Action Office Assets Distribution

Unit	Operation year			
	2015	2016	2017	2018-2020
Coy 1 & 2	Somali region	Somali Region	Somali Region	Somali Region
Coy-3	Tigray Region	Tigray & Somali	Somali Region	Somali Region
Coy-4	Tigray Region	Tigray, Afar & Oromia	Somali Region	Somali Region
TS/RRT 1	Benshangul	Benshangul & Gambela	Gambela Region	Somali Region
TS/RRT 2	Benshangul	Benshangul & Oromia	Somali Region	Somali Region
TS/RRT 3	Afar Region	Afar/Somali Region	Somali Region	Somali Region
TS/RRT 4	Somali Region	Somali Region	Somali Region	Somali Region

II. Detailed Narrative

1. Origins of the Article 5 implementation challenge

Ethiopia's mine and Explosive Remnants of War (ERW) contamination stems from a series of internal and international armed conflicts dating back to 1935, including the following:

- The Italian invasion and subsequent east Africa Campaigns (1935-1941)
- The Ogaden war between Ethiopia and Somalia (1977-1978)
- Internal conflict (1974-1991)
- The Ethiopian-Eritrean war (1998-2000)

During the Italian invasion of 1936-1941, heavy air raids and ground battles littered large areas throughout the country. Munitions stores were left in defensive positions during the Italians' hasty retreat. This armed conflict is believed to have contributed mainly to the UXO problem in Ethiopia.

During the civil war to oust Emperor Haile Selassie, commencing in 1971, and the successful fight to overthrow the Marxist Dergue regime, from 1975-1991, landmines were deployed and UXO left from fighting along all the main access routes towards Addis, southwest from Gimira, east from Asosa, and northwest from Gojam. A number of defensive minefields were laid around bridges, military camps, and other strategic positions. Minefields, especially towards the border, protect the railroad between Addis and Djibouti.

During the 1977 and 1978 Ogden conflict between Ethiopia and Somalia, the Somalians occupied a large portion of Ethiopian territory, and landmines were laid throughout the occupied areas, along the entire Ethiopia/Somalia border, and especially on all main roads. During the 1998-2000 border conflict between Ethiopia and Eritrea, landmines were used extensively, and all the areas occupied by the Eritreans, particularly in front of the trench lines, were mined.

2. Nature and extent of the original Article 5 challenge: quantitative aspects

The Ethiopia Landmine Impact Survey (ELIS) began in November 2001 and concluded in April 2004 and established a nationwide baseline data. In the course of implementing the Ethiopian Landmine Impact Survey, the ELIS teams visited all 11 regions and 70 zones and special zones in the country. Of these, ten regions and 55 zones were found to be impacted by landmines and/or unexploded ordnance (UXO). 1492 communities in these regions were found to be impacted by landmines and/or UXO.

Among the 1,492 impacted communities, 152 (10%) are highly impacted, 308 (21%) are medium impacted, and the remaining 1,032 (69%) are low impacted. Of the 152 highly impacted communities, 65 are in Somali (43%), Tigray (29%), and Afar (14%) regions. The remaining 14 percent are in Gambela, Dire Dawa, Amara, and Oromia regions. The regions of Benishangul-Gumuz, Addis Ababa, and the Southern Nations and Nationalities People's Region (SNNPR) have no highly contaminated communities. While the LIS did not offer concrete information on the level of contamination in Ethiopia, it provided a baseline for Ethiopia to begin acquiring additional information on its mine problem. The results of the LIS indicated the following:

Table 1: Results of the LIS

Region	Number of affected communities	Impacted population	SHA reported by LIS	Estimated size of the affected area (square meters)
Tigray	380	378,139	524	149,761,789
Afar	159	63,063	230	55,159,562
Somali	661	1,178,386	774	2,225,070,455
Amara	95	131,421	129	3,088,373
Oromia	137	142,963	174	7,852,455
Benshangul - Gumz	13	4,015	21	351,913
Gambela	24	44,545	38	928,320
Harar			-	
Dire Dawa	17	44,360	20	783,070
Addis Ababa	2	5,500	2	100,000
SNNPR	4	150	4	20,350
Total	1,492	1,976,542	1,916	2,443,116,287

3. Nature and extent of the original Article 5 challenge: qualitative aspects

ELIS provided the first overall picture of the landmine problem in the country and documented the socio-economic impact of landmines and ERW contamination. The ELIS reported more than 1.9 million people and 1,492 communities affected by landmines with the regions of Tigray, Afar and Somalia being the most heavily mined/ERW-affected regions. Ten percent of the impacted communities (152 communities) were high impact, while 21% (308 communities) were medium impact and 69% (1,032 communities) were low impact. The proportion of high, medium and low impact follows closely the proportions found in most other surveyed countries.

The ELIS recorded 16,616 mine/ERW casualties with 9,341 resulting in the death of the victim and 7,275 resulting in injury of the victim. Information on 1,295 of these victims was identified to have occurred during the period of the LIS 2002 – 2004 (see table below). Two-thirds of the victims were engaged in herding and farming activities when the accident occurred. Gender breakdowns indicate that women were only 18% of the victims and they tended to have slightly higher fatality rates within their class (47% fatality versus 42% for men). Thirty percent of male's survivors received some form of emergency care while only 18% of female survivors received emergency care. There was no gender distinction regarding rehabilitation care – only 3% of each category received any rehabilitation care.

Not all regions are equally contaminated. The number of landmine/ UXO -contaminated communities varies widely from one region to another. Somali region in the east and Tigray and Afar regions in the north and northeast are especially notable for their high concentration of impacted communities. The three regions combined contain 80% of all affected communities and 82% of the affected population. In contrast, the regions of Oromia and Amara, where the majority of Ethiopians live, contain nearly 16 percent of the impacted communities and 14 percent of the country's impacted population.

During the land impact survey the victims of mine accidents between 2002 and 2004 are 1,295 people were Mine incidents killed 588 people in the time preceding the survey and injured 737 persons. The survey found a further 15,321 victims before 2002. Of the total 1,492 impacted communities, 1,079 reported incidents at some time in the past with 338 communities reporting specific victims in the 24 months prior to the survey. Young adult males were the primary victims. Eighty two percent of all victims were male and 40% of all victims were between the ages of 15 and 29. The next largest age groups were children between the ages of 5 and 14 years that is 60%. Two-thirds of victims were engaged in herding and farming at the time of the incident. As the result the land mines, Explosive Remnant of war and UXO problem makes worst in the country. In Ethiopia, landmines and UXO mainly affect rural villages. Of the 1,492 impacted communities, 1,135 or 76 percent of them are either compact farming villages or dispersed villages of pastoral nomads characterized by two or more temporary locations. Eleven percent is high impact communities while 55 percent are low impact. The remaining 34 percent categorized as medium impacted is slightly more than the national average of 34%. Urban and suburban settlements constitute only 273 or 21% of the total 1,492 impacted communities. The majority of the impacted population lives in dispersed villages having mean populations ranging from 249 to 2,795, and numbers of households ranging from 50 to 550.

This is in keeping with population distribution in Ethiopia, which has many more small communities than large ones. 82% of impacted communities are in Somali, Tigray and Afar regions. When Oromia region is added, 92 percent of all impacted communities are found in just four of Ethiopia's eleven regions. The country's conflict history illustrates why these four regions bear most of the landmine problem. These conflicts have included the Italian invasion and occupation of 1936-41, the Ogden war and the Ethiopia-Somalia border conflicts of 1977 and 1978, the civil war to oust Emperor Haile Selassie commencing in 1971 and the successful fight to overthrow the Marxist Dergue regime from 1975-1991, and the Eritrea border war of 1998-2000. While these conflicts have mainly affected Tigray, Afar, Somali, and Oromia regions, a smaller but not insignificant number of impacted communities are also found in the other regions.

Table 2: Regions, by community impact classification

Region	High Impact	Medium	Low Impact	Total
Somali	65	118	478	661
Tigray	44	105	231	380
Afar	21	37	101	159
Gambela	11	9	4	24
Dire Dawa	3	3	11	17
Amara	2	13	80	95
Oromia	6	17	114	137
Addis Ababa	0	1	1	2
Benishangul-	0	5	8	13
SNNPR	0	0	4	4
Total	152	308	1,032	1,492

Table 3: Mine accident Reported to EMAO as of January. 2012

	Male	Female	Total
2002	9	0	9
2003	14	3	17
2004	11	0	11
2005	13	0	13
2006	5	0	5
2007	7	2	9
2008	4	1	5
2009	3	0	3
2010	1	0	1
2011	0	0	0
Total	66	6	73

The presence of landmines and ERW hampered the access to land in many areas, causing food insecurity and representing an obstacle to the peace consolidation process in the border areas. One half of the impacted communities reported blocked access to pasture land. Over one third of all impacted communities reported blockage to local roads and trails and rain-fed crop land. Nomadic pastoralists suffer from blocked access to water (eight percent) and forage (14%). Government plans for the resettlement of Internally Displaced Persons (IDPs) do not involve areas of high risk from landmines.

The majority of mine impacted communities are rural and engaged in herding and farming. Fifty two percent of the impacted communities report blocked pasture land. Transport corridors are the second most blocked resource. Thirty-eight percent of the impacted communities report blocked local road and trails as a more serious problem than main roads. The topography of the three most impacted regions is generally flat, thus permitting relatively easy avoidance of mined secondary and tertiary roads. The third blockage category in importance is rain fed cropland with 35% of impacted communities reporting problems. Rain fed cropland is a main feature of Ethiopian agriculture and this blockage represents serious hardship in some communities.

The ELIS also gathered information on resource and infrastructure blockages. The following six major livelihood resources were reported as blocked by landmines/UXO:

- Pasture
- Local roads and trails
- Rain-fed and irrigated farmland
- Non-agricultural land forestry area
- Water used for drinking and other purposes
- Housing

Pastureland is the resource to which access is most frequently reported as being blocked owing to the presence of landmines/UXO, with more than half the communities (52%) reporting this problem. The importance of pastureland for Ethiopia's agricultural communities, whose livelihood depends on rearing livestock second only to farming, is obvious. Pastureland is also a vital resource for the country's numerous pastoralist groups. The reason why pastureland is often heavily impacted is that fighting most often takes place around strategic hillsides, mountain tops, and barren fields, all of which are used for grazing animals.

Local roads and trails represented another important category of blocked areas, with 39% of impacted communities reporting some lost access. This category, however, does not reveal much about Ethiopia's main roads, blockages of which, observation suggests, are rare. The central portion of Ethiopia is mountainous, while the vast majority of peripheral areas are flat. This is especially true for such highly impacted regions as Somali and Afar. Detours in these flat areas are relatively easy to develop when one access route is blocked. Rain-fed and irrigated farmland is the third most frequently reported type of blocked resource, with 36% of the impacted communities reporting loss of access to this principal source of their livelihood. Ethiopia is an agrarian society, dependent overwhelmingly on rain-fed farming.

19% of impacted communities reported a loss of access to one of more types of water resources. Housing blockages, although less prevalent (6%) than other blockages, have a significant effect in that contamination by landmines and UXO close to inhabited areas places the population at a particularly high risk of landmine/UXO incidents.

The landmine/UXO exposure of Internally Displaced Persons (IDPs) typically differs from that of the residents of sedentary communities, as these latter have often fled their home areas on account of violent conflict or drought and have migrated to new areas in search of a safe place to live. On the reasonable assumption that this flight from their home communities and migration to new, often unfamiliar areas exposes these internal refugees not only to the threat of landmines/UXO in multiple locations, but also to hazards and vulnerabilities of a nature, and to an extent, not normally faced at home (e.g., being preyed upon by bandits), the ELIS collected data on the impact of landmines/UXO on IDPs not only in their communities of origin, but also along their migratory route and in the new places where they have settled and where their ELIS interview was conducted.

The three Ethiopian regions having the largest number of IDPs Tigray, Somali, and Amara with an emphasis on IDP communities whose members had been displaced by warfare and other forms of violent conflict. Two of the regions selected Tigray and Somali are the most heavily landmine/UXO -impacted regions in Ethiopia. The highest numbers of IDPs are found in Tigray, where the 1998-2000 war between Ethiopia and Eritrea was the principal cause of their displacement. In the course of their flight from their communities of origin to the places where they now dwell, IDPs displaced by landmines faced an often horrific array of dangers and deprivations, including shortage of food and water; the presence of landmines/UXO along their migratory routes; predation by bandits; and rape. Nearly 85% of these internal migrants suffered from food shortages, with 9.5% of them subjected to both food shortages and the danger of landmines in the course of their migration to their current settlement.

