Explosive Remnants of War: A War after the War?

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Abstract

Explosive Remnants of War (ERW) pose significant humanitarian problems to the civilians as well as to the governments in post conflict situations. People continue to be at risk even after the war due to the presence of ERW. The issue of ERW has in fact shifted the focus of the international community from the immediate impacts of the weapons to their long term effects. In response to this, states concluded a landmark agreement, Protocol V to the UN Convention on Certain Conventional Weapons in 2003 (CCW). This Protocol aims at providing a proper mechanism to deal with ERW threat. Meanwhile, with the beginning of the new century and the emergence of newly sophisticated weapons the debate over the ERW got shifted to one of the most menacing category of weapons called cluster munitions. Again, responding to the problem, the state parties adopted the Convention of Cluster Munitions 2003 which bans the use and development of these deadly weapons. Both these instruments suffer from certain inherent limitations. Despite these limitations they still serve as the last resort for the civilians as well as for the governments of the war torn communities in dealing with the catastrophic effects of ERW.

Keywords: Civilians, Explosive Remnants of War, Humanity, International Legal Framework, War

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Introduction

‘Wars do not always end with the last gunshot or the signing of a ceasefire agreement. The remnants of war are also a threat to civilians and military personnel alike and impede humanitarian assistance, peacekeeping, post conflict reconstruction and development’.¹

Warfare is by its very nature very lethal and damaging. Weapons that are indiscriminate by their very nature or by the reason of their operation are verboten. Even when properly targeted, many explosive weapons fail to function as designed and become explosive remnants of war (ERW).² Every modern conflict generally leaves behind large amounts of explosive remnants of war.³ These are the explosive munitions that have been fired, dropped or otherwise delivered during the fighting but have failed to explode as intended or have been abandoned by the warring parties on the battle field.⁴ This is a persistent problem⁵ and a grave threat⁶ that

² John Borrie, Explosive Remnants of War: A Global Survey (Landmine Action 2003) (earlier they were treated as the synonym of unexploded ordnance. But the Protocol V introduced another category of ERW i.e. Abandoned Explosive Ordnance).
³ Gugu Dube, Getting Rid of the Explosive Remnants of War (Feb. 02, 2012), available at http://www.issafrica.org/iss_today.php?ID=1422 (today, many African states are affected by this problem. Angola, Chad, Democratic Republic of the Congo, Eritrea, Guinea-Bissau, Mali, Mozambique, Uganda, Western Sahara and Zambia are some of them).
can kill or injure the civilians of affected areas who subsequently contaminate or tamper with them. Most often, their victims are the most vulnerable members of the society. These remnants may threaten the society for decades even when the actual war has ended a long time back.


7 See Louis Maresca & Camilla Waszink, *The Legacy Of Explosive Remnants of War*, Magazine of International Red Cross and Red Crescent Movement, available at http://www.redcross.int/EN/mag/magazine2003_4/12-13.html (last visited Jul. 29, 2013) (in Laos, where the wars in Indochina during the 1950s, 1960s and 1970s have left this country heavily affected by explosive remnants of war. It is estimated that between 9 and 27 million unexploded sub munitions remain, although hostilities ended in 1975. Some 11,000 people have been killed or injured, a large percentage being children).


9 *The Burden of Landmines and Explosive Remnants of War Rests With the Civilian Population*, Mine Action, available at http://www.fsd.ch/mine-action (last visited Nov. 29, 2012) (landmines and explosive remnants of war therefore create long-term damage to rural and low income farming communities as the amount of arable land is reduced. Therefore, the presence of landmines on agricultural land can cause malnutrition or even famines, leading to an increased need for food aid. Many individuals living in contaminated areas are forced to choose between staying and facing a deadly threat every day or abandoning their land and livelihood).
The problem of ERW has grown steadily\textsuperscript{10} in the past few decades with the proliferation of increasingly sophisticated weapons and is being reported in around 90 countries and disputed territories till now.\textsuperscript{11}

Explosive remnants of war consisting of abandoned explosive ordnance and unexploded ordnance as a result of armed conflicts pose significant threats to the survival and development of civilian populations.\textsuperscript{12} Poland, which was severely affected by ERW after the Second World War (1939-1945) as late as 1989 to 2000, military engineers cleared 3,428,290 explosive devices, of which only 12,620 were mines.\textsuperscript{13}

