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**Explosive Remnants  
of War (ERW)  
Warnings and Risk Education**

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# Explosive Remnants of War (ERW) Warnings and Risk Education

**Geneva International Centre for  
Humanitarian Demining  
Centre International de  
Démunage Humanitaire - Genève**



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The **Geneva International Centre for Humanitarian Demining** (GICHD) supports the efforts of the international community in reducing the impact of mines and unexploded ordnance (UXO). The Centre is active in research, provides operational assistance and supports the implementation of the Anti-Personnel Mine Ban Convention.

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*Cover photo:* Nicaragua, minefield warning sign (after Hurricane Mitch struck in October 1998, many landmines were displaced from their original locations), 22/12/1998 ©ICRC/Mary Anne Andersen.

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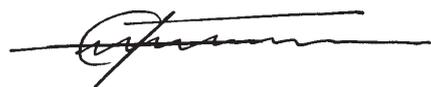
# Foreword

**U**nexploded ordnance and other explosive remnants of war (ERW) continue to have a detrimental effect on communities long after the wars have ended. The mandate of the Geneva International Centre for Humanitarian Demining (GICHD) is to support the international community in reducing the impact of mines and unexploded ordnance. This report, *Explosive Remnants of War: Warnings and Risk Education*, is a contribution to the efforts of the international community to address this important issue.

Included among measures being examined to alleviate the humanitarian suffering caused by explosive remnants of war, is the need to provide risk education and warnings to civilian populations. This report aims to provide background for States Parties involved in these discussions under the 1980 United Nations Convention on Certain Conventional Weapons (CCW).

The report discusses the aims of risk education, who should provide it and what should be provided. It focuses on the particular problems of ERW and the differences between warnings and risk education, and suggests what appropriate responses should be. The report provides numerous examples from the field as illustrations, before concluding with lessons learned based on operational experience.

This report has been prepared with funding from the New Zealand Ministry of Foreign Affairs and Trade, the Norwegian Ministry of Foreign Affairs, and the United Kingdom Department for International Development. This support is gratefully acknowledged. The GICHD is committed to providing technical expertise to the discussions under the CCW whenever States Parties require it.



Ambassador Martin Dahinden  
Director  
Geneva International Centre for  
Humanitarian Demining



*Kosovo, signs warn of a cluster bomb strike in a forest near Pristina, March 2000.*

# Executive summary

## The aims and effectiveness of warnings, and mine/UXO risk education programmes

Warnings<sup>1</sup> are the punctual provision of cautionary information to the civilian population, intended to minimise an impending or ongoing risk from ERW. Warnings are often given in advance of, or immediately following, the use of ordnance. They are sometimes provided by the weapon users themselves.

Mine and unexploded ordnance (UXO) risk education (MRE) programmes seek to facilitate information exchange between affected communities, government authorities and humanitarian organisations so that individuals and communities are informed about the UXO and mine threat and interventions can be tailored to communities' needs.

Warnings alone are unlikely to have a positive long-term impact on behaviour, they should always be followed by community-based risk education.

## The process of MRE

The process of establishing a MRE programme is common to both ERW and mines. Information gathering, community involvement and integration of activities must all be carried out irrespective of the devices involved. ERW, however, present some specific challenges, which may require specific MRE messages. Other messages are common to both ERW and mines.

## Information collection: a key element of MRE

To respond to the needs of affected communities and therefore reduce the number of victims, information gathering must be conducted both prior to and

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1. See United Nations, *Amendments on the Protection of the Civilian Population from the Effects of ERW*, Proposal by the International Committee of the Red Cross, CCW/GGE/IV/WG.1/WP.4, 12 March 2003.

during the implementation of MRE activities. In an emergency situation, information gathering must also be conducted, but will certainly be more difficult and more limited than in other contexts.

Accurate and rapid collection of information — such as munitions used, location of danger areas, attitudes and behaviours of affected communities — is crucial to a quick and successful implementation of risk education.

For ERW, information must be collected from weapon users, communities, local authorities and other organisations as soon as possible. The sooner the information is available and accessible, the better mine action agencies can protect civilian populations from the effects of ERW. Certain technical information on weapons is crucial to MRE activities.

To understand the knowledge, attitudes, practices and beliefs of affected communities, information must be collected from communities and authorities. A lack of knowledge or awareness is one of the reasons for accidents, but other injuries or deaths occur because of risk taking due to economic necessity. In this case, raising awareness is not sufficient and broader socio-economic intervention is necessary to prevent those injuries and deaths. This can only be achieved if communities are involved in looking for alternative solutions, a process depending on other humanitarian interventions.

#### Providing risk education to affected communities

The solutions identified for affected communities can be technical (marking, demining, etc.), socio-economic or information-based. In the case of solutions based on the provision of information (i.e. MRE activities), the analysis of the information previously collected allows for MRE messages to be tailored to communities' needs. The MRE messages should provide affected communities with information (e.g. about the threat involved, the potential effects of ERW etc.) they can use to reduce the risks to themselves.

Information-based solutions can be divided in two categories which can each be differentiated by the target groups, the type of organisation disseminating the information, the timing involved (long-term or short-term) and the techniques and methods employed:

- **Warnings** are most useful in specific situations, where civilian populations are not accessible, a short-term emergency response is needed, and the delivering agency is aiming to cover as many people as possible. Warnings alone are unlikely to have a positive long-term influence on behaviour, and therefore need to be followed by community-based risk education.
- **MRE or awareness information/messages** are disseminated by mine action or/and other humanitarian agencies once the threat exists, using community-based techniques requiring the involvement of affected communities or/and public information campaign using mainly local media and/or printed materials. It is usually a long-term strategy.

Specific messages often have to be developed to deal with the particular problems caused by ERW in addition to more generally applicable messages.

### Who should provide warnings and MRE?

Nationals from the affected country with the requisite communication or teaching skills should be hired to conduct MRE activities. The military will have the information necessary to provide warnings. Humanitarian organisations and authorities can also be involved in disseminating advance warnings, depending on the circumstances and recognising the potential issues it may raise, for example regarding their organisational neutrality.

Organisations involved in providing risk education deal with UXO and mines as part of the same programme.



OMAR programme in Afghanistan, board showing the different types of mines to the population.



© ICRC/Chamrong Lo, 1999

*Cambodia, living with mines and UXO on the doorstep, in this case literally.*

# 1. Introduction

**T**he Review Conference of the 1980 UN Convention on Conventional Weapons (CCW) in December 2001 established a Group of Governmental Experts on Explosive Remnants of War to examine the issues relating to ERW. At the Meeting of States Parties in December 2002, it was agreed that the Group would continue its work in 2003 to

“negotiate an instrument on post-conflict remedial measures of a generic nature which would reduce the risks of ERW... [Q]uestions need to be considered regarding ... the provision of information to facilitate clearance and risk education, [and] warnings to civilian populations.”<sup>2</sup>

The GICHD has undertaken this report, supported by the Coordinator on ERW, on warnings and risk education.<sup>3</sup> The aim of the report is to provide States Parties with an understanding of the main issues and challenges concerning warnings and risk education programmes in general. Within this framework, the report also covers the particular issues of ERW and the practicalities of a mine and UXO risk education response. The report concludes with key lessons learned from experience in the field on how to provide effective warnings and risk education.