Ethiopia is home to an estimated seven million nomadic pastoralists (11 percent of the total population), who migrate seasonally in search of forage and water for their livestock. The data collected in the pastoral module also made it possible to assess the landmine/UXO risks and impacts that are unique to pastoralists. The difficulty of precisely defining, let alone locating, nomadic communities made it impossible to survey every nomadic pastoralist group. The data from the 248 mine-impacted pastoralist communities that were surveyed are included in the general ELIS analysis.

Nomadic pastoralists are utterly reliant on their livestock, not only for their subsistence but also for use as collateral, for making marriage payments, for making and sustaining social relationships, for ritual purposes, and as assets readily convertible to cash. The loss of animals to landmines thus exacerbates the risks to human survival in harsh, drought prone regions. Altogether, the pastoralist communities surveyed by the ELIS reported the loss of 3,945 camels, 3,074 head of cattle, 4,090 sheep and goats, 527 equines (horses, donkeys, mules, and 92 others kinds of animals. Of the 2,181 grazing areas identified by these impacted pastoral communities, 304 or 14% of them were reported as blocked. Of the 2,493 water points these communities identified, 166 or eight percent of them were reported as blocked. Water and forage are the vital resources for pastoralists. Where these are blocked, pastoralists and their livestock are forced to detour to other areas, often compelling them to intrude into areas to which they may not enjoy customary access, with conflict not infrequently being the result.

Table 4: Communities blocked access to socioeconomic resources

Blocked resources	Impacted Communities, by Impact Category				Impacted Population
	High	Medium	Low	Total	
Pasture	125	239	405	769	877,555
Local roads and trails	80	171	337	588	917,651
Rain-fed farms	97	183	231	511	605,114
Non-agricultural land	57	124	103	284	267,796
Water other than drinking	51	79	13	143	235,610
Drinking Water	51	70	12	133	227,854
Housing	22	29	39	90	135,555
Irrigated farm	12	13	3	28	37,800
Other	5	1	0	6	2,050

4. Methods used to identify areas containing AP mines and reasons for suspecting the presence of AP mines in other areas

The methods used to identify areas containing AP mines include the following:

- ELIS carried out from 2001 to 2004
- Follow up Non-Technical and Technical Survey
- Population reports

While the ELIS and follow up NTS and TS operations covered most areas suspected to be contaminated by mines, given the length and breadth of the conflicts, Ethiopia does not exclude the possibility that previously unknown mined areas may be discovered through population reports following the clearance of the remaining known mined areas.

5. National demining structures

Ethiopia has signed the APMBC in December 1997, ratified the Convention on December 2004 and the Convention entered into force for Ethiopia on June 2005. At the time Ethiopia signed and ratified the Convention, it was well known that Ethiopia one of the most heavily landmine contaminated countries around the world as concerns emplaced anti-personnel mines. Ethiopia has hugely suffered from landmine and Explosive Remnants of War (ERW) contaminations left over from foreign occupation in the 1930s, war with Somalia in the 1970s, long armed civil wars and the recent war with Eritrea, resulted in the presence of mined areas worst in most of the country.

Past mine action activities were brought about through the efforts of the Ethiopian Mine Action Office (EMAO), the Ethiopian Demining Project (EDP), the Disaster Prevention and Preparedness Commission (DPPC), the United Nations Mine Action Advisory Team (UN MAAT), the United Nations International Children's Emergency Fund (UNICEF), and the Rehabilitation and Development Organization (RaDO).

The Ethiopian Demining Project was established in 1995, with bilateral assistance from the United States, as a non-combatant unit of the Ministry of National Defence, distinct from the Army's Corps of Engineers. The conflict with Eritrea led to the suspension of this support in 1998. That same year, a UN assessment mission was also conducted, but, because of the conflict, was limited to providing advice and MRE. Following the ceasefire in June 2000 and the peace agreement in December 2000, the government of Ethiopia invited the UN to provide advice and assistance in reviving the national mine action program.

A subsequent mission provided a number of recommendations in this regard, one of which was the establishment of the Ethiopian Mine Action Office (EMAO). In February 2001, the FDRE Council of Ministers established the Ethiopian Mine Action Office, which is accountable to the Prime Minister's office. Other tasks, such as victim assistance and anti-personnel mine (APM) stockpile destruction fell under the responsibility of the Ministry of Labour and Social Affairs and of Defence, respectively.

Recognizing the risk of landmines, Explosive remnant of war and UXO's, the government of Ethiopia takes initiation to establish a civilian demining agency by taking loan from the World Bank, The Ethiopian Mine Action Office (EMAO) in February 2001 by the Council of Ministers decree number 70/2001. The establishment of EMAO transferred Ethiopia's mine action responsibilities, for the first time, from the military EDP to a civilian humanitarian demining capacity. EMAO was, from the start, committed to following international standards for humanitarian demining fitted to the Ethiopian context. EMAO is the principal public agency responsible for organising, managing, planning, coordinating, regulating and executing humanitarian demining and mine risk education (MRE) tasks. EMAO is accountable to the Office of Prime Ministry, while the review and approval of mine action strategy, action plan and standards lies under the inter-ministerial Management Board.

The decree established a supervisory board to oversee EMAO's activities which included representatives from:

- Ministry of Transport and Communication
- Ministry of National Defence (chair of the board)
- Ministry of Foreign Affairs
- Ministry of Federal Affairs
- EMAO director acting as Secretary

And although EMAO remained relatively independent, it answered to a supervisory board which had the power to:

- issue administrative policies
- determine the organization's structure
- appoint the director
- fix fees for services provided by EMAO

The government of Ethiopia in collaboration with its development partners have launched and accomplished series of mine action projects since the establishment of EMAO. The 2002–2012 mine action projects have scored successful achievements in clearing and releasing contaminated lands and developing Mine Risk Education (MRE) schemes implemented by EMAO through the technical support of UNDP and fund granted notably from the European Union (EU), World Bank loan and contributions from the governments of Australia, Japan, USA, Italy and United Kingdom Department for international Development (DFID), Germany, Norwegian Peoples Aid (NPA) and Swedish International Development agency (SIDA).

Overall objectives of the mine action project are:

- Improvement of food security and socio-economic development in country;
- Enhancement of peace and stabilization process in land mine affected communities in the regions and
- Fulfill of the Mine Ban Treaty obligations.
- Specific objective will be to increase access to and improve safety land in mine-affected areas with a special focus on highly contaminated and affected regions Somali, Tigray, and Afar regions.

Beneficiaries;

- The 2002 to 2012 mine action project beneficiaries are:
- Landmine-affected communities and local residents in all the mine contaminated regions who has to benefit from humanitarian demining and mine risk education efforts.
- The displaced people during the Ethio-Eritrea war to return to their places and to rehabilitate more than 360,000 internally displaced people.
- The communities who lived on these suspected hazardous areas to have safe access, to use their land for livestock, for agriculture, food security, socio-economic and social uses.

Activities Implemented

- Manual demining and mechanical ground preparation integrated with Mine Detection Dog and Technical Survey / Rapid Response activities. This include mine clearance task prioritization, organization of clearance activities in the priority areas, actual integrated demining operations, completion of reporting and release of safe land to the communities for immediate productive use. Administrative and logistical support as well as training, monitoring and evaluation services also are provided from the Headquarter and Branch Office.
- Mine risk education and community liaison (MRE/CL) activities: This is embrace provision of mine risk education and community liaison services in and around the areas where mine clearance operations take place before, during and after such operations. MRE/CL teams gather data on the socio-economic benefit of mine clearance operations in order to demonstrate how and how much demining operations has contributed to the development outcomes of the country.
- Quality Assurance: Internal Quality Assurance teams are accompanying field operations and monitor the overall quality and safety of operations. Weekly Quality Assurance reports are submitted directly on technical and administrative issues concerning operations, along with the recommendations for action to be taken. That ensures the strict operational adherence to the Standard Operating Procedures and the IMAS /ENMAS.
- Enhanced Management Support, Efficient Decision Making and Capacity building.
- Implementation of IMSMA and effective IMSMA operations: With support of an expert and technical from SIDA and GICHD, technically develop its Information Management System for Mine Action (IMSMA) to the highest standard that is currently established in the concerned field and all the data are migrated to the New Generation of IMSMA.

As mines within reach of the civilian mine action were finalized, in 2012 the Ethiopian Government dissolved the EMAO by decree. In accordance to the remaining task, the government decided to hand over tasks to Ministry of Defense combat engineers division for the following reasons:

The remaining confirmed 5.9 sq. KMS. Minefield areas will be easily reachable to Ministry of National Defense than to the civilian Mine Action Program.

With demining resources and donations coming shorter and shorter, it is important that the landmine clearance is carried out by Ministry of National Defense, as Defense is in a better position for budgeting compared to the Mine Action Program.

The Built capacity will be in better use by Ministry of National Defense, as Ethiopian forces are widely involved in peace keeping operations in so many countries.

This responsibility includes the clearance of the remaining inaccessible minefields and Compliance to the Anti- personnel mine ban convention (APMBC), since 2012 till now responsibility of the mine clearance and relevant activities conducted by combat engineer's division Demining section. As responsibility for the remaining jobs to meet the APMBC, the MoND took some measures:

- Most assets from the previous mine action has been transferred.
- A significant numbers of de-miners and a training center were also transferred.
- Overall, almost all capacity has been transferred.

6. Nature and extent of progress made: quantitative aspects

On the basis of survey and demining efforts undertaken between 2002 and 2012, it was thought that implementation of Article 5 of the Convention would be completed in 2012 from the previous ten regions in 5 regions and in the rest 5 regions to some degree cleared. During this period in the regions of Tigray, Afar, Somali, Amara, Benshangul, Southern Nations and Nationalities people, Hareri, Gambela, Oromia regions and Addis Ababa & Dire Dawa Administrative cities were cleared. More than 59.6 Km² mined area cleared & handed over to the communities for productive use. Over 1,191,317,900 m² previously suspected hazard area technically verified, cleared by rapid respond teams and released for the community use. During the clearance 9,260 Ant-personal mines, 1,466 Anti-Tank mines and 197,985 UXO's were found and destroyed.

In 2007, EMAO has been reorganizing Technical Survey or Rapid Respond Teams (TS/RRT) to undertake a nationwide technical survey to review and determine the landmine-impacted areas identified by the ELIS with a higher degree of accuracy and to apply the Land Release Process to fasten the clearance. In 2009, the technical survey is came out with perfect and accuracy of land mines impacted areas and provided to EMAO with an essential baseline data of landmine contamination that fastened the clearance and land release process in the country to obtain communities more safe land and access. During the advanced technical survey and verification by the professional teams they found new areas previously not included in the ELIS. The verification teams confirmed that some of the SHA's in the course of the land mine impact survey are found free from the contamination and freed to local communities to use their lands.

Table 5: Impacted areas, Land released and remained area based on ELIS data

Region	Initial impacted area as of ELIS (square meters)	Cleared ELIS area (square meters)	Canceled ELIS area (square meters)	New mined area confirmed and cleared by TS/RRT outside of the ELIS (square meters)	Remained area to address as per ELIS (square meters)
Somali	2,225,070,455	19,453,838	1,018,547,814	5,767,631	1,186,897,180
Tigray	149,761,789	34,112,764	114,957,036	1,733,794	691,989
Afar	55,159,562	5,773,051	45,716,162	460,958	3,670,349
Gambela	928,320	0	90,320	-	838,000
Dire Dawa	783,070	97,349	685,721	-	0
Amara	3,088,373	200	3,088,173	-	0
Oromia	7,852,455	15,815	6,810,499	-	1,026,105
Addis Ababa	100,000	171,623	100,000	29,054	0
Benshangul Gumz	351,913	5,088	301,350	-	45,000
SNNPR	20,350	0	20,350	-	0
Hareri				200,000	
Total	2,443,116,287	59,629,754	1,190,317,900	8,191,437	1,193,168,623

Table 6: Munitions destroyed

Region	Founded Mines &UXO		
	AP	AT	UXO
Afar	336	183	100
Somali	4,308	564	15,374
Tigray	4,011	614	121,197
Benshangul Gumz	25	7	2,590
Addis Ababa	35	1	835
Dire Dawa	640	0	692
Amara	0	0	310
Oromia	8	4	14
Gambela			
SNNPR			
Total	9,363	1,373	141,112

Table 7: Remaining communities and area to be addressed as per the ELIS

Region	Communities	Area (square meters)
Afar	14	3,670,000
Benshangul Gumz	2	45,000
Gambela	20	838,000
Oromia	13	1,026,105
Somali	262	1,186,897,180
Tigray	3	691,989
Total	314	1,193,168,623

Areas that are cleared and reduced by integrated demining and TS/RRT teams have been released to the community and entitled institutions for their productive and development use.

