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Formal and Informal Responses to Ordnance Contamination

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NOTE

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SUMMARY

This paper explores the tension between informal responses to explosive remnants of war (ERW) contamination (as embodied in certain practices of ERW affected populations) and the formal structures of the mine action sector. It examines dynamics of the mine action sector as an aggregate of diverse functions. It looks at the pattern of recent ordnance handling accidents, and the structures that underpin these accidents, among the population in a specific area of Cambodia. The paper then highlights the disjuncture between the standard operational models of the mine action sector and the forces that are prompting these accidents. The paper goes on to assert that an enhanced response to this problem might come from the assimilation of traditional functions of the mine action sector into other programmes of development assistance, which would enhance the instrumental value of these functions. It suggests that mine action's current assertions to form a coherent sector may run counter to the best interests of affected populations.

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FORMAL AND INFORMAL RESPONSES TO ORDNANCE CONTAMINATION

Richard Moyes and Dave Tinning

INTRODUCTION

This paper explores the tension between informal responses to explosive remnants of war (ERW) contamination (as embodied in certain practices of ERW affected populations) and the formal structures of the mine action sector. It examines dynamics of the mine action sector as an aggregate of diverse functions. It looks at the pattern of recent ordnance handling accidents, and the structures that underpin these accidents, among the population in a specific area of Cambodia. The paper then highlights the disjuncture between the standard operational models of the mine action sector and the forces that are prompting these accidents. The paper goes on to assert that an enhanced response to this problem might come from the assimilation of traditional functions of the mine action sector into other programmes of development assistance, which would enhance the instrumental value of these functions. It suggests that mine action's current assertions to form a coherent sector may run counter to the best interests of affected populations.

BACKGROUND: ORDNANCE CONTAMINATION

Unexploded ordnance (UXO), and to some extent abandoned explosive ordnance (AXO), will present a persistent form of contamination wherever modern conflict takes place.¹ The main negative impacts of this contamination are deaths and injuries that result from detonations of the ordnance, or secondary impacts that result from fear of initiating such detonations. By comparison with anti-personnel mine contamination, these secondary impacts (for example, land denial) are not so severe. Local people will generally work around ordnance contamination or they engage with the ordnance in an effort to control or manage the risk to which they or others are exposed. These forms of management, either through avoidance or engagement, are generally possible because ordnance is often found lying on the surface (it is visible) and because ordnance is not so likely to detonate as a result of accidental contact.² In addition to patterns of risk management, people commonly seek to extract economic value from ordnance, usually through the sale of metal components. Patterns of risk management and economic exploitation vary between communities and societies on the basis of their overall 'resilience'—those economic and societal structures that allow people to avoid risk.³

FORMAL RESPONSES TO ERW CONTAMINATION: THE MINE ACTION SECTOR

The mine action sector is the array of institutions, financial relations and emerging bureaucratic forms that purport to address the impact of post-conflict mine and ordnance contamination. The sector has developed rapidly since the early 1990s and it has enjoyed an uneasy relationship with broader forms of post-conflict assistance (such as development programming).⁴ The sector was initially dominated by a sense of technical specialization, reinforced by reliance on an expatriate staff base of former military personnel. For a time a

development focus wrestled to become the dominant organizing principle. However, over recent years the dominance of the military/technical perspectives has been overtaken not by a development focus but by the desire for formal bureaucratic definition of the sector and its practices. The emergence of this formal bureaucracy is most apparent in the International Mine Action Standards (IMAS), obligations and anxieties regarding insurance and, encapsulating these, the national coordinating function often seen as a requirement for mine action implementation.

Mine action comprises five pillars: humanitarian demining, mine risk education, advocacy against anti-personnel mine use, victim assistance and stockpile destruction.⁵ These are a disparate set of activities brought together in a common claim on the financial resources mobilized to address the impact of mine contamination (and often ordnance contamination also). While some components share a degree of technical common ground (such as the explosives engineering commonality between landmine clearance, ordnance disposal and stockpile destruction), the different components brought together as mine action can also stand separately—often as elements of other sectors or areas of practice with which they have greater commonality. Thus, for instance, survivor assistance has been struggling as a component of mine action because in its technical details, and in its macro-level context, it has little to do with mines and ordnance and much more to do with health services and social constructions of disability. In a similar, though less stark, way, stockpile destruction is primarily about treaty implementation and perhaps improved control of military structures⁶—it has little immediate similarity with the processes by which a post-conflict community is helped in managing the threat of landmine contamination on its agricultural land. Advocacy against mine use is also primarily about treaty implementation, development of civil society and issues of state responsibility. Mine risk education, in its pedagogic or participatory practices, is more closely related to health education, community safety planning or development needs assessment than it is to landmine clearance.⁷ These disparate elements cohere around landmine clearance, which is the most individual function within mine action and the one that has been the greatest focus of resource mobilization.