The CCW Group of Governmental Experts on ERW has yet to agree on a precise definition of ERW. The Framework Paper submitted to the Group by the Coordinator for ERW suggested the following as a starting point for discussion:

“Explosive Remnants of War – means unexploded ordnance and abandoned explosive ordnance with the exception of anti-personnel mines, booby-traps, other devices and mines other than anti-personnel mines as defined in Protocol II as amended on 3 May 1996”.<sup>4</sup>

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2. United Nations, *Report of the Meeting of the States Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects*, CCW/MSP/2002/2, 20 December 2002.

3. Letter from Ambassador Chris Sanders to Paul Ellis, GICHD, 30 January 2003.

4. United Nations, *ERW Framework Paper – Possible structure for an ERW instrument*, UN Doc. CCW/GGE/IV/WG.1/WP.1, 28 February 2003

This working definition is used for the purposes of the present report.<sup>5</sup> Warnings have also not been defined under international law, although the term has been used in CCW Protocol II and Amended Protocol II.<sup>6</sup> A warning is ordinarily defined, *inter alia*, as “an indication of danger” and “advice to beware of something as being dangerous”.<sup>7</sup> It is therefore not time-specific and therefore a warning may be given before or after the use of explosive ordnance (EO). Mine risk education is also not defined under international law, but is defined under the International Mine Action Standards (IMAS) as

“a process that promotes the adoption of safer behaviours by at-risk groups, and which provides the links between affected communities, other mine action components and other sectors. It comprises two related and mutually reinforcing components: a) community liaison; and b) public education.”<sup>8</sup>



©Lensmen, Susan Kennedy

Warnings on the edge of a clearance operation, showing how integrated the two activities are, Angola.

5. For further background see the GICHD paper, *Explosive Remnants of War (ERW) – A Threat Analysis*, GICHD, Geneva, 2002, which attempted to provide a quantitative analysis of the problem using data from Kosovo.

6. See Articles 4 and 5, 1980 Protocol II, and Articles 3, 6 and 7, 1996 Amended Protocol II.

7. *Shorter Oxford English Dictionary*, Fifth Edition.

8. *International Mine Action Standards (IMAS) 04.10*, Second Edition, 1 January 2003, Standard 3.126.

## 2. The ERW threat

### 1. The impact of ERW

Although the precise definition of ERW has still to be clarified, it is generally understood that the problems ERW cause are both widespread and long-term. Information collection established as part of mine/UXO risk education and other mine action programmes has highlighted the significance of casualties caused by ERW, in particular by UXO such as hand grenades, mortars shells, fuzes and cluster bombs.<sup>9</sup> In Afghanistan and Cambodia, for example, more than half of the victims have been killed or injured by UXO. Data collection in Bosnia and Herzegovina, showed that around 30 per cent of the victims are UXO casualties. In Laos, nearly all of the casualties are caused by UXO.<sup>10</sup>

The physical and psychological impacts of ERW on a community are significant considering the number of deaths and the nature of injuries caused, which can overload often already stretched medical infrastructures. ERW also have a wider socio-economic impact on affected communities in terms of land use (a decrease of agricultural productivity) and blockages to reconstruction and development activities.

### 2. The dangers from ERW

The main points relating to the dangers posed by ERW (other than anti-personnel mines) and their impact on affected communities can be described as follows:

- **Injuries or deaths can take place at a distance from the explosion:** most items of ordnance contain an explosive charge and some element of fragmentation designed to kill or injure people at a distance from the explosion. Depending on the ordnance involved, the danger area can vary from a few metres to several hundred metres.

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9. *Cluster bomb unit (CBU)*: A bomb containing and dispensing submunitions, which may be mines (anti-personnel or anti-tank), penetration (runway cratering) bomblets, fragmentation bomblets, etc. (*IMAS 04.10, op. cit.*, Standard 3.28).

10. For further information see C.King, *Explosive Remnants of War, A study on Submunitions and Other Unexploded Ordnance*, ICRC, Geneva, August 2000.

- **Items of UXO are generally more powerful (and therefore more lethal) than anti-personnel mines:**
  - The power of the explosion and fragmentation effect often results in the death or injury of more than one person in the same accident;
  - Due to the nature of the ordnance, UXO incidents result in a greater proportion of deaths than incidents involving mines (mines are generally designed to maim, not to kill).
- **When UXO accidents do not involve deaths, they typically result in severe wounds**, such as fragmentation injuries to the abdomen and chest, which often include damage to vital organs, amputation of limbs, and loss of vision or hearing.
- **ERW are generally found on the surface, and are therefore more visible, which can result in a higher interaction of people with ERW than with mines.**
- **But ERW can also be found sub-surface where clearance can be particularly difficult**, for example, aircraft bombs can be found buried up to several metres.
- **The fear of UXO is generally lower than the fear of mines**, possibly because they are usually more visible than mines; this can increase the risk;
- **ERW are unpredictable and can be detonated at any time under a variety of stimuli:** by pressure, by hit or kick or by simple touch. ERW often respond differently to the same action: an item of UXO can explode after being kicked once or it may explode after ten kicks.
- **Unlike mines, UXO is explosive ordnance which has failed to operate as designed, and only rarely is it possible to identify the reason for this failure.**

Cluster munitions have been identified as a particular problem in post-conflict clearance and present the following problems compared to other types of UXO:<sup>11</sup>

- They are most commonly delivered by aircraft, surface artillery rockets or shells and are designed to disperse submunitions over a large area. Subsequently, they result in high-density contamination.
- Some studies suggest they suffer higher failure rates than “unitary” munitions.<sup>12</sup>
- Their effects can be anti-personnel, anti-armour or/and incendiary.
- The design of submunitions (shape and colours) makes them attractive to people, especially children.

As ERW are typically more visible, often being found on the surface, activities at the time of an ERW incident often differ from those involving landmines. Generally, children and male adults are those most at risk, although a very small percentage of women are also injured, usually as a result of lack of knowledge of the dangers. Reasons for interaction with ERW resulting in deaths or injuries include:

- Curiosity of children tampering with the item.
- Children playing with the item, for example by kicking it, hitting it, or throwing it into a fire.
- Over-confidence of adults, in general adult males with a military background, thinking they know how to handle ordnance, and subsequently tampering or moving the item.
- Accidental contact of people standing close to, or passing by others who are tampering with the item.

11. GICHD, *Explosive Remnants of War (ERW) – A threat analysis, op. cit.*

12. Landmine Action, *Explosive remnants of war – Unexploded ordnance and post-conflict communities*, Landmine Action, London, March 2002.

- Accidental contact with sub-surface items, for example farmers accidentally hitting an item of UXO while ploughing.
- Economic necessity: people attempting to recover scrap metal or use the explosives for other purposes, for example fishing.
- Intentional tampering to protect others, for example moving UXO from an area to protect children.
- Lack of knowledge of the danger, for example people removing the item to clean up the area.

ERW are often visible, and this has a crucial impact on the way MRE programmes are implemented. Accidents caused by curiosity, lack of knowledge, tampering or playing with UXO should typically be easier to prevent than mine accidents due to lack of knowledge of the location of the mines. Key elements of a risk education response aimed at protecting civilians from the effects of ERW are globally similar to risk education activities focusing on mines, but as has been seen ERW have their own particular set of challenges.

#### Warnings and MRE programmes have to advise on the location of possible ERW

Generally, MRE programmes include messages about dangerous areas such as places where fighting took place, and warning signs like animal carcasses or skeletons. Those types of messages also sometimes include messages about abandoned armoured fighting vehicles. For example, in Afghanistan, one MRE message refers to the “damaged or blown-up vehicle”, which could indicate the presence of UXO.\* In Kosovo, a message was disseminated about the dangers of destroyed tanks (“Do not approach damaged or blown-up tanks!”), as there was concern about a possible threat from depleted uranium.