7. Humanitarian, economic, social and environmental implications

As a result of demining activities conducted in the country between 2002 and 2012, in 2007 the Government of Federal Democratic Republic of Ethiopia Mine Action Office has established the Technical Survey /Rapid Respond teams to Verify and to identify the SHA's and communities with exact mined areas. It was found 256 communities are free from land mines vs the ELIS of 2002-2004. This represents a significant milestone in what are the Government's efforts to ensure security for the social and economic development of communities, as well as meeting its international obligations in the context of Article 5 of the Anti-Personnel Mine Ban Convention.

In accordance with commitment it made through Cartagena Action Plan activities Progress report on the application of Cartagena Action Plan 2010-2014 submitted to ISU of GICHD (August 2010). The mine action was integrated into the development, safety & peace, Food security and Poverty Reduction in Ethiopia. That provides direct contribution towards projects for expanding the network of housing, education and health, also taking decisive role in pursuing investment projects in some key areas national development, with emphasis on mineral exploration, agricultural development and livestock, resettle internally displaced people, rehabilitation and construction of dams, roads, bridges, railroads, power lines, among others.

Demining has an important role in promoting the country's security, stability and socio-economic development. Priorities are population resettlement, demining areas destined for agricultural activities, social infrastructure (schools, hospitals, commercial areas, and areas around or within human settlements), areas of socio-economic interest, such as roads and bridges, railway lines, dams, electricity transmission lines and industrial infrastructure.

Surveys, cancellation and demining have made a valuable contribution to on-going efforts to reduce the poverty affecting Ethiopian communities. Demining is thus contributing to the maintenance of peace and the political, economic and social stability of the country, and has made it safer for the circulation of people and goods. It has also enabled populations to be resettled, agricultural activities in areas previously blocked by mines, roads to be opened, schools, health posts and wells rehabilitated. It has also benefited economic development projects where the biggest impact has been on the transport and communication, energy and public works sectors.

Demining has also resulted in a continuing downward trend in the number of accidents and new victims from landmines and UXO. Due to the large size of Ethiopia and the fact that most recent accidents occur in very remote locations and pastoralists, it is likely that some mine and UXO accidents go unrecorded. However, the general trend in the data that is captured does show a continuing downward trend as illustrated in the MRE/CLO table-10.

The mine action process has achieved commendable results contributing to the realization of the objectives of increased access to food security, enhancement of peace and stability and fulfillment of the Anti-Personnel Mine Ban Convention (APMBC) obligations. EMAO has cleared and released safe lands, sensitized mine affected community members and enhanced technical capacity. The mine action effort in Ethiopia is in a right track to achieve the overall objectives of the mine action and Anti-Personnel Mine Ban Convention (APMBC) obligations.

The sectors that have benefited most from demining include in particular: agriculture (in Somali, and Tigray regions, water (Somali, Tigray and Afar regions), public works (National Highway, rail way, education, health, communication, condominiums) (Dire Dawa Djibouti railway lines) communications (expansion of the mobile telephone network, energy (electricity line between Jigjiga and Kebridehar) and Housing (condominiums in Addis Ababa at gotera).

Landmines and items of UXO's disallow local communities' access to arable land, grazing fields, and other vital services such as clean water. Landmine and ERWs restrict free movement of people and their animals and goods hindering economic productivity and social services. Mines and other items of UXO's threaten livelihood and physical safety of people and their animals causing economic, social and psychological damages. This negatively affects access to food security and basic services and thereby affects the achievement of the MDGs and other national goals. Mine clearance is a prerequisite for social and economic activities by enhancing peace and security, reduction of human accident and material damage, reduction of poverty, facilitation of trade, infrastructural development, improvement of economic benefits, and overall social welfare around mine affected locality.

Mine action practices revealed that peaceful movement; safe livelihood and reduction of the threat of landmines, and other spill-over effects have been practically realized in and around cleared mined areas. Such instances are key indicators of communities' welfare. Measurement of the socio economic benefits from the demining program needs extensive qualitative and quantitative data collection around the project sites and analysis of secondary sources. This requires considerable time and resources which remains a critical challenge for EMAO with limited resource and mandate.

EMAO with its existed structure and mine risk education/community liaison (MRE/CL) services have tried to capture such data from the field, whenever conditions permit. Beneficiaries, local authority representatives and other stakeholders have agreed that this demining project has scaled up free movement, peace and security around the previous landmine contaminated areas in the impacted regions and the surroundings.

Contribution to the development



Few cases of post clearance data collected by MRE/CL officers from the field proved the contribution of the mine action for development. Post clearance data collected by MRE/CL field officers on areas cleared in 2002 and beyond in Kafta Humera district (Woreda) in Tigray region indicated that various agricultural products worth of 2,831,000 ETB was harvested in a cleared area of 212 hectares. This shows the positive contribution of mine action programme in the economic and social improvements of local inhabitants and other stakeholders. 169,056 hectares cleared and released land has benefited local community to graze total of 276,500 various domestic animals as depict in.

Table 8: Benefits gained in grazing from cleared mine areas and the surrounding (in Kafta humera, Tigray region)

Domestic animals	Area utilized (hectares)	Quantity
Cattles	56	28,000
Goats	90,000	115,500
Sheep	60,000	115,000
Camels	16,000	12,000
Donkeys	3,000	6,000
Total	169,056	276,500

Table 9: Benefits gained in agricultural production from cleared mine areas and the surrounding (in Kafta humera, Tigray region)

Crops type	Area utilized in hectare	Estimated production value in birr
Sorghum	16	159,000
Sesame	14	228,000
Maize	33	420,000
peanut	1	32,000
Special oil seed	1	12,000
Biltug/ local sorghum	3	44,000
Pepper	19.5	162,000
Onion	69	686,000
Tomato	16	202,000
Lettuce	4.5	105,000
Spinach	2	33,000
Molokiya/ local cabbage	2	96,000
Bamiya	1	20,000
Mango	6	114,000
Papaya	5	116,000
Lemon	5	99,000
Avocado	1	20,000
Guava	2	52,000
Banana	6	147,000
Lusinia	2.5	38,000
Alfa alfa	2	30,000
SaeriHarmaz	0.5	16,000
Total	212	2,831,000

Cleared fertile farmland used by local farmer in Tigray region



Post clearance data confirmed that in Bare, Degehabur and Shinille areas in Somali region 1,785 returnees have been resettled while above 80,835 local inhabitants benefited and 1,929,926 sq. meters of land was used for grazing 2,300 camels 4,180 cows/oxen and 3,300 sheep/goats. Similarly, the demining in these areas enabled to dig deep water well and construct above 30 kilometers road that critically benefited the community.

Goats and sheep are grazing Jijjiga and Water well drilling in Tigray region



In Jijjiga Woreda of Somali region, local community members have grazed 2,050 cattle, 3,000 goats, 3,040 sheep and 390 camels in the surface land of 114,000 sq. meters cleared. The following table 3 further reveals infrastructural developments that have built in some areas of the Somali region benefiting millions of people.

Table 10: Infrastructural construction in and around cleared area in Jigjiga Woreda, Somali region

Description of	Estimated Utilized	Estimated production	Remark
Fiber Optic telecom	270Km	80 million	3 million
Electric Power line	125km	150 million	1 million
Road	75km	860 million	1.5 million
Water supply/reservoir	N/A	Supporting about 7 million	
Stone Quarry for Construction	About 50 X16 m3 hard stone and 30X16	About 44,000 ETB per day for some period	
Stone Quarry for	About 50 X16 m3	About 28,000 ETB per day	
Housing	A house for family of	About 7.000 ETB	
School construction	1 school		About 60

These small scale cases clearly verify the important benefits of the mine action project for mine affected communities. The continued clearance and release of safe land and disposal of the mines and UXO's have contributed to the promotion and achievement of the specific MDGs as briefly illustrated below.



School constructed in Somali region

EMAO has successfully cleared the mine contaminated area around the Awash Bridge and handover to the Ethiopian Roads Authority allowing the construction of a new bridge over the Awash River. This is a symbolic contribution to the development benefiting the nation and local communities through the clearance of the extended area around the Awash Bridge. The bridge is economically and socially vital linking Ethiopia with the major import/export port of Djibouti facilitating international trade and easing the movement of people and trade within the country. The demining also enabled the Ethiopian Railway Corporation to rehabilitate, upgrade and build new railway over the Awash River and linking Main part of Ethiopia with port of Djibouti.

Demining over the cliff around the Awash railway and road bridges, Afar reg



It is observed that in mine-free area cleared by EMAO in the Afar region, Amibara area is used for the construction of small scale roads and Awash second big bridges that connects the main Export and import line to Djibouti port and benefited local community facilitating free movement of people and goods. These developments have created jobs, facilitated trade and movement of people, and increased agricultural productions of locals.

Table 11: Contributions to the programme - 2001 to 2012

No	Organization	Amount in USD
1	Ethiopian Government	US\$ 8,000,000.00
2	A world Bank Loan	US\$ 15,000,000.00
3	Donors with facilitation of UNDP ¹	US\$ 34,000,000.00
4	Donors through NPA ²	US\$ 19,000,000.00
5	Other bi-lateral support	US\$ 4,000,000.00
Total		US\$ 80,000,000.00

8. Methods & standards used to release areas known or suspected to contain AP mines

The Land Release methodology is based on the application of IMAS. The application of land release assumes a level of risk based on verification of threat. It recognizes that just because a hazard is reflected on the IMSMA database, the details are not necessarily accurate and that all hazards benefit from thorough application of the Land Release Process at all levels of intervention. Land release in Ethiopia has been based on three process; survey, clearance and land cancellation

 1. Australia, Canada, China, Denmark, the European Union (EUR 16 million), Germany, Italy, Japan, the

Netherlands, Norway, Sweden, UK-DFID, USA, UN/UNDP, & UNA-USA.

2. Finland, Germany, Norway, the Netherlands, & US

- Information gathered during the Land Release Process (LRP) will dictate the amount of work to be carried out to release land from the actual threat or threat suspicion based on information quality and sources, it will lead to full clearance of defined mined areas, while Areas proved to be free from mines / ERW will be released only through the application of Non –Technical Survey based on information available and the technical opinions of TS/RRT teams and EMAO Head quarters operations and communities’ representatives.
- Cancellation through non-technical survey: - Based on the concrete information’s gathered. These the Technical Survey /RRT teams they collect information from different angles from IMSMA data base entered, Defence Minster Units, Regional states offices and asking Affected communities (Elders, Women, Herders etc.) who are living on the area. The Technical Survey/RRT teams are went to the spot Asking different questions and discussing with the people from the communities who knew about the SHAs to get the exact information. After all the information’s are gathered and confirmed on the field TS/RRT fill the form and signed by TS/RRT team leader, CLO of the team, community representative members and Leaders. Then form sent to the EMAO Head quarter to approve and enter into the data base. The approval done by Operation head, Mine Risk education head and Quality assurance head. After the approval the areas list sent to the local administrative offices to hand over to communities and announce the SHAs areas are free from AP/ERW and to use for development.
- Reduction through technical survey: - The reduction of the SHAs areas will be done through the information gathered by Technical Survey or RRT teams and on the spot of SHAs. The information’s and data’s gathering is the same with non-technical process but the difference is that from the information gathered there is symptoms of recent or before incident, remains of animals or war armaments fortifications and comps. The Technical Survey /RRT will take samples in the SHAs area if they found AP, UXO and ATP they mark and locate the exact area by limiting boundary polygon. If there is less than 10,000 sq.mt. The TS convert to RRT and clears the area immediately to release the area for communities’ safety and use. Reduction on the other hand the existing information on the data base the SHAs in square meters is very vast even so based on the actual information of the TS/RRT survey works the area will be reduced to accurate area to be cleared. This saves time, cost, material, proper use of the demining assets, deployment of manpower to clear effectively and efficient.