While these elements may assert their commonality under the term “mine action”, it is a nominal meeting of different humanitarian functions. These functions have shared in a common endeavour but each can (or could) be seen equally to share in common endeavour with other parallel practices. We highlight here that the mine action sector is an artificial construct because we will argue that other development programmes need to appropriate some of the objectives and functions of the mine action sector if a more effective programme of post-conflict assistance is to be developed. Such a process must necessarily clash with those forces that currently seek to bind the mine action sector together.

The latest developments of the formal bureaucracy of mine action are a natural extension of the guiding principles of the earliest mine action field operations. Almost all mine action field operations have asserted the authority of their staff to engage directly with the mine or ordnance contamination, and at the same time have asserted the effective “illegality”⁸ of such engagement on the part of local people. Assertion of an effective monopoly over engagement with explosive contaminants has been a hallmark of the formal mine action sector. Such a monopolizing drive has been a common component of professionalization in many spheres. As part of this process, developments such as IMAS serve to dictate the terms and conditions that must be met in order for an operation to continue to enjoy the benefits of that monopoly in a given country environment (as any number of codes of practice serve to ensure minimum standards in other professional contexts.) The stated purpose of such codification and regulation is of course the protection of the public against malpractice by those claiming professional status.

A corollary of this formalization is a developing perception of the informal mine action practices of local people in mine- and ordnance-affected environments. The two most clearly delineated examples of these practices have been the phenomenon of “village demining” and “tampering” with ordnance. Analyses of these issues have generally developed into a critique of the formal mine action sector.⁹ This is almost inevitable given that the practices in question are given a name and a meaning in dialectical opposition to the formal sector's assertion of its monopoly of direct engagement with mines and ordnance; that these practices stand in opposition to this monopoly was one reason for them being constructed as “problems” in need of further analysis in the first place.¹⁰

MINE ACTION AND ORDNANCE

From mine action's inception, ordnance contamination has been addressed as a component of mine action programming. However, as the sector's name suggests, ordnance has generally taken second place to the challenge of alleviating the impact of anti-personnel mines. It was the severe impact of anti-personnel mines on post-conflict populations that precipitated the establishment of specialist mine action organizations. It was this contamination that was a focus for civil society campaigning, the advocacy of Princess Diana, the legal innovation of the Ottawa Mine Ban Treaty and the award of the Nobel Peace Prize to Jody Williams and the International Campaign to Ban Landmines. Mines dominate the discourse of post-conflict contamination. In many countries, ordnance accidents are reported externally under the catch-all title of mine accidents.

There has however been a general recognition that over time different operational structures are more or less appropriate for addressing mine and ordnance contamination (in particular the use of responsive mobile teams to address ordnance contamination). There is also recognition that the long-term prognoses for mine and ordnance contamination may be different in any given environment. No governments would sign up to such a commitment as Article V of the Ottawa Mine Ban Treaty with respect to ordnance contamination. In Poland, for example, over 10,000 reports of ordnance contamination were responded to by the national authorities in 2003—this some 50 years since the cessation of hostilities.¹¹ The long-term prognosis of residual ordnance contamination (which does not represent an acute threat) is very important to this analysis. In general, mine action programmes have failed to effectively recognize and plan for the long-term need for capacity to manage this threat and have created operational structures that are separate from regular institutions of the state and operating at significantly higher costs than could be borne by such regular institutions.

FORMAL RESPONSES TO ERW CONTAMINATION IN CAMBODIA

International donors, including the EU and various individual member states, have been providing resources for mine action activities in Cambodia since 1991, aiming to release land, reduce casualties, and increase the potential for social and economic development within affected communities. The Cambodian Mine Action Authority has a vision “to move toward zero impact from landmines and UXO by 2012” and “to have a Cambodia free from the negative humanitarian and socio-economic impacts of landmines/UXO by 2020”.¹² It is also stated that “even beyond this period, it is probable that a reduced capability, with smaller and more mobile demining teams, will be needed to deal with smaller or lower priority clearance tasks and numerous UXO for possibly as long as a further 50 years.”¹³

There have been two primary mechanisms for addressing ordnance contamination through the formal mine action sector:

- Explosive ordnance disposal (EOD) teams run by national or international mine action agencies as part of a specialist mine action capacity (e.g. not integrated into any other state structures such as the army or the police); and
- Mine risk education (MRE) undertaken in schools and through mobile teams. This work is undertaken by mine action agencies, through government education channels and by broader development organizations. MRE generally promotes the key messages that ordnance is dangerous and that people should not touch suspicious items but report them for destruction by the EOD capacity.