\*ICRC, *ERW Training Curriculum for Iraq Operations*, ICRC Middle East Delegations, ERW Awareness Team, February 2003.

#### The threat from abandoned ammunition

In 1997, following the explosion of 15 ammunition depots in Albania, an awareness programme was initiated to inform people about the threat. These random explosions resulted in munitions still in the depots becoming highly unstable and explosive ordnance being scattered randomly in the surrounding area.\*

\*GICHD, *Explosive Remnants of War (ERW) – Undesired Explosive Events in Ammunition Storage Areas*, GICHD, Geneva, 2002.

### ERW – a worldwide problem

In Cambodia, in 1998-1999, 29 per cent of the reported casualties were injured or killed by UXO. In 2000 and 2001, this figure increased to 47 per cent and 49 per cent, respectively.\*

During the wars in Indochina in 1964-1973, more than two million tons of ordnance were dropped over Laos, with up to 30 per cent failing to detonate on impact. Bombing records and results from a socio-economic impact survey indicate that over 87,000 square kilometres of land (from a total landmass of 236,800 square kilometres) are considered to be at risk of containing UXO. The net result for people living in contaminated provinces has been the denial of valuable fertile land for food production, and the ever-present physical fear of UXO accidents. Those most vulnerable are the children living in the affected areas as well as subsistence farmers.\*\* In the country, 39 people were reported killed and 63 injured by UXO in 2000 and 122 new mine/UXO casualties were reported in 2001. Precise details of the breakdown between UXO and mines, though most if not all were caused by UXO.\*\*\*

In Afghanistan, between 1998 and 2000, while most mine victims were men injured during fighting or travelling, the bigger threat to the livelihood of civilians, especially children, was from UXO. All in all, UXO casualties amounted to about half of the recorded accidents.\*\*\* In 2001, 54 per cent of the reported casualties were injured by UXO, including fuzes, booby-traps and cluster munitions.

In southern Iraq, there is a significant threat posed by ERW from the 1991 Gulf War. Although information is limited, an assessment conducted by the ICRC in southern Iraq identified cluster bombs and other UXO as the main threat to civilian population, including nomads.

Submunitions in Kosovo have killed more people in the post-conflict period than mines and are the primary UXO problem in the province.

\*UNICEF, *A Collection of Practices from UNICEF's Mine Action Experience in Cambodia*, June 2002.

\*\* UN E-MINE website, [www.mineaction.org](http://www.mineaction.org)

\*\*\* International Campaign to Ban Landmines, *Landmine Monitor Report 2002: Toward a Mine-Free World*, Human Rights Watch, Washington DC, August 2002.



A U.S. BLU-97 bomblet which failed to explode, its innocuous shape and bright colour can make it attractive to children.

© Vera Bohle, 2002.

## 3. Basic principles for mine/UXO risk education

### 1. General background

**Mine action** refers to activities that aim to reduce the social, economic and environmental impact of landmines and UXO.<sup>13</sup> It is a comprehensive package including mapping, survey, and clearance operations (humanitarian demining); mine risk education (MRE); victim assistance, including rehabilitation and reintegration; advocacy against the use of anti-personnel mines; and stockpile destruction.

Mine action, including MRE, is a relatively new field of activity which originated towards the end of the 1980s in Afghanistan and subsequently in Cambodia (1991-1993). The campaign to ban landmines further highlighted the impact of landmines and humanitarian organisations became progressively more involved in activities aimed at reducing the problems and suffering caused by UXO and mines.

In these early years, mine risk education<sup>14</sup> was little more than an emergency public information alert or mass media campaign, whereby warning presentations were given to mine-affected communities and those at risk of entering suspected mined areas, such as refugees. These presentations were normally supported by posters, videos, theatre, puppetry, songs, leaflets, T-shirts, lectures, and models of mines, but would be typically one-off events lasting between one and three hours. The development of MRE programmes was generally unstructured, ad hoc and isolated from other mine action initiatives, including from mine clearance itself.

As funding for mine action interventions increased, more agencies became involved and the need to professionalise



Republic Srpska. Short ICRC film on the danger of mines, shown before the movie Tarzan.

13. IMAS 04.10, *op. cit.*, Standard 3.126.

14. At this time, it was known as mine awareness.

the sector became evident. It became crucial to establish coordination mechanisms as well as standards and procedures which would allow agencies to build on existing programmes by using the lessons learnt from the MRE community. The mine action sector has therefore developed its own expertise and standards (the International Mine Action Standards — IMAS), including guidelines for MRE activities.<sup>15</sup>

## 2. Definitions

The terms “mine/UXO awareness programmes” or “mine/UXO risk education programmes” are used to describe activities aimed at protecting civilian populations from the dangers of UXO and mines. The term “mine/UXO risk education programmes” is used throughout this report to describe any of these programmes, whether the threat comes from UXO, other EO, or landmines. According to the IMAS, MRE is an essential component of mine action<sup>16</sup> which aims to help reduce accidents among populations living in mine-affected areas.

According to the IMAS, **unexploded ordnance** — UXO — refers to EO that has been primed, fuzed, armed or otherwise prepared for use or used. It may have been fired, dropped, launched or projected, yet remains unexploded either through malfunction or design or for any other reason.<sup>17</sup>

EO includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; pyrotechnics; clusters and dispensers; cartridge- and propellant-actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.<sup>18</sup>

A **mine** is 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.<sup>19</sup>

## 3. The aims and main principles of MRE

### *The inclusion of the UXO threat as part of MRE programmes*

Information collection in various post-conflict situations has highlighted that communities are not only affected by landmines, but also by other types of UXO. This information has been essential in understanding who was affected by those other devices and how. MRE programmes were adapted accordingly and have included the UXO threat since the early years. As such, the process for establishing MRE programmes is common to both UXO and mines and requires, as described below

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15. IMAS standards for MRE are being developed but have not yet been finalised but there exist *International Guidelines for Landmine and Unexploded Ordnance Awareness Education*, which were adopted by the UN in 1999. In addition, several organisations have developed MRE Implementation Guides, such as Handicap International, the ICRC, Save the Children, and UNICEF.

16. *IMAS 04.10, op. cit.* Standard 3.126.

17. *Ibid.*, Standard 3.218.

18. *Ibid.*, Standard 3.69.

19. *Ibid.*, Standard 3.122.

and whenever possible, to establish information collection, community involvement as well as coordination with other agencies for an effective integration of activities.

### *Information collection: a key element of MRE*

MRE programmes were initially developed through the provision of information to affected communities. However, as people continued to be injured and killed, it became essential to understand the reasons for these accidents through the collection of appropriate information.

To plan an appropriate MRE strategy, adapted to the local context, it is essential to first conduct a needs assessment, including not only casualty data but also other types of information categorised as follows:

- **Analysis of the threat:** types of UXO and mines, knowledge of conditions in which these munitions were deployed, types of areas affected, estimated quantity of land contaminated with ERW or denied to population, location of affected areas, number of casualties and livestock accidents.
- **Country analysis:** infrastructure; population statistics; political context, foreign policy; national plan for mine action and existing mine action activities; development plan for the country and activities of all agencies and ministries involved; existing resources available locally and through other agencies; awareness within the national government, local authorities and agencies of the ERW problem; cultural perceptions of mine survivors; and traditional ways of communicating.
- **Analysis of institutional mine awareness knowledge:** lessons learned from existing mine awareness initiatives in country; lessons learned from previous mine awareness initiatives in other countries; lessons learned from other development initiatives in country, for example, public health programmes.
- **Analysis of affected population (including information on mine/UXO accidents):** the role of men, women and children and different ethnic groups; community leaders and influential community members; cultural attitudes; religious beliefs; power structure; level of education; known UXO-affected areas; information on accidents with livestock; assessment of current mine/UXO related behaviour i.e. activities per group; activities influenced by presence of mines (e.g. access routes blocked causing long detours, children's games, such as throwing stones at mines, etc.); current local coping strategies to the problem; existing level of awareness and knowledge of ERW.