- Clearance (Manual demining, Mine Detection Dogs, Mechanical) :-These after the technical survey have confirmed the suspected hazardous areas as a Mine Fields the demining company's deployed and cleared with all necessary and adequate assets of mine clearance.

Quality Assurance:

Monitoring and Evaluation is a crucial management tool we use for better performance, Quality, Productive and to resolve most operational, logistical, administrative, technical and managerial challenges in mine action project. In this regard continuous information gathering and assessment were conducted on all aspects of the project work throughout the period. This includes the regular radio conference between the operations and headquarters; every QA/QC field report is consolidated through evaluation meetings. Beside this Operational productivity and quality are improved and maintained with International and national Standards with nearly monitoring at the spot. To assure EMAO has deployed skilled quality assurance personnel (QAP) in all demining operations. These quality assurance professionals are tasked to supervise and constantly monitor the mine clearance, surveying, mine risk education and other mine action related activities. They conduct their duties on daily basis in each demining operation sites. Technical and administrative comments provided by QA personnel were extremely helpful to closely follow up and assist the operation. It reinforced the operational safety and adherence to Ethiopian Mine Action Office (EMAO's) SOP based on international mine action standards (IMAS). Quality control (QC) of mine clearance is conducted both at the clearance and post-clearance stages. QC has made remarkable contribution for the existence of sustainable quality performance, productivity of mine clearance and related tasks.

Any significant report form QA/QC is sent to EMAO HQ for analysis and serious improving measures. As a result, the consideration of the QAP/QCP by the operators is so high. Such tools and mechanisms have contributed to the risk mitigation of our operators. Even though, the good experiences of Ethiopian Mine Action will continue.

Enhanced Management Support and Efficient Decision Making

Ethiopian Mine Action office (EMAO) has established, reviewed and updated proper work processes and procedures. EMAO implemented enabling and appropriate decentralization policy across the layers of management from the headquarters down to demining companies and other operational entities. The set up of EMAO management and leadership arrangement at headquarter, branch office and project sites created sound potential to implement the

humanitarian mine action project. Working horizontal and vertical structural links among the departments provide favorable environment for a smooth and fast flow of information that enabled demining companies in the field to get all necessary support, guidance and resources tackling administrative and technical challenges. Regular radio conference between branch office and headquarters and with demining companies was helpful mechanism to solve emerging problems and share information/knowledge. In its deepest form, the system has enhanced common understanding and shared values of the organization and mine action efforts.

Integrated administrative, financial, logistical and managerial supports were provided at all levels from field, Coordination office and Headquarters. Groups of management members and experts conducted extensive field Supervision on all project sites during the entire project lifetime. EMAO had built effective methodology and tools to provide timely solution for all technical and administrative challenges. The approaches played significant role to share the lessons learned and to take constructive measures based on the real practice

The intact management coupled with the systems and structures established to support the effective and efficient demining (supplying/distributing vital resources such as demining consumables, spare parts, fuel and oil, stationery and sanitation items, insurance service and vehicles maintenance services) has enabled EMAO to successfully implement the project. Consequently, the demining, TS/RRT, MRE and other operational activities were going on without interruption. EMAO's practice of facilitating access to community members, stakeholders and development partners to openly observe the performance of mine action operations in the field enhanced monitoring and builds sense of accountability of EMAO to the community and partners of the project. These an integrated management system the National Defense Combat Engineering Main Department will continued to achieve the remained mine clearance task to achieve in the extension period.

Ethiopia has made a great progress on humanitarian demining capacity building to achieve his obligations. Ethiopia with his partners builds the integrated demining assets training center (Manual deminers, Mine detecting dogs, Ground preparation Machines and Technical survey/ Rapid respond teams). These capacities are functional by the National Defense Combat Engineering Main Department to give refreshment training to the de-miners.

Implementation of IMSMA and effective IMSMA operations

EMAO has already installed and customized the New Generation (NG) of IMSMA. Despite the high turnover of professionals in the data entry, acquisition, data cleaning and corrections of most clearance and MRE data were continuously entertained within the system. Regardless of this, EMAO has been working on capacity development to upgrade the data processing skill. However there is still a challenge to fix some database related challenges in the data processing section. Therefore, till it has to be resolved the gap in the IMSMA system, Ethiopian National Defense Force will continue using alternative data processing packages together with IMSMA for planning, reporting and analysis purpose. Hence it needs technical adviser and training support from the GICHD to finalize the IMSMA new generation to be fully functional and used the database by the Ethiopian National Defense Force combat engineering main department operators to process the data for planning, reporting and analysis purpose.

In line with one of the indicators set in the mine action logical framework we were dealing with the (APMBC), that EMAO had processed the expected information on implementation progress. It had provided summarized data and information to the Ministry of Foreign Affairs. The strong link between the mine affected communities and the CLOs at field, EMAO has made extensive communication with local authorities and community representatives. These include the consultation with at different level leaders of land mine affected regions during Minefield clearance, survey and cleared mined area handover process. Information regarding the national mine action implementation effort were delivered to the international consultant appointed by GICHD and the UNDP evaluation team.

Non-Technical / Technical Survey RRT

In the Ethiopia the Advanced Technical Survey process based on IMAS.

The advanced TS/RRT teams where well organized teams with experienced and skilled deminers. The structure of the group is the team leaders and deminers are x-combat engineering military skilled members they know how to demine and the techniques where can be mines laid. They have over all knowledge and skills to verify and survey the previously surveyed SHAs areas and newly founded areas. This team carried out both the survey procedures at the same time once they survey finish all non-technical and technical survey to save time and man power.

1. Non-Technical Survey: - where the TS/RRT surveyors went to the communities affected and asked people on the problem of mines and ERW they faced based on the previous data

and new found SHAs. If they received a response of no mines and ERW, they went to the spot (SHAs) and assure that the area is match with the information taken from the data base, they filled the form and got the community members, Leaders signature, and along with the TS/RRT & CLO signature they submitted the forms to the office for the approval and registration into the data base. The main reason of Advanced Technical Survey is to make an in depth analysis of a previously recorded mine/ERW contaminated area in the database or to find a new contaminated areas. This procedure will continue to get accurate contaminated areas with their threat level, real square meters, and importance to the community or development.

2. **Technical Survey** – is the intervention into a landmine hazardous area with manual demining teams, machines and dogs to confirm the presence of landmines identify the level of contamination and type of hazard and limit the boundaries of the hazard for further clearance if required. The TS/RRT once they go they finish every necessary work to do unless the area is extent and needs the clearance company's. This experience will continue to save time, cost, man power, demobilizing cost and to release the contaminated land to community on time for the development.

These procedures will continue in Combat Engineering Mina Action Office to get accurate contaminated areas & Free of mines/ERW with their threat level, real square meters, and importance to the community or development.

9. Efforts undertaken to ensure the effective exclusion of civilians from mined areas

During the project period the MRE trainers, for 191,502 female and 295,694 male totally 487,196 members of landmine impacted communities living close to mine clearance operation areas giving mine risk awareness to mitigate the threat posed by the presence of landmines and sensitized about mine action activities, mine/UXO risks and safe behaviors. While the role of the CLOs to link the community and the demining professionals during the clearance, UXO collection and demolition was crucial during the project. The CLOs role in prioritizing and implementing the erection of many more big size visibility billboards around previously cleared areas of the regions.

As the outcome of the awareness members of the communities are Reported 463 anti-personnel landmines, 154 anti-vehicle mines and 56,715 items of UXO that were found in communities for the subsequent disposal by EMAO's EOD professionals and Mine-risk

education; mitigating risks by helping people understand how to stay out of harm's way; preventing new victims resulted in reducing casualties close to zero. Large sized bill boards around cleared mined areas of Afar, Somali and Tigray regions are posted. This will help to aware people how the national demining effort and the joint cooperation with donor support the mine affected communities. The visible bill board will also facilitate the link for significant information flow from the community to the Mine action office or concerned local authority on new Landmine/UXO threats that could be discovered and indicates that the environments are free and safe from land mines to anyone.

Due to the fact when the mine fields were cleared from land mines and UXO, the MRE trainers /CLOs integrated with other Project man powers are giving awareness to the community to utilize the cleared areas for different developmental activities.

Table 12: Number of inhabitants who receive MRE/CL and items reported as of January 2012

Year	Male	Female	Total	AP	AT	UXO
2003	24,502	18,218	42,720	286	27	1,282
2004	64,136	48,060	112,196	21	34	3,885
2005	17,547	11,699	29,246	11	5	698
2006	40,140	24,850	64,990	44	8	26,900
2007	46,592	30,472	77,064	20	18	9,103
2008	27,373	15,572	42,945	21	19	2,316
2009	30,757	16,676	47,433	51	37	11,459
2010	28,132	16,218	44,350	2	5	498
2011	16,515	9,737	26,252	7	1	574
Grand Total	295,694	191,502	487,196	463	154	56,715

10. Resources made available to support progress made to date

Over the years, Ethiopia has benefited from a wealth of financial contributions from organizations and States to carry out its mine clearance operations beginning in 2001. Additionally, mine clearance operations have also been supported by yearly contributions, financial and in kind, directly from the Ethiopian government.

EMAO reported that the total cost of the programme activities implemented by the Organisation since 2002 reached around USD 80 million.

Table 13: Table of contributions to Ethiopia's demining program

Contribution to EMAO	USD
Ethiopian Government	8, 000,000
World Bank Loan ERP	15, 000,000
Donors through UNDP : European Union (EUR 16,000,000), Australia, Canada, China, Denmark, Germany, Italy, Japan, Netherlands, Norway, Sweden, UK, USA and UN/UNDP	34,000,000
Donors through NPA: Finland, Germany Norway, Netherlands, USA	19,000,000
Other bilateral and technical support	4,000,000
Total contributions 2001 to 2011	80,000,000

Additional support

Following the conflict with Eritrea in 2000 EMAO worked hard to develop its capacity with the technical assistance from NPA, UNDP and UNICEF. From 2005 to 2012, NPA supported EMAO in a number of areas including in the carrying out of approximately 52 surveys, the strengthening of EMAO's survey capacity, particularly with strengthening its land release methodologies, development of its MDD capacity amongst other support. In 2012 this MDD capacity, including 49 canines, was transferred to EMAO and subsequently transferred to the federal police.

11. Circumstances that impede compliance in a 10 year period

The circumstances that have impeded Ethiopia from being in a position to expect to be able to declare completion by its existing 1 June 2015 deadline include

- **Insecurity:-**Some of the suspected and known mine contaminated areas are located in border and remote areas where it is inaccessible for civilian demining staff in terms of security and safety.
- **Accessibility:-**Naturally unfriendly characterized by harsh climate, absence of basic social services for the supply of basic needs (including shelter, water, medical, infrastructure etc) and located in remote areas.
- **Operations:-**Continuous redeployment of demining teams in scattered minefield areas and absence of fund.
- **Insecurity:** Some of the suspected mine contaminated areas are located in border and remote areas where it is inaccessible for civilian demining staff in terms of security and safety.

- **Accessibility:** Naturally unfriendly characterized by harsh climate, absence of basic social services for the supply of basic needs (including shelter, water, medical, infrastructure etc) and located in remote areas. The remaining areas are located in remote parts of the country, typically in the Somali region, and, for security reasons, were not accessible to a civilian humanitarian agency like EMAO.
- **Limited operations:** Continuous redeployment of demining teams in scattered minefield areas and absence of fund.
- **New Hazards found:** As the surveys were carried out and the ELIS which was completed in 2004 came to a conclusion, new hazards were found which were added to the IMSMA data base.
- **Climatic Factor:** Three months out of the year mine action more or less comes to delay because of heavy rain in most part of Ethiopia. Lack of suitable roads and other infrastructures make it impossible for the teams to carry their operation and reach hazardous areas during the rainy season.
- **Lack of information:** there is not precise knowledge about the number and locations of all areas contaminated by landmines in the country. Ethiopia acknowledges that landmines may have been left because of lack of information during clearance operations, because of ground movements, exposure to rain or climatic conditions. It is also possible that more mines have been recently laid due to arising new conflicts. As observed in all countries that went through protracted periods of conflicts, a thin, diffuse, scattered residual contamination composed of various and heterogeneous unexploded devices –including landmines – will remain present for a long period. The scope of this residual contamination remains unknown in Ethiopia.