Despite the ongoing application of formal mine action responses to ordnance contamination, Cambodia continues to present annual ordnance-related casualty rates as high as any country in the world. While the number of casualties from landmines declined during the period 1999–2003, casualties from ERW remained at a more or less stable level. In recent years the number of ERW related casualties has actually risen. The majority of ERW injuries and deaths (around 75–80% of such casualties each year during the period 1999–2003) were attributed to a combination of “tampering” activities (the deliberate handling of ordnance) and “bystanding” by those at the scene of such incidents.¹⁴ Tampering, as we have noted, is one of those informal practices by which local people breach the monopoly that the mine action sector asserts over contact with explosive contaminants.

INFORMAL RESPONSES TO ERW CONTAMINATION: SCRAP METAL & TAMPERING ACCIDENTS IN BATTAMBANG

As we have indicated above, tampering, or deliberate handling of live ordnance, has been an object of study for the mine action sector and such analysis has contributed to an ongoing critique of the sector. This section presents a new case study of Battambang Province, Cambodia. This provides an opportunity to restate some basic elements of the established critique, while presenting new material that reinforces and further illuminates that critique.

CASE STUDY: BATTAMBANG PROVINCE CAMBODIA

We draw here on a focused data set from Battambang Province, Cambodia.¹⁵ This research analysed casualty data and interviews with accident survivors in order to provide further insights into key economic and community structures driving informal responses to ERW.¹⁶

Figure 1, based on Cambodia Mine/UXO Victim Information System (CMVIS) data,¹⁷ shows that casualties for both mines and ordnance in Battambang Province rose in 2004. Within Battambang, a significant proportion of the increase in UXO casualties from 2003 to 2004 is accounted for by an increase in the districts of Samlot and Rattanak Mondol.¹⁸ The casualty data illustrated here should be understood in the context of national-level trends over the last five years that have seen mine accidents falling but UXO accidents staying at more or less the same level, only to have risen recently.

This increase in casualties was experienced in areas to which mine action assets had been deployed with the specific objective of reducing UXO casualties through effective ordnance disposal operations. So why, with the absence of conflict and the continued implementation of

ordnance disposal operations, are UXO casualties rising rather than falling? On the basis of the analysis below, we assert that traditional mine action responses are ineffective at further reducing casualties in this context because they are focused on ordnance as an external threat when it is the internal vulnerabilities that bring people into contact with the ordnance that are the primary reason for the accidents.

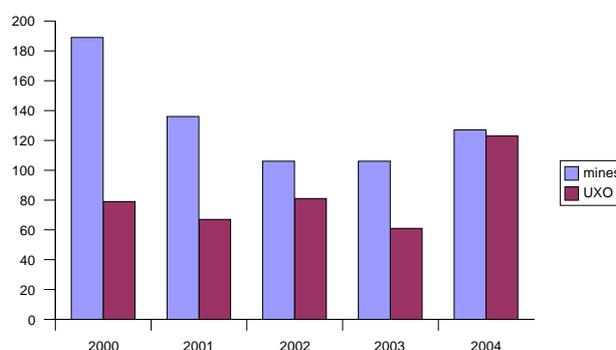


Figure 1. Reported casualties, Battambang Province

ANALYSIS OF CASUALTY DATA AND ACCIDENTS

Two fundamental issues are clear regarding UXO accidents according to the CMVIS data for Battambang in 2004. Firstly, most of the casualties result from people deliberately engaging with items of ordnance (e.g. from people handling ordnance that they find). Secondly, the great majority of the casualties are male rather than female.

Deliberate handling

Some 60% of ERW casualties were recorded as deliberately engaging with ERW at the time of their accident. A further 11% responded that they were injured while “bystanding”. This generally refers to observing others deliberately handling ERW, and being injured in the same accident.¹⁹ In this data set all the bystanding casualties were injured in incidents in which at least one other casualty was recorded as deliberately handling ERW.