#### The main causes of UXO and mine accidents

- People are not aware of UXO and mines;
- People do not know the safe behaviours to practice around UXO and mines. They may be aware, but do not have the appropriate knowledge to avoid accidents;
- People are aware of UXO and mines and they know how to minimise the risks mines pose, but they are still practising high-risk behaviours (due to economic necessity or other compelling reasons).

As part of information gathering, casualty data collection is an important element of MRE activities (as well as of other mine action interventions) because it allows for the targeting of at-risk groups and of the location of the threat as well as contributing to the definition of adapted risk education/awareness messages. It also shows that people are not only injured or killed by lack of knowledge, but that a certain percentage of the victims has been forced into contaminated areas, generally because of economic necessity.

#### Economic necessity and ERW injuries in Bosnia-Herzegovina

The casualty information collected by the ICRC in Bosnia-Herzegovina shows the percentage of people injured in areas they knew to be dangerous. Over the years, there has been a clear increase in the percentage of people injured in known dangerous areas: an average of 13 per cent of people were injured in areas they knew were mined between 1992 and 1996 and the figure increased to 34 per cent for the years 1997-2002. These accidents are due to economic reasons as people do not have alternatives to cultivating their land, cutting wood, etc.

Information collection is essential for the appropriate targeting of groups at risk and areas of work, as well as for the elaboration of MRE messages. The lack of information can result in non-affected populations or low-risk groups being targeted, in MRE activities being implemented in areas not presenting any dangers, or in delivering messages that are not adapted to the at-risk populations in terms of content and/or methods. Subsequently, MRE activities established in such situations will not have any effective impact on decreasing the number of casualties and/or helping the affected populations in reducing the threat to themselves.

#### The importance of information collection

In Cambodia in the early 1990s, MRE programmes were developed without conducting an initial needs assessment. As a result, MRE activities were established in all villages, including non-affected villages. Although it can always be useful to conduct MRE in non-affected villages (they can be located near to affected villages or people may travel in dangerous areas for example), it is important to target affected villages first in order to minimise the existing threat. Targeting non-affected villages can also create paranoia amongst the population by highlighting a risk that does not exist.

In many contexts, children are often the group targeted first, generally because funding is easier to access and children easier to reach in terms of methods than adults. This often means that the groups generally most at-risk, often male adults, are not targeted and the overall number of victims hardly influenced.

Following the needs assessment, information collection continues throughout the MRE process so that adapted and selected information can in return be given out to affected communities according to their needs, their existing knowledge and their perception of the dangers.

### *Involving communities as a means to enable them to reduce the risks to themselves*

Risk-taking behaviour became an important issue as it highlighted the need for MRE programmes not only to raise awareness and knowledge of people but also to influence their behaviour. It is therefore necessary not only to establish a flow of information from the MRE agency to the affected communities, but also to collect information from the communities so that MRE programmes and other humanitarian activities can be tailored to the needs of each affected community. This also demonstrates the importance of working closely with affected communities and involving them in the whole process of MRE so that the problems they face can be discussed and appropriate solutions identified. This whole process has led to the establishment of what is called “MRE community-based programmes”.

### *Integration with other humanitarian activities to reduce the number of victims*

Community-based MRE can generate large amounts of data the analysis of which assists in the planning and priority setting of the mine action programme. Appropriate interventions can therefore be developed with the affected communities but require the integration of MRE activities with other humanitarian activities, such as clearance and socio-economic interventions, so that accidents can be reduced.



ICRC Mine Awareness Officer conducting mine awareness activities and group discussions with adults, Kosovo.

### Integrating risk education with other activities, experiences from Cambodia and Kosovo

In Cambodia, the Mines Advisory Group (MAG) community liaison strategies aim to ensure that UXO and mine clearance is prioritised on the basis of the needs of the villagers. MAG community liaison teams conduct pre-clearance village assessments where the views of the community are sought on development priorities, and monitor post-clearance activities. MAG also coordinates its work plans with development NGOs to assist community development activities, including building schools and health centers, together with ensuring access to wells, roads and land for agriculture.

Mine-affected communities often need other humanitarian assistance. Information collected by mine awareness teams from affected communities has a direct bearing on the work of organisations implementing humanitarian projects such as reconstruction, water sanitation, food and shelter distribution, medical assistance and agricultural projects. For example, in Kosovo, the ICRC compiled a list of villages needing wood so that people would not have to venture into mined forests. The list was forwarded to agencies engaged in wood distribution to assist them in prioritising target villages.

### *Long-term or emergency approach?*

Community-based MRE to civilians interventions are generally implemented on a long-term basis, at least until the threat has been removed or significantly reduced. This approach is used in the post-conflict period.



©ICRC/Jessica Barry, 2001.

Sarajevo, ICRC mine awareness "jumbo" poster.

In an emergency the focus is short-term. It is first necessary to warn people of the threat as soon as possible. This approach typically involves a one-way flow of information from the MRE agency to the target audience and generally uses mass media and/or audio-visual and graphic materials. If the situation allows, information should be collected from the target audience in order to adapt the messages and methods to be used according to the need. Overall community involvement is possible but to a much lesser extent. Whenever possible, emergency MRE interventions should evolve into community-based activities. A short-term risk education programme can take place prior to the end of, as well as after, conflict.



©ICRC/Johan Sohlberg, 2002.

*Public performance of mine awareness theatre for schoolchildren in a village of northern Albania severely affected by cluster submunitions.*

#### The risk education response in Kosovo

In response to the Kosovo crisis, an emergency UXO and mine awareness information campaign was launched in the Macedonian and Albanian refugee camps in May 1999, including leaflets distribution and presentations, in order to inform people about the new danger awaiting them before they return to their villages.

In sum, UXO and mine risk education programmes seek to facilitate information exchange between affected communities, government authorities, and humanitarian organisations, so that individuals and communities are informed about the UXO and mine threat and humanitarian interventions can be tailored to communities' needs.

The desired outcome of this information exchange is that the affected individuals will use the information provided to modify their behaviour and engage to a lesser degree in high-risk activities. In certain cases, e.g. where risk-taking is caused by economic necessity, this can only be achieved if solutions are provided in conjunction with other types of humanitarian intervention. The ultimate goal is of course to minimise the impact of UXO and mines and reduce the number of accidents.

#### 4. Who should provide MRE?

The selection of trainers involved in delivering risk education/awareness messages is crucial to the quality of MRE programmes. Internationally, organisations such as the International Committee of the Red Cross (ICRC), the United Nations Children's Fund (UNICEF) or international non-governmental organisations often provide the resources and seek to recruit local staff. National organisations have also been responsible for programmes, as, for instance, in Afghanistan and Laos. MRE activities are about exchanging information and discussing problems with affected communities, delivering awareness messages and training community members. Ideally, mainly nationals from the affected countries with the requisite communication or teaching skills should be recruited as MRE trainers.