12. Nature and extent of the remaining Article 5 challenge: quantitative and qualitative aspects

As the ELIS there are 314 communities are known and suspected containing mines with a total of 1,193,168,623 square meters will remain to be addressed in order for Ethiopia to be in a position to declare completion of its obligations under Article 5, paragraph 1 of the Convention. These suspected areas did not include the border line between Ethiopia and Eritrea which is remained with suspected contaminated area, because the boundary was not demarked on the ground and no one can enter between the defence lines.

These areas are located in six regions Somali, Afar, Oromia, Gambela, Benshangul and Tigray. Ethiopia is requesting an extension of its deadline until 31 May 2020 (i.e., a Five years extension), on the basis that it is realistic, using all available demining assets in Ethiopia, that all the remaining 307 communities can be cleared and released within the Five years period.

Table 14: Summary of Demining Tasks for completion by May 2020

No.	Region	SHAs	Area in m2
1	Afar	14	3,670,349
2	Benshangul Gumz	2	45,000
3	Gambela	20	838,000
4	Oromia	13	1,121,105
5	Somali	262	1,186,897,180
6	Tigray	3	691,989
	Total	314	1,193,168,623

An analysis of past operational experience we estimate that following technical survey we will get 2-3% of the remained suspected areas will be confirmed as real mined areas that is 23.8-35.8 km².

The Tigray border mine field is suspended due to the insecurity to demine by civilian humanitarian demining, but now it is possible to clear the mine fields by military humanitarian demining operations. The Afar, Somali and Oromia mined areas present a particular challenge due to the insecurity, no social serves and mines in remote difficult to access areas. Gambela and Benshangul technical and logistical challenges (this is the problem of the infrastructure; roads, water, shelter, nearest Hospital places ...etc) to and in the mined areas the habitants who live on these areas are semi pastorals so there is no social serves in the areas.

13. Amount of time requested and a rationale for this amount of time

Federal Democratic Republic of Ethiopia is requesting an extension totalling Five years from 1 June 2015 until 31 May 2020, on the basis that:

The extension of Five years will focus exclusively on the 307 mine suspected hazardous areas covering 1,193,168,623square meters previously surveyed that will be cleared and verified by technical survey to be reduced and freed by land release technique.

It is logical that, utilizing all available demining assets in Ethiopia, all known minefields along the Ethiopian side of the border can be cleared in the five years period, including quality assurance and Mine risk education/community liaison work.

Under the proposed extension period of June 2015 to May 2020, All existing demining capacity in Ethiopia would concentrate on clearing and releasing the SHA's by advanced technical surveying the 307 mine suspected hazardous areas covering 1,193,168,623square meters that remained in the Six regions (Afar, Tigray, Benshangul, Gambela, Oromia and Somali) that gives the accurate location of land mines and figure of square meters of mine fields to fasten the clearance.

14. Detailed work plan for the period of the requested extension

With the responsibility of meeting Ethiopia's obligations under the AP Mine Ban Convention lying within the MoND. The MoND has begun to implement the plan to meet its objectives. The Combat engineers Mine Action Office planned to reach areas where EMAO have not, they are now accessible to demine and accomplish clearance activities on areas remaining after the closure of the EMAO.

The Work Plan for the five years extension period will include the remaining mine suspected areas in the six regions (Afar, Somali, Oromia, Gambela, Tigray and Benshangul).

The remaining mine suspected areas in those six regions NDF Combat Engineering Main Department (CEMD)plans to run advanced Technical Survey by TS/RRT teams to confirm exact mined area and to release the mine free mine suspected areas that fastens the clearance process and to save time consumption. The procedures to be applied will be.....

For this matter, the CEMAO considers the most cost efficient method of clearing and releasing these areas to be a combination of technical survey and mine clearance utilizing land release procedures to minimize the clearance of areas to only confirmed hazard areas. The National Defense force Combat Engineering main department considers manual clearance with mechanical vegetation cutting and ground preparation support as the simplest and most cost efficient method of clearance.

- Solicit and acquire the support of international advisors these supports are On Technical advisors; Trainers, EOD, QA and IMSMA experts that are going to carry out the data verification on the data base and to make fully efficient to the operations. The other experts are the advisers and evaluators of the clearance process that done by MoND Mine Action Office.
- Provide training and capacity building to demining teams, rapid response teams and EOD teams.
- To full equip Rapid Response Teams and EOD teams

- Complete the work of the Demining Training Centre left unfinished by Ex-EMAO
- To complete the survey and clearance of the remaining mined areas
- To clear out data's in NG IMSMA.

Before deploying clearance Companies and TS/RRT teams to those areas, the division has to work on refreshment capacity building by developing mine action standards through combat engineer teams, parallel to ERW clearance /spot task. The aim of this preparation and capacity building is to conduct training and clearance activities with minimal costs.

Basic Demining Course Training

During this training period four companies have to receive the basic humanitarian deminers training. The content of this training focus on: Explosive ordinance Disposal /EOD/, Explosives Remnants of war, Battle Area Clearance, Techniques of casualty evacuation /Casavac/, De-mining procedures, SOP's and First aid.

The humanitarian Demining basic refreshment course will be held from July 15/2015 to September 30/2015. Before the formal training session the trainers will receive an advance technical seminar for 3 days to strengthen their skills.

Established RRT and EOD Teams

In case of serving Rapid Responses for the communities having impact of remnants of war, the combat engineers division involving on reshuffling the structure of the Rapid Response Team and EOD teams. In addition to this the division equipped and engaged all available demining tools for the time being. On the other hand the division prepares a base camp for all teams close to the capital city Addis Ababa.

Deployment

- From December 01/2015 until end of May 2020 the four de-mining companies and 4 rapid response Teams will start the clearance and surveying the contaminated regions.

2015:

- Demining course training
- Establishment of RRT and EOD teams
- Deployment of the 4 demining companies to the regions of Somali, Tigray and Oromia

- Deployment of 4 teams of TS/ RRT to Afar, Gambela and Benshangul
- We expect that over the course of 2015 we will be able to address by non-technical and technical survey 452,890 square meters.
- We expect to clear 28,098,439 square meters

2016:

- Continued operations by the 8 teams through the region
- Deployment of 4 teams of TS/ RRT to Afar, Gambela, Oromia and Benshangul to conclude survey and in Somali continues.
- Over the course of 2016 we aim to define the areas more precisely for clearance and we expect over the course of 2016 we will be able to address be non-technical and technical land survey 515,171,855 square meters
- We expect to clear 4,881,052 square meters

2017:

- Continue work with the 4 demining companies in Somali and Oromia regions and 1 TS/RRT will clear Gambela region while the rest 3 TS/RRT teams are going to conclude survey in Somali region.
- We expect over the course of 2016 we will be able to address be non-technical and technical land survey 647,810,293 square meters
- We expect to clear 4,801,597 square meters
- Submit by April 2017 an updated work plan to the States Parties based on more precise information gathered through operations

Table 15: Estimated progress over the course of 2015 - 2017

		Afar	Benshangul Gumuz clearance	Gambela	Oromia	Somali	Tigray Clearance	Total
2015	Estimated number of areas to be addressed	3	2			6	1	12
	Estimated amount of area to be addressed	917587	22500			27,180,851	197,712	
2016	Estimated number of areas to be addressed	11	1	20	13	113	2	
	Estimated amount of area to be addressed	2,752,762	22500	838000	1026105	512,419,093	494277	
2017	Estimated number of areas to be addressed					143		
	Estimated amount of area to be addressed					647,810,293		

MILESTONES SURVEY ACHIEVEMENTS PER YEAR

Regions	2015		2016		2017	
	SHA	Area km²	SHA	Area km²	SHA	Area km²
Afar	3	911,587	11	2,758,762		
Benshangul	1		1			
Gambela	6	209526	14	628,474		
Oromia	3	256,526	10	864,579		
Somali	6	27,180,851	113	511,906,036	143	647,810,293
Tigray	3	1,300,000				
Total	22	29,858,490	149	516,157,851	143	647,810,293

MILESTONES CLEARANCE ACHIEVEMENTS PER YEAR

Unit	YEARS			
	2015	2016	2017	2018-2020
Coy 1 & 2	230,663	2,484,000	2,484,000	Clearance will
Coy-3	98,856	1,186,268	1,186,268	Continue in
Coy-4	98,856	1,186,268	1,087,412	Surveyed areas
TS/RRT 1	11,250	11,250	41,900	mainly in Somali
TS/RRT 2	11,250	11,250		Region
Total	452,890	4,881,052	4,801,597	

In calculating the clearance costs the, following factors were considered:

- The average m2 of the minefields.
- Manual, detector mine clearance will be possible supported by mechanical vegetation cutting in minefields.
- To replace the old materials and de-mining equipments additional materials and demining equipment will have to be purchased for use on the minefields.
- For large, poorly-defined mine suspected areas, land release procedures and technical survey will be used to limit full-manual clearance to confirmed hazard areas.
- Clearance is possible throughout the year, but more less three months out of the year mine action comes to a halt because of heavy rain.
- May 2020 will be the expected deadline to complete clearance.

By deploying all available demining assets of the Four Demining companies to the regions Somali, Afar, Tigray and Oromia in October 2015, Gambela and Benshangul the 4 Teams of TS/RRT teams to survey and clearing it from October 2015. It is estimated that all hazard areas within Ethiopia can be concluded by May 2020 at an average cost of \$1.5 USD per square meter. The ELIS estimated square meters is 1,193,168,623 m² , but end of the survey of TS/RRT it will be reduced and 2% of the ELIS estimated can be the real mined field and the rest will be freed by land release process. So the estimated mine field will be 24,752,656 square meters. The estimated cost will be 24,752,656 x 1.5= 37,127,484.00 USD. Even though the average cost per square meter in remote areas that are difficult to accesses is higher than the normal areas.

Table 16: 2015-2020 Estimated costs in USD for demining operations by hazard area

Region	Communities	Estimated ELIS	ELIS estimation of 2% Area (m2)	Cost USD	Demining Operator
Somali	262	1,186,897,180	23,737,944	35,606,916.00	CEMD
Tigray confirmed MF	3		691,989	1,037,983.000	CEMD
Oromia	13	1,121,105	51,305	76,957.00	CEMD
Afar	14	3,670,349	183,513	275,297.00	CEMD
Benshangul Confirmed MF	2		45,000	225,000.00	CEMD
Gambela	20	838,000	41,900	62,800.00	CEMD
Total	314	1,193,871,634	24,751,656	37,127,484.00	

Table 17: Summary of Costs to Demine Ethiopia by May 2020

Summary of Costs	USD
Demining Operations in the Regions	26,,276,490.40
Quality Assurance and Information Management	1,856,374,.20
Training and Equipment to Manage Residual Issues	7,425,496.80
Coordination and Administration	5,569,122.60
TOTAL	37,127,484.00

In total it is estimated that **\$37,127,484.00 USD** will be required to demine the remaining mine suspected areas in the Six regions of Ethiopia. The contribution of the Ethiopia is most of the Administrational costs will be covered. This includes all associated costs for Quality Assurance, Information Management, coordination and training a national capacity that will respond to the threat of residual UXO's and Explosive Remnants of War other than landmines that will inevitably remain after the 2020 deadline. A breakdown of the estimated costs is included in Table 17.

The plan is based on the fact that the security situation will improve in all the regions contaminated by mines and ERW. Presently the regions are accessible from a security point of view for the demining teams to reach the hazardous areas.

Funding is another major concern and all plans are based on adequate funding to the programme. Presently only National Defense Combat Engineering Main Department demining companies will work in Ethiopia. It is hoped that other international NGOs companies will come to Ethiopia which can participated on the technical support, material and funds will have a positive impact on the overall out of cleared areas.

Lack of funding and technical support is the concern that has to be taken into consideration. Population movements, high metallic contents in hazardous areas and heavy rainy season will delay the clearance process.