Despite a growing awareness about the catastrophic effects of these, states continue to use weapons that are malfunctioning, hence produce ERW and as a consequence cause casualties among civilians. Controlling ERW is thus a key element in establishing and sustaining peace in post conflict situations, which in turn is a prerequisite for sustainable economic development.\textsuperscript{14}


\textsuperscript{12} See Directorate of Political Affairs, Swiss Federal Department of Foreign Affairs, \textit{Protecting the Civilian Population from Mines and Explosive Remnants of War} (this project was aimed at removing the remnants of war materials in Libya. The freedom of movement of the population, direct and preventive protection of the population and the social development of the country are all closely linked to de-mining).


Explosive Remnants of War

Protocol V\textsuperscript{15} of Convention on Certain Conventional Weapons 2003 (CCW) provides a legal definition for explosive remnants of war (ERW). It defines ERW as unexploded ordnance (UXO)\textsuperscript{16} and abandoned explosive ordnance (AXO).\textsuperscript{17} Protocol V’s definition of ERW provides two important modifications to the popular understanding of ERW-as-UXO. The first one is the inclusion of ‘abandoned explosive ordnance’ which marks a departure from the traditional meaning of ERW as UXO and it now includes weapons that were not used at all.\textsuperscript{18} The second modification is that this new legal definition specifically excludes the remnants that would not...
fall under the category of ERW\textsuperscript{19} due to separate obligation under CCW Amended Protocol II\textsuperscript{20} and thus making the classification much easier. But here exists a potentially problematic gap between an understanding of ERW with regard to legal obligations of state parties and an understanding of effective clearance operations. This technical definition may produce difficulties for the clearance team regarding what are they supposed to clear on the ground.\textsuperscript{21}

In order to resolve this conflict, the definition proposed by Geneva International Centre for Humanitarian Demining (GICHD) can be taken into account.\textsuperscript{22} The GICHD divided the ERW threat into four broad areas that are useful as a framework to comprehend better what ordnance might pragmatically be included in ERW risk:

1. Mine\textsuperscript{23} and UXO contamination of the ground.
2. Abandoned armored fighting vehicles.
3. Small arms and light weapons (SALW),\textsuperscript{24} including limited ammunition and explosives in the possession of civilians and non state actors.


\textsuperscript{21} Ressler, supra note 6.


\textsuperscript{23} Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (adopted 18 September 1997, entered into force 1 March 1999), 36 I.L.M. 1507, art. 2(2) (it defines mine as a munition designed to be placed under, on or near the ground or other surface area and to be exploded by the presence, proximity or contact of a person or a vehicle. And therefore, though not legally, but functionally they act as ERW).

\textsuperscript{24} Paddy Blagden & Adrian Wilkinson, Explosive Remnants of War: A “Quick Look” Threat Analysis, Geneva International Centre for Humanitarian Demining
4. Abandoned or damaged or disrupted stockpiles of ammunition and explosives.25

Therefore, this definition of ERW is helpful in avoiding the clash between the practical and legal understanding of explosive remnants of war.

**Impact of Explosive Remnants of War on Humanity**

As the Preamble of Protocol V of CCW, 2003 recognizes, the presence of ERW creates crippling humanitarian effects in war torn countries. The most evident of them is the casualties that they cause. On an average ERW kill or injure more people than landmines and put a heavy toll on medical infrastructure.26 They are unpredictable and can be exploded at any time under a variety of stimuli. Known as *killing fields*27 in Cambodia and *devil’s gardens*28 in Afghanistan, areas contaminated with explosive remnants of war are known for their impartiality when claiming victims, the majority of whom are children.29 In Laos, ERW are available at http://www.gichd.org/fileadmin/pdf/publications/Threat_Analysis_Paper.pdf (last visited Jun. 6, 2013) (it defines SALW as all lethal conventional munitions that can be carried by an individual combatant or a light vehicle, that also do not require a substantial logistic and maintenance capability).