The involvement of the military in this field of activities has been controversial. Often they have worked in isolation from the wider UXO and mine programme. On occasion this has resulted in the dissemination of contradictory messages to those agreed upon by the humanitarian agencies. In other contexts, the arrival of “uniforms” was not well received in communities, and their style of teaching and use of “military” training techniques were not always appropriate nor appreciated.

#### Military MRE responses: experiences in Bosnia and Herzegovina and Kosovo

In Bosnia and Herzegovina, the military did not initially coordinate with the rest of the MRE community and started the dissemination of different mine/UXO awareness information to children, potentially endangering them. For example, they were teaching them to retrace their footsteps if they found themselves in a minefield, even though it had been decided by the coordinating body not to give out such a message.

## 5. What should MRE provide<sup>20</sup>

Depending on the situation (i.e. emergency or not) and once appropriate information has been gathered, MRE programmes should provide information to raise knowledge and awareness of groups at risks and/or provide information which allow people to change behaviour and look for alternatives.

Causes of accidents	MRE to provide information
People are not aware of UXO/mines.	For people to know about UXO and mines.
People do not know the safest behaviour to practise around UXO/mines. They may be aware but do not have the appropriate knowledge to avoid accidents.	For people to know what to do about UXO and mines and how to behave.
People are aware of UXO/mines and they know how to minimise the risks mines pose, but they are still practising high-risk behaviour.	To allow people to find alternative solutions. To help people to change their behaviour.

The type of UXO/mine information given to affected population will depend on the information collected from them and will vary according to the target audience e.g. farmers, refugees, children. Generally, however, the main messages are built upon the following key elements:

- Basic safety messages and introduction;
- UXO and mine recognition (e.g. what is UXO, how to recognise it);

20. For an in-depth study which examines the different communication channels and media commonly employed as part of mine awareness activities and highlight their efficiency and appropriateness for different audiences, in different socio-cultural contexts and phases of an evolving mine action programme, see GICHD, *Communication in Mine Awareness Programmes*, GICHD, Geneva, 2002.

- The effects of UXO and mines: physical, psychological and economic;
- Profiles of risk-taking behaviours: adventure seekers, curiosity, false beliefs, economic necessity (access to food, fuel, work and items of economic value);
- Dangerous areas i.e. recognition of them, what they are, how to avoid them;
- Warning signs and clues indicating potential dangers;
- How to protect yourself and others: proper behaviours; what to do in unknown areas; what to do if you find yourself in a dangerous areas; what to do if you encounter UXO/mines; what to do in case of accident;
- Marking and reporting procedures for UXO and mines; and
- Myths/misconceptions about mines and UXO.

As UXO is generally found in contexts where mines have been used, the UXO threat is dealt with as part of a MRE programme along with mines. Messages specific to ERW (other than landmines) are described in section 4.

## 6. The difference between warnings and risk education

To protect the civilian population from the effects of ERW, it is important to understand the difference between “warnings” and “MRE”.

- **Warnings** can be defined as safety messages intended to make a target population aware of an impending or existing ERW threat. They may be given in advance by users of weapons i.e. “advance warnings”<sup>21</sup> and related to a public information campaign using international or local media, and/or printed materials, before the threat is effective. Humanitarian agencies can be involved in delivering advance warnings in certain contexts (see below). Warnings are typically one-way, negative and punctual messages. This reduces their effectiveness over the long term.
- **MRE or awareness information** is disseminated by mine action and humanitarian agencies, usually once the threat exists. It uses community-based techniques requiring the involvement of affected communities and public information campaigns using mainly local media. MRE therefore aims to be two-way and sustained. It is known that over the long term positive messages are more likely to be heeded than warnings not to do something.



Croatia, a school play to learn about living in an ERW contaminated area. ©ICRC, G. Diffidenti, 2000.

Humanitarian agencies can be involved in the dissemination of advance warnings when the threat is known in advance, e.g. in relation to the announced bombing

21. See United Nations, *Amendments on the Protection of the Civilian Population from the Effects of ERW*, *op. cit.*: “It would seem useful to maintain this framework and terminology in Article 6 of the ERW framework paper. In other words, when identifying measures, such as advance warning, which may be taken before or during an attack, one would speak of taking ‘feasible precautions’. Alternatively, actions to be taken after the end of active hostilities would be identified as ‘necessary and appropriate measures’. This would be consistent with the structure of existing law and language already agreed upon by States.”

campaigns in the recent conflicts of Afghanistan, Kosovo and Iraq. In such circumstances, it is possible for MRE agencies to prepare and disseminate messages to warn civilian populations of the future threat. If the threat is not known prior to the conflict, humanitarian agencies can also provide advance warnings during the use of weapons, as the threat starts to be exposed. For warnings to be effective it is extremely useful to know as soon as possible which munitions are being used; which depends on the willingness of the weapon users to disclose that information. Advance warnings can also be disseminated to civilian populations if the relevant humanitarian organisations have access to the affected communities either directly or, if not, through the mass media, an example is media reporting of the use of cluster munitions in Iraq.<sup>22</sup>

### Warnings in Iraq

Prior to the outbreak of the war in Iraq in 2003, UNICEF provided advance warnings about ERW in television spots as part of a general safety campaign, and the dissemination of materials through the Iraqi Women's Federation.<sup>23</sup>

The dissemination of advance warnings by humanitarian organisations is generally done independently from the military in order to both preserve the neutrality of the organisations and ensure a clear distinction of mandates towards local authorities and population.

	Characteristics of advance warnings	Characteristics of mine risk education
<b>By whom</b>	Users of weapons. In some cases, humanitarian organisations.	MRE agencies: NGOs, Mine Action Centres, local and national authorities.
<b>When</b>	In advance of the threat: prior to the use of a weapon or at the time of its use.	Existing threat: during and after the use of the weapons.
<b>How</b>	Public information campaign, using international or local media and/or printed materials.	Community-based techniques and/or information campaigns using mainly local media and/or printed materials.
<b>How long</b>	Short term.	Middle to long term.
<b>For whom</b>	The whole population inside or outside their country.	Targeted audience going back to or living in affected areas.
<b>What for</b>	To inform people or raise their awareness of a future danger.	To inform people about an existing danger and give them information they can use to reduce the risks to themselves and their communities.

22. "UK forces use cluster bombs", BBC News, 3 April 2003, at: [news.bbc.co.uk/2/hi/uk\\_news/2912105.stm](http://news.bbc.co.uk/2/hi/uk_news/2912105.stm).

23. E-mail from UNICEF Office of Emergency Programmes to GICHD, 1 May 2003.

Because physical access to affected communities is generally difficult and sometimes impossible in the context of a known future conflict e.g. announced bombing campaigns, the provision of advance warnings is carried out through public information campaigns, using local or international media (mainly radio or TV spots and programmes as they can be broadcast from within or from outside the country).



© ICRC/Till Mayer, 2001.

*Macedonia. Reading an awareness leaflet about the dangers of UXO and mines.*

Printed materials are also used and can either be distributed directly to the populations if they can be reached (e.g. refugees going back to their country) or dropped over certain areas. The dropping of leaflets, brochures, etc. is mainly done by users of weapons. The security situation is generally one of the main reasons why humanitarian organisations do not have access to affected communities. Subsequently, and for the same reason, flying over the concerned area or country to drop printed warnings is not a means open to the humanitarian organisations but is, generally, in the case of the users of weapons.

The methods used for providing warnings (mass media, printed materials) and the timing of their dissemination (prior to the threat or during the use of weapons) do not allow affected groups to be precisely selected. Indeed, at the time of weapon use, the exact location of the threat is not necessarily known because munitions can go astray or miss their target.