During the extension period, clearing all mines and ERW will require other International NGO's to support Ethiopia technically and financially which have a good experience on Mine Action works. Ethiopia Resource mobilization strategy is geared to meet the overall objectives of Ethiopia Mine Action's national and international obligations in terms of Humanitarian Mine Action to:

1. Increase donations from donors

2. Assess budget of Government Contribution

It is also important to point out that the progress over the next years as well as the overall budget is all an estimations based on the currently knowledge we have on the actual remaining challenge. The 314 affected SHAs which were activities will take place are on mined areas and in suspected areas. Further survey will provide more precise information on the challenge and allow for more detailed and precise planning in the future. Ethiopia is committed to keep the States Parties informed on progress over the course of the next years as Ethiopia gains greater knowledge of its remaining contamination.

15. Institutional, human resource and material capacity

The recent Operational capacity is

- 4 Manual clearance companies
- 2 Technical Survey/Rapid Response Teams
- 2 EOD Special Teams
- 6 Ground preparation machines

EMAO's operational capability consists of:

- 5 manual clearance companies;
- 17 Mine Detection Dog (MDD) teams;
- 6 ground preparation machines;
- 5 Technical Survey / Rapid Response (TS/RR) teams; and
- MRE & CL personnel attached to companies & TS/RR teams.

1 Company / 90 total / 6 Bozena teams / 2 technical survey / 2 EOD special teams (rapid response) / 4 demining units

16. Conclusion

All mine action operations (manual demining, MDD, TS, RRT and MRE/CL) activities and accomplishments, EMAO has adhered to international and national standards implementing enhanced quality assurance and close monitoring and evaluation systems and process, and building the technical expertise of its staff. All these efforts have improved the overall organizational and programmatic capacity of EMAO that enabled it to efficiently implement the project.

The above achievements, according to data collected in sample cases, have significantly increased access to food security, enhance peace and security and contributed to the overall socio-economic improvements of mine affected communities. The efforts put forth by Ethiopia have placed it on the right track to clear Ethiopia from landmine contamination and fulfill the legal obligation of the Mine Ban Treaty. Ethiopia successful achievement has also contributed to the overall development of the nation as part of the wider poverty reduction programme.

The Ethiopian National Defense Combat Engineering Main Department will continue, as former Ethiopian Mine Action Office has done the clearance with all qualities and managerial experiences. To release the remaining contaminated land to the communities and to use for development, increase access, food security, and socio-economic improvements and enhance peace and security. This leads us successfully to accomplish the clearance of contaminated areas from land mines and fulfill the legal obligation of the Anti-Personnel Mine Ban Treaty by the 2020.

Annex I: Areas remaining to be addressed and expected completion date

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
1	ELIS-1918-1	Afar	Afambo	Daka	30,000	Survey and Clearance in Afar region will be concluded by End of 2016
2	ELIS-1917-1	Afar	Afambo	Daka	100,000	
3	ELIS-1782-2	Afar	Elidar	Lamsan	60,000	
4	ELIS-1782-1	Afar	Elidar	Lamsan	80,049	
5	ELIS-1781-1	Afar	Elidar	Lamsan	480,000	
6	ELIS-1780-1	Afar	Elidar	Lamsan	1,000,000	
7	ELIS-1779-2	Afar	Elidar	Lamsan	120,000	
8	ELIS-1779-1	Afar	Elidar	Lamsan	15,000	
9	ELIS-1069-1	Afar	Berahle	Aynedib	200,000	
10	ELIS-1065-1	Afar	Dalul	Gersat	225,000	
11	ELIS-1070-1	Afar	Dalul	Gersat	300,000	
12	ELIS-1060-1	Afar	Dalul	Gersat	300,000	
13	ELIS-1060-2	Afar	Dalul	Gersat	160,300	
14	ELIS-1060-3	Afar	Dalul	Gersat	600,000	
15	ELIS-1487-1	Benshangul	Komosha	Dunga	5,000	Survey and Clearance in Benshangul Region will be concluded By the first quarter of 2016
16	ELIS-1491-1	Benshangul	Kumruk	Horazahab	40,000	
17	ELIS-2383-1	Gambella	Akobo	Babe	10000	Survey of the Gambela Region will be Concluded by the end of 2016 survey and Clearance by the First quarter of 2017
18	ELIS-2384-1	Gambella	Akobo	Belnafign	2500	
19	ELIS-2397-1	Gambella	Akobo	Buray	0	
20	ELIS-2393-1	Gambella	Akobo	Chod Joke	28000	
21	ELIS-2393-2	Gambella	Akobo	Chod Joke	200000	
22	ELIS-2380-1	Gambella	Akobo	Debok	0	
23	ELIS-2379-2	Gambella	Akobo	Denbogne	10000	
24	ELIS-2379-1	Gambella	Akobo	Denbogne	20000	
25	ELIS-2400-2	Gambella	Akobo	Egnale	0	
26	ELIS-2400-3	Gambella	Akobo	Egnale	0	
27	ELIS-2396-1	Gambella	Akobo	Gangrial	10000	
28	ELIS-2390-1	Gambella	Akobo	Kognerek	0	
29	ELIS-2398-1	Gambella	Akobo	Madigne	10000	
30	ELIS-2382-2	Gambella	Akobo	Malow	200000	
31	ELIS-2402-1	Gambella	Akobo	Pone	0	
32	ELIS-2386-1	Gambella	Akobo	Ragne	5000	
33	ELIS-2387-1	Gambella	Akobo	Tergole	20000	
34	ELIS-2388-1	Gambella	Akobo	Tore	20000	
35	ELIS-2403-1	Gambella	Akobo	Ulake	2500	
36	ELIS-2389-1	Gambella	Akobo	Yeryer	300000	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
37	ELIS-0390-1	Oromia	E/Harargea	Babile	2,000	Survey and clearance of the Oromia Region will be concluded by the end of 2016
38	ELIS-0394-1	Oromia	E/Harargea	Babile	10,000	
39	ELIS-0394-2	Oromia	E/Harargea	Babile	10,000	
40	ELIS-0391-1	Oromia	E/Harargea	Babile	20,000	
41	ELIS-0431-1	Oromia	E/Harargea	Gursum	20,000	
42	ELIS-0438-2	Oromia	E/Harargea	Gursum	10,000	
43	ELIS-0432-1	Oromia	E/Harargea	Gursum	20,500	
44	ELIS-0432-2	Oromia	E/Harargea	Gursum	7,500	
45	ELIS-2100-1	Oromia	E/Shoa	Akaki	20000	
46	ELIS-2102-1	Oromia	E/Shoa	Akaki	1000000	
47	ELIS-1734-1	Oromia	W/Wellega	Mena Sibü	5	
48	ELIS-2298-1	Oromia	Shoa	Chelina	300	
49	ELIS-2296-1	Oromia	Shoa	Meta Robi	800	
50	ELIS-1820-1	Somali	Bare	Aelhare	30,000	
51	ELIS-1823-1	Somali	Bare	Aelhare	7,500	
52	ELIS-1823-2	Somali	Bare	Aelhare	5,004	
53	ELIS-1816-1	Somali	Bare	Gamobade	20,000	
54	ELIS-1816-2	Somali	Bare	Gamobade	8,000	
55	ELIS-1812-1	Somali	Bare	Gamobade	5,000	
56	ELIS-1814-1	Somali	Bare	Gamobade	50,000	
57	ELIS-1629-1	Somali	Chererti	Hunde	255,000	
58	ELIS-1628-1	Somali	Chererti	Hur Arebo	25,000	
59	ELIS-1874-1	Somali	Dolobay	Alen	20,000	
60	ELIS-1871-1	Somali	Dolobay	Bengol	50,000	
61	ELIS-1858-1	Somali	Dolobay	Bengol	50,000	
62	ELIS-1858-2	Somali	Dolobay	Bengol	20,000	
63	ELIS-1857-1	Somali	Dolobay	Garba Guracha	30,000	
64	ELIS-1630-1	Somali	Gura Baqaqsa	Hardaka	50,000	
65	ELIS-2957-1	Somali	Aware	Aaboker	3,000,000	
66	ELIS-2955-1	Somali	Aware	Aaboker	3,000,000	
67	ELIS-2961-1	Somali	Aware	Aaboker	21,000,000	
68	ELIS-2960-1	Somali	Aware	Aaboker	4,000,000	
69	ELIS-2994-1	Somali	Aware	Aware Kebele 01	60,000	
70	ELIS-2971-1	Somali	Aware	Aware Kebele 02	10,900	
71	ELIS-2956-1	Somali	Aware	Bisade	10,000	
72	ELIS-2963-1	Somali	Aware	Bukudewo	600,000,000	
73	ELIS-2951-2	Somali	Aware	Dhagh Ture	150,000	
74	ELIS-2951-1	Somali	Aware	Dhagh Ture	2,000,000	
75	ELIS-2947-1	Somali	Aware	Dhagh Ture	10,000	
76	ELIS-2945-1	Somali	Aware	Dhagh Ture	250,000	
77	ELIS-2958-1	Somali	Aware	Dhagh Ture	40,000,000	
78	ELIS-2969-1	Somali	Aware	Dusmo	10,000	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
79	ELIS-2969-2	Somali	Aware	Dusmo	250,000	
80	ELIS-2959-1	Somali	Aware	Gashanka	2,000,000	
81	ELIS-2968-1	Somali	Aware	Inaguha	3,000,000	
82	ELIS-2965-1	Somali	Aware	Inaguha	6,000,000	
83	ELIS-2964-1	Somali	Aware	Kamtug	6,000,000	
84	ELIS-2966-1	Somali	Aware	Kamtug	150,000	
85	ELIS-2962-1	Somali	Aware	Kamtug	10,000	
86	ELIS-2950-2	Somali	Aware	Kora	15,000	
87	ELIS-2950-1	Somali	Aware	Kora	25,000	
88	ELIS-2967-1	Somali	Aware	Lan Kyrta	10,200	
89	ELIS-3037-1	Somali	Degehabur	Gohidi	250,000	
90	ELIS-3103-1	Somali	Degehabur	Gosoleley	600000	
91	ELIS-3065-1	Somali	Degehabur	Labig	25000	
92	ELIS-3079-1	Somali	Degehamedo	Dagh Madow 02	10000	
93	ELIS-3064-1	Somali	Degehamedo	Diba	16000000	
94	ELIS-3073-1	Somali	Degehamedo	Gubdigon	10000	
95	ELIS-3087-1	Somali	Misrak Gashamo	Dabagorayale	15000	
96	ELIS-2939-2	Somali	Misrak Gashamo	Dungis	16000000	
97	ELIS-2939-1	Somali	Misrak Gashamo	Dungis	10000000	
98	ELIS-2936-1	Somali	Misrak Gashamo	Dungis	10000	
99	ELIS-2934-1	Somali	Misrak Gashamo	Dungis	10000	
100	ELIS-2927-1	Somali	Misrak Gashamo	Halhalis	15000000	
101	ELIS-2941-1	Somali	Misrak Gashamo	Halhalis	1500	
102	ELIS-2938-1	Somali	Misrak Gashamo	Katumo	10000	
103	ELIS-2937-1	Somali	Misrak Gashamo	Katumo	10000	
104	ELIS-2933-1	Somali	Misrak Gashamo	Katumo	320000	
105	ELIS-2935-1	Somali	Misrak Gashamo	Lanmulaho	25000	
106	ELIS-3081-1	Somali	Dihun	Duhun	60000	
107	ELIS-3078-1	Somali	Dihun	Hidmarodile	750000	
108	ELIS-2096-1	Somali	Fik	Aloosane	10000000	
109	ELIS-2072-1	Somali	Fik	Aloosane	40000	
110	ELIS-2090-1	Somali	Fik	Awsmaan	40000	
111	ELIS-2024-1	Somali	Fik	Bashuro	500000	
112	ELIS-2081-1	Somali	Fik	Danga	10000	
113	ELIS-2039-1	Somali	Fik	Danga	10000000	
114	ELIS-1856-1	Somali	Fik	DunDumo Adka	500000	
115	ELIS-2098-1	Somali	Fik	DunDumo Adka	100000	
116	ELIS-2089-1	Somali	Fik	DunDumo Adka	80000	
117	ELIS-2319-1	Somali	Fik	Galacha 03	75000	
118	ELIS-2325-1	Somali	Fik	Galacha 01	10,000	
119	ELIS-2321-1	Somali	Fik	Galacha 01	4,000,000	