The deliberate handling category of the CMVIS data has a number of subsections that provide more accurate information on the casualties’ motivation at the time of the accident, including the intention to sell the item, move it, fish with it, play with it, and so on. Of the casualties we are focusing on here, 19 responded that they were handling the ERW in order to sell it. Following this, eight stated they intended to use the item for fishing, and the remaining 17 were split across other categories. Although there is known to be some market for explosives, most salvaging is focused on the sale of metal.

Research undertaken for this report found that among the sample of casualties interviewed, the percentage of respondents reporting their motivation to sell the item was less than the CMVIS data (32% compared to 43%).²⁰ Casualties were reluctant to admit to selling ordnance as a motivation, instead often claiming they struck the item by accident or were trying to move it to a safer location. Understandably, respondents were disinclined to discuss behaviour that may be criminal and that flaunts the directives (“do not touch ordnance”) of mine action NGO’s active in

the area. This provides further indication of how the discourse of the mine action sector (and more broadly of the Cambodian Government) serves to condition the relationship of local people to external analysis and scrutiny.

Gender

With 80% of casualties being male, gender is one of the key factors in such accidents. This data is striking because it suggests strong and prevalent cultural distinctions between men and women are modifying the way in which these groups are exposed to risk. But, if half of the population find it so easy to avoid these accidents, then why cannot accident levels be dramatically reduced overall? This question is fundamental because it emphasizes that ERW accidents do not result primarily from the (external) *threat* of the ordnance but from (internal) *vulnerability*, which dictates exposure to the threat.²¹ However, current funding and mine action practices are targeted primarily at addressing the external threat. Vulnerability is generally constructed in simplistic and narrow terms and local capacity to manage the threat is usually seen as inappropriate or illegal.²²

SCRAP METAL: RATTANAK MONDOL AND SAMLOT

In this section we present a brief analysis of issues relating to salvaging from ordnance for sale in the scrap metal trade in Rattanak Mondol and Samlot districts. It should be noted that this is not the only social or economic function that brings people into contact with ordnance nor is this analysis a thorough evaluation of the scrap metal trade itself.²³

In Rattanak Mondol and Samlot there were no villages visited during the research that lacked the ability to sell scrap metal for cash. No other secondary income activity can provide this access to money on a daily basis and within the environs of the village. This makes the scrap metal trade one of the most important economic structures within these communities.

This study found that the most common practice among ordnance handlers (not all people involved in the scrap metal trade collect ordnance of course) was to search for UXO in the forest or around their agricultural land, and then return it to the village for dismantling. Thirteen of the 28 reported recent casualties from this area had their accident within the village. In order for it to be saleable to the dealers the item must be dismantled (the fuse and main explosive charge must be removed). Following the lead of the Thai smelting companies (where the vast majority of Cambodian scrap ends up), the item then needs to be cut into smaller pieces to show that it is safe. Ten of the respondents admitted that their accident occurred while trying to remove the fuse, either by unscrewing it or using tools to dislodge it.

In general, collecting scrap for secondary income is at its peak toward the end of the dry season—between January and April. Local access to surrounding areas is at its best during this period, and villagers travel further during these months in order to open up new land, take advantage of forest resources (collecting wood, resin, wild fruits) and search for scrap metal. This period also includes the leanest periods in the annual agrarian economic cycle. It is important to note that the incentive of access to the broader scrap metal trade is often removed during the wet season due to financial risks associated with contracted haulage. As a result the market for scrap metal is generally depressed out of season.

POVERTY AND SCRAP METAL

In those villages where particularly high accident rates occurred, villagers are predominantly involved in either working their own and, or being employed as labourers on other peoples' land. The village authorities confirmed that less than 20% of the families cultivated rice. Crops in Rattanak Mondol and Samlot are generally peanuts, sesame, soybeans, corn and green beans. These crops are harvested and sold at market in order to produce income, primarily used to buy rice. Rice harvests can be kept and used year round, whereas other produce cannot. Prior to a new harvest, villagers can experience food shortages, particularly toward the end of the dry season.

In Rattanak Mondol and Samlot, food shortages were compounded in 2004 by a poor harvest. U Chandy, village chief of Raksmei Sonkga in Sdau commune, reported that a usual yield might be 3 tonnes of produce per hectare; but in 2004, due to a lack of rain, only 200–300 kilos per hectare were harvested. Such changes highlight the dynamic nature of vulnerability for a community or for individuals and such changes can dramatically increase the value of scrap metal salvaging as an input into the household economy.