Advance warnings permit a large number of people to be warned about a potential or a new threat, in a short time. Thus, coverage should be broad and messages general. Due to the general lack of precise information, the warnings must explain the type of danger to be expected, its effects and the behaviours to adopt. Warnings must be followed up as soon as possible by specific MRE messages targeting the groups at risk with locally-adapted information. Warnings can be relatively quick to organise. Field-testing of warnings before their production is important, ideally within the affected country or with refugee populations. However, this may be difficult to organise, especially at short notice.

## 7. Measuring success of UXO/mine risk education

Monitoring and evaluation are necessary components to know whether a MRE programme is being successful. The aim of monitoring is to keep track of activities and identify whether changes need to be made to MRE activities and materials. As such, it serves as a “quality control” instrument and also allows for the development of information records to be used for evaluation.

An **evaluation** is a process which attempts to determine the value or worth of an intervention.<sup>24</sup> It attempts to measure the effectiveness and efficiency of the programmes, and in particular its impact on the intended beneficiaries. In the specific case of a MRE programme, it will be a way to measure the acquisition of knowledge and behaviours by affected communities and whether the provision of information to affected communities, the integration with other development projects, and the communication channels used, have had an impact on raising the knowledge of people and changing their behaviours, thereby reducing the number of casualties.

The evaluation of MRE programmes is a challenging issue as it involves both quantitative (e.g. number of accidents) and qualitative indicators (e.g. behaviour change, raising of awareness, etc.). Many other factors can influence the number of casualties (e.g. other mine action programmes being carried out, such as clearance operations, or population movements.). It is almost impossible to take into consideration all the factors involved when evaluating a MRE programme, so results may be inconclusive.

Another constraint is the general lack of information collected on knowledge, attitudes, practices and beliefs prior to the implementation of MRE activities. This makes it more difficult for an evaluation to assess the specific impact of MRE activities in bringing about change.

Thus, to monitor and to evaluate MRE programmes, it is essential to carry out information collection prior and during the implementation of MRE activities. Information on existing knowledge, attitudes, practices and beliefs as well as on casualties, needs to be collected as early as possible. Even with a concerted effort, an objective, quantitative and qualitative evaluation of the effect of warnings and risk education programmes is very difficult to achieve.

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24. United Nations, *International Guidelines for Landmine and Unexploded Ordnance Awareness Education*, United Nations, New York 1999.

### Examples of warnings and of MRE awareness information/messages

#### Warnings

- Past conflicts have provided examples of advance warning which could be taken for the protection of civilian population.\* During the 1939-1945 war, warnings of impending attack were sometimes given to civilians by radio or by means of pamphlets in order to allow them to leave a targeted area. One specific example is the bombing of the Skoda armament works in Czechoslovakia in April 1945. Prior to the bombing of the plant, a warning was broadcast to workers indicating the likelihood of an attack.
- During the 2001 bombing campaign in Afghanistan, “advance warnings” were disseminated in the form of leaflets and radio spots were broadcast by the coalition forces to inform people about the threat.

#### Risk education

- In Kosovo, mass media campaigns were established in refugee camps by MRE organisations to inform people about the threat before they went back to their villages. Those campaigns were followed by targeted community-based MRE interventions within affected villages in Kosovo.
- A BBC radio programme was used inside Afghanistan by MRE organisations during the bombing campaign by coalition forces at the end of 2001 in order to inform people about the dangers posed by cluster bombs and other munitions being dropped. Radio spots were also broadcast during the bombing campaign so that people in camps and throughout the country could be informed about the dangers of UXO.
- After the bombing campaign, community-based activities were established by MRE agencies in affected areas and targeted communities living in or nearby contaminated environments.

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\* United Nations, *Amendments on the Protection of the Civilian Population from the Effects of ERW*, *op. cit.*



©ICRC/Tim Page, 2002.

*Omantai, between Sri Lankan government and the Liberation Tamil Tigers Eelam zone. Mine warning signs.*

## 4. The risk education response to ERW

### 1. Information collection

#### *Type of information needed*

##### Information provision in Kosovo and Afghanistan

Following the bombing campaign in Kosovo at the end of 1999, the UN Mine Action Center only had access to crucial information about the precise location of the strikes the following year. This information was of particular importance for demining work and for a better targeting of risk education activities focusing on cluster munitions. A lot of time was wasted by mine action organisations, and their work could have been more efficient had this information been available earlier.

Information was released in a more effective manner to mine action organisations following the bombing campaign of 2001 in Afghanistan, which resulted in an improved selection of affected communities by demining and MRE organisations.

Information collection is crucial for the development of any ERW risk education activities in order to better understand the profiles of the victims, the circumstances of the accidents, the types of devices involved and their dangers, and affected areas. This information has to be collected from the weapon users, from affected communities, humanitarian organisations and from survey work in-country.<sup>25</sup> The GICHD has previously prepared a list of information requirements including technical specifications of munitions, aim points and method of operation.<sup>26</sup> This information could be provided very quickly and is essential to establish adapted and targeted risk education activities. The following table summarises the information:<sup>27</sup>

25. The GICHD has sought responses from organisations involved in clearance and risk education operations on what the field requirement is for information. See GICHD, *Explosive Remnants of War — Information Requirements*, GICHD, Geneva, May 2003.

26. GICHD, *Information Needed on Explosive Remnants of War by Mine Action Organisations*, GICHD, paper presented to CCW Intersessional Meeting, August 2001.

27. *Ibid.*

Information type	Use in MRE education programmes
<ul style="list-style-type: none"> <li>• Types of munitions used.</li> <li>• Dimensions and visual characteristics of munitions used (e.g. size, shape and marking).</li> <li>• Dimensions and visual characteristics of packaging or transporting material.</li> </ul>	<ul style="list-style-type: none"> <li>• ERW recognition by population.</li> <li>• Training for MRE trainers.</li> <li>• Development of didactic and support materials and media.</li> </ul>
<ul style="list-style-type: none"> <li>• Location information (e.g. air strikes location for cluster bombs, fighting location, etc.).</li> <li>• For air-, gun- or rocket-delivered submunitions or conventional bombs, details of the munition (e.g. type, fuzing and warhead), delivery direction, drop height and target area.</li> <li>• For air- or rocket-delivered submunitions, details of delivery canisters, including markings.</li> </ul>	<ul style="list-style-type: none"> <li>• Information on dangerous areas for population.</li> <li>• Training for MRE trainers.</li> <li>• Development of didactic and support materials and media.</li> <li>• Precise selection of where MRE is needed.</li> </ul>
<ul style="list-style-type: none"> <li>• Details of any anti-disturbance or anti-handling devices, any self-destruct or self neutralisation systems (e.g. munition “life” and active period).</li> </ul>	<ul style="list-style-type: none"> <li>• Training for MRE trainers.</li> </ul>

It is essential to obtain this information as soon as possible in order to establish effective and locally-adapted MRE activities. Where possible, this information should be obtained as early as possible from the weapon users, so that MRE interventions can be developed quickly.

The other type of information needed for the development of ERW-specific MRE programmes (e.g. casualty data, risky behaviours and attitudes, perception and awareness of the risk by the communities, causes of accidents, etc.), has to be collected from the communities, local authorities and other agencies, as detailed in section 3.3 above.

### *Constraints in getting the information*

Recent conflicts have shown that the information provision by weapon users was not always possible although lessons learnt from past conflicts have allowed for an improved access to information from warring parties. The problems encountered in Kosovo in 1999 by mine action organisations in gaining access to crucial information have been easier to overcome after the 2001 bombing campaign in Afghanistan.