120	ELIS-2066-1	Somali	Fik	Hardagah	10,000	
121	ELIS-1844-1	Somali	Fik	Hardagah	2,000,000	
122	ELIS-1967-1	Somali	Fik	Hodan Wayne	100,000	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
123	ELIS-2099-1	Somali	Fik	Hodan Wayne	60,000	
124	ELIS-2035-1	Somali	Fik	Hodan Wayne	7,500	
125	ELIS-2041-1	Somali	Fik	Hodan Wayne	80,000	
126	ELIS-2065-1	Somali	Fik	Hodan Wayne	10,000	
127	ELIS-2069-1	Somali	Fik	Hodan Wayne	10,000	
128	ELIS-2036-1	Somali	Fik	Jerinka	30,000	
129	ELIS-2070-1	Somali	Fik	Jerinka	3,000,000	
130	ELIS-2078-1	Somali	Fik	Jerinka	10,000,000	
131	ELIS-2094-1	Somali	Fik	Jerinka	1,000,000	
132	ELIS-2079-2	Somali	Fik	Jerinka	80,000	
133	ELIS-2079-1	Somali	Fik	Jerinka	500,000	
134	ELIS-2088-1	Somali	Fik	Jerinka	40,000	
135	ELIS-2031-1	Somali	Fik	Jerinka	400,000	
136	ELIS-2027-1	Somali	Fik	Kudamaydel	120,000	
137	ELIS-2083-1	Somali	Fik	Kudamaydel	60,000	
138	ELIS-2071-1	Somali	Fik	Shiniga	10,000	
139	ELIS-2032-1	Somali	Fik	Tukale	4,000,000	
140	ELIS-2092-1	Somali	Fik	Tukale	25,000	
141	ELIS-2084-1	Somali	Fik	Tukale	10,000	
142	ELIS-2097-1	Somali	Fik	Tukale	10,000	
143	ELIS-2093-1	Somali	Fik	Tukale	25,000,000	
144	ELIS-2025-1	Somali	Fik	Tukale	1,000,000	
145	ELIS-2068-1	Somali	Fik	Tukale	20,000,000	
146	ELIS-2064-1	Somali	Fik	Tukale	2,500,000	
147	ELIS-2915-1	Somali	Gerbo	Darder	40,000	
148	ELIS-2600-1	Somali	Gerbo	Darder	28,000	
149	ELIS-2916-1	Somali	Gerbo	Darisalan	10,000	
150	ELIS-2719-1	Somali	Gerbo	Darisalan	10,000	
151	ELIS-2593-1	Somali	Gerbo	Darisalan	10,000	
152	ELIS-2596-1	Somali	Gerbo	Darisalan	13,000	
153	ELIS-2720-1	Somali	Gerbo	Darisalan	10,000,000	
154	ELIS-2599-1	Somali	Gerbo	Darisalan	540,000	
155	ELIS-2721-1	Somali	Gerbo	Darisalan	6,000,000	
156	ELIS-2595-1	Somali	Gerbo	Darisalan	10,000	
157	ELIS-2583-1	Somali	Gerbo	Gari Goan	10,000	
158	ELIS-2597-1	Somali	Gerbo	Gari Goan	10,000	
159	ELIS-2913-1	Somali	Gerbo	Gari Goan	4,000,000	
160	ELIS-2717-1	Somali	Gerbo	Gari Goan	12,000	
161	ELIS-2717-2	Somali	Gerbo	Gari Goan	36,000	
162	ELIS-2584-1	Somali	Gerbo	Gari Goan	10,000,000	
163	ELIS-2723-1	Somali	Gerbo	Helo Dere	16,000	

164	ELIS-2594-1	Somali	Gerbo	Helo Dere	600,000	
165	ELIS-2722-1	Somali	Gerbo	Maleko	10,000,000	
166	ELIS-2725-1	Somali	Gerbo	Maleko	10,000	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
167	ELIS-2716-1	Somali	Gerbo	Maleko	45,000	
168	ELIS-2604-2	Somali	Gerbo	Mugweyn	25,250	
169	ELIS-2601-1	Somali	Gerbo	Mugweyn	10,000	
170	ELIS-2586-1	Somali	Gerbo	Mugweyn	6,000,000	
171	ELIS-2598-1	Somali	Gerbo	Raso	36,000	
172	ELIS-2591-1	Somali	Gerbo	Raso	10,000,000	
173	ELIS-3084-1	Somali	Hamero	Gasangas	10,000	
174	ELIS-3076-1	Somali	Hamero	Godi	10,000	
175	ELIS-3083-1	Somali	Hamero	Hamaro-02	10,000	
176	ELIS-3082-1	Somali	Hamero	Sammalmale	10,000	
177	ELIS-3069-1	Somali	Mlmulko	Rakey	6,000,000	
178	ELIS-2375-1	Somali	Sagiagi	Ali Fan Ad	6,000	
179	ELIS-2381-1	Somali	Sagiagi	Ali Fan Ad	24,000	
180	ELIS-2366-1	Somali	Sagiagi	Ali Fan Ad	250,000	
181	ELIS-2345-1	Somali	Sagiagi	Ali Fan Ad	6,000,000	
182	ELIS-2358-1	Somali	Sagiagi	Ali Fan Ad	900,000	
183	ELIS-2353-1	Somali	Sagiagi	Ali Fan Ad	1,000,000	
184	ELIS-2575-1	Somali	Sagiagi	Barkomal	10,000	
185	ELIS-2376-1	Somali	Sagiagi	Barkomal	10,000	
186	ELIS-2326-1	Somali	Sagiagi	Barkomal	6,000,000	
187	ELIS-2349-1	Somali	Sagiagi	Barkomal	20,000,000	
188	ELIS-2588-1	Somali	Sagiagi	Barkomal	10,000	
189	ELIS-3070-1	Somali	Sagiagi	Barkomal	1,000,000	
190	ELIS-2356-1	Somali	Sagiagi	Ebla Ad	10,000	
191	ELIS-2371-1	Somali	Sagiagi	Ebla Ad	15,000,000	
192	ELIS-2392-1	Somali	Sagiagi	Ebla Ad	400,000	
193	ELIS-2577-1	Somali	Sagiagi	Ebla Ad	10,000	
194	ELIS-2354-1	Somali	Sagiagi	Ebla Ad	10,000	
195	ELIS-2365-1	Somali	Sagiagi	Ebla Ad	12,000,000	
196	ELIS-2369-1	Somali	Sagiagi	Ebla Ad	2,500,000	
197	ELIS-2602-1	Somali	Sagiagi	Ebla Ad	100,000	
198	ELIS-2332-1	Somali	Sagiagi	Fulunful	160,000	
199	ELIS-2378-1	Somali	Sagiagi	Fulunful	6,000,000	
200	ELIS-2350-1	Somali	Sagiagi	Fulunful	10,000	
201	ELIS-2333-1	Somali	Sagiagi	Fulunful	9,000	
202	ELIS-2377-1	Somali	Sagiagi	Fulunful	10,000,000	
203	ELIS-2363-1	Somali	Sagiagi	Horo Kalifo	30,000	
204	ELIS-2342-1	Somali	Sagiagi	Horo Kalifo	1,500,000	
205	ELIS-2585-1	Somali	Sagiagi	Horo Kalifo	750,000	
206	ELIS-2573-1	Somali	Sagiagi	Horo Kalifo	10,000	

207	ELIS-2582-1	Somali	Sagiagi	Horo Shirwa	120,000	
208	ELIS-2339-1	Somali	Sagiagi	Horo Shirwa	2,000,000	
209	ELIS-2343-1	Somali	Sagiagi	Barkadle	160,000	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
210	ELIS-2352-2	Somali	Sagiagi	Barkadle	1,000,000	
211	ELIS-2341-1	Somali	Sagiagi	Barkadle	500,000	
212	ELIS-2327-1	Somali	Sagiagi	Barkadle	6,000,000	
213	ELIS-2355-1	Somali	Sagiagi	Barkadle	9,000,000	
214	ELIS-2579-1	Somali	Sagiagi	Barkadle	100,000	
215	ELIS-2373-1	Somali	Sagiagi	Barkadle	10,000	
216	ELIS-2337-1	Somali	Sagiagi	Barkadle	10,000	
217	ELIS-2362-1	Somali	Sagiagi	Barkadle	1,300,000	
218	ELIS-2344-1	Somali	Sagiagi	Sagiga 01 kebele	10,000	
219	ELIS-2374-1	Somali	Sagiagi	Sagiga 01 kebele	12,000,000	
220	ELIS-2336-1	Somali	Sagiagi	Sagiga 01 kebele	10,000	
221	ELIS-2340-1	Somali	Sagiagi	Sagiga 01 kebele	600,000	
222	ELIS-2340-2	Somali	Sagiagi	Sagiga 01 kebele	160,000	
223	ELIS-2364-1	Somali	Sagiagi	Sagiga 01 kebele	3,000,000	
224	ELIS-2329-1	Somali	Sagiagi	Sagiga 01 kebele	200,000	
225	ELIS-2368-1	Somali	Sagiagi	Sagiga 01 kebele	10,000	
226	ELIS-2587-1	Somali	Sagiagi	Sangal	10,000	
227	ELIS-2338-1	Somali	Sagiagi	Sangal	1,000,000	
228	ELIS-2367-1	Somali	Sagiagi	Sangal	14,000	
229	ELIS-2347-1	Somali	Sagiagi	Yahob	240,000	
230	ELIS-2578-1	Somali	Sagiagi	Yahob	600,000	
231	ELIS-2580-1	Somali	Sagiagi	Yahob	15,000,000	
232	ELIS-2351-1	Somali	Sagiagi	Yahob	1,500,000	
233	ELIS-2811-1	Somali	Adadle	Jirey	2,500	
234	ELIS-2809-1	Somali	Adadle	Kudaley	5,000	
235	ELIS-2983-1	Somali	Denan	Danan 01	1,000	
236	ELIS-2997-1	Somali	Denan	Danan 02	10,000	
237	ELIS-2995-1	Somali	Denan	Danan 02	20,000	
238	ELIS-2974-1	Somali	Denan	Danbarweyne	20,000	
239	ELIS-2987-1	Somali	Denan	Danbarweyne	10,000	
240	ELIS-2990-1	Somali	Denan	Ijeed	200,000	
241	ELIS-2982-1	Somali	Denan	Ijeed	1,000	
242	ELIS-2986-1	Somali	Denan	Shinile	10,000	
243	ELIS-2989-1	Somali	Denan	Shinile	20,000	
244	ELIS-2984-1	Somali	Denan	Shinile	20,000	
245	ELIS-2810-1	Somali	Emey	Buhodle	10,000	
246	ELIS-2807-1	Somali	Emey	Buhodle	50,000	
247	ELIS-2804-1	Somali	Emey	Emey 02	5,000	
248	ELIS-2755-1	Somali	Emey	Goljano	20,000	
249	ELIS-2825-1	Somali	Emey	Habiso	10,000	

250	ELIS-2812-1	Somali	Emey	Habiso	10,000
251	ELIS-2899-1	Somali	Fer Fer	Aballey	5,000
252	ELIS-2897-1	Somali	Fer Fer	Aballey	20,000