Rural poverty, and specifically the effect of poor harvests and low incomes, is clearly a broad economic and rural development issue. However, there is a causal link between these problems and the need for secondary income to bridge food gaps. Many ERW accidents in this context should therefore be seen primarily as an effect of poverty and should be addressed as such. There is a strong danger that by conceptualizing such accidents as resulting primarily from the presence of ordnance (as is the current tendency of the dominant mine action discourse) the real meaning of these accidents is lost to the broader development community.

The availability of scrap metal in these regions and the relative ease in collecting it was continuously cited as a reason for the prominence of the trade in these two districts. None of the scrap dealers interviewed in these locations were from the area, yet they were willing to travel significant distances to target remote villages in Samlot (for example) to exploit the abundance of scrap. One dealer living in Battambang town would travel four hours by motorcycle each day in order to collect metal in Ta Krouk commune, Samlot. He stated that 10 other dealers would target the same villages each day, and that 50% of the metal he collected was derived from ordnance. He would target this location due to people being particularly poor, the scarcity of work and the resultant willingness of the villagers to collect scrap to sell to him. A common response from villagers, local authorities and mine action organizations was that some scrap dealers were particularly unscrupulous, and would encourage villagers and especially children to render items safe for sale. A village chief claimed that one such dealer had told children how to remove fuses and explosives from live ordnance. As scrap dealers are rarely members of the communities they work in, it can be argued that their sense of social responsibility to these communities is weak. Mine action organizations have also raised this point in trying to focus awareness and education activities on these dealers.

There is a danger again here that mine action responses fall back on models of awareness and education when the real need is to empower communities to exert authority and sanction over these external drivers of risk-taking behaviour. By blaming the scrap dealers, villagers (and in particular village chiefs) can accord with the messages of the dominant discourse by asserting that the problem resides with these outsiders. This tends to distract away from the fact that the community's failure to demand responsible behaviour from the scrap dealer is actually indicative of vulnerability on their part. Whilst blaming these outsiders, communities are often complicit in their activities though silence and inaction at the very least. Almost all formal mine action

responses serve to exacerbate this problem by asserting that solutions lie in the hands of external bodies—external educators, ordnance disposal teams and the like. Thus little is being done to empower communities in relation to their own problems. Despite the value of scrap to the community economy, the scrap dealers are not powerful people. That these people are not being made to operate in accordance with some agreed standard of behaviour is testimony to lack of will or lack of sense of self-efficacy on the part of these communities. These are the shortcomings that should be the focus of external assistance.

The mine action sector has generally relied on the application of pre-determined responses. If ineffective, this can create a tension between the dominant but failing discourse of the mine action sector (and complicit authorities such as the police, health workers, village chiefs) and the actuality of local knowledge and practice. This expresses itself in a problematic relationship between the two camps that makes it more difficult to understand and address underlying problems. For many, adherence to the dominant discourse becomes more important than the analysis of reality, leading local people to assert a need for “education” in response to incidents where lack of knowledge was clearly not an underlying factor.²⁴ In such situations we see the power of the rhetoric of mine action to dictate perceptions of where the solutions must lie.

POPULATIONS AND MIGRATION

Battambang has traditionally been seen as Cambodia’s “bread basket”. Rich and fertile land has meant it has long been an area to which migrants gravitate; almost 40% of Battambang Province’s population are internal migrants who came in search of improved access to land. Samlot was perhaps the most conflict-affected district in the country. According to local authorities, people are continuing to migrate to Samlot and Rattanak Mondol in order to claim agricultural land, resulting in extensive deforestation in some communes. This inflow results in people trying to open up new land, finding ERW items and being presented with the opportunity to interact with ordnance, to clear it from their land and to earn money after rendering it saleable.