believed to have claimed 13,000 victims between 1973 and 2006. Worldwide, landmines and unexploded ordnance kill and maim approximately 20,000 people annually, one third of them being children. The explosive force of these munitions and their fragments tend to be directed towards the abdomen, torso and head regions of victims’ bodies. ERW when present in large quantities can cause massive trauma and kill or injure people in a wide radius. Usually, ERW have a metal casing; fragments are dispersed at high speed causing severe injuries. Injuries sustained include multiple traumatic amputations of limbs, burns, punctures by shrapnel, ruptured eardrums and blindness. Their surgery

http://www.unicef.org/protection/Monitor_Fact_Sheet_Children_November_2010.pdf (last visited Jul. 1, 2013) (a total of 3,956 new casualties from mines, explosive remnants of war (ERW), and victim activated improvised explosive devices (IEDs) were recorded in 64 countries and other areas in 2009).

Kateland Shane, Lao PDR: Country Profile, 10(2) J ERW & Mine Action (2006), available at http://maic.jmu.edu/journal/10.2/profiles/laos/laos.htm (last visited Jun. 7, 2013) (Laos is badly affected by this ERW problem. Since 1964, more than 50,000 ERW casualties have been reported in the country).


See Weapons of Mass Destruction, available at http://www.phtls.fr/admin/ed7pdf/19.pdf (last visited Jun. 30, 2013) (fragment (fragmentation) injury, or secondary injury, is the most common category of injury in terrorist bombings and low-order explosions. These projectiles may be components of the bomb itself, as from military weapons designed to fragment, or from improvised bombs augmented with nails, screws, and bolts).

Robin Coupland & Hans Samnegaard, Effect of Type and Transfer of Conventional Weapons on Civilian Injuries: Retrospective Analysis of Prospective Data from Red Cross Hospitals, 319 British Medical J 410 (1999).


involves the staged surgical management of the wounded, often at different echelons of care and provided by different surgeons which is again very difficult to find in post conflict situations. Even with the passage of time, survivors often have low levels of overall physical health and experience on going pain as a result of their injuries. Most survivors show symptoms of chronic post traumatic stress disorder, and survivors often have reduced emotional well being due to depression, anxiety, fear, anger, dependence on others, and isolation. The victims often endure psychological trauma in addition to physical injury. ERW also hampers efforts of the affected communities to achieve sustainable development. Their presence prevents the usage and

37 See ICRC, Health Care in Danger, A Sixteenth Country Study, available at http://www.icrc.org/eng/assets/files/reports/4073-002-16-country-study.pdf (last visited Jul. 30, 2013) (a sound, intact health-care infrastructure and the safety of health-care personnel are prerequisites for the delivery of health care. When people take up arms for whatever reason, health care is disrupted in a variety of ways: fighting prevents personnel from reaching their place of work; health-care facilities and medical vehicles are inadvertently damaged; soldiers or police forcibly enter health-care facilities looking for enemies or “criminals;” and sometimes gaining control of a hospital is sometimes an objective of fighters. In the most serious cases, health-care facilities are directly targeted, the wounded and the sick are attacked and personnel are threatened, kidnapped, injured or killed).
38 See Blackeney et al., Long Term Physiological Adjustment Following Burn Injury, 9(6) J Burn Care & Rehabilitation 661 (1988).
application of community infrastructure and resources for reconstruction. Also, they deny access to land and hinder free movement and in poor community people have no choice but to use the contaminated land. Further the agricultural capacity will diminish because access to land is mired by the presence of UXOs. Vast tracts of valuable land continue to be plagued by landmine and ERW contamination. According to a survey conducted in Laos in 1997, around 87,213 square kilometers of land (out of a country wide total of 236,800 square kilometers) are considered as being at risk from UXO contamination and thus of no use to the many of which are recovering from years or decades of war. Every new casualty adds an increasing burden on health structures already strained beyond capacity by the need to support hundreds of thousands of landmine survivors injured in the 1980s and 1990s).

42 See Jon Unruh et al., Volatile Landscapes: the Impact of Explosives Remnants of War on Land Rights in Conflict Affected Countries, Journal of Peace, Conflict & Development, available at http://www.peacestudiesjournal.org.uk/dl/2%20Iss%202018%20Art%204%20Final.pdf (last visited Jul. 30, 2013) (land rights problems during and after war are multifaceted, often fluid, pervasive, usually contentious and confrontational, and can be long lasting. Land and property issues are often a central feature of civil wars, either as a direct or contributing cause, a pre-existing tension, or as a series of problems that emerge during conflicts).