Information collection from affected communities will depend on the physical access to the areas at risks. Can MRE agencies access affected villages or only population in camps? If the MRE organisations are based in the country, are the affected villages safe to travel to? Do the national authorities involved allow MRE organisations to collect the required information?

### *Using information to plan the MRE strategy for ERW*

As seen in section 2, the information collected is analysed so that an MRE strategy can be determined and developed. In summary, the information gathering mainly allows for the planning of an appropriate strategy:

- By defining the approach to be used: long-term or emergency;
- By defining the at-risk groups to be targeted;
- By identifying affected areas to be targeted;
- By determining what information/messages affected communities should receive; and
- By deciding what activities to establish and materials to produce.

The following examples can illustrate how information collected can be used in defining the strategy:

Type of information collected	Analysis of information	Planning the MRE strategy
<b>ERW threat</b>		
<ul style="list-style-type: none"> <li>• There is a limited ERW problem in the south of the country.</li> <li>• Refugee camps on the other side of the border and it is feared that refugees will cross to reach their villages.</li> <li>• Cluster munitions have been dropped in towns and fighting took place in the centre of the country.</li> </ul>	<ul style="list-style-type: none"> <li>• The information on the UXO will be different according to the located area.</li> <li>• Different target groups to be reached.</li> <li>• The work will have to be prioritised according to the type of threat.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific messages to be delivered in refugee camps to inform people about the danger from ERW prior to their return.</li> <li>• Reporting structure to be established to and from the communities on the location of cluster munitions and UXO.</li> <li>• Specific messages on cluster munitions to be disseminated to children living in urban areas.</li> </ul>
<b>Country analysis</b>		
<ul style="list-style-type: none"> <li>• Most people have radios but TV is available mainly in towns.</li> <li>• Physical access to certain affected villages is difficult in winter.</li> <li>• Children helping out in income-generating activities do not go to schools.</li> </ul>	<ul style="list-style-type: none"> <li>• It will be possible to disseminate mine/UXO information through radios, but TV is not an efficient means for people in rural areas. MRE activities should be implemented as a priority in villages whose access is difficult before winter.</li> <li>• Children should also be targeted through out-of-school activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Radio spots and radio programmes to be broadcast and linked to activities developed in the villages.</li> <li>• Supporting materials to be developed to support media campaign.</li> <li>• TV spots and programmes focusing on cluster munitions threat to be broadcast.</li> <li>• Interactive as well as out-of-school activities to be developed for children, focusing on what is safe to play with, and where it is safe to play.</li> </ul>
<b>Affected population</b>		
<ul style="list-style-type: none"> <li>• Risky behaviours: adults collect scrap metal; children in towns play with cluster munitions having an attractive colour.</li> <li>• Community perception: women think that UXO can be moved without danger.</li> <li>• Existing knowledge: children know UXO are dangerous but think they can safely destroy them by throwing them in the fire.</li> </ul>	<ul style="list-style-type: none"> <li>• Risky behaviours are linked to economic conditions.</li> <li>• Messages have to be developed according to the identified at-risk activities and according to the various groups.</li> <li>• The main target groups in order are children, women and then men; information will be targeted at the specific groups.</li> </ul>	<ul style="list-style-type: none"> <li>• Community-based activities to be established to discuss with affected communities and to find alternative solutions to the problems they face.</li> <li>• MRE activities to be integrated with other development and mine action activities to reduce the threat due to economic factors.</li> <li>• Specific activities to be developed for and with women, who can also be used as a vector to disseminate information to the children and men.</li> </ul>

### *Main type of messages and information provided to affected communities*

The messages will be defined on the basis of the information collected from affected communities on existing knowledge, community perception of the threat, misconceptions, as well as from the analysis of information on the UXO and mine threat. The methods employed to deliver prevention messages will be decided upon after analysis of the other information collected, i.e. country analysis, means of communication, physical access to affected villages, schooling, etc.

The listed key messages used as part of MRE programmes (see section 3.5) have included both the UXO and mine dangers. In certain contexts however (e.g. Afghanistan, Cambodia, Iraq, Kosovo, Laos, etc.), the UXO threat has been highlighted in the training curricula as follows:<sup>28</sup>

- **Basic safety messages :** general awareness information on the dangers of both UXO and mine. Safety messages are common to both UXO and mines, with sometimes specific messages relating to UXO only.

#### Examples of common messages:

- *All UXO/mines are potentially deadly*
- *Do not keep UXO/mines at home.*

#### Example of UXO specific messages:

- *If someone has moved an item of UXO, it does not mean it is safe.*

- **UXO recognition:** what is an item of UXO, how to recognise them. Recognition of UXO is a separate topic included within the mine recognition chapter. According to the context and the existing threat, details about such UXO as fuzes, cluster munitions, mortars, will be included in order to further explain the dangers involved with these devices. Mines will be dealt with separately. Abandoned armoured fighting vehicles and small arms and light weapons have been included as part of ERW in the ICRC training curriculum for its Iraq operations.<sup>29</sup>

#### Examples of messages used:

- *UXO are explosive devices which have been used but did not go off.*
- *UXO are sometimes more powerful than mines.*
- *Fuzes can be very small but are potentially harmful and can even be deadly.*
- *Cluster bomb munitions are normally more powerful than mines and can kill and injure at greater distances; they come in many shapes, sizes and colours.*

28. Examples have been extracted from Handicap International, *MRE Implementation Guide*, Handicap International Publications, coll. Mines Department, Lyons, July 2001; ICRC, *ERW Training Curriculum for Iraq Operations*, ICRC Middle East Delegations, ERW Awareness Team, February 2003; ICRC, *Mine/UXO Awareness Training Curriculum for Afghanistan*, 2002.

29. ICRC, *ERW Training Curriculum for Iraq operations*, *op. cit.*

- **The effects of UXO and mines:** while varying in severity, they are generally similar and have a physical, psychological and economic impact.
- **Profiles of risk-taking behaviours:** adventures seekers, curiosity, beliefs, economic necessity. As highlighted above, there are specific risk-taking behaviours relating to UXO, e.g. intentional tampering out of curiosity, playing or to remove the threat from children. Many people have also been injured while passing or standing by when somebody was handling an item of UXO. This is specifically dealt with with messages such as “Putting yourself at risk is a selfish act as you also put bystanders at danger”. Economic necessity leading to scrap metal or extracting explosives is also taken into consideration for prevention messages and reinforces the needs for integrating MRE activities with other humanitarian activities.
- **Dangerous areas:** i.e. what they are, how to avoid them. The list of indicators for the presence of ERW and mines is common to all devices e.g. areas of previous fighting, roads and roadsides, trenches, bunkers, ammunition packing cases, changes of vegetation. Specific and locally-adapted messages are necessary to inform people in bombed areas and in areas targeted by cluster munitions strikes.
- **Warning signs and clues:** indicating potential dangers and relating messages are common to both UXO and mines. In certain cases, messages state that the presence of UXO can also be an indicator of mines.<sup>30</sup>
- **How to protect yourself and others:** proper behaviour i.e. what to do in unknown areas, what to do if you find yourself in a dangerous areas, what to do if you encounter a mine/UXO, what to do in case of accident. These issues are also dealt with together and evacuation procedures are similar whether it is a mine or UXO accident. It is mainly due to the fact that wherever there is an UXO, there might be mines as well as/or other sub-surface UXO.
- **ERW marking and reporting procedures.** The procedures for ERW marking are generally similar to those for mines, though it depends on the context. The importance of reporting dangerous and unknown items remains a constant requirement. As part of MRE programmes, it will be essential to implement an efficient reporting system to the mine action coordination body and local authorities in charge so that the threat can be dealt with as soon as possible.
- **Myths/misconceptions.** Myths or misconceptions are relevant mainly to specific UXO, e.g. “do not let your shadow fall over a cluster bomblet or it will explode”. Whilst other myths and misconceptions relate to both UXO and mines, e.g. “if you drive your cattle through a mined field, it will then be safe”.