As we have noted, new settlers are generally economic migrants and as a result they will often be among the poorest members of their new community. Economic opportunities are very limited and social integration within the communes is weak. Respondents in this study reported handling ERW to be anti-social behaviour as it endangers others and negates the work and message of development organizations.²⁵ A common response from village chiefs when asked about villagers who handle ERW was that many people used to do it, but now it is just the new villagers who disregard the message from outside organizations and local authorities. That these new arrivals may be among the most economically marginal would support the theory that they will place a greater reliance on income from scrap metal salvaging. Such a response may also be offered in order to demonstrate strong leadership among the more established villagers, and adherence to law and the messages of outside organizations. The fact that new settlers were blamed may also be indicative of social exclusion; being on the fringes of society may make people susceptible to acting in non-socially sanctioned ways, which in turn reinforces exclusion.²⁶

We illustrated a number of key points regarding forces that shape vulnerability to the external threat of ordnance. In particular we have highlighted the strength of economic opportunity presented by scrap metal as a component of the rural economy and certain issues of social exclusion that may provide further evidence regarding vulnerability or may be indicative of other issues to do with different discourses of authority. We have also noted the importance of looking beyond the simplistic models of education toward empowering communities to exert their own control over risk-taking behaviour that they do not sanction.

ECONOMIC NECESSITY

This argument brings us to a familiar point within the analysis of mine action where it is asserted that economic necessity among the local population is limiting the adoption of the safe behaviours being recommended. Even though we construct such risk-taking behaviour as a *necessity*, however, the mine action sector has consistently avoided forms of engagement that suggest any acceptance of this behaviour. This avoidance is generally explained as resulting from a fear of encouraging risky behaviour or of being held responsible for any negative outcomes that result. This is a smoke-screen that serves to hide the fact that we don't know what best to tell people in such circumstances and that telling people what to do is the only model of assistance that we have got. If mine action agencies gave out messages that suggested that all items of ordnance could be safely dismantled by some simple process this certainly would be negligent—but that is not the proposition. The challenge here is to recognize that it is the model of telling local people what to do that is the real problem, not the imagined liabilities that could arise from the misapplication of this model.

CONCLUSIONS

Ordnance still presents a widespread external threat in the rural environment in Cambodia. This threat most commonly manifests itself when people engage with the ordnance for some reason. People's decisions to engage with ordnance are likely to be driven by some form of vulnerability or capacity, most likely in combination. The purpose of the detailed examination of data in the previous section is to illustrate that it is these internal vulnerabilities or capacities that are the overriding force governing the likelihood of people engaging with ordnance. As a result they are the overriding force governing the likelihood of people suffering an accident resulting from ordnance contamination. The currently available international data suggests that this is the case in a wide range of environments.

In this regard, efforts to address the impact of ordnance contamination, like efforts to address SALW, should examine the social, political, economic and environmental contexts that support continued engagement with ordnance (or continued desire to obtain or retain weapons.) Current mine action sector models for addressing ERW contamination focus on the external threat and consider the internal vulnerabilities as falling under the development sector. The development sector, on the other hand, perceives ERW casualties as coming under the mine action sector and does not take ownership of this problem. The broader structures of development assistance have yet to take ownership of mine action functions as integrated components of their operations.

While the mine action sector's current responses may be incapable of reducing accidents below a certain level in the face of economic forces, this does not mean that there is no value to the process of ordnance disposal. Logically, if ordnance disposal is continued for a sufficient period the time will come when all ordnance is removed and UXO-related accidents become nearly impossible. The question is how long would it take to get to such a state and what resources are required in order to get there? We have already noted that the Cambodian Mine Action Authority²⁷ has stated that "even beyond [2020], it is probable that a reduced capability, with smaller and more mobile demining teams, will be needed to deal with smaller or lower priority clearance tasks and numerous UXO for possibly as long as a further 50 years."²⁸ The

evidence of countries which were subject to conflict during the Second World War would support such an assumption—with ordnance continuing to be found on an ongoing basis every year.

However, any demand for further resources to address this problem must also be seen in the context of other pressing demands within Cambodia (including landmine contamination) and the intrinsic effectiveness of the solutions available to address those demands. While ERW accidents are substantially a manifestation of poverty, they amount to a relatively small proportion of poverty-driven morbidity in Cambodia every year by comparison to such factors as infant mortality, malaria, HIV/AIDS etc. Even traffic accidents kill and injure perhaps 15 times as many people per annum in Cambodia as are killed and injured in ordnance accidents. If the intrinsic effectiveness of the mechanisms for addressing the long-term impact of ordnance contamination are currently weak there are two key options that can be taken forward:

- Development of models for community empowerment and policing, rather than perpetuating the risk education model of the mine action sector. This should be undertaken not with a focus solely on ordnance but as part of broader “community safety” development; and
- Enhancing the instrumental value of the ordnance disposal function by ensuring that it is undertaken as part of a broader process of development assistance (such as assistance to the military or the police).²⁹ In this way the process of building capacity has a benefit to bodies that have a broader and longer-term role within society than the artificially isolated institutions of the mine action sector. The purpose here is to maximize the instrumental as well as the intrinsic value of supporting these function as a form of external assistance.³⁰