45 Sayed Aqa, Mine Action: Success and Challenges, 9(1) J ERW & Mine Action (2005), available at http://maic.jmu.edu/journal/9.1/Focus/aqa/aqa.htm (last visited May 21, 2013) (for instance, in a survey conducted in Afghanistan in the year 2005, it was found that ERW contaminated an area of 270km² thereby affecting 657 communities for a total of 715.6km²).
civilians.\textsuperscript{46} In addition to this, due to their metallic value, people, especially in poor communities undertake the risk of locating and extracting these explosives.\textsuperscript{47} The simple answer to why people deliberately handle them is because they have no other means of survival. The World Bank also pointed out these adverse effects of ERW on the economy of war torn communities in 2004.\textsuperscript{48} Fear of ERW makes it difficult for the people to overcome physiological trauma of war.\textsuperscript{49,50} They also present obstacles in reestablishing peace by affecting peacekeeping efforts of the government.\textsuperscript{51}


\textsuperscript{50} See Kerry Smith, \textit{Devastating Effect: Explosive Weapons and Children, Save the Children U.K.}, available at http://www.unicef.org/protection/Devastating_Impact_low_res.pdf (last visited Jun. 30, 2013) (in Northern Ireland, over one-third of those seeking trauma counseling after the Omagh bomb of August 1998 were children. Trauma at a critical time in their psychological development can cause children to drop out of education and can lead to mental illness, substance abuse and social problems).

\textsuperscript{51} See Roman Hunger, \textit{Explosive Remnants of War: The Problem}, 2(4) Strategic Insights (Apr. 2003) (recent studies of contemporary conflicts have shown that the threat posed by Explosive Remnants of War (ERW) to the civil population as well as to peace keeping forces is of great humanitarian concern. Because of a lack of specific legal regulations on the issue of ERW, a large number of innocents have been killed or injured by ERW after conflicts have ended).
The illicit trade of these abandoned explosives links them with more serious issues of terrorism.\textsuperscript{52} The natural environment of the region also gets severely affected.\textsuperscript{53} All in all, ERW affect all stages of conflict prevention, crisis management, conflict resolution and post conflict rehabilitation and reconstruction.\textsuperscript{54}

**Protocol V to the Convention on Certain Conventional Weapons 2003**

The use of so called 'cluster bombs' in the Kosovo Campaign in 1999 generated much discussion over the problems of clearance of unexploded ordnance (UXO).\textsuperscript{55} The ICRC subsequently held a meeting in Nyon (Switzerland) on 18\textsuperscript{th} and 19\textsuperscript{th} September 2000 at which it drew attention to the problem caused by ERW.\textsuperscript{56} This initiative signaled the beginning of the discussions in the CCW 2003 framework on the issue of ERW.

In December 2001, the second review conference of parties to the CCW 2003 established a group of governmental experts to discuss


the issue of ERW.\textsuperscript{57} It was quite obvious that the sole issue for them was going to be the long term effects of war weapons and not specific weapons causing it. In the same meeting, a mandate in respect of ERW was agreed.\textsuperscript{58} The first formal round of negotiations for an instrument on ERW took place from 10 to 12 March 2003.\textsuperscript{59} Finally Protocol V of CCW 2003 was adopted on 28 November 2003. It is the first multilateral agreement to address the various humanitarian problems created by a range of unexploded and abandoned ordnance in a post conflict situation. The third review conference was held from 7-17 November 2006 and it came into force on 12 November 2006.\textsuperscript{60} The relevant provisions of the Protocol are discussed below.

**Clearance, Removal and Destruction of Explosive Remnants of War**

Clearance with respect to battle area is defined as the systematic and controlled clearance of hazardous areas where the hazards are known not to include mines.\textsuperscript{61}


\textsuperscript{58} Sean Murphy, *Adoption of Fifth CCW Protocol on Explosive Remnants of War*, 98(2) AJIL 357(2004).