#### Examples of myths relating to both UXO and mines:

- *Just because the war is over does not mean that the mine/UXO threat is over.*
- *If someone was in a dangerous area before and was not injured, it does not make the area safe.*

30. Handicap International, *MRE Implementation Guide*, op. cit.

**Misconceptions relating mainly to UXO:**

- *Putting a fire over an item of UXO does not necessarily make it explode but can make it more unstable.*
- *Just because an item of UXO has been handled once or twice does not mean it is safe — it can explode anytime.*

## 2. The process of community involvement, coordination and integration

Once the initial information collection process has been initiated, the principles of community involvement, coordination with other agencies, integration of activities and the relevant methods and techniques will be applied in the same ways whether dealing with a UXO threat or a mine problem (see section 3.3) or both. Reporting from and feedback to affected communities should be highlighted as an essential element of a MRE programme.

## 5. Lessons learned from MRE

### *The process of MRE*

The process of establishing a MRE programme is common to both ERW and mines. Information gathering, community involvement and integration of activities have to be carried out whatever the devices involved are. However, ERW, however, present some specific problems which have to be taken into consideration for the implementation of MRE activities.

- ✓ The process for MRE activities is common to both ERW and mines.

### *Information collection: a key element of MRE*

A needs assessment including information collection on knowledge, attitudes, beliefs and practices is essential for:

- The implementation of locally adapted MRE activities,
- The monitoring and evaluation of the programme.

In an emergency situation (e.g. little or no access to affected population, timing constraints, etc.), information gathering must also be conducted but will certainly be more difficult and more limited than in other contexts. Nonetheless, as much information as possible must be collected.

- ✓ To respond to communities' needs and therefore reduce the number of casualties, information gathering must be conducted prior to and during the implementation of MRE activities.

For ERW, information must be collected from weapon users, communities, local authorities and other organisations. The sooner the information is available and accessible, the better mine action agencies can protect civilian populations from the effects of ERW. Certain technical information on weapons is crucial to MRE activities.

- ✓ Technical information from weapon users must be provided as soon as possible to facilitate the protection of civilian populations from the effects of ERW.

To understand the knowledge, attitudes, practices and beliefs of affected communities, information must also be collected from communities and authorities. It has been previously highlighted that lack of knowledge or awareness is one of the reason of accidents but that other injuries or deaths occur because of economic necessity. In this case, raising awareness is not sufficient and socio-economic intervention is needed to prevent those injuries and deaths. This can only be achieved if communities are involved in looking for alternative solutions, a process depending on other humanitarian interventions.

- ✓ The necessary information for planning and organising a risk education programme must be collected from all relevant sources, including weapon users, affected communities and authorities, as soon as possible.
- ✓ Casualties resulting from high-risk behaviours can only be addressed if technical and/or socio-economic solutions are sought, in addition to providing warnings and risk education.

### *Providing risk education to affected communities*

The solutions identified for affected communities can be technical (marking, demining etc.), socio-economic and informative. In the case of informative solutions (or MRE activities), the analysis of the information previously collected allows for MRE messages to be tailored to communities' needs. The MRE messages should provide affected communities with information (e.g. about the threat involved, the potential effects of ERW, etc.) they can use to reduce the risks to themselves.

- ✓ To be tailored to communities' needs, informative solutions must be based on information collected and its analysis.

Informative solutions can be divided in two categories which can each be differentiated by the target groups, the type of organisation disseminating the information, the timing involved (long-term or short-term) and the techniques and methods employed:

- **Warnings** are messages usually, though not exclusively, given in advance by weapon users; disseminated through a public information campaign using international or local media, or/and printed materials, before the threat is effective. It is usually a short-term strategy.
- **MRE or awareness information/messages** are disseminated by mine action or/

and other humanitarian organisations once the threat exists, using community-based techniques requiring the involvement of affected communities or/and public information campaign using mainly local media and/or printed materials. It is usually a long-term strategy.

✓ Informative solutions can be of two sorts: “warnings” and “MRE information/messages”. They differ in their target groups, the type of organisation disseminating the information, the timing involved (long-term or short-term) and the techniques and methods employed.

- **Warnings** are most useful in specific situations, where civilian populations are not accessible, when a short-term emergency response is needed, and the delivering organisation is aiming to cover as many people as possible. Warnings alone are unlikely to have a positive long-term influence on behaviour, therefore they need to be followed by community-based risk education.

✓ Warnings are short-term and usually aimed at a specific task, that does not mean they are without merit, but warnings alone are insufficient to have a substantial positive effect on the behaviour of affected civilian communities.

The particular problems associated with ERW may require specific MRE messages. Other messages are common to both ERW and mines.

✓ Specific messages addressing the threat from ERW are necessary.

### *Who should provide MRE*

Professional teachers or communicators from the affected country should be involved in implementing community-based MRE activities. The military, humanitarian organisations and government authorities can be involved in disseminating advance warnings, depending on the circumstances and recognising the potential issues it may raise, for example regarding the neutrality of NGOs.

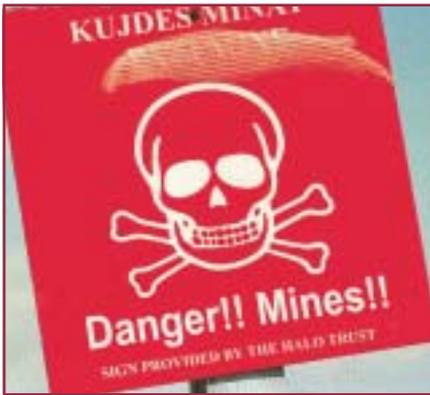
✓ Nationals from the affected country with the requisite communication or teaching skills should be hired to conduct MRE activities.

✓ Advance warnings can be delivered by military or weapon users and humanitarian organisations, depending on the context and on the information available.

Examples of different MRE and warning signs



Omantai, between Sri Lankan government and the Liberation Tigers Eelam zone. Mine warning sign. ©ICRC/Tim Page, 2003.



Minefield in Kosovo. ©ICRC/Giovanni Diffidenti, 2000.



Minefield in Cambodia. ©Handicap International/Philippe Merchez, 1994.



Nicaragua, after Hurricane Mitch. © ICRC/Mary Anne Andersen, 1998.



Minefield at the border between Georgia and Abkhazia. ©ICRC/François von Sury, 1999.

# Glossary of acronyms

CBU	cluster bomb unit
CCW	Convention on Certain Conventional Weapons
EO	explosive ordnance
ERW	explosive remnants of war
GICHD	Geneva International Centre for Humanitarian Demining
ICRC	International Committee of the Red Cross
IMAS	International Mine Action Standards
MAG	Mines Advisory Group
MRE	Mine/UXO Risk Education
NGO	non-governmental organisation
UN	United Nations
UNICEF	United Nations Children's Fund
UXO	unexploded ordnance



©ICRC/Giovanni Diffidenti, 2000.

Gnjilane/Gjilan, Sojeva, Kosovo, primary school. Children of school receiving mine awareness training from ICRC officers.

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