The models and discourse of the mine action sector may be too entrenched now in Cambodia to allow for an effective exploration of alternative models or a transition to implementation through genuine state bodies—but the lessons that can be learned from this environment should have application elsewhere (in particular, lessons learned would be applicable to environments of substantial residual contamination). None of this is to say that the standards, methods and the like of the mine action sector are not extremely useful for organizing such functions as landmine clearance and ordnance disposal. But assertions that these should continue to be marshalled and controlled as part of a coherent sector may ultimately block effective support to affected populations. Certain functions of the mine action sector need to be appropriated and undertaken as components of broader assistance—not as separate subcontracted entities but as mechanisms for maximizing the instrumental value of these functions. In order to achieve this however, broader programmes of assistance need to identify and appreciate the capacity of mine action functions to be used not solely in terms of their intrinsic value but also in terms of their instrumental value. Programmes addressing SALW offer a possible framework for undertaking such functions as EOD as part of a broader process of developing capacity and accountability in such institutions as the police and the military. They also have the capacity to look at the development of Arms Law legislation in the light of the relationship between impoverished rural communities and economic structures such as the scrap metal trade. Such programmes could look at local-level determinations of acceptable and unacceptable behaviour as part of broader initiatives to develop community safety, supported by community policing. The most effective non-emergency responses to ERW will come not from the mine action sector but from mine action functions embedded within programmes with a broader developmental vision.

Notes

- ¹ Richard Moyes (ed.), *Explosive Remnants of War and Mines other than Anti-Personnel Mines: Global Survey 2003–2004*, Landmine Action, Mines Action Canada, Actiongroup Landmine.de, 2005, p. 6.
- ² Landmine Action, *Explosive Remnants of War: Unexploded Ordnance and Post-Conflict Communities*, 2002, p. 21.
- ³ Richard Moyes, *Global Impact Survey: Presentation to the CCW*, Palais des Nations, Geneva, 10 March 2005.
- ⁴ Chris Horwood, *Humanitarian Mine Action: the First Decade of a New Sector in Humanitarian Aid*, RRN Network Paper, Overseas Development Institute, 2000; Stuart Maslen, *Mine Action after Diana—Progress in the Struggle against Landmines*, Landmine Action, 2004.
- ⁵ These are the components of mine action as defined in the 2nd edition of IMAS, 2003.
- ⁶ On the danger of poorly managed explosive stores, see also Geneva International Centre for Humanitarian Demining, *Explosive Remnants of War (ERW): Undesired Explosive Events in Ammunition Storage Areas*, 2002; Landmine Action, *Explosive Remnants of War: Unexploded Ordnance and Post-conflict Communities*, 2002.
- ⁷ The relationship between mine risk education and “community liaison” continues to be a source of confusion within the sector. Where community liaison ought to stand in the same relation to mine risk education as to landmine clearance (or explosive ordnance disposal, or any other form of externally precipitated assistance), it is common practice for community liaison to be considered a form of mine risk education. See for example the position of community liaison in the narratives of Geneva International Centre for Humanitarian Demining, *A Guide to Mine Action*, 2004; and Stuart Maslen, *Mine Action after Diana—Progress in the Struggle against Landmines*, Landmine Action, 2004. While community liaison has languished, much loved in theory but little seen in practice, the wider mine action world has seen far greater momentum behind the efforts of central coordination and task distribution. Community liaison is about the greatest possible devolution of prioritization and resource-allocation decisions and this devolution fits awkwardly with the demands of greater centralized control and standardization.
- ⁸ The term “illegality” is used figuratively here. However, in many environments this can be taken literally. In Cambodia, which provides the focus of the case study data for this paper, the Prime Minister has declared efforts by local people to clear mines from their own land to be illegal.
- ⁹ See for example Ruth Bottomley, *Crossing the Divide: Landmines, Villagers and Organizations*, Handicap International (Belgium), the International Peace Research Institute, Oslo, and the United Nations Children’s Fund, 2003; Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action Group, Norwegian People’s Aid, 2004.
- ¹⁰ This is more true with respect to village demining (or “informal demining” as it is increasingly and more usefully now called) where village deminers are credited with working on large areas of land and removing large quantities of mines yet have not experienced large numbers of accidents. “Tampering”, on the other hand is a term derived from casualty surveillance and became an object of study primarily because of its high incidence in casualty surveillance data in certain environments. It should be noted that informal demining and tampering do not amount to an exhaustive list of informal mine action practices.
- ¹¹ Richard Moyes (ed.), *Explosive Remnants of War and Mines other than Anti-Personnel Mines: Global Survey 2003–2004*, Landmine Action, Mines Action Canada, Actiongroup Landmine.de, 2005, p. 43.
- ¹² Cambodia Mine Action and Victim Assistance Authority, *National Mine Action Strategy 2004*, 2004, p. 4.
- ¹³ *Ibid.*, p. 6.
- ¹⁴ Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action Group, Norwegian People’s Aid, 2004.
- ¹⁵ Dave Tinning, *The Rise in Live Ordnance Casualties in Samlot and Rattanak Mondol Districts*, 2004, research and discussion paper, 2005.
- ¹⁶ This data and analysis provides new insights into local practices and economic structures while supporting the broad direction and central conclusions of the report: Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action