Article 3 of the Protocol V of CCW 2003 deals with the ‘clearance, removal and destruction’ of ERW. It lays down that:

Each High Contracting Party and party to an armed conflict shall bear their responsibilities set out in this Article with respect to all explosive remnants of war in the territory under its control. In cases where a use of explosive ordnance which has become explosive remnants of war, does not exercise control of the territory, the user shall, after the cessation of active hostilities, provide where feasible, inter alia technical, financial, material or human resources assistance, bilaterally or through a mutually agreed third party, including inter alia through the United Nations system or other relevant organizations, to facilitate the marking and clearance, removal or destruction of such explosive remnants of war.

The clearance and disposal are urgently required as soon as the conflict ends. The first obligation which the Protocol V of CCW 2003 casts on every party is to clear the remnants in their own territory. Apart from this, it casts an additional responsibility on the users of the explosive ordnance to provide assistance, wherever feasible, to carry out clearance work outside their territory. And all these must be carried out ‘after the cessation of


62 Id.
63 See Explosive remnants of war and small arms: a new challenge for Libya, Handicap International, available at http://www.handicap-international.us/fileadmin/files/documents/0704_SitRep_Libya.pdf (last visited Jul. 30, 2013) (to clear the land of Libya from the dangers of ERW a telephone hotline was set up in Misrata, allowing people to call and trigger the intervention of an expert. This expert moves to identify the explosive, establish a security perimeter, and transmit the information to the technical teams that will conduct the cleanup. Between October 2011 and April 2012, more than 300 suspected hazardous locations (homes, farms, gardens) have been identified).
64 See Draft Proposal for an Instrument on Explosive Remnants of War, Group of Governmental Experts on Convention on Certain Conventional Weapons (May 2003), UN Doc CCW/GGE/V/WG.1/WP.1/Rev.1 (this additional non-binding
hostilities’ and ‘as soon as feasible’. It includes both surface and sub surface clearance.\footnote{Supra note 61, ¶ 5.} In this regard, the parties are required to take into account the international standards.\footnote{Protocol V on Explosive Remnants of War, (Nov. 12, 2006) (2006) 45 I.L.M. 1348, art. 2(4).} These measures include threat survey, assessment of needs, marking and resource mobilization to successfully carry out clearance operations. Priority setting of the affected area is also required.\footnote{Protocol V on Explosive Remnants of War, (Nov. 12, 2006) (2006) 45 I.L.M. 1348, art. 3(3).} All these operations must be carried out by the qualified operators.\footnote{See Electronic Mine Action Network, available at http://www.mineaction.org/country.asp?c=6 (last visited Jun. 30, 2013); See also Minefield and UXO clearance - Guinea Bissau, available at http://www.landmineaction.org/activities/activity.asp?PLID=1025 (last visited Jun. 30, 2013).} Measures to facilitate the rapid and safe clearance of ERW are essential in addressing the problem.

**Warnings and Risk Education Relating to Explosive Remnants of War**

Under Article 5 of the Protocol V of CCW 2003, parties are required to take all feasible precautions to protect the post conflict community from the effects of ERW. This obligation is much narrower in operation as it is applicable only to the party in control of the contaminated territory. Also, it only talks about all feasible precautions\footnote{Protocol V on Explosive Remnants of War, (Nov. 12, 2006) (2006) 45 I.L.M. 1348, art. 5 (feasible precautions are those precautions which are practicable or practically possible, taking into account all circumstances ruling at the time, including humanitarian and military considerations).} and not all necessary precautions. The sole objective of providing warnings is to reach as many people as soon as possible with advice on threat and correct behavior to be adopted responsibility is the result of the opposition of US to the draft which contained a binding responsibility on the users to cooperate in the clearance work).\footnote{}
The present structure of the said Article as well as its annexure are largely based on the report submitted by the GICHD during the negotiation process in order to address the main issues concerning warnings and risk education. The annexure of the article and the report inter alia includes the following:

a) It considers information collection as the basic necessity of Mine Risk Education (MRE) and this information may include threat analysis, country analysis and population analysis.

b) It provides for the mechanism of using such information to plan MRE strategy.

c) It also emphasizes on the role of the community in reducing risk and clarifies the position about who should provide such warnings.

d) Finally, it outlines what MRE should provide.