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
253	ELIS-2902-1	Somali	Fer Fer	Barmagog	40,000	
254	ELIS-2887-1	Somali	Fer Fer	Burdinle	30,000	
255	ELIS-2887-2	Somali	Fer Fer	Burdinle	30,000	
256	ELIS-2885-1	Somali	Fer Fer	Tawakal	125,000	
257	ELIS-2904-1	Somali	Fer Fer	Tawakal	20,000	
258	ELIS-2467-1	Somali	Gode	Bargun	10,000	
259	ELIS-2464-1	Somali	Gode	Karinka	7,000	
260	ELIS-2471-1	Somali	Gode	Karinka	122,500	
261	ELIS-2455-1	Somali	Gode	Karinka	10,000	
262	ELIS-2455-2	Somali	Gode	Karinka	10,000	
263	ELIS-2411-1	Somali	Gode	Lab	125,000	
264	ELIS-2448-1	Somali	Gode	Lab	2,000	
265	ELIS-2414-1	Somali	Gode	Lab	60,000	
266	ELIS-2454-1	Somali	Gode	Lab	2,000	
267	ELIS-2883-1	Somali	Kelafo	Afdub	50,000	
268	ELIS-2877-1	Somali	Kelafo	Boholo-Was	450,000	
269	ELIS-2873-1	Somali	Mustahil	Bardon	45,000	
270	ELIS-2850-1	Somali	Mustahil	Kalaman	7,500	
271	ELIS-2872-1	Somali	Mustahil	Saba-Hume	80,000	
272	ELIS-0748-1	Somali	Kebribeyah	Alaybede 03	15,000	
273	ELIS-0751-1	Somali	Kebribeyah	Alyibede	12,500	
274	ELIS-0749-1	Somali	Kebribeyah	Alyibede	10,000	
275	ELIS-0749-2	Somali	Kebribeyah	Alyibede	10,000	
276	ELIS-0737-1	Somali	Kebribeyah	Debile	10,000	
277	ELIS-0747-1	Somali	Kebribeyah	Dubule Two	5,000	
278	ELIS-0826-1	Somali	Kebribeyah	Durwale	80,000	
279	ELIS-0717-1	Somali	Kebribeyah	Durwale	10,075	
280	ELIS-2623-1	Somali	Kebridehar	Dere	7,000,000	
281	ELIS-2607-1	Somali	Kebridehar	Dere	1,796,351	
282	ELIS-2654-1	Somali	Kebridehar	Folgeh	2,000	
283	ELIS-2610-2	Somali	Kebridehar	Folgeh	5,000,000	
284	ELIS-2610-3	Somali	Kebridehar	Folgeh	50,000	
285	ELIS-2610-1	Somali	Kebridehar	Folgeh	15,000	
286	ELIS-2605-1	Somali	Kebridehar	Galadid	8,000	
287	ELIS-2638-1	Somali	Kebridehar	Galadid	5,000	
288	ELIS-2985-1	Somali	Kebridehar	Gielle	100	
289	ELIS-2655-1	Somali	Kebridehar	Gobo Gabo	21,000	
290	ELIS-2644-1	Somali	Kebridehar	K/dahar 01	15,000	
291	ELIS-2658-2	Somali	Kebridehar	Kebtineg	50,000,000	
292	ELIS-2658-1	Somali	Kebridehar	Kebtineg	70,000,000	

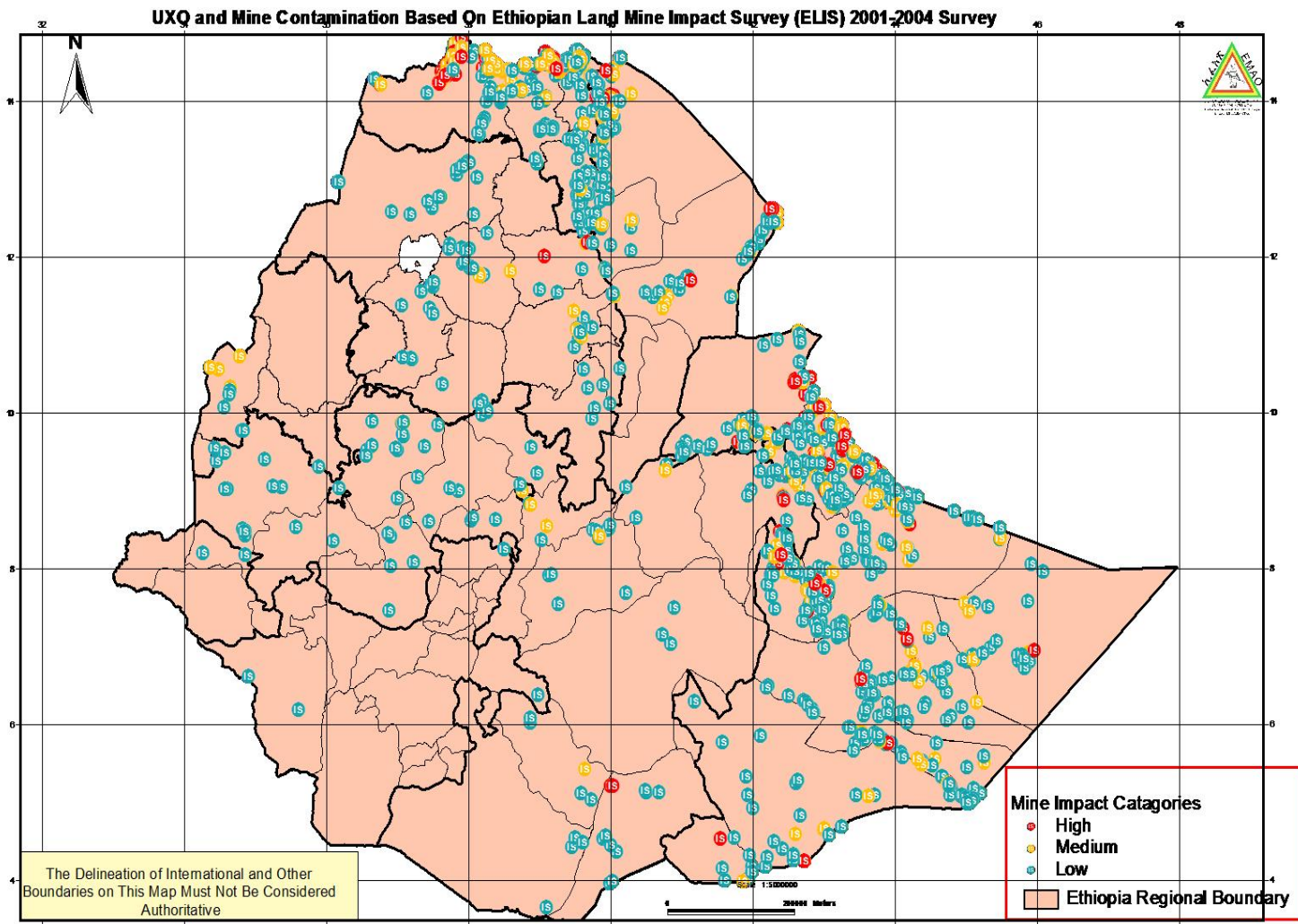
293	ELIS-2661-1	Somali	Kebridehar	Kerinbsk	104,000	
294	ELIS-2661-2	Somali	Kebridehar	Kerinbsk	18,800	
295	ELIS-2637-1	Somali	Kebridehar	Malka Afawayn	137,500	

No.	Record Number	Regions	Wereda	Community	Area (square meters) suspected to contain anti-personnel mines	Estimated date of completion (year-end)
296	ELIS-2649-1	Somali	Kebridehar	Tayine	100,000	
297	ELIS-2634-2	Somali	Kebridehar	Tayine	1,500	
298	ELIS-2634-1	Somali	Kebridehar	Tayine	20,000	
299	ELIS-2619-1	Somali	Kebridehar	Tayine	80,000	
300	ELIS-2640-1	Somali	Kebridehar	Tayine	35,000	
301	ELIS-2639-1	Somali	Shekosh	Gedarmi	40,000	
302	ELIS-2651-1	Somali	Shekosh	Wich Wachi	600,000	
303	ELIS-2616-1	Somali	Shilabo	Labobar	10,000	
304	ELIS-2628-1	Somali	Danot	Kurile	200,000	
305	ELIS-2629-1	Somali	Danot	Kurile	1,500,000	
306	ELIS-2627-1	Somali	Danot	Kurile	200,000	
307	ELIS-2678-1	Somali	Warder	Wafdug	100,000	
308	ELIS-2667-1	Somali	Warder	Wafdug	5,000	
309	ELIS-2671-1	Somali	Warder	Youb	100,000	
310	ELIS-2679-1	Somali	Warder	Youb	10,000	
311	ELIS-2680-1	Somali	Warder	Youb	10,000	
312	ELIS-0563-1	Tigray	Mereb Lehe	Habtemariam	750,000	
313	ELIS-3110-1	Tigray	Mereb Lehe	Habtemariam	300,000	
314	ELIS-3110-2	Tigray	Mereb Lehe	Habtemariam	250,000	
TOTAL					1193871634	

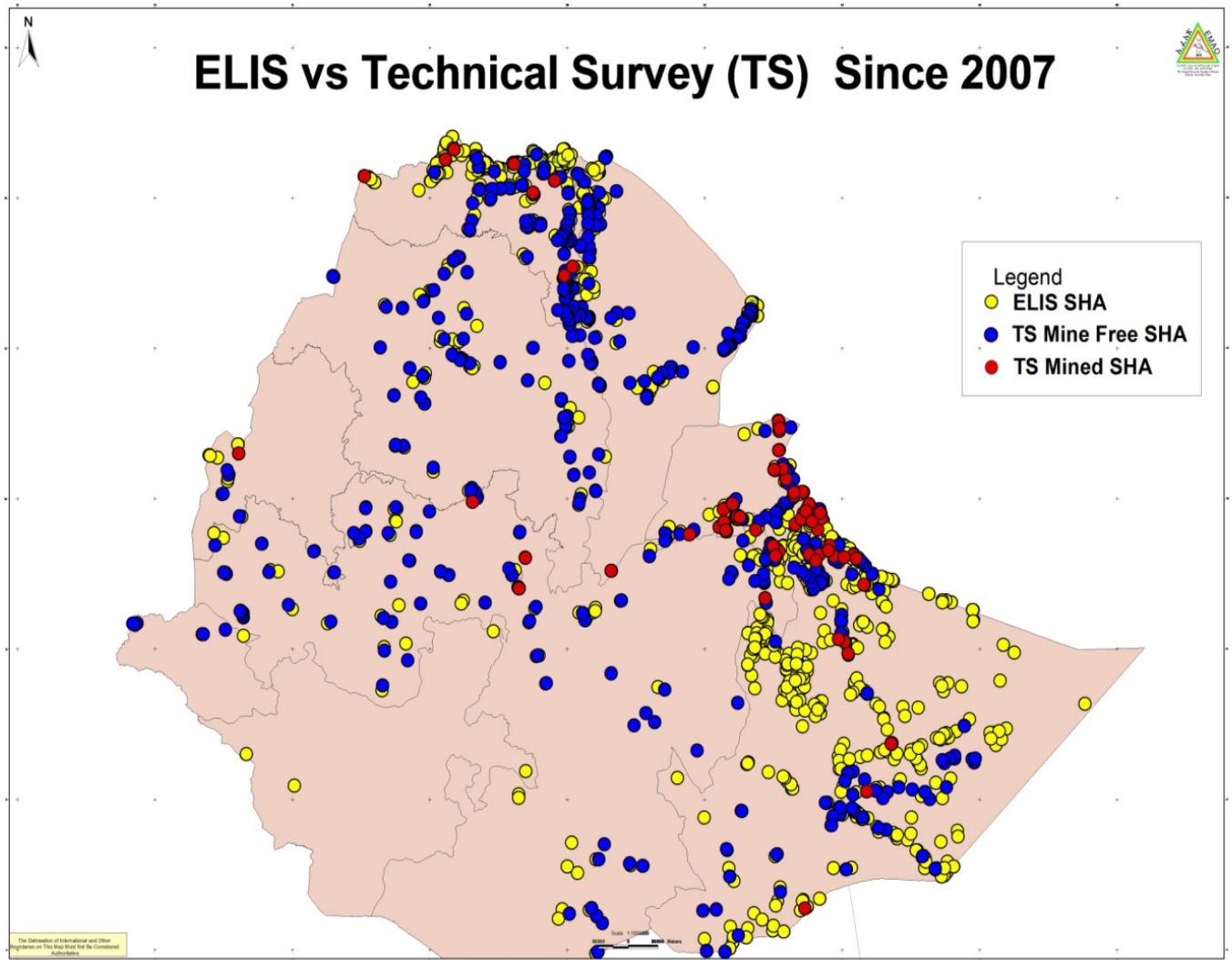
Annex II: Map of Ethiopia's eleven regions



Annex III: ELIS map of suspected hazardous areas



Annex IV: Map of revised ELIS data from nationwide technical survey since 2007



Annex V: Integrated demining operations and achievements