Group, Norwegian People's Aid, 2004. The small sample size of the data discussed here must therefore be seen in the context of its coherence with larger data sets looked at in that report.

¹⁷ The Cambodia Mine/UXO Victim Information System (CMVIS) is the national casualty surveillance system for mine and ordnance accidents operating in Cambodia.

¹⁸ It is notable that casualties resulting from landmines also increased by 18% in Rattanak Mondol and Samlot from 2003 to 2004. Although a considerable increase, this is within the parameters of the fluctuations seen at district level over the previous years. Far more significant is the 69% increase in ERW-related casualties for these two districts over the same period.

¹⁹ Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action Group, Norwegian People's Aid, 2004.

²⁰ The CMVIS data is probably more accurate due to the experience of their staff and rigour of the investigation process they have been undertaking in this area. Interviews with Cambodian Red Cross staff determined that each accident was fully investigated by experienced data gatherers. Hean Chaem, senior data gather for Rattanak Mondol and Samlot, described the data collection process as an investigation involving numerous interviews with not just the casualty but also with friends, neighbours, and village authorities.

²¹ It is important to recognize the complexity of such a term as "vulnerability". With regards to this gender split of casualties, it may be the forces that would generally be constructed as "capacity" within the population (such as bravery, technical knowledge and the like) which make men more likely to engage with ordnance and thus have accidents.

²² The key point for this analysis is that the gender split evidences the wholesale social filtering of the ordnance threat. For analysis of the gender issue in this context, see Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action Group, Norwegian People's Aid, 2004.

²³ For more detail see *ibid.*, and Dave Tinning, *The Rise in Live Ordnance Casualties in Samlot and Rattanak Mondol Districts, 2004*, research and discussion paper, 2005.

²⁴ Richard Moyes, *Tampering: Deliberate Handling of Live Ordnance in Cambodia*, Handicap International (Belgium), Mines Action Group, Norwegian People's Aid, 2004, pp. 80–82.

²⁵ This is strongly reinforced by data from a knowledge, attitudes and practices (KAP) survey; *ibid.*

²⁶ The same cyclical relationship has been noted in the West with respect to youth delinquency and social exclusion. See for example Caroline Paskell, "Are Young People Being Doubly Excluded? Resident Action over Youth Behaviour in Disadvantaged Areas", paper presented at Youth: Voice and Noise, 8th Nordic Youth Research Symposium, Roskilde University, 8–10 June 2004.

²⁷ Cambodia Mine Action and Victim Assistance Authority, *National Mine Action Strategy 2004*, 2004, p. 4.

²⁸ *Ibid.*, p. 6.

²⁹ Too often, efforts to integrate mine action and development programming have purely focused on the intrinsic benefits of the mine action components without maximizing the instrumental benefits. Thus a mine action capacity may be paid to clear an area of land that will subsequently be used for some physical development project. Under such a structure, however, the mine action component may be wholly separate from the other elements of the development process.

³⁰ Stuart Maslen, *Mine Action after Diana—Progress in the Struggle against Landmines*, Landmine Action, 2004, p. 106 and elsewhere.

ACRONYMS

AXO	abandoned explosive ordnance
CMVIS	Cambodia Mine/UXO Victim Information System
EOD	explosive ordnance disposal
ERW	explosive remnants of war
IMAS	International Mine Action Standards
MRE	mine risk education
UNIDIR	United Nations Institute for Disarmament Research
UXO	unexploded ordnance