Moreover, the Annexure of the said Protocol provides for the adoption of proper procedure for marking, fencing, monitoring and utilization of warning signs near the contaminated region while taking into account the prevailing national and international standards and ‘at the earliest opportunity’.

Dissemination of Information about Explosive Remnants of War

During the negotiation process of Protocol V of CCW 2003, United States submitted a discussion paper titled ‘Information Sharing as a

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70 Desvignes, Maslen & Sohlberg, supra note 26.
73 E-Mine, Mine Risk Education (Jun. 2010), available at http://www.mineaction.org/overview.asp?o=17 (last visited May 22, 2013) (it refers MRE to include educational activities aimed at reducing the risk of injury from mines and unexploded ordnance by raising awareness and promoting behavioral change through public-information campaigns, education and training, and liaison with communities).
Explosive Remnants of War Tool to Protect Civilians from the effects of ERW".\(^74\) In this they identified various humanitarian information requirements essential for the clearance team like location, number, characters and method of destroying of munitions used. It also provided various considerations relating to such information sharing.\(^75\) Another paper in this regard was submitted by Landmine Action identifying the necessity of information sharing.\(^76\) Based on these papers and negotiations, Article 4 was engendered in the said Protocol. It states that-

“High Contracting Parties and parties to an armed conflict shall to the maximum extent possible and as far as practicable record and retain information on the use of explosive ordnance or abandonment of explosive ordnance, to facilitate the rapid marking and clearance, removal or destruction of explosive remnants of war, risk education and the provision of relevant information to the party in control of the territory and to civilian population in the territory.”

Further Article 4(2) of the said Protocol states that ‘make available such information to the party or parties in control of the affected area’. Therefore both high contracting parties and parties to the


\(^{75}\) See Explosive Remnants of War (ERW) Information Requirement, Geneva International Centre for Humanitarian Demining, available at http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots783=0c54e3b3-1e9c-be1e-2c24 a6a8c7060233&lng=en&id=26677 (last visited Jun. 30, 2012) (the information required to assist clearance and risk education operations is generally available to most military forces. The issue is ensuring that accurate information is released in a timely manner and in a useable format. Failure to release the information by the military means that humanitarian organizations have no alternative but to try to find the answers themselves, as the information is essential to the safety and effectiveness of their work).

conflict must retain and record the information on the use or abandonment of weapons ‘as far as practicable’. Further, under Article 4(2), such information must be shared without delay and ‘after the cessation of hostilities’, with the party in control of the affected region bilaterally or with the help of mutually agreed third party.

**Assistance to Victims of Explosive Remnants of War**

Article 7 and 8 of the Protocol V of CCW 2003 are the two provisions providing for the measures of assistance and cooperation among the victims.

Article 7(1) provides that “Each High Contracting Party has the right to seek and receive assistance, where appropriate, from other High Contracting Parties, from states non party and relevant international organizations and institutions in dealing with the problems posed by existing explosive remnants of war.”

Further, Article 7(2) provides that each High Contracting Party in a position to do so shall provide assistance in dealing with the problems posed by existing explosive remnants of war, as necessary and feasible.

The only difference between the two is while Article 7 covers the problem caused by ERW already existing at the time the state become party to the Protocol, Article 8 applies only to those ERW cases that arise after the entry of party to the Protocol.

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77 See Explosive Remnants of War- Challenges for Victim Assistance, Berlin Conference Documentation, available at http://www.genevacall.org/resources/gc-articles/f-gc-articles/2001-2010/2009-4nov-hi.pdf (last visited Jul. 29, 2013) (unlike the Convention on Cluster Munitions of December 2008, the Antipersonnel Mine Ban Convention does not define the term “victim”. It was not until the first revision of this treaty that a broader understanding of victims was decided on and then stipulated in the Nairobi Final Report and the Nairobi Action Plan (Final Report 2004, Section IV). According to this outlook, victims are not only persons killed or injured in an accident with an antipersonnel mine but also their families and their communities).
Article 7 provides the High Contracting parties facing the ERW problem with the right to seek assistance from other states or organizations. Also, it casts a parallel obligation on the parties to provide assistance to other states dealing with such problem. Again this obligation is also subject to the qualifications such as ‘when necessary’ and ‘where feasible’.

Article 8 enumerates various requirements in involving all high contracting parties in efforts to tackle the problem. Such programs may include or take care of:

1. Data collection and information management
2. Medical needs of survivor
3. Framework for ensuring equality of opportunity to the disabled persons
4. Strategies for funding
5. Psychological support of victims

The major challenges faced while implementing these programs are access to care, capacity and sustainability, progress monitoring and prioritization.

Generic Preventive Measures to Minimize the Occurrence of Explosive Remnants of War

The Preamble of the Protocol V of CCW 2003 itself lays emphasis on adopting generic preventive measures in order to minimize the occurrence of ERW. Poor manufacturing, improper storage, improper handling, incorrect launch profiles, poor strike angles, environment and insufficient training are basically the reasons for

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their occurrence.\textsuperscript{80} This has further been dealt under Article 9 of the said Protocol which ‘encourages parties to take generic preventive measures’. This means that this provision is not mandatory but voluntary in nature.

Some of the measures are provided in the Technical Annex to the Article which contains the best practices which would help in reducing the volume of UXOs if properly followed.

The measures outlined in the Annex are:\textsuperscript{81}

1. Munition manufacturing management to make sure that the weapons may not become ERW.
2. Munition management to ensure their long term reliability.
3. Training of all personnel involved in handling and use of weapons.
4. Proper transfer of weapons after ensuring that receiving state has the adequate facilities for their use.
5. Future production and improvement of the quality of weapons.

All these measures would simplify any post conflict effort of the government.


Sometimes, the slowness of the Convention is criticized as even after 6 years of its ratification, it has only been signed by 78 states.\textsuperscript{82} Fourth Review Conference of CCW also reiterated its goal of

\textsuperscript{80}U.N. Group of Governmental Experts on Convention on Certain Conventional Weapons, U.N. Doc.CCW/GGE/I/WP.5 (May 2002) (the types of munitions which become explosive remnants of war and the factors which contribute to the occurrence of explosive remnants of war are explained here).

\textsuperscript{81}Id. (the measures provided in the annex were incorporated on the recommendations of European Union).

universalisation of the Convention.\textsuperscript{83} Also, the Protocol is a legally binding text, but many of its qualifiers leave ample room for avoiding obligations. For instance, the states are not bound to deal with regions currently affected by ERW and it solely applies to future conflicts, although it does allow affected state parties to ask for voluntary cooperation and assistance for existing problems. It can be argued that such an instrument should either be fully binding or merely a political statement but not a mixture of both.\textsuperscript{84} But despite all these limitations this Protocol represents advancement in international humanitarian law for ensuring the safety of post conflict societies.

**Cluster Munition**

By a process of elimination, the effort to address ERW has quickly come to focus primarily on one subgroup with the most serious impact on humanity.\textsuperscript{85} A cluster munition is defined as a conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions.\textsuperscript{86} A submunition is an individual item of explosive ordnance contained within the dispenser or ‘parent munition’ and which is ejected, expelled, or dispersed at some point after the cluster munition is fired, launched, expelled, or dropped.\textsuperscript{87} These bomblets are versatile in nature and each bomblet essentially acts similar to a powerful hand.


\textsuperscript{86} Convention on Cluster Munitions, 48 I.L.M. 357 (Aug., 2010).

grenade. At least 75 countries worldwide have stockpiled cluster munitions. It was found that up to 30,000 cluster munitions were left as UXO following the war in 1999. Also between 1998 and 2006, there were a total of 124 reported cluster munitions casualties in Cambodia.

Cluster bombs are particularly more harmful than other weapons because of the two reasons. Firstly the cluster bomb is an ‘area weapon’, because their contents spread over a wide area, or footprint. When multiple cluster munitions are deployed in tandem, the area multiplies and can cover up to 27,000 football fields sometimes. Secondly, a significant percentage of the small cluster bombs are duds. Due to the high failure rates of submunitions, many do not detonate on impact and pose a serious threat to civilians long after the fighting has ceased. Since the small cluster bombs often look like toys, children tend to pick them up, often resulting in death or amputation. In Albania, the overall

failure rate of North Atlantic Treaty Organization 1949 (NATO) submunitions was between 20–25% and between 30–35% for Yugoslavian (Serbian) submunitions. The presence of these unexploded submunitions impedes all aspects of post conflict recovery. Hence, because of these two factors i.e. wider footprints and high dud rates, they pose greater dangers on the civilians as compared to other weapons.

**Convention on Cluster Munitions 2008**

Recently during Second Lebanon War, Israel fired around 1.2 million cluster bombs on Lebanon. Given the official failure rate of 3%-14%, it could be well deciphered that around 21,000 failed bomblets are still lurking in the Lebanese soil. This frequent use of cluster munitions raised a lot of hue and cry in the international community. Human Rights Watch in memorandum to CCW delegates pointed out that not only their use but also the effects of cluster munitions as ERW are discriminatory. International Committee of the Red Cross (ICRC) also, in its paper submitted to CCW delegates observed the need for a specific instrument to

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address the problem. In the meantime, two international tribunals have found two defendants liable for civilian deaths caused by cluster munitions.

All these efforts and events, followed by the culmination of the ‘Oslo Process’, under whose heading five conferences were held between February 2007 and May 2008 resulted in the CCM 2008. The Convention entered into effect in February 2010, six months after its ratification by thirty states. At present, there are signatories and 71 parties to CCM 2008.

Article 1 of the CCM 2008 bans the use, development, production, acquisition, stockpiling, retention, and transfer of cluster munitions.

It says that each State Party undertakes never under any circumstance to:

(a) Use cluster munitions,
(b) Develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, cluster munitions,
(c) Assist, encourage or induce anyone to engage in any activity prohibited to a state party under this Convention.

Article 3 of the CCM 2008 requires state parties to destroy their stockpiles of cluster munitions ‘as soon as possible but not later than eight years after the entry into force of the Convention.’

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It reads as “Each State Party shall, separate all cluster munitions under its jurisdiction and control from munitions retained for operational use and mark them for the purpose of destruction”. It further adds that “Each State Party undertakes to destroy or ensure the destruction of all cluster munitions, as soon as possible, but not later than eight years after the entry into force of this Convention for that State Party”. Article 4 requires state parties to clear and destroy cluster munitions remnants under their control within ten years.

**Limitations of Convention on Cluster Munitions 2008**

The CCM 2008 has little power because the major producers and users have not joined it yet.\(^{103}\) Also, Article 21 of CCM 2008 which talks about joint military operations with the non state parties and allows the state parties to engage in the activities prohibited under the convention has also been criticized for poor drafting and elements of uncertainty.\(^ {104}\)

Further Article 3(6) of CCM 2008, which provides for retention of cluster munitions for training purpose, also limits the operation of its key provisions.

Though CCW 2003 takes care of negative after effects of cluster munitions, but it also has its own limitations as discussed earlier. Negotiations are going on about adopting a sixth protocol to CCW 2003 which would deal with cluster munition problem.\(^ {105}\) Till now, no effective conclusion has been reached.

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Conclusion

Explosive remnants of war (ERW) have a great impact on the lives and livelihood of millions of people around the globe. They leave both immediate and long term impacts on affected communities thereby intensifying the human suffering during and after humanitarian crises. But a large proportion of these effects are both predictable and preventable as people’s decisions to engage with ordnance are likely to be driven by some form of vulnerability or capacity, most likely in combination.106

The task of dealing with ERW is broad, comprehensive and resource intensive. However, we do have solutions in the form of Protocol V and CCM 2008. Despite their limitations, they represent a major advancement for the safety of the civilians in war torn communities. Countries should come forward to ratify these instruments and universalize them for their proper implementation.

Apart from this, improved cooperation is required at every level and the nation states should look beyond the borders in order to tackle this problem. International community is more than willing to work out a permanent solution to the ERW problem but it is incumbent upon all the nations to translate this shared willingness into a decisive action. It is the responsibility of each individual party to these instruments to fulfill obligations both binding as well as voluntary. Strong political will is essential to deal comprehensively and honestly with the issue of ERW and to arrive at a realistic and useful field solution.